# "Self-reliance and Inclusive Green Socio-economic Development"



**Gross National Happiness Commission** P.O Box: 127, Tashichhodzong, Thimphu Website: www.gnhc.gov.bt



# **ELEVENTH FIVE YEAR PLAN Volume II : Programme Profile**

2013-2018

"Self-reliance and Inclusive Green Socio-economic Development"



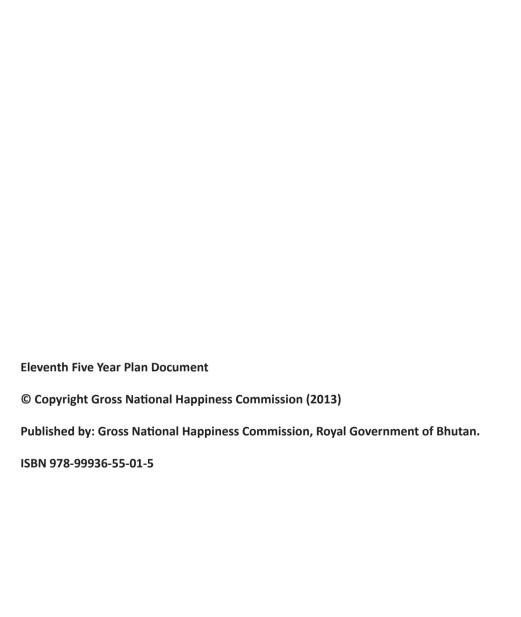
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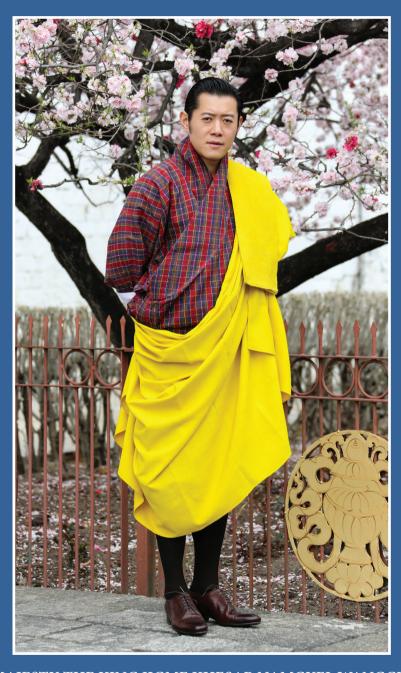
**GOOD HEALTH FOOD SECURITY** 

**VALUE-ADDITION IDENTITY** 

**POVERTY REDUCTION** 

ICHU





HIS MAJESTY THE KING JIGME KHESAR NAMGYEL WANGCHUCK

Our Nation has seen great socio-economic growth but it is more important that we have growth with equity. We must raise, with all our effort, the less fortunate so that they may, at the earliest, begin to partake in the opportunities brought by modernization and progress.

The government has provided education to our youth. But for the nation to prosper for all time, a sound education must be succeeded by access to the right jobs and responsibilities, so that our youth may bloom as individuals and at the same time serve their Nation well.

The recent Rupee shortage is a serious problem. I feel it is a reminder that, as a Nation, we must exercise our traditional sense of caution and work even harder as we address the challenges of the time. For no matter what challenges lie ahead, it is only the Bhutanese citizen who can protect and safeguard Bhutan.

- His Majesty The King's address to the nation during the 105th National Day celebrations, 17th December 2012, in Thimphu.



# रमयः स्वारत्युगः गलुरा

# **Royal Government of Bhutan**

28 October 2013

#### PREFACE

Globally, transformative changes in the social, economic, environmental and political spheres are compelling countries, both developed and developing alike, to take stock of their development strategies and embark on far reaching reforms to address new challenges and opportunities of the 21st Century. Bhutan finds itself in the midst of similar social, economic and political transformation. With our future increasingly linked to a globalized world, the rapid transformation of our nation has ushered in new realities that require innovative and creative approaches to address them. The Eleventh Plan has provided an opportune time to take stock of the state of our nation against these new developments and build on our strong foundations by ushering in new plans, strategies and preparations that reflect the new opportunities and challenges.

The Eleventh Plan is not a political document but belongs to all our people. It builds on the sweat of all our past achievements, the Vision 2020, and key policy documents such as the Economic Development Policy 2010. It reflects the extensive work carried out across all sectors and agencies at the national and local levels to provide a comprehensive and sustainable development framework, while clearly benchmarking our progress. It has been formulated keeping all the above factors in mind. Most significantly, the Eleventh Plan draws upon the wisdom of His Majesty the King, which has been consistently articulated in Royal Addresses to all cross sections of our people. As we embark on the implementation of the Eleventh Plan, it would be apt to recapitulate the essence of His Majesty's guidance on the fundamental goals and objectives for our nation.

Firstly, to ensure the peace and well-being of the people and sovereignty and security of the country. Secondly, to ensure the security that comes when people are united in their love for the country and are united in their efforts to further secure, consolidate and hand over an even stronger nation to their children. Thirdly, to build a vibrant democracy fortifying its roots, properly understanding its tenets and judiciously exercising rights in ways that will always benefit the nation. Fourthly, to achieve the goal of self-reliance – which entails changing our mindset, our way of working, and to succeed through our own hard work and sweat, on our own terms and merit. Fifthly, the realization of our development philosophy of GNH, which while timeless in its essence would require every generation to find new ways of achieving its goals in a fast changing globalised world. In this context, His Majesty has stressed that if the current generation succeeded in fulfilling their duty of building a strong Bhutanese economy, then they would have laid the foundation for a sound



# र्मयाः ध्रुवारस्युगाः गलुरा

## **Royal Government of Bhutan**

#### **PRIME MINISTER**

democracy, for Gross National Happiness and for peace and prosperity for all Bhutanese now and in the future.

In going forward, the imperatives and indispensability of the relevance of our education system to achieve our national goals and objectives must remain at the forefront of our thinking, planning and implementation of the current and successive Five Year Plans. His Majesty the King has often underscored that the quality of education for our youth is of paramount importance, reminding us that "a nation's future will mirror the quality of her youth - a nation cannot fool herself into thinking of a bright future when she has not invested wisely in her children". For neither our Vision nor our goals in our plans and policies are attainable if we do not relentlessly and uncompromisingly invest in building a dynamic education system. Such a system must nurture our youth with the right values, character, skills, knowledge and training that are relevant and reflect our changing opportunities and challenges. The complexity and enormity of this task in education cannot be denied - it will require a systemic approach, new thinking, institutions and tools, a longer term perspective of 20 years in our planning, predictable resources, and the collaboration and commitment of all our people. Nor can the urgency to begin this task be overemphasized as the largest sections of our population today are youth whereby our window of opportunity is small. The education sector, which has always been a high priority for the Royal Government, will be given special emphasis in the Eleventh Plan to provide the critical impetus for achieving our shared vision and goals for our future.

While we have every reason to be proud of our achievements as a nation over five decades of development, many challenges remain to be addressed. Disparities in income and social outcomes are of growing concern. The paradox of growing youth unemployment and an acute shortage of a skilled workforce remains a major challenge for private sector development. Related to this, our economy is faced with a narrow industrial base, a high dependency on a single sector and imports and is experiencing unprecedented macroeconomic instability despite a prolonged period of robust economic growth. The sustainability of the demand on our health and education sectors due to rising expectations is under stress. Lack of adequate preparation for the inevitable trend of rapid urbanization is giving rise to new social, economic and infrastructure challenges. Environmentally, we are highly vulnerable to natural disaster arising from climate change and geological risks, while human-wildlife conflict brings challenges of balancing our environmental goals with sustaining the livelihood of our rural communities. We have no doubt made good progress in laying a strong foundation for our democratic process. However, much remains to be done in terms of further strengthening it through greater transparency, efficiency and accountability in the political and administrative processes. Most significantly, combating corruption in all its forms must remain an utmost priority. While the improved and



# रमयाः स्वारत्युगाः गलुरा

# **Royal Government of Bhutan**

#### **PRIME MINISTER**

respectable ranking of 33 among the 176 nations in Transparency International's 2012 Corruption Perception Index is indeed encouraging and reflective of our commitment to fight corruption, recent reports by relevant national agencies suggest that our task is far from over.

The Eleventh Plan sets out an ambitious development agenda to address these challenges. With an unwavering faith in our future and an enduring belief in our abilities, let us all join together to rededicate our efforts towards fulfilling the sacred responsibilities entrusted upon us by His Majesty the Fourth Druk Gyalpo and His Majesty the King to ensure the peace, prosperity and security of our nation for generations to come. Together, let us work to ensure that the Eleventh Plan is a success so that we lay the foundations for a future that is even more remarkable than our past.

Tashi Delek!

(Tshering Tobgay)

Chairman of the GNH Commission

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#### **ACRONYMs**

ACC Anti-Corruption Commission

AIDS Acquired Immune Deficiency Syndrome

ANC Ante Natal Care

APIC Agency for Promotion of Indigenous Craft
ASOSAI Association of Supreme Audit Institute
BAAC Bhutan Assurance and Accreditation Council

BAFRA Bhutan Agriculture and Food Regulatory Authority

BAS Budget and Accounting System
BDI Bhutan Development Index

BHMC Bhutan Health and Medical Council

BHTF Bhutan Health Trust Fund

BHU Basic Health Unit

BIMSTEC Bay of Bengal Initiative for Multi-Sectoral Technical and

**Economic Cooperation** 

BLSS Bhutan Living Standards Survey
BPCL Bhutan Power Corporation Limited

BPFFS Budget Policy and Fiscal Framework Statement
BVQF Bhutan Vocational Qualifications Framework

CC Community Center

CDM Clean Development Mechanism

CEDAW Convention on the Elimination of All Forms of

Discrimination against Women

CNR College of Natural Resources
CDB Construction Development Board

CORRB Council for Renewable Natural Resources Research

of Bhutan

CSIS Cottage and Small Industries

CSMI Cottage, Small and Medium Industry
CST College of Science and Technology
DGPC Druk Green Power Corporation
DGM Department of Geology and Mines
DHI Druk Holdings and Investment

DOE Department of Energy
DPR Detail Project Report

DES Department of Engineering Services
DHS Department of Human Settlement

DOR Department of Roads
DRA Drug Regulatory Authority
DSA Debt Sustainability Analysis

DT Dzongkhag Tshogdue

EA Environmental Assessment

ECCE Early Childhood Care and Education
ECOP Environmental Codes of Best Practices
EFRC Environment Friendly Road Construction

EIA Environmental Impact Assessment

E-Services Electronic Services
E-Gov Electronic Government

E- Gif Electronic Government Interoperability Framework EARRD Engineering Adaptation Risk Reduction Division

E-Waste Electronic Waste Financial Institutions

FMU Forestry Management Unit

FR Feeder Roads

GAO Geog Administrative Officer

GCBS Gaedu College of Business Studies

GLOF Glacial Lake Outburst Flood

GPMS Government Performance Management System

GNH Gross National Happiness

GHG Green House Gas
GT Geog Tshogde

G2C Government to Citizen
G2B Government to Business
G2G Government to Government

GER Gross Enrolment Ratio
GPS Global Positioning System

HH Households

HIV Human Immunodeficiency Virus

HYV High Yielding Variety

HRD Human Resource Development

ICT Information and Communications Technology

IT Information Technology

ITES Information Technology Enabled Service

IOC International Olympic Committee

IDD Iodine Deficiency Disorder

ILCS Institute of Language and Cultural Studies

IMR Infant Mortality Rate

IMS Information Management System

IP Intellectual Property

IWRM Integrated Water Resource Management

JNP Jigme Namgyel Polytechnic

JV Joint Venture Kcal Kilo Calorie

LFPR Labor Force Participation Rate

LGs Local Governments

MCH Maternal and Child Health
MDGs Millennium Development Goals

MMR Maternal Mortality Ratio
MoA Ministry of Agriculture
MoE Ministry of Education
MoF Ministry of Finance
MoH Ministry of Health

MSME Micro Small and Medium Enterprises
MTFF Medium Term Fiscal Framework
MFF Macro-Economic Framework

M-Services Mobile Services

MYRB Multi Year Rolling Budget
MSD Medical Supply Depot

NaSART National Search and Rescue Team

NAPA National Adaptation Programme of Action
NCWC National Commission for Women and Children

NEC National Environment Commission

NFE Non-Formal Education

NID National Institute for the Disabled

NITM National Institute of Traditional Medicine

NLFS National Labor Force Survey

NLCS National Land Commission Secretariat
NPPF National Pension and Provident Fund

NWFP Non Wood Forest Products
NSB National Statistic Bureau

Nu Ngultrum

O&M Operation and Maintenance OAG Office of Attorney General ORC Outreach Clinic

OVC Office of Vice Chancellor

PAVA Property Assessment Valuation Agency

PCE Paro College of Education
PCS Position Classification System

PEMS Public Expenditure Management System
PHCB Population and Housing Census Bhutan

PPA Power Purchasing Agreement
PPP Public Private Partnership

QAAD Quality Assurance and Accreditation Division

QAS Quality Assurance System
RBM Results Based Management

RE Rural Electrification

RGOB Royal Government of Bhutan
RIHS Royal Institute of Health Services
RMA Royal Monetary Authority of Bhutan
RIM Royal Institute of Management
RNR Renewable Natural Resource
RWSS Rural Water Supply and Sanitation

RUB Royal University of Bhutan

RUG Road Users Group

SAARC South Asian Association for Regional Cooperation

SAP School Agriculture Programme
SDGs SAARC Development Goals
SME Small and Medium Enterprise

SASEC South Asia Sub-regional Economic Cooperation

SAFTA South Asian Free Trade Area
SOP Standard Operating Procedures

TAT Turn Around Time

TVET Technical Vocational Education Training

TWAN Thimphu Wide Area Network U-5MR Under-five Mortality Rate

UNFCCC United Nations Framework Convention on Climate Change

VET Vocational Education and Training
VSDP Village Skills Development Programme

VTI Vocational Training Institute

WRF Weather Research and Forecasting

WUG Water Users Group
WUA Water User Association



#### **Summary of Programme Profiles by Sector**

Introduction: Volume II of the Eleventh Five Year Plan document contains the programme profiles of the Ministries, Constitutional Bodies, Autonomous and other Government Agencies. These programmes are organized and presented in the following summary table on the basis of the twenty strategic sectors. These programme profiles consist of the justification for the programme, the strategies to achieve the outcomes and outputs. In line with the results based approach to planning, it also spells out the outcomes and outputs with their key performance indicators, targets and baselines.

| List of Programmes by Sector                                       |   |   |
|--|---|---|
| Sector/Agency  | Name of Programme                           | Indicative Capital Outlay (in millions) |
| Sector: Renewable Natural Res                                      | ources                                      |   |
|  | National Field Crop Development             | 430.00                                  |
| Department of Agriculture,   | National Horticulture Commodity Development | 230.00                                  |
| IVIOAF   | Agriculture Infrastructure Development      | 1600.00                                 |
|  | National Organic Program                    | 40.00                                   |
| Department of Livestock,   | National Livestock Commodity Development    | 1035.00                                 |
| MOAF   | Targeted Highland Development               | 55.00                                   |
| Department of Agricultural<br>Marketing and Co-operatives,<br>MoAF | Marketing & Cooperative Development         | 180.00                                  |
| Council of RNR Research of   | RNR Research & Extension Services           | 20.00                                   |
| Bhutan, MoAF   | School Agriculture                          | 20.00                                   |
| National Biodiversity Centre,<br>MoAF                              | Biodiversity Conservation                   | 65.00                                   |
| Bhutan Agriculture and Food<br>Regulatory Authority, MoAF          | National Biosecurity and Food Safety        | 65.00                                   |
| Rural Development Training<br>Centre, MoAF                         | Rural Development Training                  | 21.00                                   |
| Secretariat, MoAF  | Coordination and Support Services           | 205.04                                  |

| Sector: Roads and Bridges                |  |          |  |  |
|--|--|----------|--|--|
|  | Construction/up gradation of southern east-west highway  | 7295.915 |  |  |
| Department of Roads, MoWHS               | Up gradation/improvement of northern east-west highway   | 1364.438 |  |  |
|  | Construction and up gradation/<br>improvement of roads connecting hydro<br>power projects            | 1443.003 |  |  |
|  | Construction and up gradation of Dzongkhag roads   | 556.503  |  |  |
|  | Construction and Up gradation of North  -South Highway   | 2964.46  |  |  |
|  | Road Asset Management  | 2372.00  |  |  |
| Sector: Human Settlement & Ho            | ousing   |          |  |  |
| Department of Human<br>Settlement, MoWHS | Enhancing Human Settlement in Bhutan   | 245.00   |  |  |
| Sector: Construction                     |  |          |  |  |
| Construction Development<br>Board, MoWHS | Promotion and Strengthening of Construction Sector   | 40.00    |  |  |
|  | Engineering Adaptation and Disaster Risk Reduction   | 785.00   |  |  |
| Department of Engineering                | Technical Support for Construction and<br>Maintenance of Trail Suspension Bridges<br>and Mule Tracks | 71.00    |  |  |
| Services, MoWHS                          | Technical support and Management for infrastructure development and engineering services             | 3858.75  |  |  |
|  | Planning, Policy and Institutional<br>Strengthening  | 112.93   |  |  |
| Sector: Geology and Mines                |  |          |  |  |
| Department of Geology and                | Geological Mapping, Mineral Exploration and Sustainable Mineral Development                          | 48.91    |  |  |
| Mines, MoEA                              | Geo-scientific Studies and Risk<br>Assessment of Geo-hazards   | 372.38   |  |  |
| Sector: Tourism                          |  |          |  |  |
| Tourism Council of Bhutan                | Strengthening of the Royal Institute of Tourism and Hospitality                                      | 25.50    |  |  |
|  | Sustainable Tourism Development  | 345.61   |  |  |

| Sector: Hydromet                                 |   |         |  |
|--|---|---------|--|
| Department of Hydromet                           | Enhancing Hydrological Network for<br>Water Resources Assessment and<br>Improvement of Flood Information/GLOF<br>Early Warning System | 311.14  |  |
| Services, MoEA                                   | Strengthening Meteorological Network<br>Coverage and Enhancing Weather and<br>Climate Information Services                            | 428.60  |  |
| Sector: Energy                                   |   |         |  |
|  | Institutional Reforms and Capacity Building   | 29.40   |  |
| Department of Hydropower and Hydropower Systems, | Accelerated Hydropower Development & Transmission Network Strengthening   | 1310.50 |  |
| MoEA   | Promotion and Development of Renewable/Alternate Energy Technologists   | 1526.50 |  |
| Sector: Trade                                    |   |         |  |
|  | Export Promotion and Market Access  | 433.14  |  |
|  | Strengthening Trade Policy and Regulatory Framework   | 298.00  |  |
| Department of Trade, MoEA                        | Development and Strengthening of Intellectual Property.   | 24.20   |  |
|  | Institutional strengthening of the Secretariat/RTIOs  | 3.70    |  |
| Sector: Industry                                 |   |         |  |
|  | Promotion of sustainable and environment friendly industrial development  | 1796.00 |  |
| Department of Industry                           | Strengthen Policy Environment and Institutional capacity  | 37.50   |  |
|  | Development of Cottage & Small Industry in Bhutan   | 57.60   |  |
| Sector: Transport and Communications             |   |         |  |
| Department of Civil Aviation,<br>MolC            | Expansion & Strengthening of Air<br>Transport   | 1734.00 |  |
| Road Safety and Transport<br>Authority, MoIC     | Quality & Safe Surface Transport<br>Development   | 276.60  |  |

| Sector: ICT and Media                                  |  |         |
|--|--|---------|
| Department of Information Technology and Telecom, MoIC | ICT for Good Governance & Socio-<br>economic Development                     | 1391.37 |
| Department of Information and Media, MoIC              | Promotion and Development of Media   | 142.16  |
| Bhutan Broadcasting Services                           | Strengthening Quality & Content of TV & Radio                                | 340.00  |
| Sector: Education                                      |  |         |
| Department of School                                   | Access and Sustainability of School<br>Education                             | 380.60  |
| Education, MoE   | Relevance and Quality of School<br>Education                                 | 444.40  |
| Department of Curriculum<br>Research                   | Curriculum Research and Development Program                                  | 200.00  |
| Department of Adult and                                | Higher Education Services  | 981.49  |
| Higher Education, MoE                                  | Adult Literacy and Lifelong Learning   | 23.10   |
| Department of Youth and Sport, MOE                     | Youth and Sports Development   | 329.81  |
| Connectories Mark                                      | Teacher Support Services   | 359.40  |
| Secretariat, MoE                                       | Institutional Development  | 198.20  |
|  | Enhancing Access to Tertiary Education                                       | 778.51  |
| Royal University of Bhutan                             | Enhancing Quality and Relevance of<br>Tertiary Education                     | 281.48  |
|  | Promoting Research, Innovation and Enterprise                                | 26.46   |
| Royal Education Council                                | Strengthen and Promote Innovation,<br>Creativity and Enterprise in Education | 292.00  |
| Royal Institute of Management                          | Management Programme in Support of Good Governance                           | 273.00  |
| Sector: Health   |  |         |
|  | Medical Services   | 2543.61 |
| Department of Medical Services, MoH                    | Traditional Medicine Services  | 40.35   |
|  | Medicines, Technologies and Logistics  | 739.54  |
| Secretariat, MoH                                       | Institutional Development & Monitoring                                       | 54.19   |
| Department of Public Health,<br>MoH                    | Public Health Services   | 461.42  |
| University of Medical Sciences                         | University of Medical Science of Bhutan                                      | 823.70  |
|  |  |         |

| Sector: Employment and HRD                     |  |         |  |
|--|--|---------|--|
| Department of Employment,                      | Promotion of full and productive   | 184.00  |  |
| MoLHR  | employment   | 184.00  |  |
| Department of Labour, MoLHR                    | Promotion of Decent Working Condition and Work Environment                         | 156.00  |  |
| Department of Occupational Standards, MoLHR    | Improving the Quality of Skilled Workers   | 65.00   |  |
| Department of Human<br>Resource, MoLHR         | National Human Resource Development Programme                                      | 960.20  |  |
| Sector: Culture                                |  |         |  |
| Dratshang Lhentshog                            | Strengthening of Dratshang   | 379.00  |  |
| Department of Culture,<br>MoHCA                | Preservation and Promotion of Culture  | 1983.30 |  |
| Agency for Promotion of Indigenous Craft, MoEA | Promotion and Development of the Craft Industry                                    | 104.50  |  |
| Sector: Environment                            |  |         |  |
| Department of Forest and Park<br>Service, MoAF | Sustainable Management of Forest<br>Landscapes and Conservation of<br>Biodiversity | 237.00  |  |
|  | Sustainable Management of State Forest   | 135.00  |  |
|  | Integrated Watershed Management  | 518.00  |  |
| Department of Disaster<br>Management, MoHCA    | Enhanced Disaster Preparedness,<br>Response and Relief Capacity                    | 84.00   |  |
| National Environment<br>Commission             | Conservation and sustainable environmental management                              | 374.00  |  |
| Sector: Sports                                 |  |         |  |
| Bhutan Olympic Committee                       | Excellence through Sports for all  | 395.00  |  |
| Sector: Governance                             |  |         |  |
| Department of Revenue and Customs, MoF         | Revenue and Customs Services   | 583.15  |  |
| Department of Public<br>Accounts, MoF          | Public Accounts Services   | 13.80   |  |
| Department of National<br>Budget, MoF          | National Budget Services   | 28.10   |  |
| Department of National<br>Properties, MoF      | National Property Services   | 79.00   |  |
| Secretariat, MoF                               | Secretarial Services   | 1974.50 |  |
|  |  |         |  |

| Department of Civil<br>Registration and Census,<br>MoHCA | Enhance Civil Registration and Census<br>Services               | 27.02   |
|--|---|---------|
| Department of Immigration,<br>MoHCA                      | Strengthen National Security and Enhance Immigration Services   | 90.00   |
| Department of Local<br>Governance, MoHCA                 | Strengthening of Local Governance                               | 34.00   |
|  | Development of Fire and Rescue Services                         | 94.00   |
| Royal Bhutan Police                                      | Development and Reformation of Prison Services                  | 274.00  |
|  | Maintenance of Law and Order                                    | 1040.00 |
| Election Commission of Bhutan                            | Strengthening Electoral System & Processes                      | 428.00  |
| Royal Audit Authority                                    | Strengthening Institutional Capacity and Audit Service delivery | 216.00  |
| David Civil Comics Commission                            | Strengthening Human Resource Systems in the Civil Service       | 207.00  |
| Royal Civil Service Commission                           | Human Resource Development of Civil<br>Servant                  | 2000.00 |
| Anti-Corruption Commission                               | Minimize Corruption and Strengthen ACC                          | 93.50   |
| Office of Attorney General                               | Strengthening of the Public Prosecution System                  | 43.90   |
| National Statistical Bureau                              | Strengthening Statistics for Development                        | 92.44   |
| Royal Court Of Justice                                   | Effective and Efficient Judicial Services                       | 623.80  |
| Royal Institute of Law                                   | Institute Development and Capacity Building                     | 547.50  |
| Sector: Vulnerable Groups                                |   |         |
| National Commission for<br>Women and Children            | Protection and Promotion of Women and Children Rights           | 55.00   |
| Gross National Happiness<br>Commission                   | Targeted Poverty Interventions                                  | 225.00  |
| National Land Commission                                 | Land and Rehabilitation Services                                | 500.00  |
|  |   |         |

# RENEWABLE NATURAL RESOURCES

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS                       | Department: DEPARTMENT OF AGRICULTURE |
|--|---------------------------------------|
| Program Name: National Field Crop Commodity<br>Development Program | Phase: Approved                       |

#### Justification:

Domestic production of cereals meets only66% of the total requirement. Country is only 47% self-sufficient in rice,47% in wheat, 40% is pulses and less than10% in oils. However, the country has the potential to increase both production and productivity.

Agriculture is important not only to the rural farming households. It contributes significantly to national economy by employing more than 60% of the country's population. It also provides important ecological functions and contributes significantly in carbon sequestration. It is also the living tradition and culture and hence plays very important role in cultural preservation.

Some of the major challenges to agriculture growth include lack of assured irrigation water, predation of crops by wild animals, labour shortages and agriculture feminization resulting into low level of agriculture intensity. Steep terrain and dispersed settlements are some of the physical challenges affecting growth.

#### Strategy:

- i. To bring focus on priority commodities to enhance production, commodity program approach will be continued with specific commodity area delineation.
- ii. Commercialization for potential crops such as rice, maize, wheat and oil seeds will be pursued through PPP/IFD.
- iii. To achieve the volume for commercialization, land intensification will be emphasized through assured irrigation water and mechanization services.
- At strategic locations, storage facilities and processing plants will beinstituted.
- Environmentally friendly and socially accepted electric fencing system (EFS) will be promoted, and SLM technologies will be promoted in steep slopes.
- vi. Research on varieties that are tolerant to biotic and abiotic stress to cope with climate change challenges will be pursued strongly.

| Risk         | i. Inadequate and timely allocation of fund  |
|--------------|--|
| Assessment:  | ii. Loss of agriculture land to soil erosion, landslide, flash flood and infrastructures development.  |
|              | iii. The climate change impact such as extreme weather condition can perpetuate drought, flood and outbreak of pest and diseases.  |
|              | iv. Cheap import opportunities of cereal grains and other field crops from across the border may also limit participation of private sector.   |
| Beneficiary: | <ul> <li>At the national level, the successful implementation of the program will<br/>reduce dependence on import of cereal, pulses and oil and improve<br/>food security and sufficiency levels.</li> </ul> |
|              | ii. At the local level, the program will benefit the farming households by creating meaningful and gainful employment opportunities.   |

#### **Program and SKRA Linkages**

| NKRA   | SKRA  | SKRA KPI   |
|--|---|--|
| Food secure and                                  | Enhance food and nutrition                        | Cereal production (mt/annum) - (RNR<br>Stat)   |
| sustained security                               |   | Rice Production (mt/annum) - (RNR Stat)  |
| Generate additional employment opportunities and |   | Annual cash income from sale of<br>RNR products (Nu. in millions/<br>annum) - (RNR Stat) |
| MDG+ achieved                                    | increase mean annual rural household cash income. | Percent contribution of agriculture income to total HH income (%) - (BLSS)               |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators                                       | Baselines | Plan Targets |
|--|--|-----------|--------------|
|  | Annual paddy production(MT/annum)                | 78730     | 98894        |
|  | Annual maize production(MT/annum)                | 79826     | 88365        |
| Outcome001:Increase field crops production for enhancing cereal self | Annual other cereal production(MT/annum)         | 24777     | 36478        |
| sufficiency  | Annual oilseeds and legumes production(MT/annum) | 5658      | 7000         |
|  | Cereal imports(%)                                | 34        | 24           |

| Results Levels (Output)  | Indicators  | Baseline | Plan Targets |
|--|---|----------|--------------|
|  | Area under-assured irrigation(acres)  | 67676    | 77827        |
|  | Productivity(MT/acres)  | 1.3      | 2            |
| Output001:Enhanced rice  | Area under farm mechanization (acres)   | 1271     | 5000         |
| production   | Number of rice processing facilities established and functional for commercialization(Nos.) | 1        | 6            |
|  | Area under maize cultivation(acre)  | 70312    | 71812        |
| Output002: Enhanced  | Seed replacement ratio(%)   | 24       | 50           |
| maize production   | Number of post-harvest facilities established and functional(Nos.)                          | 396      | 946          |
| Output003: Enhanced other cereal (Wheat, Buckwheat, Millet) production | Area under wheat, buckwheat and millet cultivation(acre)                                    | 24096    | 35607        |
|  | Area under oilseed production(acres)  | 1333     | 2000         |
| Output004: Enhanced oilseed production                                 | Processing facilities established and functional (Nos)                                      | 1        | 1            |
| Output005: Enhanced pulses production                                  | Area under pulses cultivation(acre)   | 2918     | 5000         |
| Output006: Enhanced service delivery                                   | Functional support service centers (Nos)  | 6        | 6            |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Rehabilitate and construct irrigation structures including R&D on water use efficiency  | 0.000   |
| Promote the use of HYV varieties  | 0.000   |
| Introduce, evaluate, assess and produce high yielding varieties including biotic and abiotic stress tolerant varieties and characterization of local germ plasm | 2.000   |
| Promote and demonstrate integrated plant nutrient management and soil fertility management including green manuring   | 0.000   |
| Promote and demonstrate integrated pest management technology including disease diagnosis and surveillance  | 4.500   |
| Promote mechanization services through FSSU, hiring services, mobile clinics, supply of machineries and including privatization                                 | 340.000 |
| Enhance the capacity of the farmers and extension agents on operation and maintenance of farm machineries   | 10.000  |
| Support and operationalize commercialization and marketing of rice in selected areas through farmers' group and private participation in ABSD areas             | 3.000   |

| Promote double cropping in potential areas as pre-rice maize   | 0.000   |
|--|---------|
| Production of quality certified seeds by strengthening the capacity of CBSP, RSG and NSC farms   | 0.000   |
| Introduce, evaluate and promote HYV disease tolerant varieties including quality protein maize and hybrid seeds                                      | 1.000   |
| Demonstrate IPM including the management of vertebrate pests   | 5.000   |
| Disseminate and promote Integrated nutrient management including sustainable land management technologies  | 2.000   |
| Support and promote improved storage facility and processing technologies for value addition   | 5.000   |
| Promote high yielding varieties of wheat and other cereals in potential areas  | 0.000   |
| Evaluate and promote high yielding varieties of wheat seeds (both spring and dry land wheat)   | 0.500   |
| Evaluate and characterize local germ plasm of buckwheat and millet for productivity improvement  | 1.000   |
| Develop and promote value addition to other cereals  | 2.000   |
| Develop and disseminate agronomic recommendation for improved cultivation methods  | 0.500   |
| Evaluate, assess and promote HYV oilseeds (mustard,rape seed and sunflower)including hybrid varieties  | 0.500   |
| Demonstrate integrated nutrient management practices   | 0.500   |
| Support and operationalize commercialization of oilseed production, processing and marketing through farmers' group and private sector participation | 1.000   |
| Promote large scale cultivation of pulses in potential geographic areas under organic management   | 0.500   |
| Facilitate marketing of pulses through grower' group formation   | 1.000   |
| Evaluate, assess and promote HYV pulses including the characterization of germ plasm or productivity improvement                                     | 0.000   |
| Strengthening institutional capacity of the Directorate  | 10.000  |
| Strengthening institutional capacity of the RDC Bhur   | 10.000  |
| Strengthening institutional capacity of the RDC Bajo   | 5.000   |
| Strengthening institutional capacity of the NPPC   | 5.000   |
| Strengthening institutional capacity of the NSSC   | 10.000  |
| Strengthening institutional capacityof the AMC   | 10.000  |
| Total:   | 430.000 |

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS                         | Department: DEPARTMENT OF AGRICULTURE |
|--|---------------------------------------|
| Program Name: National Horticulture<br>Commodity Development Program | Phase: Approved                       |

| Justification:      | The demand for horticultural crops to meet nutrition, food and income requirement is growing to keep up with increasing population, urbanization and disposable incomes. The domestic production especially vegetables is increasingly falling behind in meeting the domestic demand. This is resulting in growing importation of these products and corresponding trade imbalances. This program plans to revert this trend by strengthening the commodity chains of (i) vegetables, (ii) citrus, (iii) potato, (iv) fruits & nuts, (v) medicinal, aromatic & spice and (vi) mushrooms with greater emphasis on increasing production for meeting domestic requirement and enhancing income through internal trade and export.  This would require the design of interventions that will not only increase productivity but also expanding area under cultivation and improving product |  |  |
|---------------------|--|--|--|
|                     | handling/processing across the entire chain. Such interventions will necessarily involve systematic widening of all technical, institutional & policy bottlenecks which prevent farmers from engaging in increasing productivity.  |  |  |
| Strategy:           | i. National horticultural commodity development program will be implemented by the Dzongkhag & Geog administration with support from different central programs viz. Research & Development Centres, Engineering Division, National Plant Protection Centre, National Soil Service Centre, National Mushroom Centre, Agriculture Machinery Centre, National Seed Centre, National Post harvest Centre and National Organic Program. The overall coordination of commodity programs will be carried out by the commodity coordinators based in Horticulture Division. The program will adopt a strategy which is aimed at improving the national self-sufficiency, especially vegetables by the end of the 11th FYP.  |  |  |
|                     | ii. The programs will focus on key measures aimed at increasing the farm productivity, competitiveness and output of the targeted crop value chains to contribute to enhanced national food and nutrition security.  |  |  |
| Risk<br>Assessment: | i. Climate change risk (extreme weather conditions; pest and disease epidemics, break down of crop resistance)   |  |  |
|                     | ii. Funding risks (Inadequate RGoB funding support, limited donor projects)  |  |  |
|                     | iii. Human Resource Risk (Inadequate numbers of technically competent professionals)   |  |  |
|                     | <ul><li>iv. Private engagement risk (Lack of cooperation and interest from private agencies/individuals, unwillingness to invest in RNR commodity programs – PPP models)</li></ul>   |  |  |
|                     | v. Market related risks: (demand and supply not matching, limited market access)   |  |  |

| Beneficiary: | i. Farming communities;  |
|--------------|--|
|              | ii. Private entrepreneurs engaged in horticulture crop production and marketing. |

#### **Program and SKRA Linkages**

| NKRA                               | SKRA  | SKRA KPI  |  |
|------------------------------------|---|---|--|
| Poverty + reduced/MDG+<br>achieved | Accelerate RNR sector growth through              | Mean annual value of export (Nu. in million/annum) - (RNR Stat)                         |  |
|                                    | commercial farming                                | Mean annual volume of export (mt/annum) - (RNR Stat)                                    |  |
| Food secure and sustained          | Enhance food and nutrition security               | Vegetable production (mt/annum) – (RNR Stat)  |  |
| Poverty + reduced/MDG+<br>achieved | Generate additional employment opportunities and  | Annual cash income from<br>sale of RNR products (Nu. in<br>millions/annum) - (RNR Stat) |  |
|                                    | increase mean annual rural household cash income. | Percent contribution of agriculture income to total hh income (%) - (BLSS)              |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                  | Indicators                            | Baselines | Plan Targets |
|--|---------------------------------------|-----------|--------------|
|  | Annual vegetable production (MT)      | 44650     | 65200        |
|  | Annual citrus production(MT)          | 60993     | 67273        |
|  | Annual potato production (MT)         | 52116     | 78000        |
| Outcome 001 : Increase horticultural crop production for | Annual fruits and nuts production(MT) | 35530     | 38856        |
| enhancing nutrition and income                           | Annual MAPS production(MT)            | 5183      | 6000         |
|  | Annual mushroom production (MT)       | 89        | 119.3        |
|  | Annual import of vegetables (MT)      | 11619     | 5809         |

| Results Levels (Output)                       | Indicators   | Baseline | Plan Targets |
|---|--|----------|--------------|
|   | Area under vegetable cultivation (acres)   | 33532    | 38532        |
| Output 001:Increased vegetable production     | Average productivity (mt/acre)   | 1.30     | 1.70         |
|   | Functional post-production infrastructures (Nos.)                                | 307      | 522          |
| 0. 4 4.003. Day                               | Average productivity (kg/tree)   | 35       | 40           |
| Output 002:Promote citrus production          | Fruit bearing trees (Nos.)   | 3122356  | 3328431      |
| production                                    | Functional post-production infrastructures (Nos.)                                | 7        | 12           |
| Output 003:Enhance potato                     | Average productivity (mt/acre)   | 3.34     | 5            |
| production                                    | Functional post-production infrastructures (Nos.)                                | 349      | 799          |
|   | Average Productivity (kg/tree)   | 22       | 30           |
| Output 004:Promote fruits and nuts production | Fruit bearing trees (Nos.)   | 3191053  | 4135609      |
| nate production                               | Functional post-production infrastructures (Nos)                                 | 32       | 82           |
|   | Area under MAPS cultivation (acres)  | 7507     | 8633         |
| Output 005:Promote MAPS production            | Average productivity (Kg/acre)   | 752      | 827          |
|   | Functional post-production infrastructures (Nos)                                 | 13       | 44           |
| Output 006:Enhance mushroom production        | Functional focus farmer's groups and associations for mushroom cultivation (Nos) | 18       | 70           |
| production                                    | Functional post-production infrastructures (Nos)                                 | 33       | 50           |
| Output 007:Improve service delivery           | Functional support service centers (Nos)   | 6        | 6            |

Table 2: Programme Plan Outlay Summary

| Programme Activities  | Capital |
|---|---------|
| Support commercialization of vegetable production in potential areas  | 15.000  |
| Promotion of nutrition garden in food insecure geogs  | 3.000   |
| Promotion of protected cultivation technology (Greenhouses, shade houses, poly tunnels etc)                           | 25.000  |
| Supply of adequate quality seed and seedlings   | 10.000  |
| Generation and promotion of cost effective and safe pest management technologies including vertebrate pest management | 5.000   |
| Promotion of farm mechanization(Land preparation) for commercial cultivation of major vegetables                      | 12.000  |
| Strengthen R&D activities( Germplasm, Nursery and Production management) to increase production                       | 3.000   |
| Promotion of integrated plant nutrient management technologies(bio-fertilizers, green manures etc)                    | 5.000   |
| Establishment of packing house, storage and processing facilities   | 30.000  |
| Strengthen R&D activities (Germplasm, nursery and management practices) for production increase                       | 3.000   |
| Generation and promotion of cost effective and safe pest management technologies                                      | 5.000   |
| Promotion of IPNM technologies(bio-fertilizers, green manures etc)  | 1.000   |
| Promotion of new orchards and rehabilitation of old and declining orchards  | 20.000  |
| Adequate supply of quality (disease free, grafted) seedlings  | 5.000   |
| Establishment of packing house, storage and processing infrastructures  | 7.000   |
| Improve seed potato production including seed replacement and distribution system                                     | 3.000   |
| Strengthen R&D activities for production increase.  | 2.000   |
| Promote integrated nutrient management technologies   | 1.000   |
| Generation and promotion of cost effective and safe disease management practices                                      | 3.000   |
| Promote mechanization for labor intensive operations like planting, harvesting and inter-cultivation.                 | 5.000   |
| Establishment of storage and processing infrastructures   | 7.000   |
| Strengthen R&D activities (Germplasm, Nursery and Production management-Canopy management)                            | 1.000   |
| Generation & promotion of cost effective & safe pests management practices  | 1.000   |
| Promote IPNM & SFM activities   | 5.000   |
| Promote fruits & nuts for commercialization and nutrition   | 2.000   |
| Improve seed & seedling production & distribution system  | 2.000   |

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| ,  | 3.000<br>2.000 |
|--|----------------|
| Upscale MAPS cultivation in potential areas  | 2.000          |
|  |                |
| Improve seed & seedling production and distribution system   | 2.000          |
| Strengthen R&D activities (Germplasm, Nurseries & Production management)   | 2.000          |
| Generation and promotion of cost effective and safe disease management practices (Cardamom blight & Ginger rhizome rot)                            | 2.000          |
| Establishment of storage and processing infrastructures (CFC)  | 5.000          |
| Promotion of mushroom cultivation in potential areas (focus village, farmers groups, private individuals) - Shitake, Oyster, Button & Auricularia) | 4.000          |
| Generation and promotion of R&D activities (Germplasm - cultivated & wild, spawn, growth media, etc) for production increase                       | 2.000          |
| Improve spawn production and distribution system   | 0.000          |
| Establishment of storage and processing infrastructures for mushroom   | 2.000          |
| Strengthening institutional capacity of RDC- Wengkhar  | 5.000          |
| Strengthening institutional capacity of NMC  | 5.000          |
| Strengthening institutional capacity of NPHC   | 3.000          |
| Strengthening institutional capacity of NSC  | 5.000          |
| Strengthening institutional capacity of Horticulture Division  | 2.000          |
| Strengthening institutional capacity of RDC- Bhur  | 5.000          |
| Total:   | 30.000         |

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS         | Department: DEPARTMENT OF AGRICULTURE |
|--|---------------------------------------|
| Program Name: Agriculture Infrastructure Development | Phase: Approved                       |

| Justification:  The basic infrastructure required to enhance the production of cereals and horticulture crops is adequate irrigation facilities to meet the crop water requirements. The country has a large network of irrigation systems designed primarily to meet water demand for paddy cultivation. However, owing to inadequate maintenance, use of inappropriate technology and technical design, most of these irrigation systems have low water delivery efficiency. These problems have resulted in low crop yields. Irrigation infrastructures for Kamzhing are virtually non- existent. This land use type constitutes a major part of the total arable land and now supports important commercial crops such as potato, fruit crops, maize and vegetables. Therefore, continued investment in irrigation infrastructure will be required to enhance productivity and production of agricultural crops.  The importance of farm roads requires no emphasis as still about 31% of the rural population still reside one hour walking distance from road head.  Strategy:  i. The Department of Agriculture will plan and implement all major new and rehabilitation projects. Detailed design of the systems will be carried out by the Engineering Division while actual construction will be outsourced to local contractors.  ii. DoA will also implement storage, pumping and water management research programs in collaboration with relevant agencies.  iii. In collaboration with Horticulture Division, potential areas for irrigating commercial crops will be identified and appropriate irrigation technologies will be developed.  iv. To keep abreast of new technologies and enhance knowledge and skills of DoA engineers, a select number of farm road construction and its improvement will also be implemented.  v. The program will also initiate land development activities in selected Dzongkhags.  Risk  i. Risk of not getting the required minimum additional engineers especially at the RDCs.  ii. Availability of adequate and timely fund.  ii. The direct beneficiaries of irrigati |                |  |
|--|----------------|--|
| rural population still reside one hour walking distance from road head.  Strategy:  i. The Department of Agriculture will plan and implement all major new and rehabilitation projects. Detailed design of the systems will be carried out by the Engineering Division while actual construction will be outsourced to local contractors.  ii. DoA will also implement storage, pumping and water management research programs in collaboration with relevant agencies.  iii. In collaboration with Horticulture Division, potential areas for irrigating commercial crops will be identified and appropriate irrigation technologies will be developed.  iv. To keep abreast of new technologies and enhance knowledge and skills of DoA engineers, a select number of farm road construction and its improvement will also be implemented.  v. The program will also initiate land development activities in selected Dzongkhags.  Risk Assessment:  i. Risk of not getting the required minimum additional engineers especially at the RDCs.  ii. Availability of adequate and timely fund.  Beneficiary:  ii. The direct beneficiaries of irrigation program will be the farmers owning Chuzhing and those cultivating commercial crops such as potato, orchards, vegetables etc.  iii. Land development will benefit dry land and orchard owners.  iiii. Farm roads will benefit rural communities, traders and facilitate civil servants   | Justification: | horticulture crops is adequate irrigation facilities to meet the crop water requirements. The country has a large network of irrigation systems designed primarily to meet water demand for paddy cultivation. However, owing to inadequate maintenance, use of inappropriate technology and technical design, most of these irrigation systems have low water delivery efficiency. These problems have resulted in low crop yields. Irrigation infrastructures for Kamzhing are virtually non- existent. This land use type constitutes a major part of the total arable land and now supports important commercial crops such as potato, fruit crops, maize and vegetables. Therefore, continued investment in irrigation infrastructure will be required to enhance productivity and production |
| and rehabilitation projects. Detailed design of the systems will be carried out by the Engineering Division while actual construction will be outsourced to local contractors.  ii. DoA will also implement storage, pumping and water management research programs in collaboration with relevant agencies.  iii. In collaboration with Horticulture Division, potential areas for irrigating commercial crops will be identified and appropriate irrigation technologies will be developed.  iv. To keep abreast of new technologies and enhance knowledge and skills of DoA engineers, a select number of farm road construction and its improvement will also be implemented.  v. The program will also initiate land development activities in selected Dzongkhags.  i. Risk of not getting the required minimum additional engineers especially at the RDCs.  ii. Availability of adequate and timely fund.  Beneficiary:  i. The direct beneficiaries of irrigation program will be the farmers owning Chuzhing and those cultivating commercial crops such as potato, orchards, vegetables etc.  ii. Land development will benefit dry land and orchard owners.  iii. Farm roads will benefit rural communities, traders and facilitate civil servants   |                |  |
| research programs in collaboration with relevant agencies.  iii. In collaboration with Horticulture Division, potential areas for irrigating commercial crops will be identified and appropriate irrigation technologies will be developed.  iv. To keep abreast of new technologies and enhance knowledge and skills of DoA engineers, a select number of farm road construction and its improvement will also be implemented.  v. The program will also initiate land development activities in selected Dzongkhags.  i. Risk of not getting the required minimum additional engineers especially at the RDCs.  ii. Availability of adequate and timely fund.  i. The direct beneficiaries of irrigation program will be the farmers owning Chuzhing and those cultivating commercial crops such as potato, orchards, vegetables etc.  iii. Land development will benefit dry land and orchard owners.  iii. Farm roads will benefit rural communities, traders and facilitate civil servants  | Strategy:      | and rehabilitation projects. Detailed design of the systems will be carried out by the Engineering Division while actual construction will be  |
| irrigating commercial crops will be identified and appropriate irrigation technologies will be developed.  iv. To keep abreast of new technologies and enhance knowledge and skills of DoA engineers, a select number of farm road construction and its improvement will also be implemented.  v. The program will also initiate land development activities in selected Dzongkhags.  i. Risk of not getting the required minimum additional engineers especially at the RDCs.  ii. Availability of adequate and timely fund.  Beneficiary:  i. The direct beneficiaries of irrigation program will be the farmers owning Chuzhing and those cultivating commercial crops such as potato, orchards, vegetables etc.  ii. Land development will benefit dry land and orchard owners.  iii. Farm roads will benefit rural communities, traders and facilitate civil servants   |                |  |
| skills of DoA engineers, a select number of farm road construction and its improvement will also be implemented.  v. The program will also initiate land development activities in selected Dzongkhags.  i. Risk of not getting the required minimum additional engineers especially at the RDCs.  ii. Availability of adequate and timely fund.  Beneficiary:  i. The direct beneficiaries of irrigation program will be the farmers owning Chuzhing and those cultivating commercial crops such as potato, orchards, vegetables etc.  ii. Land development will benefit dry land and orchard owners.  iii. Farm roads will benefit rural communities, traders and facilitate civil servants  |                | irrigating commercial crops will be identified and appropriate   |
| Risk Assessment:  i. Risk of not getting the required minimum additional engineers especially at the RDCs.  ii. Availability of adequate and timely fund.  i. The direct beneficiaries of irrigation program will be the farmers owning Chuzhing and those cultivating commercial crops such as potato, orchards, vegetables etc.  ii. Land development will benefit dry land and orchard owners.  iii. Farm roads will benefit rural communities, traders and facilitate civil servants   |                | skills of DoA engineers, a select number of farm road construction   |
| Assessment: the RDCs.  ii. Availability of adequate and timely fund.  Beneficiary:  i. The direct beneficiaries of irrigation program will be the farmers owning Chuzhing and those cultivating commercial crops such as potato, orchards, vegetables etc.  ii. Land development will benefit dry land and orchard owners.  iii. Farm roads will benefit rural communities, traders and facilitate civil servants  |                |  |
| Beneficiary:  i. The direct beneficiaries of irrigation program will be the farmers owning Chuzhing and those cultivating commercial crops such as potato, orchards, vegetables etc.  ii. Land development will benefit dry land and orchard owners.  iii. Farm roads will benefit rural communities, traders and facilitate civil servants  |                |  |
| Chuzhing and those cultivating commercial crops such as potato, orchards, vegetables etc.  ii. Land development will benefit dry land and orchard owners.  iii. Farm roads will benefit rural communities, traders and facilitate civil servants   |                | ii. Availability of adequate and timely fund.  |
| iii. Farm roads will benefit rural communities, traders and facilitate civil servants  | Beneficiary:   | Chuzhing and those cultivating commercial crops such as potato, orchards,  |
|  |                | ii. Land development will benefit dry land and orchard owners.   |
| -  |                |  |

| NKRA  | SKRA               | SKRA KPI                                     |
|---|--------------------|--|
|   |                    | Cereal production (mt/annum) - (RNR Stat)    |
| Food secure and Enhance food a sustained nutrition securi |                    | Rice Production (mt/annum) - (RNR Stat)      |
|   | nutrition security | Vegetable production (mt/annum) – (RNR Stat) |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Base Year | Plan Targets |
|---|---|-----------|-----------|--------------|
|   | Paddy field area under functional irrigation systems (ha)   | 19200     | 2010      | 32000        |
| Outcome   | Horticulture (cash) crops area under irrigation (ha)  | 0         | 2012      | 300          |
| 001: Improved and functional agriculture infrastructure in place        | Percentage of households<br>living more than one hour<br>walking distance from a<br>road head (%) | 31        | 2010      | 15           |
|   | Proportion of existing farm roads under pliable condition (%)                                     | 0         | 2010      | 100          |
|   | Facilitated farm mechanization (acres)  | 0         | 2010      | 66348        |
| Results Levels (Output)   | Indicators  | Baseline  | Base Year | Plan Targets |
|   | New irrigation systems constructed (Nos)  | 0         | 2012      | 10           |
| Output 001:Increased paddy field area under improved irrigation systems | Existing irrigation systems improved (Nos)  | 0         | 2012      | 20           |
|   | Reservoirs constructed (Nos)  | 1         | 2012      | 20           |
|   | Area terraced for horticulture and field crops production (ha)                                    | 0         |           | 500          |
| Output 002:Install new irrigation systems for horticulture (cash) crops | New irrigation system installed (Nos)   | 0         | 2012      | 20           |

| Output 003:Reduced percentage of households living more than one hour          | Proportion of households living more than one hour walking distance from a road head (%) | 31                           | 2010 | 15                      |
|--|--|------------------------------|------|-------------------------|
| walking distance from a road head  | New farm roads constructed (Nos)   | 0                            | 2012 | 10                      |
|  | Proportion of farm roads under pliable condition (%)                                     | N/A                          | 2010 | 100                     |
| Output<br>004:Increased<br>existing  | Functional farm roads<br>database  | Database<br>in GIS<br>format |      | Updated<br>database     |
| farm roads<br>under pliable<br>condition                                       | Updated farm road maps by<br>Dzongkhag available   | farm<br>roads<br>maps        |      | Updated farm roads maps |
|  | Farm roads manual updated  | Old<br>manual                |      | Updated<br>manual       |
| Output 005:Increased terraced area for horticulture and field crops production |  | N/A                          | 2010 |                         |

# **Table 2: Programme Plan Outlay Summary**

| Program Activities  | Capital  |
|---|----------|
| Construction of new irrigation schemes for rice- based farming system   | 625.000  |
| Improve existing irrigation infrastructures (major)                     | 743.000  |
| Install new irrigation systems for horticulture (cash) crops            | 10.000   |
| Promote and strengthen effective functioning of WUAs                    | 0.000    |
| Construct water storage structures                                      | 10.000   |
| Develop Irrigation water allocation system in the country               | 3.000    |
| Develop Guidelines/Manuals for NIP implementation                       | 0.000    |
| Develop & update national irrigation database                           | 5.000    |
| Pilot implementation of lift/pump irrigation including water harvesting | 20.000   |
| Construction and improvement of farm roads                              | 176.00   |
| Support and strengthen farm road user groups                            | 0.000    |
| Deployment of machineries for land development and improvement          | 7.000    |
| Conduct farm road training/ workshop in dzongkhags and geogs            | 1.000    |
| Total   | 1600.000 |

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS                | Department: DEPARTMENT OF AGRICULTURE |
|---|---------------------------------------|
| Program Name: National Organic Development Programme (NOP). | Phase: Approved                       |

#### Justification: Organic farming in Bhutan is still in its infancy but there is growing interest from both the Government and the farming communities in developing this potential in Bhutan. This is because organic food is increasingly gaining popularity in mainstream agriculture around the world with growing global market. It therefore presents significant prospects for commercial agriculture as well as for promoting sustainable agriculture practices. Organic farming is known to help improve soil conditions and land use management for small farms. It can also provide for broader income base through diversification of crops. Further, processing and marketing of organic agricultural products could also create new off-farm rural employment opportunities, especially when export markets can be accessed effectively. Therefore, given the expected economic and environmental benefits, this program will continue to promote and strengthen enabling policy environment for the development of organic farming in Bhutan. i. Category 1 - Naturally organic - will be implemented in remote areas, areas Strategy: within National Parks and high altitude areas with the objective of conserving watershed, household food and nutrition security and developing integrated self-reliant farming systems. ii. Category 2 - will focus on selected areas on selected products linked to potential markets. Production for local markets by farmer groups will be organized to supply local markets with local organic guarantee with Bhutan organic logo for domestic market Category 3 - Any area suitable for production, any products identified as suitable for production for assured market with certification and for exports. Risk i. Having a National Organic Policy will determine the development of organic Assessment: sector in the future. ii. Priority and vision of the government towards organic sector will have direct bearing on the implementation of the planned activities. iii. Availability and timely allocation of resources will directly affect the program obiectives. iv. Coordination within and among the line agencies including private sector will affect market growth Beneficiary: i. Organic RNR sector ii. Small farm holders and commercial organic farmers iii. Organic traders iv. General consumers v. Country- environmental conservation

| NKRA   | SKRA  | SKRA KPI   |
|--|---|--|
| Sustainable utilization and management of natural resource | Enhanced sustainable forest, land, water and biodiversity resource management | Land area under organic/natural production (acres) - (RNR Stat)                          |
| Poverty + reduced/MDG+<br>achieved                         | Generate additional employment opportunities                                  | Annual cash income from sale of<br>RNR products (Nu. in millions/<br>annum) - (RNR Stat) |
|  | and increase mean annual rural household cash income.                         | Percent contribution of agriculture income to total hh income (%) - (BLSS)               |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome 001:Promote organic  | Organic production (Livestock, Agriculture) (MT/annum)                       | 65        | 980          |
| production for sustainable agriculture growth and rural                  | Income from organic production(Nu. in million)                               | 0         | 1570         |
| income   | Employment from organic sector(Nos)  | 4262      | 10000        |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets |
|  | Area under organic cultivation (acres)                                       | 2069      | 5560         |
| Output001:Increased organic agriculture production                       | Average productivity of asparagus (kg/acres)                                 | 670       | 750          |
|  | Average productivity buckwheat (kg/acres)                                    | 300       | 400          |
|  | Organic honey production(MT)   | 0         | 1            |
| Output002:Increased organic livestock production                         | Organic diary production- butter & cheese (MT)                               | 0         | 2            |
|  | Organic fish production(MT)  | 0         | 7.5          |
| Output003:Promote sustainable management and production of organic NWFPs | Collection of 5NWFPs under SFED compact (MT)                                 | 0         | 260          |
|  | Area of common property resources under organic management practices (acres) | 38558     | 50000        |

| Output004: Increased trade of organic produce and products | Organic regulation and certification system established and functional (Nos) | 0 | 2  |
|--|--|---|----|
|  | Products developed and marketed with organic brand(Nos)                      | 1 | 12 |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Upscale cultivation of organic commodities                                    | 4.000   |
| Support commercialization of as paragus and buckwheat cultivation             | 3.000   |
| Promote organic plant nutrient management technology                          | 3.000   |
| Generate and promote organic pest and diseases management technology          | 3.000   |
| Strengthen R&D activities for increased productivity                          | 2.000   |
| Establish organic seed system   | 1.000   |
| Organize education, advocacy and promotional programmes                       | 2.000   |
| Promote appropriate technology, tools and machinery                           | 2.500   |
| Conduct farmers' trainings on organic activities                              | 3.000   |
| Establish organic livestock-based project                                     | 0.000   |
| Increased area of common resources under organic management practices         | 1.000   |
| Promote organic animal health management                                      | 1.000   |
| Conduct R&D on organic technologies   | 3.000   |
| Promotion of sustainable management of NWFPs                                  | 0.000   |
| Initiate local assurance and certification and product development in NWFPs   | 0.500   |
| Develop management plans for organic NWFPs                                    | 0.000   |
| Institute certification systems for domestic and international market         | 2.000   |
| Institute certification systems for domestic and international trading        | 1.000   |
| Conduct awareness campaign on consumers, producers and traders                | 2.000   |
| Support groups for local and international assurance programmes for marketing | 3.000   |
| Carry our market promotion& branding for organic products                     | 3.000   |
| Total:  | 40.000  |

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS                     | Department: DEPARTMENT OF LIVESTOCK |
|--|-------------------------------------|
| Program Name: National Livestock Commodity Development Programme | Phase: Approved                     |

#### Justification:

Livestock production in Bhutan mainly includes dairy products, meat, fish and poultry products. Over the years, livestock sector witnessed significant progress and has contributed significantly to food and nutrition security of the populace. However, owing to several constraints and challenges, livestock sector has not grown rapidly as it could. A large share of national consumption of livestock products are still imported. Latest RNR statistics of 2012 suggest that about 80% of national domestic beef consumption requirements are still imported. Similarly, about 97% of total fish consumption and 83% of total pork consumption are all met from imports.

There is thus considerable potential for expanding livestock production beyond subsistence levels in view of the sizeable demand within the domestic market, particularly in the major urban centers. Therefore, in consideration of the huge potential of the sector to enhance the income generation capacity as well as improving the food and nutrition security status of the population, the program will continue to focus on creating an enabling environment to boost livestock production.

#### Strategy:

- i. Institute and strengthen national commodity & service Centers and implement commodity development plans.
- ii. Pursue pro-poor livestock development initiatives
- iii. Conduct value chain analysis of livestock commodities
- iv. Encourage investments in commercial livestock farming
- v. Explore possibilities of horizontal and vertical integration of mega farms to small producers
- vi. Institute improved services delivery system
- vii. Encourage and foster formation of groups/cooperatives
- viii. Standardize technology transfer process
  - ix. Pursue Public-Private Partnership (PPP) including FDI for all commodities-
  - x. Improve animal energy resources for draft power

| Risk<br>Assessment: | <ul> <li>Inadequate budget allocation can hamper the implementation of planned activities,</li> </ul> |
|---------------------|---|
|                     | ii. Unavailability of skilled human resources can be a bottle- neck                                   |
|                     | iii. Limited access to livestock inputs depending on import,  |
|                     | iv. Unaffordable and low quality feed   |
|                     | v. Limited land holding for livestock enterprises   |
| Beneficiary:        | i. Rural and urban livestockfarmers of Bhutan.  |
|                     | ii. Entrepreneurs engaged in livestock sector.  |
|                     | iii. Consumers  |

| NKRA                            | SKRA   | SKRA KPI  |
|---------------------------------|--|---|
| Food secure and sustained       | Enhance food and nutrition                                     | Egg production (million Nos/<br>annum) - (RNR Stat)                               |
|                                 | security   | Milk production (mt/annum) - (RNR Stat)   |
| Poverty + reduced/MDG+ achieved | Generate additional employment opportunities and increase mean | Annual cash income from sale of RNR products (Nu. in millions/annum) - (RNR Stat) |
|                                 | annual rural household cash income.                            | Percent contribution of agriculture income to total hh income (%) - (BLSS)        |
|                                 | Accelerate RNR sector growth through commercial farming        | Mean annual value of export<br>(Nu. in million/annum) - (RNR<br>Stat)             |
|                                 |  | Mean annual volume of export (mt/annum) - (RNR Stat)                              |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators                            | Baselines | Plan Targets |
|--|---------------------------------------|-----------|--------------|
|  | Milk Production(mt/year)              | 29625     | 40000        |
| Outcome001:Enhanced self-<br>sufficiency of livestock products | Egg production (Nos. in million/year) | 57        | 92           |
|  | Chicken production(mt/year)           | 909       | 1200         |
|  | Pork production(mt/year)              | 317       | 1000         |

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
|  | Fish production (mt/year)                                   | 65        | 750          |
| Outcome001:Enhanced self-  | Chevon production (mt/year)                                 | 63        | 150          |
|  | Beef production(mt/year)                                    | 513       | 600          |
| sufficiency of livestock products  | Honey production(mt/year)                                   | 15        | 27           |
|  | Fresh milk(mt/year)   | 17626     | 2643         |
|  | Eggs(%)   | 100       | 100          |
|  | Chicken(mt/year)  | 711       | 213          |
| Outcome002:Reduced import of   | Pork (mt/year)  | 1842      | 847          |
| livestock products   | Wet fish(mt/year)   | 1325      | 583          |
|  | Chevon (mt/year)  | 20        | 10           |
|  | Beef(mt/year)   | 5719      | 5089         |
|  | Fresh honey(mt/year)  | 3         | 1.5          |
|  | Milking cattle population (Nos.)                            | 70533     | 80410        |
| Output001:Enhanced livestock   | Improved cattle breed(Nos.)                                 | 72154     | 88526        |
| breed improvement  | Laying bird population(Nos.)                                | 289596    | 350000       |
|  | Broiler bird population(Nos.)                               | 64400     | 666000       |
|  | Improved pig population (Nos.)                              | 19711     | 30132        |
|  | Fingerling distribution for aquaculture(Nos.)               | 688078    | 2500000      |
| Output001:Enhanced livestock   | Goat population (Nos.)                                      | 43134     | 45290        |
| breed improvement  | Bee colonies in improved hives (Nos.)                       | 600       | 1045         |
|  | Community managed capture and recreational fisheries (Nos.) | 2         | 20           |
|  | Average growth of fingerlingsin6months (kgs)                | 0.35      | 0.65         |
| Output002: Enhanced production efficiency and livestock service delivery | Incidences of pandemic and epidemics diseases (Nos.)        | 26        | 15           |
|  | Feed and fodder utilization (%)                             | 70        | 90           |
|  | Households adopting stall feeding and composting (Nos)      | 3360      | 10000        |
|  | Average productivity of improved cows (Itrs/day)            | 5         | 7            |

| Output002: Enhanced production efficiency and livestock service delivery | Average productivity of improved poultry birds(Nos/year)                                 | 190 | 270  |
|--|--|-----|------|
|  | Average FCR of broiler chicken (kgs)   | 2.5 | 1.8  |
|  | Average fattening period of pigs(months)   | 12  | 9    |
|  | Households adopting bio-gas (Nos)  | 130 | 2500 |
| Output003: Promoted green livestock farming practices to                 | Organic livestock products for niche markets developed(Nos)                              | 0   | 5    |
| adapt/mitigate climate change  | Eco-friendly terrestrial crop<br>residue feed for backyard fish<br>farms developed (nos) | 0   | 20   |

 Table 2 : Programme Plan Outlay Summary

| Programme Activities  | Capital |
|---|---------|
| Produce high quality dairy inputs   | 30.000  |
| Produce high quality poultry inputs   | 45.000  |
| Produce high quality piggery inputs   | 34.250  |
| Produce high quality fishery inputs   | 24.700  |
| Produce high quality wild fishery inputs                                    | 21.500  |
| Improve dairy breeds to enhance productivity                                | 64.900  |
| Improve poultry breeds to enhance productivity                              | 53.500  |
| Improve pig breeds to enhance productivity                                  | 26.800  |
| Improve fish breeds to enhance productivity                                 | 2.800   |
| Improve wild fishery breeds to enhance productivity                         | 1.000   |
| Promote commercial egg and chicken production                               | 7.500   |
| Support commercial pork production  | 58.500  |
| Promote commercial fish production  | 58.000  |
| Promote commercial wild fish production                                     | 6.500   |
| Support dairy product value addition and diversification                    | 40.000  |
| Support poultry product value addition and diversification                  | 7.300   |
| Support piggery product value addition and diversification                  | 9.950   |
| Promote product value addition and diversification                          | 7.000   |
| Support wild fisheries product value addition and diversification           | 11.500  |
| Enhance professionalism and technical capacity for Dairy sector development | 13.000  |

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| Total:   | 1035.000 |
|--|----------|
| Promote green farming technology (Dairy, Poultry, Piggery, Fishery)                |          |
| Support commercial milk production   |          |
| Strengthen national level livestock support services                               |          |
| Strengthen regional livestock support services                                     |          |
| Enhance professionalism and technical capacity for livestock research development  |          |
| Enhance professionalism and technical capacity for feed and fodder development     |          |
| Enhance professionalism and technical capacity for animal health                   | 105.000  |
| Enhance professionalism and technical capacity for wild fishery sector development | 7.000    |
| Enhance professionalism and technical capacity for fishery sector development      | 6.000    |
| Enhance professionalism and technical capacity for piggery sector development      | 2.500    |
| Enhance professionalism and technical capacity for poultry sector development      | 3.800    |

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS          | Department: DEPARTMENT OF LIVESTOCK |
|---|-------------------------------------|
| Program Name: Targeted Highland Development Programme | Phase: Approved                     |

| Justification: | Highlanders and the nomadic communities play an important role in maintaining the integrity of the northern frontiers. However, over the years, the population of the herders and nomads are reported to be on decline. This is because herding in extreme climatic conditions entails hard work with no commensurate gains. Many of these nomadic communities continue to rely on traditional methods which are highly inefficient, laborious and less productive. |  |  |
|----------------|---|--|--|
|                | There is a growing body of evidence suggesting that the herding culture is increasingly becoming less attractive among the younger generations. If left unchecked, this continual decreasing trend will likely lead to the extinction of the nomadic culture and may likely compromise the integrity of the biodiversity resources in the high land areas.  |  |  |
|                | This program therefore will design and implement appropriate interventions that not only improves livelihoods of the high land communities but also promotes conservation of biodiversity and important watersheds.   |  |  |
| Strategy:      | <ul> <li>i. Institute a nodal agency to address the livestock priority needs of nomadic<br/>communities;</li> </ul>   |  |  |
|                | ii. Promote efficient management of rangelands and watersheds;  |  |  |
|                | iii. Promote and support organic livestock production;  |  |  |
|                | iv. Promote use of alternative energy sources.  |  |  |
|                | v. Promote eco-tourism and niche product development.   |  |  |
| Risk           | i. Limited accessibility to provide coordinated supports.   |  |  |
| Assessment:    | ii. Migration & alternative income sources  |  |  |
|                | iii. Acceptability of planned programs  |  |  |
| Beneficiary:   | i. Highland communities   |  |  |

| NKRA                            | SKRA   | SKRA KPI  |
|---------------------------------|--|---|
| Food secure and sustained       | Enhance food and nutrition security  | Milk production (mt/annum) - (RNR Stat)   |
| Poverty + reduced/MDG+ achieved |  | Annual cash income from sale of RNR products (Nu. in millions/annum) - (RNR Stat) |
|                                 | Generate additional employment opportunities and increase mean annual rural household cash income. | Percent contribution of agriculture income to total hh income (%) - (BLSS         |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                      | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome001: Maintained critical population of herders        | Yak population(Nos)  | 38011     | 40100        |
|  | Sheep population(Nos)  | 10783     | 12900        |
| and animals  | Yak herder population (No.of HH)                             | 1039      | 1039         |
| Results Levels(Output)                                       | Indicators   | Baseline  | Plan Targets |
|  | Livestock based ecotourism initiatives (Nos)                 | 0         | 7            |
| Output001: Increased alternate                               | Livestock organic product developed for niche markets (Nos.) | 0         | 5            |
| income generation sources                                    | Implement payment for environmental services(Nos)            | 0         | 1            |
|  | Livestock related festivals in the highland(Nos)             | 1         | 4            |
|  | Breeding yak bulls supplied (Nos)                            | 966       | 1016         |
|  | Milking yaks (Nos)   | 9227      | 10000        |
|  | Functional milk processing units(Nos)                        | 0         | 1            |
|  | Functional yak product value addition facilities(Nos)        | 0         | 1            |
| 0  | Model yak breeding farm(Nos)                                 | 0         | 1            |
| Output002: Enhanced highland livestock production efficiency | Animal health Outpost (Nos)                                  | 1         | 3            |
| and service delivery   | Yak farmers' groups(Nos)                                     | 1         | 5            |
|  | Breeding Bulls- Mithun and Nublang (Nos)                     | 1173      | 1373         |
|  | Area under improved pasture (Acre)                           | 150       | 1000         |
|  | Equine(Nos)  | 22        | 75           |
|  | Compact feed blocks for yaks supplied (mt)                   | 0         | 10           |
| Output003:Climate smart                                      | Solar lightings facilities as alternate energy (Nos)         | 0         | 500          |
| livestock technology promoted                                | Herders shelter(yak hair tents)                              | 0         | 150          |
|  | Bio gas plant (Nos)  | 0         | 2500         |

# **Table 2: Programme Plan Outlay Summary**

| Programme Activities  | Capital |
|---|---------|
| Promote alternative sources of income generation                          | 11.000  |
| Improve yak breeds for productivity enhancement                           | 10.500  |
| Promote yak product value addition and diversification                    | 5.000   |
| Enhance professionalism and technical capacity for yak sector development | 10.000  |
| Promote green farming technology  | 10.500  |
| Promote efficient use of animal energy                                    | 8.000   |
| Total:  | 55.000  |

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS                          | Department: DEPARTMENT OF AGRICULTURE MARKETING AND COOPERATIVES |
|---|--|
| Program Name: Agriculture Marketing & Cooperative Development Program | Phase: Approved  |

| Justification:      | Farming in Bhutan has largely remained subsistence although the sale of agriculture, livestock and forestry products continues to be a major source of income to many of the farmers. As an agrarian society where more than60% of population depend directly on farming, agriculture marketing can play a huge role in the growth and development of farming systems in Bhutan. Nonetheless, inspite of continuous effort by the Government to making the agriculture marketing system efficient and vibrant, the development of agriculture marketing and trade is still faced with several challenges.  Some of the main challenges are paucity of information on commodity prices, deep knowledge gap on demand-supply conditions and market outlet, minimal |
|---------------------|--|
|                     | economy of scale, extremely weak coordination between the Department and other technical Departments, inadequate mechanism for product standardization, grading, packaging and labeling, lack of product differentiation and lack of processing and value addition.  |
| Strategy:           | <ul> <li>Department-wise commodity focal persons will be further strengthened<br/>in line with the Departments' priorities to cater to the Cooperatives and<br/>Marketing needs effectively.</li> </ul>  |
|                     | <ol> <li>Focus on the implementation of the commodity wise programs through the<br/>regulation and promotion of farmers groups and cooperatives.</li> </ol>  |
|                     | iii. The focus, going forward, will be on developing and facilitating linkages<br>and networking between the major markets and the producers/dealers/<br>cooperatives.   |
|                     | iv. Conduct strategic market research and studies to the production plan for the potential commercial products.  |
|                     | v. Contact farming will continue to receive attention in the 11th FYP and will be strengthened and up-scaled to other commodities and clients.   |
| Risk<br>Assessment: | <ol> <li>Market Size: small population and scattered households makes marketing<br/>challenging as demand is small coupled with limited scope of economy of<br/>scale in production, collection or distribution.</li> </ol>  |
|                     | ii. Competition with Indian produce/products   |
|                     | iii. Ownership of new marketing interventions by farmers and traders   |
| Beneficiary:        | i. Farmers   |
|                     | ii. Traders/vendors/middlemen/entrepreneurs iii. Farmer groups and cooperatives  |
|                     | m. Tarrier groups and cooperatives   |

| NKRA   | SKRA   | SKRA KPI  |  |
|--|--|---|--|
| Poverty + reduced/MDG+ achieved                      |  | Mean annual value of export (Nu. in million/annum) - (RNR Stat)                   |  |
|  | Accelerate RNR sector growth through commercial farming                    | Mean annual volume of export (mt/annum) - (RNR Stat)                              |  |
|  |  | Real annual growth rate in RNR sector (%) - (NSB)                                 |  |
|  | Generate additional employment opportunities                               | Annual cash income from sale of RNR products (Nu. in millions/annum) - (RNR Stat) |  |
| and increase mean annual rural household cash income | Percent contribution of agriculture income to total hh income (%) - (BLSS) |   |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines | Plan Targets |
|---|--|-----------|--------------|
|   | Employment generated through farmers groups/Coops/OSFS. (Nos)                              | 580       | 1370         |
|   | Income generated through Farmers Group and Cooperative enterprises (Nu. million)           | 96        | 200          |
| Outcome001: Enhanced employment and income opportunities from sale of RNR | Employment generated through commercial farming such as contact farming, PPP and FDI (Nos) | 2723      | 4397         |
| products  | Rural household cash income through sale of RNR products (Nu. million/annum)               | 2203      | 3305         |
|   | Value of exports (Nu million/annum)  | 1623      | 3246         |
|   | Volume of exports(mt/annum)  | 62742     | 125484       |
| Results Levels (Output)   | Indicators   | Baseline  | Plan Targets |
| Output001: Promoted the   | Registered Cooperatives  | 25        | 50           |
| development of Farmers  | Registered Farmers Groups  | 225       |              |
| Groups and Cooperatives   | Functional cooperative shop (Nos)  | 1         |              |
| Output002: Increased establishment of functional OSFS                     | Functional OSFS (Nos)  | 25        | 65           |

| Output003:Increased  | MoUs signed and implemented (Nos)                                   | 6    | 16   |
|--|---|------|------|
|  | Functional institutional linkages<br>on commercial<br>Farming (Nos) | 2    |      |
| commercial farming enterprises   | Commercial farming enterprises supported (Nos)                      | 16   |      |
|  | Functional Community owned Company(Nos)                             | 2    |      |
| Output004:Promoted contact farming   | Households engaged in contact farming (Nos).                        | 1163 | 2000 |
| laming   | Area under contact farming(acres)                                   | 5000 |      |
| Output005: Market<br>Infrastructure developed  | Functional marketing infrastructure (Nos)                           | 56   | 166  |
| Output006:Increased domestic<br>and export market<br>Major domestic markets<br>explored(Nos) | Major export market sexplored (Nos)                                 | 2    | 5    |
|  | Major domestic markets explored (Nos)                               | 60   |      |
| Output007: Improved market   | Improvedmarketinformation in place (Nos)                            | 10   | 20   |
| information  | Increased modes of market information dissemination (Nos)           | 2    | 4    |
| Output008:Conduct market research and studies  | Market studies conducted (Nos)                                      | 1    | 5    |
| Output009:RNR marketing  | RNR marketing strategy formulated (Nos)                             | 0    | 1    |
| policy in place  | RNR marketing policy formulated (Nos)                               | 0    | 1    |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Awareness and promotion of FGs/Coops  | 2.000   |
| Capacity building of FGs/Coops  | 5.000   |
| Amendment of Cooperative Act of Bhutan, 2009 and Cooperative Rules and regulations 2010 | 2.000   |
| Support to business plans of FGs/Coops  | 5.000   |
| Establishment of Cooperative Development Fund(CDF)                                      | 10.000  |
| Linking of FG/Coop's product to markets   | 1.000   |

| Development and construction of OSFS  Supply of basic in puts/equipment for OSFS  L.500  Commission support to OSFS  Establishment of cooperative shops  Eol concepts building and Signing of MoU on prioritized commodities such as rice, fruits, MAP basedon priorities and markets available  Support to contact farming, PPP, FDI and commercial farming enterprises based on priorities of commodities  Establish Community owned company on pilot basis (concept of Fab India) for organic agriculture, eco-tourism and or arts and crafts with market outlets through Fab India stores  Construction of RNR sales counter for agri/livestock/forestry products  Construction of cluster and collection depots for agri /livestock/forestry products  Construction and up-gradation of urban market shed and auction yard  Renovation of existing market sheds  Promotion of major RNR products and trial marketing  Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  Construction of cold and ambient stores and processing facilities | Supply of primary processing and packaging equipment                                  | 10.000  |
|--|---|---------|
| Supply of basic in puts/equipment for OSFS  Commission support to OSFS  Establishment of cooperative shops  Eol concepts building and Signing of MoU on prioritized commodities such as rice, fruits, MAP basedon priorities and markets available  Support to contact farming, PPP, FDI and commercial farming enterprises based on priorities of commodities  Establish Community owned company on pilot basis (concept of Fab India) for organic agriculture, eco-tourism and or arts and crafts with market outlets through Fab India stores  Construction of RNR sales counter for agri/livestock/forestry products  Construction of cluster and collection depots for agri /livestock/forestry products  Construction and up-gradation of urban market shed and auction yard  Renovation of existing market sheds  Promotion of major RNR products and trial marketing  Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  6.000   |   |         |
| Establishment of cooperative shops  Eol concepts building and Signing of MoU on prioritized commodities such as rice,- fruits, MAP basedon priorities and markets available  Support to contact farming, PPP, FDI and commercial farming enterprises based on priorities of commodities  Establish Community owned company on pilot basis (concept of Fab India) for organic agriculture, eco-tourism and or arts and crafts with market outlets through Fab India stores  Construction of RNR sales counter for agri/livestock/forestry products  Construction of cluster and collection depots for agri /livestock/forestry products  Construction and up-gradation of urban market shed and auction yard  Renovation of existing market sheds  Promotion of major RNR products and trial marketing  Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  2.000  Market-driven RNR production promotion by linking FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  6.000  |   |         |
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| Eol concepts building and Signing of MoU on prioritized commodities such as rice, fruits, MAP basedon priorities and markets available  Support to contact farming, PPP, FDI and commercial farming enterprises based on priorities of commodities  Establish Community owned company on pilot basis (concept of Fab India) for organic agriculture, eco-tourism and or arts and crafts with market outlets through Fab India stores  Construction of RNR sales counter for agri/livestock/forestry products  Construction of cluster and collection depots for agri /livestock/forestry products  Construction and up-gradation of urban market shed and auction yard  Renovation of existing market sheds  Promotion of major RNR products and trial marketing  Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  6.000  | * *   | 0.000   |
| Establish Community owned company on pilot basis (concept of Fab India) for organic agriculture, eco-tourism and or arts and crafts with market outlets through Fab India stores  Construction of RNR sales counter for agri/livestock/forestry products  Construction of cluster and collection depots for agri /livestock/forestry products  Construction and up-gradation of urban market shed and auction yard  Renovation of existing market sheds  Promotion of major RNR products and trial marketing  Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  6.000  | Eol concepts building and Signing of MoU on prioritized commodities such as rice,-    | 1.500   |
| ganic agriculture, eco-tourism and or arts and crafts with market outlets through Fab India stores  Construction of RNR sales counter for agri/livestock/forestry products  Construction of cluster and collection depots for agri /livestock/forestry products  Roadside vendors shed constructed for agri/livestock/forestry products  Construction and up-gradation of urban market shed and auction yard  Renovation of existing market sheds  Fromotion of major RNR products and trial marketing  Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  30.000   | · · · · · · · · · · · · · · · · · · ·   | 6.000   |
| Construction of cluster and collection depots for agri /livestock/forestry products  Roadside vendors shed constructed for agri/livestock/forestry products  3.000  Construction and up-gradation of urban market shed and auction yard  Renovation of existing market sheds  5.000  Promotion of major RNR products and trial marketing  Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  6.000  | ganic agriculture, eco-tourism and or arts and crafts with market outlets through Fab | 30.000  |
| Roadside vendors shed constructed for agri/livestock/forestry products  Construction and up-gradation of urban market shed and auction yard  35.000 Renovation of existing market sheds  Fromotion of major RNR products and trial marketing  Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  3.000  | Construction of RNR sales counter for agri/livestock/forestry products                | 5.000   |
| Construction and up-gradation of urban market shed and auction yard  Renovation of existing market sheds  Fromotion of major RNR products and trial marketing  Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  5.000   | Construction of cluster and collection depots for agri /livestock/forestry products   | 6.000   |
| Renovation of existing market sheds Promotion of major RNR products and trial marketing 4.000 Minimum support price for selected priority commodities to enhance self-sufficiency Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing Strengthen market information database and dissemination Conduct value chain analysis and market intelligence studies for major agricultural commodities Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents 2.000 Construction of cold and ambient stores and processing facilities  5.000   | Roadside vendors shed constructed for agri/livestock/forestry products                | 3.000   |
| Promotion of major RNR products and trial marketing  Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  2.000  Construction of cold and ambient stores and processing facilities  6.000  | Construction and up-gradation of urban market shed and auction yard                   | 35.000  |
| Minimum support price for selected priority commodities to enhance self-sufficiency  Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  12.000  2.000  2.000  2.000  2.000   | Renovation of existing market sheds   | 5.000   |
| Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  3.000  2.000  2.000  5.000  6.000   | Promotion of major RNR products and trial marketing                                   | 4.000   |
| tutions, mega projects, schools, armed forces, hotels, urban markets.  Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  3.000  2.000  6.000   | Minimum support price for selected priority commodities to enhance self-sufficiency   | 12.000  |
| poultry and NWFPs.  Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  2.000  |   | 3.000   |
| keting  Strengthen market information database and dissemination  Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  2.000   |   | 2.000   |
| Conduct value chain analysis and market intelligence studies for major agricultural commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  5.000  2.000  |   | 2.000   |
| commodities  Conduct diagnostic studies on major marketing problems in domestic and export markets  Development of policy and strategy documents  Construction of cold and ambient stores and processing facilities  5.000  2.000  | Strengthen market information database and dissemination                              | 3.000   |
| markets 2.000  Development of policy and strategy documents 2.000  Construction of cold and ambient stores and processing facilities 6.000   | ,   | 5.000   |
| Construction of cold and ambient stores and processing facilities 6.000  |   | 2.000   |
| 1 2  | Development of policy and strategy documents  | 2.000   |
| Total: 180.00  | Construction of cold and ambient stores and processing facilities                     | 6.000   |
|  | Total:  | 180.000 |

Au Name: MINISTRY OF AGRICULTURE AND FORESTS

Department: COUNCIL FOR RENEWABLE NATURAL RESOURCE RESEARCH OF BHUTAN

Program Name: RNR Research & Extension Services Program

Department: COUNCIL FOR RENEWABLE NATURAL RESOURCE RESEARCH OF BHUTAN

Phase: Approved

| Justification:      | With the restructuring of the RNR research system in the 10 <sup>th</sup> FYP, the administration and management of the Research and Development Centers were entrusted with the relevant technical Departments. The CoRRB secretariat was given the new mandated to screen RNR research proposals for relevance & quality control and monitor and evaluate research programs through reviews, impact studies and recommend changes and adjustments in RNR policies and programs.  |
|---------------------|--|
|                     | The generation of RNR technologies over the years has contributed to productivity enhancements of many agriculture commodities. However, in-spite of its progress, Bhutan continues to depend on India and other countries in meetings its demand for agriculture commodities. Any effort to boost domestic production is expected to increasingly exert pressure on natural resources and its carrying capacity. There is therefore, the need to constantly review, evaluate and make adjustments in generation of RNR technology to ensure that the technology generations are relevant to the emerging issues and challenges. |
| Strategy:           | <ul> <li>i. Building up appropriate research agenda through consultation considering the One Gewog Three Products (OGTP), area/crop potential and marketability.</li> <li>ii. Conduct regular evaluation and impact studies and use these studies to recommend strategies &amp; policies to enhance land expansion, market, irrigation, farm mechanization and consolidation of agriculture production areas, in the research agenda. Collate feedbacks from various stakeholders of MoAF to respond to various needs and challenges</li> </ul>  |
| Risk<br>Assessment: | i. Financial resources constraint     ii. Limited research capability.   |
|                     | iii. Adoption of technology by the farmers/entrepreneurs   |
| Beneficiary:        | i. Farmers in terms of access to upto-date and innovative technologies   |
|                     | ii. Scientific community   |
|                     | iii. Agribusiness houses   |

| NKRA                            | SKRA   | SKRA KPI   |
|---------------------------------|--|--|
| Poverty + reduced/MDG+ achieved | Accelerate RNR sector growth through commercial farming  | Real annual growth rate in RNR sector (%) - (NSB)  |
|                                 | Generate additional employment opportunities and increase mean annual rural household cash income. | Annual cash income from sale of<br>RNR products (Nu. in millions/<br>annum) - (RNR Stat) |

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
| Outcome 001 : RNR research                                     | Proportion of farming HH adopting RNR technologies (%)                        | 30        | 80           |
| and extension service delivery strengthened                    | RNR technology available for use by the farmers (Nos)                         | 76        | 236          |
| Results Levels (Output)  | Indicators  | Baseline  | Plan Targets |
| Output 001:Research agenda setting coordinated                 | Consultative meetings conducted (Nos)   | 10        | 26           |
| Setting coordinated  | Research plans in place (Nos)   | 6         | 12           |
|  | Policy/strategic research conducted (Nos)                                     | 1         | 11           |
| Output 002:Policy / strategic research coordinated & conducted | Emerging research [CC initiatives] conducted (Nos)                            | 1         | 11           |
|  | Council meetings conducted (Nos)  | 5         | 15           |
| Output 003:Research information                                | Functional research databases (Nos)   | 0         | 2            |
| managed & disseminated   | RNR journals published (Nos)  | 5         | 10           |
| Output 004:Research  | MoUs signed (Nos)   | 8         | 14           |
| collaborations & linkages established                          | Memberships acquired (Nos)  | 3         | 8            |
|  | M&E / feedback reports published (Nos)  | 3         | 13           |
| Output 005:Research system monitored and evaluated             | Technologies screened [incl: climate smart technologies] (Nos)                | 22        | 40           |
| monitored and evaluated  | Adoption & impact studies conducted [incl: climate smart technologies] (Nos.) | 1         | 11           |
|  | Extension policies reviewed & strategy developed (Nos)                        | 0         | 3            |
| Output 006:RNR research & extension policies, programs &       | Baseline surveys conducted (Nos)  | 0         | 1            |
| strategies streamlined   | Technology generation framework improved (Nos)                                | 3         | 4            |
|  | Technology dissemination process improved (Nos)                               | 0         | 1            |
| Output 007:Research knowledge base & outreach strengthened     | Accreditation / award system instituted (Nos)                                 | 0         | 1            |

|   | Subscriptions formalized (Nos.)                                   | 1  | 3   |
|---|---|----|-----|
| Output 008:Socio-economic research services delivered                     | Socio-economic study reports produced (Nos.)                      | 2  | 6   |
|   | Articles collated & screened for publishing in RNR Journal (Nos.) | 60 | 100 |
| Output 009: Research budget allocation & disbursement system streamlined  | System of Budget allocation for research streamlined (Nos)        | 0  | 1   |
| Output 010:Climate smart initiatives streamlined & technologies delivered | Climate sensitive project proposals finalized (Nos)               | 0  | 10  |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Conduct annual RNR Research, planning & review meetings to set research agenda                                      | 0.000   |
| Identify & implement collaborative strategic, socio-economic and policy research                                    | 3.000   |
| Conduct RNR research conferences/lectures and seminar   | 1.000   |
| Establish and maintain database on research activities, inventory of technologies, publications and human resources | 2.000   |
| Publication of RNR policy briefs /annual reports/journals   | 1.000   |
| Identify international institutions and sign MoU to enhance linkages  | 1.000   |
| Screen RNR technologies through TRC   | 0.000   |
| Conduct monitoring and evaluation of research including impact studies [incl: climate smart technologies]           | 0.000   |
| Draft RNR research strategy   | 0.300   |
| Conduct baseline survey on extension service delivery [at beginning & end of EFYP]                                  | 2.000   |
| Process RNR innovations and IPR issues  | 1.000   |
| Institute accreditation/ award system for researchers   | 0.000   |
| Prepare Climate smart PPP strategy and guideline for RNR sector   | 0.200   |
| Initiate Climate smart commercial PPP farming ventures  | 3.000   |
| Institutionalize, mobilize and manage research fund   | 0.500   |
| Conduct monitoring and evaluation of research [incl: climate smart technologies]                                    | 0.000   |
| Coordinate the implementation and monitoring of GCCA project  | 3.000   |
| Establish climate change information management system  | 2.000   |
| Total:  | 20.000  |

Au Name: MINISTRY OF AGRICULTURE AND FORESTS

Department: COUNCIL FOR RENEWABLE NAT-URAL RESOURCE RESEARCH OF BHUTAN

Program Name: School Agriculture Program

Phase: Approved

| Justification:      | The School Agriculture Program (SAP) contributes to attaining the socio economic development goals of the Bhutan by-way empowering youths with sound entrepreneurial knowledge and skills in framing. With increasing need for nutritionally balanced food for the school youths and withdrawal of WFP feeding program by 2018, SAP will play an important role in contributing to the food and nutrition security of school students and help in maintaining the school enrollment, particularly in rural communities of Bhutan. In the recent survey done by Institute for Management Studies [IMS2010], 49% of the respondents reported that SAP offers a great opportunity in school feeding and nutrition, especially in schools with boarding facilities.  Further, program will also prepare the school youths to take up farming on a commercial basis and will contribute to lowering the unemployment situation in the country. |
|---------------------|---|
| Strategy:           | <ul> <li>i. SAP will continue to focus on integrated agriculture which includes vegetable production, poultry rearing, dairy, piggery and fishery.</li> <li>ii. The program will use the experiences gained from the past to cover more schools under the program in the11th FYP.</li> <li>iii. The program will also continue to upscale the farm to school approach in the11th FYP.</li> <li>iv. With the view to sustaining the SAP, the program will, during the plan period, work towards including agriculture as one of the subject in the school curriculum.</li> </ul>   |
| Risk<br>Assessment: | <ul> <li>i. Possible conflict with academic schedule and SAP receiving second priority.</li> <li>ii. Ownership of SAP by schools.</li> <li>iii. Inadequate fund to implement SAP</li> </ul>   |
| Beneficiary:        | <ul><li>i. SAP schools,</li><li>ii. Educated youths engaged in farming.</li><li>iii. Farmers</li></ul>  |

| NKRA   | SKRA   | SKRA KPI   |
|--|--|--|
| Improved Disaster resilience and management mainstreamed | Environmental education enhanced in schools  | % of schools practicing green initiatives  |
| Poverty + reduced/MDG+ achieved                          | Preventative, Promotive and Rehabilitative Healthcare services                                     | Stunting ( Height for age )  |
|  | Generate additional employment opportunities and increase mean annual rural household cash income. | Annual cash income from<br>sale of RNR products<br>(Nu. in millions/annum) -<br>(RNR Stat) |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome001: Farming as a livelihood option promoted among school youth | Proportion of school dropouts taking up farming as a source of livelihood(%) | 0         | 15           |
|  | Percent contribution of SAP to totals chool food basket (%)                  | 20        | 30           |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets |
|  | School sunder SAP (Nos.)   | 200       | 300          |
|  | FAT trained(Nos)   | 150       | 300          |
| Output001:School Agriculture<br>Program Strengthened                   | Educate displaced constitution in a disp                                     | _         | 100          |
|  | Educated school youth trained to take up agriculture(Nos)                    | 0         | 100          |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Train community leaders to link with SAP and input supply    | 1.000   |
| Support vegetables and livestock production activities       | 9.000   |
| Develop training modules on agriculture& nutrition education | 0.500   |
| Prepare calendar and leaflets for awareness on SAP           | 0.000   |
| Develop a guideline and implement accreditation of SAP       | 0.000   |
| Organize awareness campaigns and literary activities         | 1.000   |
| Linking community to schools(F2S)                            | 8.000   |
| Operationalize agriculture subject in class IX— XII          | 0.500   |
| Total:   | 20.000  |

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS    | Department: SECRETARIAT |
|---|-------------------------|
| Program Name: Biodiversity Conservation Program | Phase: Approved         |

| Justification:      | Although the country's natural environment is relatively pristine, the globally significant genetic diversity (both plant and animal) of Bhutan is under increasing threat. Introduction of new crop and animal genetic varieties with the aim of boosting farm production is expected to adversely impact the local genetic resources in the long-run. Further, management of newly introduced varieties invariably necessitates new agronomic approaches which would gradually lead to the erosion of the age old traditional knowledge and culture associated with biological resources. It will therefore be in the interest of Bhutan to conserve traditional genetic materials for national food security and resilience to climate change.  Additionally, tapping the potential of biodiversity resources to enhance sustainable livelihood would be an effective means of linking environment to development. This would require putting in place appropriate legal frameworks |
|---------------------|--|
|                     | and institutional capacity to ensure its sustainable use   |
|                     | i. Implement ex-situ conservation activities in collaboration with other agencies.   |
| Strategy:           | ii. Coordinate in situ conservation of domestic biodiversity in collaboration with farmers, local communities and other stakeholders.  |
|                     | iii. Implement sustainable use program from bio-prospecting and other related perspectives in collaboration with other relevant agencies.  |
|                     | iv. Strengthen biodiversity information and access to it in collaboration with relevant stakeholders.  |
|                     | v. Up-grade the center to Directorate to strengthen institutional capacity for effective delivery of the mandates.   |
|                     | i. Inadequate human resource and technical expertise.  |
| Risk<br>Assessment: | ii. Inadequate support from collaborators.   |
| Assessinelli.       | iii. Lack of policy support/policy change  |
|                     | i. Farmers.  |
| Beneficiary:        | ii. Private sector and business establishment.   |
|                     | iii. Conservationists.   |

| NKRA   | SKRA   | SKRA KPI   |
|--|--|--|
| Indigenous wisdom, arts and crafts promoted for rural livelihood | Enhance conservation of plant and animal genetic resource and natural heritage sites | Inventory of traditional<br>knowledge related to<br>biological resource (No) (NBC) |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
| Outcome 001:Conservation  | Diversity of biological resources conserved ex-situ(Nos)  | 439       | 855          |
| and sustainable utilization of biodiversity enhanced                                      | Status of agro-biodiversity maintained on-farm(Nos)   | 13        | 16           |
|   | Natural products marketed (Nos)   | 2         | 6            |
| Results Levels (Output)   | Indicators  | Baseline  | Plan Targets |
|   | Accessions of PGRFA germ-plasm at the crop gene bank including field Gene Bank(Nos)   | 1358      | 2500         |
|   | Functional backup facility<br>for ex-situ collection of plant<br>genetic resources for food and<br>agriculture(Nos.)        | 0         | 1            |
|   | Functional invitro and cryo<br>bank facilities for plant genetic<br>resources(Nos)  | 0         | 1            |
| Output001:Increased and diversified ex-situ   | Doses of animal germ-plasm (semen)at the animal gene bank (Nos)   | 3500      | 8000         |
| conservation of biodiversity  | Animal germ-plasm (embryos)of domestic animal breeds in animal gene bank(Nos)   | 0         | 20           |
|   | Animal germ-plasm(DNA)of domestic animal breeds (Nos)   | 0         | 1500         |
|   | Nucleus farms of selected local breeds(Nos)   | 3         | 4            |
|   | Living collection diversity in ex situ conservation at the botanical garden(Nos)  | 400       | 800          |
|   | Species of animal genetic resources characterized (Nos)   | 4         | 6            |
| Output002:Increased on-farm conservation and sustainable utilization of agro-biodiversity | Sites with community level initiatives on conservation and sustainable use of local crops varieties and animal breeds (Nos) | 25        | 35           |

| Output003:Enhanced capacity of the local communities to adapt to      | Resilient local crop varieties promoted in selected sites (Nos)  | N/A    | 2      |
|---|--|--------|--------|
|   | Functional community seed banks(Nos)   | 3      | 6      |
| changing climate  | Farmers trained on local genetic resources(Nos)  | 1500   | 3000   |
| Output004:Enabling legal and policy environment for                   | Policies addressing agro-<br>biodiversity and access and<br>benefit-sharing in place(Nos)                      | Draft2 | 2      |
|   | National implementation<br>mechanism for agro- biodiversity<br>and access and benefit sharing in<br>place(Nos) | 0      | 2      |
| biodiversity conservation<br>and sustainable use program<br>developed | Amended Biodiversity Act 2003 (Nos)  | 1      | 1      |
| uevelopeu   | Biodiversity Rules and Regulations in place(Nos)   | 0      | 1      |
|   | Revised National Biodiversity<br>Strategy and Action Plan in<br>place(Nos)                                     | 1      | 1      |
|   | Information on the risk status of targeted biological resource group available(Nos)                            | 0      | 4      |
|   | Herbarium specimens(Nos)   | 10,000 | 15,000 |
| Output005 Ingressed assess  | Invertebrate reference collection available(Nos)   | 0      | 1      |
| Output005:Increased access to quality biodiversity information        | Check list of horticultural crop diversity and crop wild relatives(Nos)  | 0      | 2      |
|   | Awareness raising initiatives(Nos)   | 8      | 16     |
|   | Targeted users accessing biodiversity information of the country through Bhutan Biodiversity portal(Nos)       | n/a    | 1500   |

|   | Proportion of TK associated with<br>biological resources available on<br>the National TK database (%)                 | 4   | 100         |
|---|---|---|-------------|
| Output006:Sustainable utilization of biological   | ABS agreements formalized (Nos)   | 2   | 6           |
| resources promoted  | Community based biological resources management groups supported through Bhutan access and benefit sharing funds(Nos) | 3   | 8           |
| Output007: Enhanced   | Biodiversity Stakeholder coordination mechanism in place(Nos)   | 0   | 1           |
| institutional capacity to promote coordination of biodiversity conservation and sustainable use programs. | Status of NBC   | Non-<br>Department<br>agency at<br>program<br>level | Directorate |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Explore, collect, characterize and conserve PGR germplasm in the gene bank, upgrade gene bank facilities                 | 2.100   |
| Establish invitro and cryo-bank facilities   | 2.500   |
| Collect and conserve animal germ-plasm (Semen)   | 2.000   |
| Characterize and document animal genetic diversity   | 1.500   |
| Establish embryo collection facilities   | 2.000   |
| Establish of DNA bank and collect and conserve DNA samples   | 1.500   |
| Establish nucleus herd for prioritized breeds of poultry and strengthen existing herds.                                  | 1.500   |
| Explore, rescue, conserve and maintain living collection.  | 3.000   |
| Explore and implement innovative measures to conserve and promote on-farm PGR diversity                                  | 2.000   |
| Implement innovative measure to promote on farm conservation of local animal breeds                                      | 5.500   |
| Promote PPP for native livestock farming and utilization   | 1.500   |
| Conduct comprehensive assessment of endemic and invasive plants and develop recommendations for conservation/management. | 8.300   |
| Conduct risk assessment of crop genetic resources and develop conservation strategy.                                     | 0.500   |
| Conduct threat/risk assessment of domestic animal genetic resources and develop conservation strategy.                   | 0.500   |

| Conduct research on varietal selection, release and promotion for adoption to increase crop genetic base and climate resilience in selected sites              | 0.300  |
|--|--------|
| Review and develop policies addressing agro- biodiversity and ABS.   | 0.000  |
| Develop national implementation mechanism for agro-biodiversity and ABS.   | 0.000  |
| Review and amend Biodiversity Act of 2003  | 0.000  |
| Formulate and implement Biodiversity Rules and Regulations   | 0.000  |
| Review NBSAP (BAP III,2009) to align with Aichi 2020 targets and mainstream the same into national plans and programs  | 4.000  |
| Develop one-stop web-based portal for national biodiversity information with features for citizen science participation and data analysis                      | 1.000  |
| Explore, collect and document targeted floral diversity in the country   | 5.000  |
| Coordinate inventory and documentation of selected invertebrate groups   | 0.500  |
| Coordinate inventory and documentation of horticultural crop diversity and crop wild relatives   |        |
| Publish books and articles on biodiversity of Bhutan   | 0.000  |
| Conduct inventory and documentation of TK associated with biological resources   | 0.200  |
| Promote bio-prospecting and bio-discovery initiatives  | 9.000  |
| Identify and implement potential bio-prospecting initiatives with community engagement   | 1.000  |
| Identify species requiring sustainable management interventions and promote community based management.  | 1.500  |
| Coordinate the implementation of programme of Work of Convention on Biological diversity and other biodiversity related regional and international obligations | 0.300  |
| Strengthen institutional capacity of NBC   | 0.300  |
| Establish community seed banks in selected areas.  | 1.500  |
| Capacity building of farmers on adaptation to changing climate and importance of broad genetic base  | 3.000  |
| Establish bio-cultural facilities; upgrade information centre at the botanical garden; organize biodiversity fairs, exhibitions and documentaries              | 2.500  |
| Total:   | 65.000 |
|  |        |

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS                 | Department: BHUTAN AGRICULTURE & FOOD REGULATORY AUTHORITY |
|--|--|
| Program Name: National Biosecurity and Food Safety Programme | Phase: Approved  |

| Justification: | Bhutan has a rich and varied biological diversity of regional and global importance that can be matched by few countries in the world. However, in the process of modernizing the Bhutanese economy and with ever increasing exchange of biological materials through trade, the status of Bhutan's biodiversity wealth are increasingly at risk from new pest and diseases. Be this as it may, Bhutan's capacity to effectively manage bio-security issues are relatively under developed. Further, as with many developing countries, food safety issues in the country are on the rise. An inefficient response to this issue will not only have negative affect on the health of the population but will also negatively impact the growth of tourism sector in Bhutan. Concurrently, the institutional capacity to manage food safety issues in Bhutan is also very weak. |
|----------------|--|
| Strategy:      | <ul> <li>i. Strengthen capacity in risk assessment and management as a foundation of bio-security and food safety measures.</li> <li>ii. Strengthen regulatory and analytical capacity through upgrading scope of laboratory analyses.</li> <li>iii. Infrastructure development in strategic locations/entry points to optimize efficiency of bio-security measures.</li> <li>iv. Create mass awareness on roles and stakes of the public in bio-security and food safety activities through educational activities, awareness programmes and certification processes.</li> </ul>  |
|                | v. Draft/review legislations/standards related to bio-security and food safety   |
| Risk           | <ul><li>i. Unavailability of land for construction of quarantine station, biological pits and offices.</li><li>ii. Shortage of skilled human resource.</li></ul>   |
| Assessment:    | iii. Inadequate funds for containment operation of random incidences of pest and disease epidemics.  |
|                | iv. Stakeholder resistance to bio-security and food safety regulatory measures.  |
|                | i. Government institutions/agencies.   |
| Beneficiary:   | ii. General public.  |
| ,              | iii. Importers, exporters, farmers.  |
|                | iv. Business operators.  |

| NKRA                            | SKRA   | SKRA KPI   |
|---------------------------------|--|--|
| Poverty + reduced/MDG+ achieved | Accelerate RNR sector growth through commercial farming  | Mean annual value of export (Nu. in million/annum) - (RNR Stat)                          |
|                                 | Generate additional employment opportunities and increase mean annual rural household cash income. | Annual cash income from sale of<br>RNR products (Nu. in millions/<br>annum) - (RNR Stat) |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
| Outcome 001 : National<br>Biosecurity and Biosafety<br>Enhanced | Proportion of known exotic pests<br>and diseases of animals prevalent<br>in neighboring countries/world<br>prevented from entry into the<br>country (%) | 80        | 100          |
|   | Proportion of known exotic pests<br>and diseases of plants prevalent<br>in neighboring countries/world<br>prevented from entry into the<br>country (%)  | na        | 100          |
|   | Percent of genetically modified plants and animals prevented from introduction into the country (%)   | na        | 100          |
|   | Percent of unauthorized genetically modified products prevented from entry into the country (%)   | na        | 100          |
| Outcome 002 : Wholesome   | No. of HACCP/ISO 22000 certified establishments increased (Nos)   | 6         | 15           |
| Food Safety and Quality Assurance Enhanced                      | Mandatory labeling of imported food commodities (%)   | 0         | 100          |
| Results Levels (Output)   | Indicators  | Baseline  | Plan Targets |
| Output 001:Regulatory<br>and Quarantine System<br>strengthened  | Number of diagnostic labs<br>established at the<br>Quarantine Stations and<br>Dzongkhags  | 3         | 5            |
|   | Number of Plant & Animal<br>Quarantine Stations equipped<br>with decontamination facilities   | 0         | 5            |

|  | Functional biosafety regulatory system in place (Nos)   | 0  | 1   |
|--|---|----|-----|
|  | Biosafety Technical Working Group (BTWG) established and functional (Nos)   | 0  | 1   |
| Output 002:Biosafety measures enhanced                                     | Fully functional GMO laboratory (Nos)   | 0  | 1   |
|  | Biosafety Act of Bhutan drafted (Nos)   | 0  | 1   |
|  | Guidelines and protocols for regulation of GMOs/LMOs and GM products developed (Nos)  | 0  | 4   |
|  | Percent of food handlers trained and licensed (%)   | 70 | 100 |
|  | Food processing establishments certified (Nos)  | 6  | 11  |
|  | Food safety policy document developed and implemented (Nos)   | 0  | 1   |
| Output 003:Functional food safety and quality assurance system in place    | Food safety standards developed<br>for local food commodities based<br>on codex principles (Nos)  | 0  | 10  |
|  | Categories of food handlers training manual developed (Nos)   | 1  | 5   |
|  | Linkages with export inspection<br>and certification agencies of major<br>trading partner countries to ensure<br>safety of the food imports (Nos) | 0  | 3   |
|  | Scope of accredited test parameters for NFTL (Nos)  | 15 | 30  |
| Output 004: National Food<br>Testing Laboratory (NFTL) fully<br>functional | Functional LMO and GMO product detection laboratory (Nos)   | 0  | 1   |
|  | Establishment of functional satellite food testing labs at five major entry points (Nos)  | 0  | 5   |
|  | Research on local products for standard baseline setting completed (Nos.)   | 0  | 10  |

# **Table 2: Programme Plan Outlay Summary**

| Programme Activities  | Capital |
|---|---------|
| Establish and strengthen regulatory and quarantine infrastructures and equipment        | 50.000  |
| Develop laboratory facilities   | 7.000   |
| Conduct education and awareness program on biosecurity                                  | 1.000   |
| Enhance e-Governance  | 0.000   |
| Strengthen rapid response and containment mechanism                                     | 0.000   |
| Conduct consumer awareness advocacy programs  | 1.000   |
| Conduct consumer awareness advocacy programs on food safety                             | 3.000   |
| Develop food safety guideline and policy  | 3.000   |
| Conduct food sample analysis for various test parameters including GMO and LMO products | 0.000   |
| Enhancement of e-Governance at national food testing laboratory                         | 0.000   |
| Total:  | 65.000  |

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS       | Department: SECRETARIAT |
|--|-------------------------|
| Program Name: Rural Development Training Programme | Phase: Approved         |

| Justification:      | Farming provides huge prospect for income generation and employment. Rising domestic food demand & increasing import of agriculture commodities has increased the opportunity for rural youth to engage in farming. Besides, it is also a priority of the Government to transform farming into a commercial venture. RDTC therefore, sees huge opportunity in specialized vocational training aimed at enhancing the capacity the farmers and youth to effectively manage farming enterprises. Besides, with the registration of farmers groups and cooperatives increasing every year, the demand for specialized training has increased rapidly. Addressing the capacity gaps of the farmers to manage their farms on a business model would contribute to positioning the subsistence farming system on a more commercial footing. |
|---------------------|---|
| Strategy:           | <ul> <li>i. The RDTC will engage with relevant clients in the formulation of training needs and training plans.</li> <li>ii. Long duration training that require special facilities will be conducted at the RDT center while short and management level training will be conducted at decentralized locations across the country to facilitate maximum participation, especially the women participants.</li> <li>iii. The center will attempt to make farming attractive by means of diversification, mechanization and providing decentralized training, creating interface between financer, promoter and youth.</li> </ul>   |
| Risk<br>Assessment: | <ul><li>i. Strong urban pull for the rural youths means the targeted population of the programme may not be available as planned.</li><li>ii. Availability of adequate fund on time</li></ul>   |
| Beneficiary:        | <ul><li>i. Rural Youth;</li><li>ii. Farmer's group and cooperative's office bearers;</li><li>iii. School students and focal agriculture teachers;</li></ul>   |

| NKRA                                | SKRA   | SKRA KPI  |
|-------------------------------------|--|---|
| Poverty + reduced/<br>MDG+ achieved | Generate additional employment opportunities and increase mean annual rural household cash income. | Annual cash income from sale of RNR products (Nu. in millions/annum) - (RNR Stat)  Percent contribution of agriculture income to total hh income (%) - (BLSS) |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
| Outcome 001 : Enhanced capacity of youths and  | Proportion of trained rural youths competent to start farm business enterprises (%)   | 50        | 75           |
| farming communities on farm management   | Proportion of trained executives members applying business management skills (%)  | 50        | 75           |
| Results Levels (Output)  | Indicators  | Baseline  | Plan Targets |
| Output 001:Enhanced knowledge  | Youth and farmers trained on farm business Management (Nos)   | 473       | 3212         |
| and skills on farm management  | Farmer's group & cooperative members trained on Value chain analysis (Nos)  | 13        | 600          |
| Output 003:Enhanced capacity of the executive members of farmers groups & cooperatives | Executive members of farmers' group & cooperatives trained on leadership and management skills (Nos)                                  | 755       | 1000         |
|  | Farmers Group/Cooperative members participated in awareness training (Nos).   | 13        | 3000         |
| Output 004:Improved capacities of extension officials                                  | Extension Officers trained<br>on Business Planning, Farm<br>Economics, Financial Mgt.<br>and Market and Value Chain<br>Analysis (Nos) | 22        | 600          |
| Output 006:Conducted training on school agriculture                                    | Students and teachers attend agriculture training programme (Nos)   | 241       | 660          |
|  | Training need assessment conducted (Nos);   | 2         | 4            |
| Output 007:Strengthened institutional capacity   | Technology promoted as<br>Technology Park (Nos)   | 6         | 10           |
|  | Post training evaluation/<br>surveys (Nos)  | 1         | 3            |

## Table 2: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Conduct farm business training on poultry, piggery, dairy, vegetable, fruit, mushroom                | 4.000   |
| Conduct management training for executive members of farmer's groups/cooperatives                    | 2.000   |
| Conduct awareness training workshop on cooperative principles and governance                         | 1.000   |
| Conduct training on Business Planning, Farm Economics, Financial Mgt., Market & Value Chain Analysis | 2.000   |
| Conduct rapid market analysis & value chain analysis training  | 2.000   |
| Train students and focal agriculture teachers on school agriculture programme                        | 2.000   |
| Conduct post training evaluations & training need assessment   | 1.000   |
| Develop/update training modules including technology park  | 2.000   |
| Strengthen institutional capacity of RDTC in response to training demand                             | 5.000   |
| Total:   | 21.000  |

| Au Name: MINISTRY OF AGRICULTURE AND FORESTS            | Department: SECRETARIAT |
|---|-------------------------|
| Program Name: Coordination and Support Services Program | Phase: Approved         |

| Justification: | The secretariat consists mainly of policy planning division, administratio and finance division, information and communication and human resource division. These divisions play an important role in the overall performance of the Ministry. Given the size and the technical mandate of the Department under the Ministry, strengthening these divisions through institutional reform and capacity enhancement on areas such as strategic planning, coordinatio and monitoring would greatly contribute to improving the effectiveness of the technical Departments. Further, the secretariat also serves as the immediate contact point for addressing cross-cutting issues such as gender, poverty environment, disasters etc. Proper mainstreaming of these cross cutting issue into the plans and policies would warrant continuous capacity enhancements of the secretariat. The secretariat will also work on new initiatives such as climate smart agriculture and disaster risk management in the 11th plan |  |
|----------------|--|--|
| Strategy:      | <ul> <li>i. Provide strategic interventions in coordination, collection, management and dissemination of RNR information, both statistical and spatial.</li> <li>ii. Review and draft new policies and acts, development of strategies and guidelines</li> <li>iii. Conduct policy impact studies and develop communication strategy</li> </ul>  |  |
|                | iv. Development and implement HRD master plan, improve service delivery, streamline M&E and ICT  |  |
|                | v. Review and monitor budget and expenditure   |  |
| Risk           | i. Lack of skilled human resources.  |  |
| Assessment:    | ii. Funding delay would lead to delay in implementation of activities hence affecting the overall outcome of the Ministry.   |  |
|                | i. Departments and agencies under MoAF;  |  |
| Beneficiary:   | ii. Farmers,   |  |
|                | iii. Students/educational research institutes.   |  |

| NKRA                                  | SKRA                                     | SKRA KPI  |
|---------------------------------------|--|---|
|                                       |  | Average performance rating  |
| Strengthened Bhutanese                | Enhanced efficiency and                  | Outsourcing non-core functions                                      |
| Identity, social cohesion and harmony | effectiveness of RNR<br>service delivery | TAT of commonly availed services reduced by/maintained at least 70% |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                    | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
|  | Average performance rating (%)   | NA        | 90           |
| Outcome 001 : 11th FYP Targets of the MoAF realized        | Percent improvement in annual budget delivery (actual annual expenditure against the revised annual budget)(%) | 61        | 100          |
| Results Levels (Output)                                    | Indicators   | Baseline  | Plan Targets |
|  | New polices formulated and endorsed (Nos)  | 6         | 8            |
| Output 001:RNR Policies and<br>Legislations strengthened   | Acts amended/formulated and submitted (Nos)  | 15        | 19           |
|  | Strategies/guidelines developed for effective planning (Nos)   | 7         | 9            |
|  | Socioeconomic studies conducted (Nos)  | NA        | 1            |
|  | RNR statistical publication released (Nos)   | 6         | 11           |
| Output 002:RNR statistics and                              | RNR Census conduced (Nos)  | 2         | 3            |
| information management system strengthened                 | Gender Information system incorporated in RNR statistics   | No        | Yes          |
|  | GIS information Portal developed   | 0         | 1            |
|  | Disaster information incorporated in RNR statistics  | No        | Yes          |
|  | Midterm and Terminal evaluation conducted (Nos)  | NA        | 2            |
| Output 003:Coordination and                                | Impact/evaluation studies conducted (Nos)  | NA        | 3            |
| Monitoring of the plan programs strengthened               | GNH Committee meetings convened (Nos)  | NA        | 200          |
|  | PSC meetings convened (Nos)  | NA        | 20           |
|  | GPMS/PlaMS operationalization  | No        | Yes          |
|  | Annual reports produced (Nos)  | 0         | 5            |
| Output 004:Administration and management services improved | Quarterly budget review and monitoring conducted (Nos)   | NA 15     |              |
| management services improved                               | Biannual Audit exercises (Nos)   | NA        | 10           |

| Output 005:Investment target for                       | New investment plan/projects/<br>PPP approved (Nos)                     | NA | 3   |
|--|---|----|-----|
| the RNR Sector realized for<br>11th Plan               | Capital fund mobilized through external resources for the 11th plan (%) | NA | 100 |
| Output 006:Service delivery enhanced                   | TAT reduced or maintained by 70%  | 55 | 13  |
|  | HR master plan developed and implemented                                | 0  | 1   |
| Output 007:Human resource management and development   | HR information system developed and operational                         | 0  | 1   |
| services institutionalized and strengthened            | Agencification conducted for the Ministry                               | 0  | 1   |
|  | Weekly HR committee Meetings conducted (Nos)                            | NA | 200 |
|  | IEC Radio programs developed and aired (Nos)                            | 25 | 65  |
| Output 008:Development                                 | IEC TV programs developed and aired (Nos)                               | 42 | 92  |
| of information education communication (IEC) materials | IEC print materials developed and distributed (Nos)                     | 68 | 198 |
|  | TV spot and MTV developed and aired (Nos)                               | 14 | 34  |
|  | Live panel discussions aired (Nos)                                      | 18 | 58  |
| Output 009:Enhanced                                    | ICT services made available (Nos)                                       | 21 | 31  |
| dissemination of RNR ICT services                      | Geog RNR centres provided with internet connectivity (Nos)              | NA | 205 |
|  | RNR staff having access to RNR information and technologies (Nos)       | NA | 100 |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Conduct policy needs and gap analysis  | 0.600   |
| Review and prioritize policy formulation   | 0.500   |
| Draft and submit land related rules(exchange and conversion)                               | 1.000   |
| Develop RNR disaster management plans and strategy   | 1.000   |
| Revise/formulate and submitted guidelines for lease of GRF land for commercial agriculture | 0.500   |

| Conduct impact study  | 1.000   |
|---|---------|
| Publish annual RNR statistical books  | 0.000   |
| Conduct surveys   | 5.000   |
| Mainstreaming Gender-disaggregated data on the number of food insecure people and communities in the RNR database | 0.540   |
| Purchase server and other associates components   | 0.450   |
| Conduct consultation workshop   | 0.000   |
| Secure TA for setting up of data base in collaboration with ICIMOD  | 0.200   |
| Conduct weekly GNHC meetings  | 0.000   |
| Coordinate and convene PSC meetings   | 0.300   |
| Conduct quarterly review meetings (GPMS)  | 0.000   |
| Prepare and publish of annual reports   | 0.000   |
| Conduct mid-term evaluation   | 0.500   |
| Conduct terminal evalution  | 0.250   |
| Coordinate and conduct RNR Conferences  | 2.000   |
| Coordinate and conduct quarterly budget meetings  | 0.000   |
| Conduct audit meetings  | 0.000   |
| Formulate new Projects for donor funding  | 0.000   |
| Develop HR Master plan  | 0.600   |
| Design website  | 0.400   |
| Update information on present staff data  | 0.100   |
| Institute/strengthen online performance appraisal system  | 0.100   |
| Construct new Secretariat Building  | 175.000 |
| Publish RNR newsletter (bi-monthly)   | 0.000   |
| Print Dzongkha newsletter   | 0.000   |
| Publication of RNR information directory  | 0.000   |
| Publish RNR annual magazine   | 0.000   |
| Publish IEC materials   | 1.000   |
| Produce RNR video program   | 5.820   |
| Produce RNR radio Programs  | 0.800   |
| Produce RNR musical video   | 0.600   |
| Produce RNR radio jingles   | 0.300   |
| Produce RNR TV spots  | 1.250   |
| General Advertisement/Announcement  | 0.000   |
| Coordinate and arrange air time in slots radio  | 0.110   |

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| Total:  | 205.040 |
|---|---------|
| Conduct HRC meeting   | 0.000   |
| Train gewog extension agents on ICT know- hows                    | 0.000   |
| Develop forest fire volunteer communication system                | 0.300   |
| Use Data Center at Thimphu Tech Park                              | 0.000   |
| Develop RNR document management system                            | 0.500   |
| Connect sub-centres to centers using VPN                          | 1.000   |
| Initiate video conferencing facility to regional research centers | 2.000   |
| Launch RNR Unified Messaging System                               | 0.520   |
| Launch ICT Helpdesk system for the ministry                       | 0.200   |
| Improve internet lease line for the ministry                      | 0.000   |
| Coordinate and arrange air time in slots TV                       | 0.600   |

## **ROADS & BRIDGES**

| Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT                           | Department: DEPARTMENT OF ROADS |
|---|---------------------------------|
| Program Name: Construction and Up-gradation of Southern East-West Highway | Phase: Draft                    |

| Justification: | Recognizing roads as the main economic lifeline, the Government has accorded the highest priority to the construction and improvement of primary and secondary national highways. To this end, the construction of 743 km Southern East-West Highway (SEWH) began in 2011. The construction of some segments of the SEWH comprising of approximately 356 km (approx. 50% of the total length) could not be completed during the 10 <sup>th</sup> FYP. This program will facilitate the construction of the remaining segments of the SEWH in the 11FYP. When completed, this highway will provide reliable and safe connective infrastructure for the Bhutanese commuting between the eastern and western Bhutan and vice-versa. The SEWH will also provide linkage to the regional highway network such as the Asian Highway Network. |  |
|----------------|--|--|
| Strategy:      | <ul> <li>i. The Department will continue its role of design, supervision, quality control and coordination with the actual construction works contracted out to private sectors.</li> <li>ii. With a view to ensure the quality construction and to achieve economy of scale, importance will be given to mechanizing construction activities while continuing to implement environmentally friendly road construction techniques.</li> <li>iii. To incentivize the contractors to ensure quality of construction, the Department has initiated awarding construction plus maintenance contracts in the 10FYP. This strategy will be continued in the 11FYP.</li> </ul>  |  |
| Risk           | i. Landslide and flash flood.  |  |
| Assessment:    | ii. Cooperation from the communities.  |  |
| Beneficiary:   | All Bhutanese  |  |

| NKRA   | SKRA  | SKRA KPI   |
|--|---|--|
| Strengthened Bhutanese identity, social cohesion and harmony | Bridges constructed and replaced to improve access                                  | No. of bridges with Bhutanese architectural features (DoR)             |
|  | Bridges constructed and replaced to improve access                                  | No. of temporary (bailey) bridges replaced (DoR)                       |
| Sustained Economic Growth                                    | Construction and up<br>gradation of Primary National<br>Highways incorporating EFRC | KM of Primary National<br>Highways constructed in EFRC<br>manner (DoR) |

| Carbon Neutral/Green Climate resilient development | Construction and up<br>gradation of Primary National<br>Highways incorporating EFRC | KM of Primary National<br>Highways up-graded in EFRC<br>manner (DoR)    |
|--|---|---|
| Improved public service                            | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery           | Average performance rating (Govt. Performance Management System - GPMS) |
| delivery   | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery           | TAT for public services reduced   |
| Corruption reduced                                 | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery           | Anti-corruption Strategy implemented                                    |

**Table 1: Program Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome 001 : Improved access to socio-economic facilities for beneficiaries | Travel time in trucking hours along the Southern East West highway (Hrs) | 46.5      | 30           |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets |
| Output 001:Construction and  | Southern east-west highway constructed (Nos.)                            | 338.97    | 695.15       |
| up-gradation of Southern East-<br>West Highway completed                     | Existing southern east-west highway upgraded to PNH standard (Nos.)      | 186.82    | 189.82       |
|  | East west highway (Nos.)   | 1         | 2            |

**Table 3: Programme Plan Outlay Summary** 

| Program Activities                             | Capital  |
|--|----------|
| Construction of Samtse-Phuentsholing Highway   | 428.821  |
| Construction of Raidak-Lhamoizhingkha Highway  | 334.858  |
| Construction of Lhamoizhingkha-Sarpang Highway | 1366.710 |
| Construction of Gelephu-Panbang Highway        | 1793.360 |
| Construction of Panbang-Nanglam Highway        | 706.673  |
| Construction of Deothang-Nanglam Highway       | 799.069  |
| Construction of Samdrupcholing-Samrang Highway | 289.086  |
| Construction of Samrang-Jomotshangkha Highway  | 1221.34  |
| Up-gradation of Manitar-Raidak Highway         | 355.997  |
| Total  | 7295.915 |

| Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT                      | Department: DEPARTMENT OF ROADS |
|--|---------------------------------|
| Program Name: Up-gradation/Improvement of Northern East-West Highway | Phase: Draft                    |

| highways as the main mode of internal transport. Therefore, safe, reliable and efficient road-network is crucial for promoting balanced regional development. The northern east-west highway is one of the oldest highways and have contributed significantly to facilitating the movement of people and goods from western to eastern region and vice-versa. The highway will continue to serve as the principal mode of internal transport for the people of northeastern, north central and north western part of Bhutan. Therefore, sustained investment will be required to not only help maintain the highway but also to meet the growing demand of larger and heavier transport. This program will continue to improve and upgrade the existing highway to facilitate free flow of the traffic, reduce travel time and improve safety of the travellers.  Strategy:  i. DoR will continue its role of design, supervision, quality control and coordination with the actual construction works contracted to private sector.  ii. To ensure the quality construction and to achieve economy of scale, importance will be given to mechanizing construction activities while continuing to implement environmentally friendly road construction techniques.  iii. To incentivize the contractors to ensure quality of construction DoR has initiated awarding construction plus maintenance contracts in the 10 <sup>th</sup> FYP. This strategy will be continued in the 11FYP.  Risk  Assessment:  i. Landslides and flash floods  ii. Availability of adequate fund on time; iiii. Adequate manpower. |                |  |
|---|----------------|--|
| coordination with the actual construction works contracted to private sector.  ii. To ensure the quality construction and to achieve economy of scale, importance will be given to mechanizing construction activities while continuing to implement environmentally friendly road construction techniques.  iii. To incentivize the contractors to ensure quality of construction DoR has initiated awarding construction plus maintenance contracts in the 10 <sup>th</sup> FYP. This strategy will be continued in the 11FYP.  Risk  i. Landslides and flash floods  Assessment:  ii. Adequate manpower.   | Justification: | The northern east-west highway is one of the oldest highways and have contributed significantly to facilitating the movement of people and goods from western to eastern region and vice-versa. The highway will continue to serve as the principal mode of internal transport for the people of northeastern, north central and north western part of Bhutan. Therefore, sustained investment will be required to not only help maintain the highway but also to meet the growing demand of larger and heavier transport. This program will continue to improve and upgrade the existing highway to facilitate free flow of the traffic, reduce |
| Assessment:  ii. Availability of adequate fund on time;  iii. Adequate manpower.  | Strategy:      | <ul> <li>coordination with the actual construction works contracted to private sector.</li> <li>ii. To ensure the quality construction and to achieve economy of scale, importance will be given to mechanizing construction activities while continuing to implement environmentally friendly road construction techniques.</li> <li>iii. To incentivize the contractors to ensure quality of construction DoR has initiated awarding construction plus maintenance contracts in the 10<sup>th</sup> FYP.</li> </ul>  |
| iii. Adequate manpower.   | Risk           | i. Landslides and flash floods   |
| iii. Adequate manpower.   | Assessment:    | ii. Availability of adequate fund on time;   |
|   |                | · · · · · · · · · · · · · · · · · · ·  |
| Beneficiary:   1. Travellers;   | Beneficiary:   | i. Travellers;   |
| ii. Transport companies   |                |  |
| iii. Farmers  |                |  |

| NKRA  | SKRA  | SKRA KPI   |
|---|---|--|
| Carbon Neutral/<br>Green Climate resilient<br>development | Construction and maintenance of road network strengthened through standards, specifications and geometrics improvement for all weather access road to ensure safety | Travel time in trucking hours along the NEWH (DoR) |

|  | Construction and up gradation of Primary National Highways incorporating EFRC | KM of Primary National<br>Highways up-graded in EFRC<br>manner (DoR)    |
|--|---|---|
| Strengthened Bhutanese identity, social cohesion and harmony | Bridges constructed and replaced to improve access                            | No. of bridges with Bhutanese architectural features (DoR)              |
| Improved public service                                      | Enhanced efficiency and<br>Effectiveness of in Public service<br>delivery     | Average performance rating (Govt. Performance Management System - GPMS) |
| delivery   | Enhanced efficiency and<br>Effectiveness of in Public service<br>delivery     | TAT for public services reduced   |
| Corruption reduced   | Enhanced efficiency and<br>Effectiveness of in Public service<br>delivery     | Anti-corruption strategy implemented                                    |

#### **Table 1: Program Results Level**

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome 001 : Enhanced connectivity between eastern and western Bhutan | Travel time in trucking hours along the Northern East West Highway (Hrs) | 20        | 16           |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets |
| Output 001:Northern East-West<br>Highway upgraded to all weather       | Northern East-West highway upgraded to PNH (Km)                          | 158.39    | 238.39       |
| access road  | Road network open to traffic at all times (Km)                           | NA        | 546          |

## Table 3: Program Plan Outlay Summary

| Program Activities   |          |
|--|----------|
| Up-gradation of Kheri-Yadhi highway  | 343.299  |
| Up-gradation of Wangdue-Chuserboo highway  |          |
| Up-gradation of Semtokha-Wangdue highway   |          |
| Conduct feasibility study and initiation of road tunneling from Yusipang to Nahi on NEWH |          |
| Total  | 1364.438 |

| Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT   | Department: DEPARTMENT OF ROADS |
|---|---------------------------------|
| Program Name: Construction and upgrada-<br>tion/Improvement of roads connecting Hydro<br>Power Projects | Phase: Draft                    |

| Justification: | While the national highway network has expanded, it is still limited in term of connectivity, coverage and ability to meet the growing demands of larger and heavier transport. Further, roads in Bhutan are generally narrow with sharp curves, steep gradient and therefore not suitable for heavy load lorries. In order to facilitate faster development of hydro power projects, it is essential to put in place better quality roads that not only supports increasing number of traffic volume but also enables transportation of heavier equipment and materials efficiently to these hydropower project sites. Towards this end, this program will support the construction of new roads required to connect the project sites and improve the overall quality of existing highways connecting hydro project sites to accommodate 30-70 ton trucks. |
|----------------|--|
| Strategy:      | <ul> <li>DoR will continue its role to design, supervise, control quality and coordinate<br/>with the actual construction works contracted out to private sector.</li> </ul>   |
|                | ii. To ensure the quality construction and to achieve economy of scale, importance will be given to mechanizing construction activities while continuing to implement environmentally friendly road construction techniques.   |
|                | iii. To incentivize the contractors to ensure quality of construction, DoR has initiated awarding construction plus maintenance contracts in the 10 FYP. This strategy will be continued in the 11 FYP.  |
| Risk           | i. Landslides and flood  |
| Assessment:    | ii. Availability of fund on time   |
|                | iii. Availability of adequate human resources.   |
| Beneficiary:   | The commuters of the concerned road and the Project. In the long run it will benefit the whole nation.   |

| NKRA   | SKRA  | SKRA KPI   |
|--|---|--|
| Strengthened Bhutanese identity, social cohesion and harmony | Bridges constructed and replaced to improve access                        | No. of bridges with Bhutanese architectural features (DoR) |
| Corruption reduced   | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery | Anti-corruption Strategy implemented                       |

|  | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery              | TAT for public services reduced   |
|--|--|---|
| Improved public service delivery                   | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery              | Average performance rating (Govt. Performance Management System - GPMS) |
| Carbon Neutral/Green Climate resilient development | Roads connecting to new<br>HPP constructed and<br>strengthened incorporating<br>EFRC   | KM of roads connecting HPP up-graded (DoR)                              |
|  | Construction and up<br>gradation of Primary<br>National Highways<br>incorporating EFRC | KM of Primary National<br>Highways constructed in EFRC<br>manner (DoR)  |
| Sustained Economic Growth                          | Construction and up<br>gradation of Primary<br>National Highways<br>incorporating EFRC | KM of Primary National<br>Highways up-graded in EFRC<br>manner (DoR)    |
|  | Roads connecting to new<br>HPP constructed and<br>strengthened incorporating<br>EFRC   | KM of new roads connecting<br>HPP constructed in EFRC                   |

**Table 1: Program Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
| Outcome001:Timely start of the<br>Hydropower Projects facilitated             | New Hydro Power Project provided access (Nos.)                    | 3         | 6            |
| Results Levels (Output)   | Indicators  | Baseline  | Plan Targets |
| Output001:Roads connecting<br>Hydropower Projects constructed<br>and upgraded | New roads connecting hydropower projects constructed (Km)         | 23.08     | 34.10        |
|   | Roads connecting<br>Hydropower projects<br>upgraded/Improved (km) | 33.8      | 73           |

## Table 3: Program Plan Outlay Summary

| Program Activities                                | Capital  |
|---|----------|
| Re-alignment of Rafee-Khosala road                | 358.974  |
| Construction of Mandelpong-Digala Road            | 241.387  |
| Up-gradation of Chazam- Trashiyangtse road        | 725.926  |
| Up-gradation/improvement of Tingtibi-Praling road | 116.716  |
| Total   | 1443.003 |

| Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT                | Department: DEPARTMENT OF ROADS |
|--|---------------------------------|
| Program Name: Construction and up gradation of Dzongkhag roads | Phase: Draft                    |

| Justification:      | Most of the roads in Bhutan are built at a time when traffic volume and load factor was very low. Therefore, transportation on the existing highways are noted to be highly inefficient and lengthy. In order to reduce transportation cost and facilitate efficient movement of goods and services among and within the Dzongkhags, availability of good road network is very crucial. To this end, the construction of new Dzongkhag roads and, continuous improvement and maintenance of Dzongkhag roads has now become critical. This program will continue to support the implementation of the Dzongkhag roads by providing technical backstopping on survey and designing of the roads implemented by Dzongkhags. |
|---------------------|--|
| Strategy:           | <ul> <li>i. DoR will continue its role of design, supervision, quality control and coordination with the actual construction works mostly contracted out to contractors.</li> <li>ii. To ensure the quality construction and to achieve economy of scale, importance will be given to mechanizing construction activities while maintaining environmentally friendly road construction practices.</li> </ul>   |
| Risk<br>Assessment: | i. Landslide and flood  ii. Availability of adequate manpower  |
| Beneficiary:        | All Bhutanese  |

| NKRA   | SKRA  | SKRA KPI  |
|--|---|---|
| Improved public service                                      | Enhanced efficiency and<br>Effectiveness of in Public service<br>delivery | Average performance rating (Govt. Performance Management System - GPMS) |
| delivery   | Enhanced efficiency and<br>Effectiveness of in Public service<br>delivery | TAT for public services reduced   |
| Corruption reduced   | Enhanced efficiency and<br>Effectiveness of in Public service<br>delivery | Anticorruption Strategy implemented)                                    |
| Strengthened Bhutanese identity, social cohesion and harmony | Bridges constructed and replaced to improve access                        | No. of bridges with Bhutanese architectural features (DoR)              |

**Table 1: Program Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
| Outcome 001 : Improved access to socio-economic facilities for beneficiaries | Travel time in trucking hours from Pemagatshel to Nganglam (Hrs.) | 12        | 5            |
| Results Levels (Output)  | Indicators  | Baseline  | Plan Targets |
| Output 001:Construction and up gradation of Dzongkhag roads completed        | Dzongkhag roads constructed (Km)                                  | 1180      | 1199.29      |

**Table 2: Program Plan Outlay Summary** 

| Program Activities                                      |  |
|---|--|
| Construction of Tsebar-Mikuri-Durungri road             |  |
| Improvement of Takela-Tangmachu road                    |  |
| Construction of bridge over Pachu (Airport bypass road) |  |
| Total   |  |

| Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT                 | Department: DEPARTMENT OF ROADS |
|---|---------------------------------|
| Program Name: Construction/Up gradation of North-South Highways | Phase: Draft                    |

| Justification: | For a landlocked country, a good network of road and bridges play a critical role in facilitating trade, reducing the high cost of transportation normally associated with mountainous countries and for delivery of socio-economic services particularly to scattered and far-off rural communities. The construction of the first national highway started in 1961. Today, Bhutan has about 9491 kilometers of various categories of roads. The north-south highways have served as an important means of transport for promoting trade between northern and southern part of Bhutan. These highways are also important for completing the national highway grid and serve as the main take-off point for many of the existing feeder and farm roads. However, many of the north-south highways are highly inefficient, lengthy and susceptible to blocks from natural calamities such as landslides and snowfall. Continued investment is therefore required to maintain, improve and construct new north-south highways. |
|----------------|--|
| Strategy:      | <ul> <li>i. DoR will continue its role of design, supervision, quality control and coordination with the actual construction works mostly contracted out to contractors.</li> <li>ii. To ensure the quality construction and to achieve economy of scale, importance will be given to mechanizing construction activities while</li> </ul>   |
| Risk           | maintaining Environmentally Friendly Road Construction practices.  i. Landslides and floods:   |
| Assessment:    |  |
| Assessifient.  | ii. Availability of adequate fund on time.   |
|                | iii. Availability of adequate human resources.   |
| Beneficiary:   | All Bhutanese.   |

| NKRA   | SKRA  | SKRA KPI   |
|--|---|--|
| Sustained Economic Growth                                    | Construction and up gradation of Primary National Highways incorporating EFRC | KM of Primary National<br>Highways constructed in<br>EFRC manner (DoR) |
|  | Construction and up gradation of Primary National Highways incorporating EFRC | KM of Primary National<br>Highways up-graded in EFRC<br>manner (DoR)   |
| Strengthened Bhutanese identity, social cohesion and harmony | Bridges constructed and replaced to improve access                            | No. of bridges with<br>Bhutanese architectural<br>features (DoR)       |

| Improved public service delivery | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery | Average performance rating (Govt. Performance Management System - GPMS) |
|----------------------------------|---|---|
|                                  | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery | TAT for public services reduced   |
| Corruption reduced               | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery | Anticorruption Strategy implemented                                     |

**Table 1: Program Results Level** 

| Results Level (Outcome)  | Indicators                                  | Baselines | Plan Targets               |  |   |
|--|---|-----------|----------------------------|--|---|
| Outcome 001 : Improved access to socio-economic facilities for beneficiaries |   |           | trucking hours along North |  | 6 |
| Results Levels (Output)  | Indicators                                  | Baseline  | Plan Targets               |  |   |
| Output 001:Construction and up gradation of North-South highways completed   | New north-south highways constructed (Km)   | 908.52    | 978.63                     |  |   |
|  | North-South highways upgraded/improved (Km) | 723.43    | 833.22                     |  |   |
|  | North South highways (Nos.)                 | 4         | 7                          |  |   |

**Table 2: Program Plan Outlay Summary** 

| Program Activities                                  |          |
|---|----------|
| Construction of Dagapela-Dalbari highway            | 1200.000 |
| Construction of Gomphu-Panbang Highway              | 693.598  |
| Construction of Gyalposhing-Nganglam highway        |          |
| Re-alignment of Damchu-Chukha road                  |          |
| Up-gradation of Samdrup Jongkhar-Trashigang Highway |          |
| Up-gradation/improvement of Paro-Drukgyel road      |          |
| Restoration works on Gathana-Damji Road             |          |
| Total   |          |

| Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT | Department: DEPARTMENT OF ROADS |
|---|---------------------------------|
| Program Name: Road Asset Management             | Phase: Draft                    |

| Justification: | The primary focus of the 10FYP was on expansion of the road network to provide accessibility to remote settlements in the country. With the increased road network, it has become important to maintain the existing road networks, especially the national highways to uphold the past capital investments. Research in some countries have indicated that the capital investments made by road agencies to keep a road in good condition comprise of 10 percent of the total cost while 90 percent of the total cost on poor condition roads is borne by road users in the form of vehicle operating costs (VOC). It is therefore less expensive for road agencies to maintain roads as compared to the VOC costs borne by road users due to poor road conditions. Periodic maintenance and management of road and bridge infrastructure will form an important activity of the Department in the 11FYP. |
|----------------|--|
| Strategy:      | i. DoR will continue its role of design, supervision, quality control and coordination with the actual construction works contracted out to private sector.  |
|                | ii. To ensure the quality construction and to achieve economy of scale, importance will be given to mechanizing construction/maintenance activities while maintaining environmentally friendly road construction practices.  |
|                | iii. The Department will take up mitigation measures to prevent landslides along existing road network and will explore permanent solutions to problematic landslide areas like Rotpashong.  |
| Risk           | i. Landslide and floods  |
| Assessment:    | ii. Availability of adequate manpower resources.   |
|                | iii. Availability of adequate and timely fund.   |
| Beneficiary:   | All Bhutanese  |

| NKRA   | SKRA   | SKRA KPI   |
|--|--|--|
| Strengthened Bhutanese identity, social cohesion and harmony | Bridges constructed and replaced to improve access | No. of bridges with Bhutanese architectural features (DoR) |
| Sustained Economic Growth                                    | Bridges constructed and replaced to improve access | No. of temporary (bailey) bridges replaced (DoR)           |
|  | Private sector participation                       | Km of roads maintained through PPP model                   |
|  | Private sector participation                       | Km of roads constructed and maintained through PPP model   |

|  | Construction and maintenance of road network strengthened through standards, specifications and geometrics improvement for all weather access road to ensure safety | National Highways open to<br>traffic all times (immediate<br>clearance of blocks) (DoR) |  |
|--|---|---|--|
| Carbon neutral/Green & climate resilient development | Construction and up<br>gradation of Primary<br>National Highways<br>incorporating EFRC  | Permanent solutions to stabilize problematic landslide areas (DoR)                      |  |
| Improved public comice delivery                      | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery   | Average performance rating (Govt. Performance Management System - GPMS)                 |  |
| Improved public service delivery                     | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery   | TAT for public services reduced   |  |
| Corruption reduced                                   | Enhanced efficiency and<br>Effectiveness of in Public<br>service delivery   | Anticorruption Strategy implemented   |  |

**Table 1: Program Results Level** 

| Results Level (Outcome)                        | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome 001 : Road Network                     | Average time taken to clear road blocks (Hrs)            | NA        | 5            |
| open to traffic at all times                   | Bridges with Bhutanese architecture features (Nos.)      | 1         | 25           |
| Results Levels (Output)                        | Indicators   | Baseline  | Plan Targets |
|  | Roads maintained (Km)                                    | 3084.696  | 3522.016     |
|  | Temporary bridges replaced with permanent bridges (Nos.) | 160       | 184          |
| Output 001:Road network maintained as per road | New bridges constructed (Nos.)                           | 337       | 357          |
| classification guidelines                      | Roads maintained through PPP model (km)                  | 296       | 1296         |
|  | Roads constructed and maintained through PPP model (km)  | 25.36     | 105.94       |

Table 3: Program Plan Outlay Summary

| Program Activities   | Capital  |
|--|----------|
| Carry out road resurfacing   | 1200.000 |
| Carry out road geometric improvement works                         | 100.000  |
| Conduct routine maintenance of roads                               | 0.000    |
| Conduct routine maintenance of bridges                             | 0.000    |
| Carry out snow clearance   | 10.000   |
| Implement monsoon restoration works                                | 700.000  |
| Carry out bridge protection and river training works               | 100.000  |
| Installation of safety measures                                    | 50.000   |
| Implement road side stabilization and bio-engineering works        | 40.000   |
| Develop road side accommodations                                   | 45.000   |
| Carry out patch repairs and fog sealing                            | 10.000   |
| Conduct advanced survey and research works                         | 10.000   |
| Replacement of bailey bridges with permanent bridges               | 100.000  |
| Produce GIS based digitized road network maps and stationeries     | 7.000    |
| Replacement of existing permanent bridges on the National Highways | 0.000    |
| Total  | 2372.000 |

# HUMAN SETTLEMENT AND HOUSING

| Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT     | SETTLEMENT   | OF | HUMAN |
|---|--------------|----|-------|
| Program Name: Enhancing human settlements in Bhutan | Phase: Draft |    |       |

| Justification: | The development of human settlement areas has been accorded priority over the years but efforts have remained mostly concentrated in urban centers. Increasingly, with the improvements in the living standard of the people, unprecedented developments are observed to be taking place outside urban areas as well. Unplanned infrastructure development in peri-urban and rural areas can adversely affect the ambience and beauty of the traditional settlements. Lack of proper coordination and planning also leads to wasteful use of resources. There is therefore an urgent need to approach any settlement development plans holistically so that it provides a coherent framework to improve the quality of life for all Bhutanese. This program will work towards meaningfully contributing to maintaining and enhancing the quality and diversity of country's natural environment and cultural heritage rather than allowing uncontrolled development. |
|----------------|--|
| Strategy:      | <ul> <li>i. Legal framework for the spatial planning will be drafted jointly by the local officials and international expert with experience in spatial planning law.</li> <li>ii. Existing rules and regulations shall be reviewed to suit the changing needs.</li> <li>iii. The department will undertake settlement planning as an activity from the outset of development.</li> <li>i. Cooperation from the stakeholders;</li> </ul>   |
|                |  |
| Assessment:    | ii. Lack of competent professionals;   |
|                | iii. Adequate and time availability of fund.   |
| Beneficiary:   | Whole settlement of the country.   |

| NKRA                            | SKRA   | SKRA KPI   |
|---------------------------------|--|--|
| Poverty + reduced/MDG+ achieved | Access to affordable housing enhanced  | No. (units) of affordable and quality housing constructed through PPP (NHDC)                   |
|                                 | Access to affordable housing enhanced  | No. of housing units constructed in all dzongkhags (NHDC)                                      |
|                                 | Develop aesthetic, culturally and socially ambient houses/ housing complexes | % of aesthetic and culturally ambient housing complexes developed (NHDC)                       |
|                                 | Develop aesthetic, culturally and socially ambient houses/ housing complexes | % of new HS developed in accordance with the rural and urban human settlement guidelines (DHS) |

| Corruption reduced   | Enhance effectiveness and efficiency in delivery of public services  | Anticorruption Strategy implemented  |
|--|--|--|
|  | Enhance effectiveness and efficiency in delivery of public services  | Average performance rating (Govt. Performance Management System - GPMS)                  |
| Improved public service delivery                             | Enhance effectiveness and efficiency in delivery of public services  | Average performance rating (Govt. Performance Management System - GPMS)                  |
|  | Enhance effectiveness and efficiency in delivery of public services  | TAT for public services  |
| Improved Disaster resilience and management mainstreamed     | Innovative, affordable and eco-<br>efficient/disaster resilient housing<br>construction technology adopted   | No. of eco-efficient/ disaster resilient buildings constructed (NHDC)                    |
|  | Innovative, affordable and eco-<br>efficient/disaster resilient housing<br>construction technology adopted   | No. of houses constructed using innovative and affordable construction technology (NHDC) |
|  | Innovative, affordable and eco-<br>efficient/disaster resilient housing<br>construction technology adopted   | No. of housing complexes with waste management practices instituted (NHDC)               |
| Carbon Neutral/<br>Green Climate<br>resilient<br>development | Strategic and smart human settlements developed with high livability index for balanced regional development | No. of development plans/structural /local area plans developed (DHS)                    |
|  | Strategic and smart human settlements developed with high livability index for balanced regional development | No. of regional hubs developed (DHS)   |

**Table 1: Program Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome001:Strategic Human   | Regional hubs developed (Nos.)                                       | 0         | 2            |
|  | Population residing region wise (western Region) (%)                 | 44.3      | 30.4         |
| Settlements developed for regionally balanced development and improved quality of life and | Population residing region wise (Central Region) (%)                 | 14        | 20           |
| socioeconomic status of both urban and rural residents                                     | Population residing region wise (Central-eastern Region) (%)         | 14.1      | 22           |
|  | Population residing region wise (Eastern Region) (%)                 | 27.6      | 27.6         |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets |
|  | Acts, rules, regulations and standards developed and reviewed (Nos.) | 0         | 4            |
| Output001:Enabling framework   | Settlement plans reviewed (Nos.)                                     | 0         | 10           |
| for human settlement strengthened  | Developments in the settlements reviewed (Nos.)                      | 0         | 10           |
|  | National Human Settlement<br>Policy developed (Nos.)                 | 0         | 1            |
|  | Valley development plans prepared (Nos.)                             | 0         | 2            |
| Output002:Enhanced urban and regional planning and development                             | Urban development plans prepared (Nos.)                              | 45        | 53           |
| development  | Rural development plans prepared (Nos.)                              | 0         | 5            |
| Output003:Capacity for human Settlement and urban planning                                 | Divisions in DHS interlinked for data sharing (Nos.)                 | 0         | 4            |
| enhanced   | Human settlements with data standardization (Nos.)                   | 0         | 4            |

Table 3: Program Plan Outlay Summary

| Program Activities  | Capital |
|---|---------|
| Preparation of national human settlement policy           | 2.000   |
| Preparation of spatial planning act                       | 3.000   |
| Preparation of spatial planning standards                 | 3.000   |
| Review of land pooling rules and Bhutan buildingrules2002 | 5.000   |
| Review of settlement plans                                | 6.000   |
| Review of developments in the settlements                 | 5.000   |
| Preparation of valley development plans                   | 100.000 |
| Preparation of urban development plans                    | 40.000  |
| Preparation of rural development plans                    | 35.000  |
| Training of human settlement in-charges                   | 9.000   |
| Procurement of GIS  | 20.000  |
| Preparation of plans for regional hubs                    | 0.000   |
| Promotion of affordable housing and home ownership        | 10.000  |
| Conduct geo-technical studies                             | 7.000   |
| Total   | 245.000 |

# CONSTRUCTION

Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT

Department: CONSTRUCTION DEVELOPMENT BOARD

**Program Name: Promotion and Strengthening of Construction Sector** 

**Phase: Approved** 

| Justification:      | With increasing growth of the construction industry over the years, the role and the mandate of the CDB has also expanded to suit its relevance to the changing needs. The accelerated hydropower development plan designed to generate 10,000 MW by 2020 offers huge prospects for the construction sector. While the sector has made significant progress over the years, there are still many challenges and weaknesses that need to be addressed during the coming years. Low levels of mechanization, poor quality of work implemented, relatively lengthy construction period with frequent time over-runs, lack of professionalism among the contractors and shortage of qualified and skilled professionals are some of the major constraints hindering its growth. Therefore, with a view to making the construction industry a major source of employment and income for the Bhutanese, this program will work towards building an efficient and quality based construction industry in Bhutan. |  |  |  |  |
|---------------------|---|--|--|--|--|
| Strategy:           | i. Strengthen regulations; accelerate the implementation of e-services to enhance the capacity of the construction industry.  |  |  |  |  |
|                     | ii. Promote, stimulate and undertake research in the construction sector to adopt new technologies.   |  |  |  |  |
|                     | iii. Restructure Construction Development Board into Construction Development Authority.  |  |  |  |  |
|                     | iv. Encourage contractors to adopt the best construction practices and mechanization in the construction industry.  |  |  |  |  |
|                     | v. Provide industry support through policy reforms.   |  |  |  |  |
| Risk<br>Assessment: | i. Availability of adequate and technically qualified manpower.     ii. Cooperation from the contractors.   |  |  |  |  |
| Beneficiary:        | Construction industry as a whole.   |  |  |  |  |

| NKRA                         | SKRA   | SKRA KPI  |
|------------------------------|--|---|
| Employment                   | Contribution to GDP and employment opportunities created                                 | No. Bhutanese employed in construction industry (CDB)         |
| Sustained Economic<br>Growth | Eco-friendly/disaster resilient,<br>innovative and good quality<br>construction promoted | No. of Bhutanese contractors qualifying for HPP bidding (CDB) |

| Sustained Economic<br>Growth | Eco-friendly/disaster resilient,<br>innovative and good quality<br>construction promoted | No. of construction<br>mechanization technology<br>introduced (CDB)           |
|------------------------------|--|---|
|                              | Contribution to GDP and employment opportunities created                                 | Contribution of construction to GDP (%) (BLSS)                                |
|                              | Effective and efficient public service delivery  | Anti-corruption Strategy implemented  |
| Improved public service      | Effective and efficient public service delivery  | Average performance rating (Govt. Performance Management System - GPMS)       |
| delivery                     | Effective and efficient public service delivery  | Construction quality assurance (compliance with the standards) (%) (DNB, MoF) |
|                              | Effective and efficient public service delivery  | TAT for public service delivery reduced                                       |

**Table 1: Program Results Level** 

| Results Level (Outcome)                        | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
|  | Construction mechanization technology introduced (Nos.)                          | NA        | 50           |
| Outcome 001 : Efficient and                    | Defaulting contractors with adverse record (%)                                   | 2.05      | 1            |
| quality based construction industry enhanced   | Works completed with average performance score > 50% (%)                         | NA        | 60           |
|  | Projects running into time overruns (%)  | NA        | 40           |
| Results Levels (Output)                        | Indicators   | Baseline  | Plan Targets |
|  | Specialized Bhutanese professionals in construction industry (Nos.)              | NA        | 10           |
| Output 001:Efficient and reliable construction | Bhutanese contractors qualifying for HPP (Nos.)                                  | 1         | 3            |
| development services                           | Works awarded using e-tool/e-<br>services in the construction<br>industry (Nos.) | 1450      | 8000         |
|  | Legal framework drafted for construction sector (Nos.)                           | NA        | 10           |

|  | Research carried out to promote and stimulate efficiency and cost effectiveness in the construction sector (Nos.) | NA | 5 |
|--|---|----|---|
| Output 002:Capacity of CDB/CDA secretariat strengthened                                    | Regional linkages established to share and bring in knowledge, skill and best practices (Nos.)                    | NA | 5 |
| Output 003:Awareness/  | Awareness on norms and rules that governs construction industry (Nos.)  | NA |   |
| orientation on procurement<br>norms and rules that govern<br>construction sectors enhanced | Induction courses for new aspiring contractors joining construction Business conducted (No. of batches)           | 15 |   |

**Table 2: Program Plan Outlay Summary** 

| Program Activities   |        |
|--|--------|
| Improvement and expansion of construction development services | 25.000 |
| Research and technology development                            | 5.000  |
| Establishment of institutional linkages                        | 1.000  |
| Conduct awareness and education                                | 9.000  |
| Total:   | 40.000 |

| Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT                  | Department: DEPARTMENT OF ENGINEERING SERVICES |
|--|--|
| Program Name: Engineering adaptation for disaster risk reduction | Phase: Draft                                   |

| Justification:      | As the rivers flow towards the southern foothills, the transition from mountainous areas to flat plains typically occurs and is accompanied by extensive flooding. On the other hand, due to erratic rainfall pattern and unusually heavier precipitation, flooding in northern Bhutan is becoming a regular phenomenon. Flash flood carrying sizeable amounts of boulders and debris causes substantial damage and loss of lives from time to time. With climate change and degradation of environment, such incidences are expected to increase in the coming years. Therefore, it is urgently important to minimize the impacts of floods on human |
|---------------------|---|
|                     | safety, health and welfare by designing interventions aimed at managing the risk posed by flood and other natural disasters. To this end, this program will formulate and implement various policies and regulations related to engineering aspects adaption to natural hazards and create conducive environment for integrating the best engineering technologies.   |
| Strategy:           | <ul> <li>i. FEMD under DES will lead as the primary institution responsible for flood risk alleviation works to protect all communities under the threat of flood.</li> <li>ii. Scattered data on water resources will be consolidated on database which would be the basis for mathematical modeling and production of Flood Risk maps.</li> </ul>   |
|                     | iii. Flood management projects on major rivers will be implemented to ensure an integrated river basin management strategy, while the local governments will take up minor flood protection scheme. EARRD continue its work on capacity development, technology promotion, quality assurance and risk reduction.  |
| Risk<br>Assessment: | <ul><li>i. Lack of appropriate data.</li><li>ii. Risk of flooding during construction phase.</li><li>iii. Availability of technically competent professionals</li></ul>   |
| Beneficiary:        | All the Bhutanese population  |

| NKRA  | SKRA  | SKRA KPI   |
|---|---|--|
| Carbon Neutral/<br>Green Climate resilient<br>development | Bhutanese architect and aesthetics in construction incorporated while adopting modern construction technology | % of houses constructed using modern technology while maintaining Bhutanese aesthetics (DES) |
|   | Eco-friendly/disaster resilient, innovative and good quality construction promoted                            | No. of flood preventive infrastructures in place (DES)                                       |

|                                  | Eco-friendly/disaster resilient, innovative and good quality construction promoted | % coverage of eco-efficient/<br>disaster resilient technologies<br>(DES)      |
|----------------------------------|--|---|
| Improved public service delivery | Effective and efficient public service delivery                                    | Construction quality assurance (compliance with the standards) (%) (DNB, MoF) |

**Table 1: Program Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome 001 : Safe, high quality and sustainable disaster resilient infrastructures in place | Sustainable infrastructure development technology introduced (%)                 | NA        | 50           |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets |
| Output 001:Disaster resilient, eco-friendly and quality construction technology promoted     | Dzongkhags with resilient and eco-<br>friendly construction technology<br>(Nos). | 0         | 10           |
| Output 002:Vulnerability to flooding reduced   | Dzongkhags with flood risk assessment and mitigation plans (Nos.)                | NA        | 20           |
|  | Preventive flood protective infrastructure in place (Nos.)                       | NA        | 9            |

**Table 3: Program Plan Outlay Summary** 

| Program Activities  | Capital |
|---|---------|
| Conduct research of viable modern and traditional construction technology for sustainable infrastructure  | 0.600   |
| Conduct study of green and sustainable construction and formulate guidelines for building infrastructures | 3.000   |
| Implement flood alleviation and land reclamation works  | 741.440 |
| Conduct risk assessment and mitigation of disasters like earthquake, fire and cyclone                     | 39.96   |
| Total   | 785.000 |

| Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT  | Department: DEPARTMENT OF ENGINEERING SERVICES |
|--|--|
| Program Name: Technical support for construction and maintenance of trail suspension bridges | Phase: Draft                                   |

| Justification:      | Over the past years, Government has made huge investment in the construction of highways, farm roads and bridges. However, there are still many rural communities who use mule tracks, traditionally used trails and suspension bridges as the principle means of communication. Enhancing accessibility through the development of appropriate connective infrastructure will therefore contribute immensely to the reduction of rural poverty in the 11 <sup>th</sup> FYP.  |
|---------------------|---|
|                     | Further, many of the important traditional routes have connection to the age old culture and tradition of Bhutan. Maintaining and improving these infrastructures will not only help in conserving our cultural heritage but will also contribute greatly to promoting green tourism in Bhutan.   |
| Strategy:           | <ul> <li>i. Rural Infrastructure Services Division (RISD) will closely work with the Dzongkhags and the Local Governments in carrying out the surveying, designing, cost estimating and preparation of drawings.</li> <li>ii. The Local Governments and the beneficiaries will carry out the actual implementation. RISD will continuously provide technical backstopping at various stages of construction.</li> <li>iii. The designs for the Bazams will be carried out by the Ministry in consultation with the Division for Conservation of Heritage Sites, MoHCA.</li> </ul> |
| Risk<br>Assessment: | i. Local Governments may accord low priority to the program.     ii. Insufficient fund  |
| Beneficiary:        | The rural communities of the country.   |

| NKRA                      | SKRA  | SKRA KPI  |  |
|---------------------------|---|---|--|
|                           | Bridges constructed and replaced to improve access                        | No. of bazams constructed (DES, MoWHS)                                  |  |
| Sustained Economic Growth | Bridges constructed and replaced to improve access                        | No. of suspension bridges constructed (DES, MoWHS)                      |  |
|                           | Bridges constructed and replaced to improve access                        | No. of suspension bridges maintained (DES, MoWHS)                       |  |
| Corruption reduced        | Enhanced efficiency and<br>Effectiveness of in Public service<br>delivery | Average performance rating (Govt. Performance Management System - GPMS) |  |

| Improved public service delivery | Enhanced efficiency and<br>Effectiveness of in Public service<br>delivery | TAT for public services reduced |
|----------------------------------|---|---------------------------------|
|----------------------------------|---|---------------------------------|

**Table 1: Program Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines | Plan Targets |
|---|--|-----------|--------------|
| Outcome 001 : Increased rural accessibility to socio economic amenities | Households benefited from newly constructed trail bridges/ bazams (Nos.)     | 19000     | 24000        |
| Results Levels (Output)   | Indicators   | Baseline  | Plan Targets |
| Output 001:Enhanced safe  | Technical backstopping provided for the construction of trail bridges (Nos.) | 384       | 458          |
| and reliable access to rural  | Bazams constructed (Nos.)  | 16        | 26           |
| communities   | Existing bridges maintained/ rehabilitated (Nos.)                            | 400       | 466          |

**Table 3: Program Plan Outlay Summary** 

| Program Activities  | Capital |
|---|---------|
| Provide technical backstopping for construction of new trail bridges              | 5.000   |
| Construction of Bazams  | 50.000  |
| Carry out major maintenance/rehabilitation and de- launching of redundant bridges | 6.000   |
| Conduct training on bridge construction technology                                | 10.000  |
| Total   | 71.000  |

| Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT  | Department: DEPARTMENT OF ENGINEERING SERVICES |
|--|--|
| Program Name: Technical support and management for infrastructure development and engineering services | Phase: Draft                                   |

|                     | T  |
|---------------------|--|
| Justification:      | Over the last decade, Bhutan has experienced a very rapid pace of urbanization. Additionally, with current pace of rural-urban migration, urban populations are projected to rise significantly while on the contrary there will be fewer people living in the rural areas. With unprecedented influx of people to urban areas, the major urban centers have already started to experience the adverse effect of urbanization. Conversely, rural areas are starting to become empty, giving rise to problems such as farm labor shortages, feminization of agricultural labor force and declining agriculture production. Managing urban development efficiently and effectively to build and sustain a quality urban environment is thus very crucial. This program is formulated to promote urban infrastructure development in the most cost effective manner while ensuring high live-ability. Besides, as a means towards spreading development across the region, proper development of regional hubs will be implemented. |
| Strategy:           | <ol> <li>Devise and implement urban development plans for regional growth centers and major towns in accordance with the National Spatial Planning Policy and National Urbanization Strategy.</li> <li>Decentralize project implementation to the respective Municipalities/LGs with technical backstopping and assistance provided by Department.</li> <li>Promote and encourage private investors or PPP whenever commercially viable to implement urban development activities.</li> <li>Promote and maintain aspects that best reflect the best of Bhutanese values, aesthetics and traditional architecture and that is in harmony with the natural environment.</li> </ol>   |
| Risk<br>Assessment: | <ul> <li>i. Poor detailed design of sub-projects</li> <li>ii. Lack of experienced contractors, poor performance of contractors, poor supervision and quality control of works.</li> <li>iii. Lack of suitably trained professionals and contractors.</li> <li>iv. Availability of fund.</li> </ul>   |
| Beneficiary:        | i. Urban population ii. Private sector iii. Farmers  |

| NKRA   | SKRA  | SKRA KPI  |  |
|--|---|---|--|
| Improved Disaster  | Bhutanese architect and aesthetics in construction incorporated while adopting modern construction technology | No. of standards made<br>for standardized building<br>components (DES)                                    |  |
| resilience and<br>management<br>mainstreamed             | Eco-friendly/disaster resilient, innovative and good quality construction promoted                            | % coverage of eco-efficient/<br>disaster resilient technologies<br>(DES)                                  |  |
|  | Eco-friendly/disaster resilient, innovative and good quality construction promoted                            | % coverage of eco-efficient/<br>disaster resilient technologies<br>(DES)                                  |  |
|  | Effective and efficient public service delivery   | Anti-corruption Strategy implemented  |  |
| Improved public  | Effective and efficient public service delivery   | Average performance rating (Govt. Performance Management System - GPMS)                                   |  |
| service delivery   | Effective and efficient public service delivery   | Construction quality assurance (compliance with the standards) (%) (DNB, MoF)                             |  |
|  | Effective and efficient public service delivery   | TAT for public service delivery reduced   |  |
| Needs of vulnerable group addressed                      | Improved quality of infrastructure facilities and services  | Standards developed and incorporated in government infrastructures for differently-abled people (%) (DES) |  |
|  | Strategic and smart human settlements developed with high livability index for balanced regional development  | No. of regional hubs developed (DHS)  |  |
| Carbon Neutral/Green<br>Climate resilient<br>development | Strategic and smart human settlements developed with high livability index for balanced regional development  | % of solid waste reduced,<br>reused and recycled (DES)  |  |
|  | Strategic and smart human settlements developed with high livability index for balanced regional development  | No. of waste management measures instituted (DES)   |  |

**Table 1: Program Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines | Plan Targets |
|---|--|-----------|--------------|
| Outcome 001 : Sustainable, eco-<br>friendly, cost effective urban     | Sustainable infrastructure development technology introduced (%)   | NA        | 50           |
| infrastructures and quality engineering services promoted             | Regional hubs developed (Nos.)   | 0         | 2            |
| Results Levels (Output)   | Indicators   | Baseline  | Plan Targets |
| Output 001:Eco-efficient,   | Towns with basic urban amenities (Nos.)  | NA        | 10           |
| quality and sustainable urban infrastructure facilities               | Water supply infrastructure constructed (Nos.)   | NA        | 6            |
| developed   | Guidelines and code books published (Nos.)   | NA        | 3            |
|   | Guidelines/ thumb rules for government office building construction developed (Nos.)   | 0         | 1            |
| Output 002:Sustainable and eco-friendly engineering services promoted | Awareness/sensitization conducted on the usage of modern technology while maintaining Bhutanese architects/aesthetics (Nos.) | NA        | 3            |
|   | Rural population with access<br>to improved drinking water<br>supply (%)   | 94.8      | 100          |
| Output 004:Acess to safe and adequate water supply increased          | Functionality of RWSS (%)  | 69        | 95           |

## **Table 2: Program Plan Outlay Summary**

| Program Activities  | Capital  |
|---|----------|
| Promotion of sustainable and eco-efficient infrastructure through preparation of master plans for urban amenities | 52.000   |
| Promotion of quality pre-fabricated building components   | 5.000    |
| Development of MICE facilities  | 0.000    |
| Development of Regional Hubs  | 1000.000 |
| Construction of urban water supply infrastructures  | 600.000  |
| Development of standards, guidelines, manuals and code books for construction                                     | 10.000   |
| Strengthening of engineering services   | 5.000    |
| Conduct awareness on modern technology Bhutanese architecture   | 0.000    |
| Implement urban infrastructure Project BHU 2816   | 1239.140 |
| Conduct research on labour and material Coefficient (LMC) for BSR   | 8.000    |
| Provide urban infrastructure development services BHU 2258  | 675.311  |
| Development of urban towns  | 250.000  |
| Conduct awareness on modern technology and Bhutanese architecture (training of zows)                              | 2.000    |
| Carry out explorative studies to conserve/manage water resources/new technologies for treatment                   | 5.000    |
| Construct school water supply (rain water harvesting)   | 6.700    |
| Transportation of RWS materials to dzongkhags   | 0.600    |
| Total   | 3858.751 |

**Phase: Draft** 

Au Name: MINISTRY OF WORKS AND HUMAN **Department: SECRETARIAT SETTLEMENT Program Name: Policy planning and** 

| Justification:      | The secretariat consists mainly of policy planning division, administration and finance division and human resources division. These divisions play an important role in the overall performance of the Ministry. Given the size and the technical mandate of each Departments under the Ministry, strengthening these divisions through institutional reforms and capacity enhancement on areas such as strategic planning, coordination and monitoring would contribute to improving the effectiveness of the technical Departments. Further, the secretariat also serves as the immediate contact point for addressing cross-cutting issues such as gender, poverty, environment, disasters etc. Proper mainstreaming of these cross cutting issues into the plans and policies would warrant continuous capacity enhancements of the secretariat. |
|---------------------|---|
| Strategy:           | <ul> <li>i. Training/workshop on gender will be conducted among the employees by a group of GFPs.</li> <li>ii. Drafting of Acts/Rules/Policies/Plans shall be carried out as and when required.</li> <li>iii. Coordination among various stakeholders to facilitate smooth implementation of activities.</li> </ul>   |
| Risk<br>Assessment: | i. Cooperation from the Departments     ii. Availability of adequate and timely fund  |
| Beneficiary:        | Technical Departments under the Ministry.   |

#### **Program and SKRA Linkages**

institutional strengthening

| NKRA                    | SKRA   | SKRA KPI  |
|-------------------------|--|---|
| Democracy and           | Participation in democratic governance deepened and strengthened                           | Agencies implementing gender sensitive policies/strategies (NCWC) |
| Governance strengthened | Strengthened Accountability<br>Transparency, Efficiency and<br>Effectiveness in Governance | Civil Service performance /GPMS rating                            |
| Corruption reduced      | Strengthened Accountability<br>Transparency, Efficiency and<br>Effectiveness in Governance | Implementation of National<br>Anticorruption Strategy (ACC)       |

| Improved public service delivery | Strengthened Accountability<br>Transparency, Efficiency and<br>Effectiveness in Governance | TAT for public services           |
|----------------------------------|--|-----------------------------------|
|                                  | Strengthened Accountability<br>Transparency, Efficiency and<br>Effectiveness in Governance | Average performance rating of LGs |

**Table 1: Program Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome 001 : 11 FYP of MoWHS implemented according to its strategic focus and good capital budget delivery            | Capital budget delivery of 11 FYP (%)                      | 60        | 100          |
| Outcome 002 : Improved municipal financial management systems for the Thromdes   | Revenue collection for Thimphu Thromde (%)                 | NA        | 50           |
|  | Revenue collection for Phuentsholing Thromde (%)           | NA        | 40           |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets |
|  | Policy and planning coordination meetings conducted (Nos.) | NA        | 20           |
| Output 001:Efficient and effective   | Quarterly progress report meetings conducted (Nos.)        | NA        | 20           |
| planning and coordination system   | Reports published (Nos.)                                   | NA        | 40           |
|  | Acts/rules/policies/plans drafted (Nos.)                   | NA        | 1            |
|  | Trainings/workshops on gender conducted (Nos.)             | NA        | 2            |
| Output 002:Manuals for   | Manuals prepared (Nos.)                                    | NA        | 2            |
| strengthening revenue administration, expenditure management systems and participatory city development plans prepared | Thromde staff trained (Nos.)                               | NA        | 100          |

**Table 3: Program Plan Outlay Summary** 

| Program Activities   | Capital |
|--|---------|
| Conduct policy and planning coordination meetings  | 0.000   |
| Conduct quarterly progress report meetings   | 0.000   |
| Preparation/compilation of reports   | 3.000   |
| Environmental Management   | 0.000   |
| Drafting of Acts/Rules/Policies/Plans  | 1.000   |
| Organize engineering conference  | 0.000   |
| Conduct training/workshop  | 0.000   |
| Preparation of city development plan/manuals and institutional strengthening of Thromdes | 49.050  |
| Conduct technical and municipal finance trainings for Thromde and Ministry staff         | 25.000  |
| Digitization of database and asset register for Thromdes                                 | 5.850   |
| Procurement of vehicles, equipments and utilities and operating costs for Thromdes       | 17.550  |
| Develop cultural heritage and sustainable tourism project for Thromde                    | 11.475  |
| Total  | 112.925 |

## **GEOLOGY AND MINES**

Au Name: MINISTRY OF ECONOMIC AFFAIRS Department: DEPARTMENT OF GEOLOGY AND

IVIII

Program Name: Geological Mapping, Phase: A Mineral Exploration and Sustainable Mineral

**Development** 

Phase: Approved

#### Justification:

Bhutan has pursued mining activities cautiously bearing in mind the social and environmental consequences. The sector is, therefore, still underdeveloped. While Bhutan has significant deposits of a number of mineral resources, including limestone, coal, graphite, gypsum, slate and dolomite, most mining activities are limited to relatively small operations and mainly involve the above minerals. All the mines in the country are operated using opencast mining technique.

Several constraints and challenges have impeded the development of mining sector in Bhutan. The absence of a clear mineral development policy has hampered the management, allocation and monitoring of mines. Similarly, the sector also faces human resource constraints both in the government and the private mining sector which has hampered its effective functioning. Despite the problems, mining will continue to be an important source of revenue and it would be in the interest of Bhutan to manage these resources sustainably.

Taking Bhutan's current pace of socio-economic development into an account, the demand for industrial minerals and construction materials will highly increase over the next few decades and therefore, mineral sector will continue to play an important role for Bhutan's socio-economic development as envisaged by Economic Development Policy (EDP) 2010. For a mountainous country like ours where substantially towards Gross Domestic Product (GDP) has become necessity. Mining and mineral based industries has been an important source of foreign

Mining and mineral based industries has been an important source of foreign exchange and fiscal receipts for the government. These industries have contributed by ways of taxes, employment, wealth creation, exports, spill over to other businesses and helped diversify the economy.

#### Strategy:

- i. Prioritize the target areas for mineral investigation and construction materials study during the annual activity plan formulation.
- ii. Implementation of geological investigation of heavy minerals will be accorded priority.
- iii. In the interest of ensuring the sustainable mineral development, the department will further strengthen both technical and human capacity of both government and private sectors.
- Scientific mining will be ensured through improvement of the regulatory framework and its implementation.

#### Risk Assessment:

- i. Inadequate human resources and technical capacity.
- ii. Inadequate financial resources

#### Beneficiary:

- Private miners
- ii. Public at large

| NKRA  | SKRA  | SKRA KPI   |  |
|---|---|--|--|
|   |   | TAT for public services reduced  |  |
| Improved public service delivery                  | Enhance effectiveness and efficiency in delivery of public service    | Average performance rating (Govt. Performance Management System - GPMS)                                    |  |
| Corruption reduced                                | Service   | Anticorruption Strategy implemented  |  |
| Sustainable utilization and management of natural | Environmentally and socially responsible mineral development promoted | Number of laws amended/revised to promote scientific method, sustainable and environmental friendly mining |  |
| resource  | development promoted  | Number of mines re-vegetated or created recreational areas or other human uses after closing               |  |
| Sustained Economic                                | CDD Contribution and  | GDP contribution (plan period)   |  |
| Growth  | Sustained Economic GDP Contribution and employment increased          |  |  |
| Sustainable utilization and                       | Intergenerational equity  | Contribution to Community Development Fund   |  |
| management of natural resource                    | ensured   | Policy promoting value addition of minerals leading to few and quality mines                               |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
|  | Annual GDP contribution (%)  | 2.27      | 2            |
|  | Minerals investigations carried out (Nos)  | 102       | 112          |
|  | Construction materials site studied (Nos)  | 78        | 88           |
|  | Topo-sheet wise mapping in 1 : 50,000 scale (Nos)  | 14        | 19           |
| Outcome 001 : Geological mapping,  | Laws amended/revised to promote scientific method, sustainable and environmental friendly mining (Nos) | 0         | 2            |
| mineral exploration and mineral development in sustainable and environment friendly manner carried out | Contribution to community development by mining sector (Million Nu.)                                   | 0         | 54           |
| Carried out  | Mines re-vegetated or created recreational areas or other human uses after closing (Nos)               | 5         | 22           |
|  | Mines receiving full tax credit for complying beyond environmental standards (Nos)                     | 0         | 3            |
|  | Bhutanese employed (Nos)   | 2000      | 3000         |
|  | Policy drafted promoting value addition of minerals leading to few and quality mines (Nos)             | 0         | 1            |
| Results Levels (Output)  | Indicators   | Baseline  | Base Year    |
|  | Geological reports on gypsum deposits (Nos)  | 1         | 3            |
|  | Geological reports on Ferrosilicon grade quartize (Nos)  | 9         | 11           |
| Outrout 001. A seess to Coolegical   | Reports on talc deposits (Nos)   | 1         | 2            |
| Output 001:Access to Geological information, mines and mineral data enhanced and generated             | Geological reports on heavy minerals (Nos)   | 0         | 1            |
|  | Geological reports on construction materials (Nos)   | 78        | 88           |
|  | Regional geological mapping reports and maps in 1:50000 scale (Nos)                                    | 14        | 19           |

|  | Registry and mineral database updated (Nos)                                     | 1  | 1   |
|--|---|----|-----|
| Output 001:Access to Geological information, mines and mineral data enhanced and generated                     | Geological reports on cement/<br>chemical grade limestone or<br>marble (Nos)    | 12 | 14  |
|  | Geological reports on industrial grade dolomite deposits (Nos)                  | 4  | 6   |
|  | New geotechnical laboratory equipments/instruments procured and installed (Nos) | 38 | 41  |
|  | New surveying and mapping equipments/instruments procured and installed (Nos)   | 7  | 27  |
|  | New drilling machine and equipments procured (Nos)                              | 4  | 6   |
| Output 002:Geo-scientific and mining institutional capacity strengthened                                       | Geospatial technology<br>laboratory upgraded (Nos)                              | 1  | 1   |
|  | Geology assistant and mines inspector recruited and trained by DGM (Nos)        | 78 | 118 |
|  | Private mineral sector employees trained by DGM (Nos)                           | 0  | 150 |
|  | Mining engineers deputed to regional offices (Nos)                              | 0  | 7   |
| Output 003:Enabled legal and regulatory framework for sustainable and environment friendly mineral development | Laws/regulations amended (Nos)  | 0  | 2   |
| Output 004:CDF mobilized for Community development   | Institution of CDF (Nos)  | 0  | 1   |

## **Table 2: Programme Plan Outlay Summary**

| Programme Activities  | Capital |
|---|---------|
| Conduct geological investigation of cement/chemical grade limestone/marble                    | 0.625   |
| Conduct detailed exploration of industrial grade dolomite deposits in manas formation         | 0.450   |
| Conduct detailed exploration of industrial grade gypsum deposits in South east Bhutan         | 0.450   |
| Conduct geological Investigation of ferrosilicon grade quartzite in lesser himalayan sequence | 0.575   |
| Conduct detailed exploration of talc deposit in southern Bhutan                               | 0.250   |
| Conduct geological investigation of heavy mineral   | 0.300   |
| Construct materials study in the ten prioritized areas  | 1.325   |
| Produce five systematic topo-sheet-wise geological mapping in 1:50000 scale                   | 1.326   |
| Procurement and install of equipments and instrument for laboratories, drilling and survey    | 15.000  |
| Up-grade geo-spatial technology laboratory  | 7.006   |
| Review and amend of existing laws   | 3.500   |
| Inspection of mines and quarries  | 4.000   |
| Decentralization of mines inspection and monitoring to regional and local level               | 3.000   |
| Procurement and issuance of scientific equipments to mines inspector                          | 4.000   |
| Strengthening the HR capacity of the private mineral sector                                   | 4.000   |
| Up gradation of the registry of mineral titles  | 0.700   |
| Institute Community Development Fund (CDF)  | 0.300   |
| Construction of Office and Laboratory Building in Samtse (Spill Over)                         | 2.100   |
| Total:  | 48.907  |

Au Name: MINISTRY OF ECONOMIC AFFAIRS

Department: DEPARTMENT OF GEOLOGY AND

MINES

**Program Name: Geo-scientific studies and** 

risk assessment of geo-hazards

**Phase: Approved** 

| Justification: | Owing to fragile geology, active tectonics and climate change, Bhutan is highly vulnerable to all forms of geo-hazards such as GLOFs, earthquake, landslides and flash floods. The risks induced by such hazards potentially retard sustainable and equitable socio-economic development and pose serious challenge in realizing the nation's overarching policy of Gross National Happiness. Comprehensive geoscientific studies and geo-hazard risk assessment is therefore needed to address and manage the potential threat posed by these geo-hazards. Improving human security and safety through effective mitigating and management of climate change induced and geological hazards will be the primary objective of the program. |
|----------------|--|
| Strategy:      | <ul> <li>Major works including human and institutional capacity strengthening will have to be carried out to operationalize the earthquake monitoring network initiated with the National Research Institute for Earth Science and Disaster Prevention (NIED), Japan.</li> </ul>   |
|                | ii. Conduct geophysical investigation of potential groundwater reserves in two pilot areas.  |
|                | iii. Conduct validation of potentially dangerous lakes in the northern frontiers of Bhutan Himalayas.  |
|                | iv. Implement the landslide mitigation of critical areas under the UNDP-NAPA project.  |
|                | v. Conduct Hazard assessment of the old dzongs, monasteries and new urban centers.   |
| Risk           | i. Availability of adequate human resources  |
| Assessment:    | ii. Availability of finance resources  |
|                | iii. Institutional capacity  |
| Beneficiary:   | i. Planners and policy makers  |
|                | ii. Engineering, geosciences & risk management institutions  |
|                | iii. Scholars, researchers and media   |
|                | iv. Public at large  |

| NKRA                             | SKRA   | SKRA KPI   |  |
|----------------------------------|--|--|--|
|                                  | 5.1. (6.1)   | Anticorruption Strategy implemented  |  |
| Improved public service delivery | Enhance effectiveness and efficiency in delivery of public service | Average performance rating (Govt. Performance Management System - GPMS)              |  |
|                                  |  | TAT for public services reduced  |  |
| Improved Disaster                | Environmental impacts from snow and glacier melt reduced.          | Climate Change induced GLOF risk mitigated   |  |
| resilience and                   |  | Landslide inventory mapped   |  |
| management<br>mainstreamed       | Risk associated with GLOF and Geo hazards reduced                  | Macro seismic hazard & risk map of the country  No. of earthquake monitoring station |  |
|                                  |  |  |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
|   | National Earthquake monitoring network installed (Nos)  | 0         | 30           |
|   | Probabilistic macro-seismic hazard map of the country (Nos)   | 0         | 1            |
| 0   | Micro seismic zonation (Nos)  | 0         | 1            |
| Outcome001:Risk associated with Geo-hazards prevented and reduced | Geotechnical/foundation/sub-<br>surface investigation/studies done<br>in the prioritized areas (Nos)                      | 10        | 12           |
|   | Hazard and risk assessment map for historical monuments and urban centers produced and mitigation works recommended (Nos) | 4         | 7            |
|   | No. of glacier and glacial lakes monitored and validated  | 3         | 5            |
| Results Levels(Output)  | Indicators  | Baseline  | Plan Targets |
| Output001:Broadband/  | Short period stations (Nos)   | 0         | 5            |
| short period and earthquake                                       | Intensity stations (Nos)  | 0         | 20           |
| intensity stations installed and operational                      | Broadband station (Nos)   | 0         | 5            |

|  | Investigation on Potential groundwater resources (Nos)              | 0 | 1 |
|--|---|---|---|
|  | Geodetic measurement (Nos)  | 1 | 2 |
| Output002:Access to<br>Geophysical, geotechnical<br>and geo hazard information<br>enhanced | Land slide inventory map (Nos)                                      | 0 | 1 |
|  | Seismic and risk/vulnerability map of Thimphu city (Nos)            | 0 | 1 |
|  | Hazard assessment of new urban centers (Nos)                        | 3 | 5 |
|  | Geo hazard assessment of historical monument (Nos)                  | 1 | 2 |
|  | Studies and validation of potentially dangerous glacial lakes (Nos) | 3 | 8 |
|  | Risk assessment of hydropower development sites (Nos)               | 0 | 3 |
| Output003:Feasibility study of Thimphu-Wangdue road tunnel completed                       | Road tunnel feasibility study<br>(Thimphu- Wangdue) (Nos)           | 0 | 1 |

**Table 2: Programme Plan Outlay Summary** 

| ProgrammeActivities   | Capital |
|---|---------|
| Installation of national earthquake monitoring system   | 42.500  |
| Development and preparation of a macro earthquake hazard zonation map and risk/vulnerability assessment of Thimphu city | 3.960   |
| Conduct ground water investigation using geo-electrical resistivity and ground penetrating Radar(GPR)                   | 0.700   |
| Set up permanent GPS stations and campaign GPS measurements   | 1.200   |
| Conduct geotechnical and geophysical investigation of 3 hydropower sites  | 56.700  |
| Conduct engineering geology and geophysical investigation of Thimphu-Wangdue road tunnel                                | 18.900  |
| Conduct micro seismic zonation map of one pilot urban area  | 1.300   |
| Prepare national landslide inventory map  | 2.365   |
| Carry out engineering geological study of two new urban centres   | 1.700   |
| Carry out engineering geological study of one historical monument   | 0.550   |
| Monitor and validate glaciers and glacial lakes in the northern frontiers of Bhutan                                     | 4.500   |
| Conduct geo-hazard risk assessment, mapping and develop threshold for landslide & Mitigation works                      | 238.000 |
| Total:  | 372.375 |

# TOURISM

Au Name: TOURISM COUNCIL OF BHUTAN Department: SECRETARIAT

Program Name: Strengthening of RITH Phase: Approved

| Justification:      | Tourism industry is and will continue to be one of the main economic back-bone of Bhutan. The industry has been a major source of employment and foreign exchange. On the basis of the present growth levels and growing popularity of Bhutan as special tourism destination, the industry has the potential to becoming one of the significant drivers of Bhutan's economic development. It will therefore be in the interest of Bhutan to accelerate the development of sustainable tourism industry. This would nonetheless require high standard tourism infrastructure as well as quality hospitality services. |  |  |
|---------------------|--|--|--|
|                     | This program therefore is designed with the objective of institutionalizing an agency that will have the in-country capacity to train the next generation of tourism professionals which would in-turn directly contribute to sustaining the tourism industry. As importantly, the program will also work towards preparing the institute to becoming a regional center of excellence.   |  |  |
| Strategy:           | <ul> <li>i. Improve training modules and review curriculum as per the training needs assessment.</li> <li>ii. Consult curriculum experts, counterparts on academic related issues</li> <li>iii. Field in guest lecturers from govt. agencies, institutes and tourism stakeholders.</li> <li>iv. Develop and improve required infrastructure to conduct trainings.</li> <li>v. Market RITH to the youth and hospitality industry.</li> <li>vi. Capacity development of faculty to enhance and update knowledge and skills</li> </ul>  |  |  |
| Risk<br>Assessment: | i. Availability of students interested to undergo diploma in Tourism Management and Hotel Management.  ii. Availability of fund  iii. Availability of well trained faculty   |  |  |
| Beneficiary:        | i. Tourism and Hospitality Industry ii. Bhutanese Youth  |  |  |

| NKRA       | SKRA  | SKRA KPI                     |
|------------|---|------------------------------|
| Employment | Contribution to GDP, Revenue and Employment increased | Contribution to GDP (US\$ m) |
|            | Contribution to GDP, Revenue and Employment increased | No. of Bhutanese employed    |

| Improved public service delivery | Enhance effectiveness and efficiency in delivery of public service | Anticorruption Strategy implemented |
|----------------------------------|--|-------------------------------------|
| Corruption reduced               | Enhance effectiveness and efficiency in delivery of public service | TAT for public services reduced     |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome001:Establish RITH as a Regional Centre of excellence       | Graduates employed in international chain hotels and resorts or TCB approved hotels, resorts and restaurants (Nos) | 25        | 150          |
|  | Students graduated from the Institute (Nos)  | 45        | 270          |
|  | Graduates working in tour operation and travel agencies (Nos)  | 20        | 120          |
|  | International students seeking admission / enrollment (Nos)  | 0         | 10           |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets |
| Output001:Tourism and  | Tour guides trained (Nos)  | 0         | 140          |
| Hospitality professionals<br>trained at international<br>standards | Institutional linkages formalized (Nos)  | 0         | 3            |
|  | In-service employees trained through BMMHP (Nos)   | 50        | 110          |
|  | People attended certificate course(Nos)  | 0         | 20           |
| Output002:Infrastructures and facilities built                     | New and functional infrastructure in place (Nos)   | 0         | 5            |

Table 3: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Conduct convocation and awards   | 2.500   |
| Develop IT Network   | 1.000   |
| Procure furniture and computers & equipments   | 3.000   |
| Conduct certificate course   | 1.000   |
| Conduct marketing and advertizing of RITH at the regional level  | 4.000   |
| Developing institutional linkages  | 2.000   |
| Conduct research and development   | 2.000   |
| Develop additional Infrastructure (boundary wall, canteen/cafeteria, outdoor toilets/washroom, sports facilities and site development) | 10.000  |
| Total:   | 25.500  |

| Au Name: TOURISM COUNCIL OF BHUTAN            | Department: SECRETARIAT |
|---|-------------------------|
| Program Name: Sustainable Tourism Development | Phase: Approved         |

| Justification: | Beside hydropower, tourism sector has been a major driver of economic growth and development in Bhutan. The sector has not only contributed significantly to the national revenue and foreign reserve but has also been a major source of employment to the Bhutanese people, particularly to the youth. Additionally, the sector also creates spin-offs to various other business including small and micro enterprises. As importantly, the sector has also contributed immensely to strengthening Bhutan's image and identity around the world.                        |  |  |  |
|----------------|---|--|--|--|
|                | Recognizing its huge growth potential, Bhutan has, over the years, promoted itself as an exclusive long-stay destination for tourist. In-order to sustainable harness the sectors prospects for Bhutan's development, the sector will have to continue to address several bottlenecks and challenges impeding its growth. Some of the main ones include developing adequate tourism infrastructure, distribution of tourism benefits to wider population, diversifying tourist products and minimizing the impact of growing tourist on Bhutan's culture and environment. |  |  |  |
| Strategy:      | <ul> <li>i. Implemented in collaboration with all tourism stakeholders including local government.</li> <li>ii. Focus on diversifying tourism attractions, promoting regional and seasonal spread of tourism, improving quality and standards of services including accommodation, broadening the demand base by identifying new source, increasing community participation, developing and upgrading tourism human resources, and improving infrastructure through promoting PPP.</li> </ul>   |  |  |  |
| Risk           | i. Occurrence of global or regional economic and financial crisis.  |  |  |  |
| Assessment:    | ii. Competition from the regional markets   |  |  |  |
| Beneficiary:   | i. Travel Companies   |  |  |  |
|                | ii. Hoteliers.  |  |  |  |
|                | iii. Tour Guides  |  |  |  |
|                | iv. Farmers   |  |  |  |

| NKRA                                     | SKRA  | SKRA KPI  |  |
|--|---|---|--|
| Indigenous wisdom, arts                  | Bhutanese culture and   | % of tourist on cultural tours  |  |
| and crafts promoted for rural livelihood | tradition promoted among visitors   | Growth in sale of handicraft products   |  |
| Sustained Economic<br>Growth             |   | Contribution to GDP (US\$ m)  |  |
| Employment                               | Contribution to GDP, Revenue and Employment increased                           | No. of Bhutanese employed   |  |
| Sustained Economic<br>Growth             | and Employment mercused   | Yield per tourist/night (US \$)   |  |
| Corruption reduced                       | Enhance effectiveness and efficiency in delivery of public service              | Anticorruption Strategy implemented   |  |
| Improved public service delivery         | Enhance effectiveness and efficiency in delivery of public service              | Average performance rating (Govt. Performance Management System - GPMS)                   |  |
|  |   | TAT for public services reduced   |  |
| Sustainable utilization and              | Environment conservation  | % of tourists on eco-tourism  |  |
| management of natural resource           | promoted and well being of<br>rural communities improved<br>through eco-tourism | Rural communities benefitting from eco-tourism (project areas)                            |  |
| Improved public service delivery         | Improved service delivery   | Tourist satisfied with visit  |  |
| Sustained Economic<br>Growth             | New products developed  | No. of new products (wellness, cultural, sports, eco-tourism MICS & Nature based tourism) |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets                |
|--|--|-----------|-----------------------------|
| Outcome 001 : Bhutan   | Tourist satisfaction (%)   | 85        | >90                         |
| promoted as a high-end   | Revenue generation mil. US \$)   | 62.2 M    | 250 M                       |
| destination by ensuring improved service delivery,   | Employment generation (Nos.)   | 9238      | >28000                      |
| contribution to GDP and  | Annual tourist arrivals (Nos)  | 65756     | >150,000                    |
| employment, and increased yield  | % of tourist visiting East, south and central circuits   | 21.86     | >50                         |
|  | Yield per tourist/night (US \$)  | 344       | 350                         |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets                |
| Output 001:Tourism Products diversified  | Products developed (Nos)   | 4         | 8                           |
| Output 002:Institutional plan  | Tourism database (Nos)   | 1         | 2                           |
| developed  | Average performance rating   | NA        | > 90%                       |
|  | Industry stakeholder cooperation   | 1         | Maintained and Strengthened |
| Output 003:Sustainability standards developed and implemented with effective monitoring mechanisms | Sustainability standards reviewed (Nos)  | 1         | 1                           |
|  | Implementation of green growth proposal (Nos)  | 0         | 1                           |
| Output 004:New tourism services supply created over next 5 years                                   | FDI hotels/resorts operational in the country (Nos)  | 3         | 8                           |
|  | Farm houses and home stays in the east, south and central (Nos)  | 21        | 31                          |
| Output 005:Community + private partnership based tourism projects created/developed                | Technical support provided for development of new farm houses, home stays, heritage sites and noble houses (Nos) | 21        | 31                          |
|  | Public infrastructure created (Nos)  | 2         | 5                           |
| Output 006:Tourists accommodations classified as per the classification system                     | Existing 2 and 1 star accommodations upgraded to 3 star and above (Nos)  | 40        | 88                          |
|  | Trainings conducted for assessors (Nos)  | NA        | 10                          |
|  | Star rating certificate issued (nos)   | NA        | >100                        |

| Output 007:Tourism services improved/upgraded                                       | Guide and cook with licenses (Nos)   | 1358 | >50% |
|---|--|------|------|
|   | IDEC and BSTEC issued to accommodation providers   | NA   | All  |
|   | Tourism Liaison Office set up in East and South (Nos)  | 2    | 4    |
| Output 008:Integrated<br>Tourism infrastructures                                    | New trekking routes operationalized (Nos)  | 31   | 33   |
| developed   | Road side amenities (Nos)  | 5    | 10   |
|   | Special interest tour (eg. bird watching, mountain biking, river rafting, butterfly tours etc.) related infrastructure developed (Nos) | 4    | 8    |
| Output 009:Tour guiding related training and hospitality related training conducted | Basic tour guide training,<br>specialized courses and foreign<br>language courses conducted<br>(Nos)                                   | 4    | 20   |
|   | Hospitality training conducted (Nos)   | 4    | 20   |
| Output 010:Build Brand<br>Bhutan through effective<br>channels                      | Tie up with international tour operators (Nos)   | 5    | 18   |
|   | Market research, refine product market combination, explore new markets (Nos)  | 1    | 5    |
|   | Travel fairs and roadshows attended in the source market (Nos)   | 8    | 50   |
|   | Media FAM (Nos)  | 30   | 125  |
|   | FAM facilitated for ITO's (Nos)  | 100  | 500  |
|   | Websites developed in different languages (Nos)  | 2    | 5    |
|   | Tourism attaché appointed (Nos)  | 0    | 1    |
| Output 011:Tourism Planning and development decentralized                           | No. of Dzongkhag with Tourism<br>Development Plan (Nos)  | 2    | 3    |
|   |  |      |      |

Table 2: Programme Plan Outlay Summary

| Programme Activities  | Capital |
|---|---------|
| Development of new tourism products   | 30.000  |
| Plan and facilitate identification, development and promotion of new destinations with special interests across the country   | 2.160   |
| Review and development of regulations (a. Tour Operators' regulations, b. Trekking regulations, c. Guides regulations including code of conducts, d. hotel regulations etc.   | 4.200   |
| Develop and institute implementation and monitoring mechanisms  | 0.270   |
| Implementation and monitoring of regulations and guidelines   | 0.090   |
| Develop guidelines for wellness, MICE and other key attractions/activities  | 3.080   |
| Review and make policy directions on tariff   | 1.450   |
| Review and undertake processes for adoption of tourism bill   | 1.650   |
| Develop and consider proposal for carbon levy (carbon Neutral) to be charged from the appropriate carbon generating sectors   | 1.400   |
| Advocate awareness program  | 1.350   |
| Develop procedures and systems to clarify and decentralize tourism planning and management responsibilities   | 0.450   |
| Strengthen TCB's research capacity  | 2.500   |
| Study and streamline inbound procedures   | 0.650   |
| Support to Tour Operators, Hotels, Guides and Handicraft associations   | 15.000  |
| Coordinate and conduct basic tour guide training, trekking cook training, specialization course, foreign language course and hospitality (front office, F&B and cooking) training   | 15.000  |
| Promote cooperation with regional and international organizations and bodies, International and regional connectivity extended as feasible, develop and institute mechanism to coordinate donor assistance in tourism   | 2.100   |
| Develop baseline data set, undertake motivational research and studies  | 2.280   |
| Facilitate and promote FDI for development of high-end hotels/resorts, Land identification and carry out a feasibility study, attend International Hotel Investment Forums to attract investors.  | 5.000   |
| Identify suitable sites and prepare guideline for community participation to provide accommodation and other activities to tourists, Engage experts to provide technical assistance for project development and implementation and Test pilot project in each of these categories | 9.500   |
| To carry out assessment of accommodation across the country, design incentives/soft motivator for supply-up gradation and ensure rollout of the incentive system with clear timelines for up gradation. Conduct training for assessors and issue certificate for star rating.     | 6.000   |

| Maintain Royal Institute of Tourism and Hospitality  Develop tourism synergies with environmental agendas  Develop tourism initiatives with cultural agendas  IT online application extended to include hotels  Establish protocols and processes for monitoring over all tour quality services | 5.200<br>79.294<br>7.259<br>0.000<br>0.000<br>0.000 |
|---|---|
| Develop tourism synergies with environmental agendas  Develop tourism initiatives with cultural agendas   | 79.294<br>7.259<br>0.000<br>0.000                   |
| Develop tourism synergies with environmental agendas  | 79.294<br>7.259<br>0.000                            |
|   | 79.294<br>7.259                                     |
| Maintain Royal Institute of Tourism and Hospitality   | 79.294  |
| NA  |   |
| Construction of Hotel and Tourism management training Institute (Spill over)  | 5.200   |
| Implementation of Green Growth Proposal   | F 200   |
| Facilitate development of product amenities for key products  | 2.000   |
| Develop and implement destination management plans, transit/circuit management plans and site management plans for relevant sites   | 4.130   |
| Development, Facilitation, Monitoring and Evaluation of Dzongkhag Tourism Development Plans (DTDP)  | 12.100  |
| Marketing and Promotion   | 90.000  |
| Carry out survey or seek proposal for development of special interest tour infrastructure, documentation (develop design and drawing, cost estimation, prepare tender documents) floating of tender, evaluation and awarding of work.   | 10.000  |
| Field survey to assess requirement of new trekking routes and campsites as and where required or on request/proposal from different stakeholders, documentation (develop design and drawing, cost estimation, prepare tender documents) floating of tender, evaluation and awarding of work.    | 6.000   |
| Develop RSA's as and where required or on request/proposal from different stakeholders, documentation (develop design and drawing, cost estimation, prepare tender documents) floating of tender, evaluation and awarding of work.  | 25.500  |

## **HYDROMET**

| Au Name: MINISTRY OF ECONOMIC AFFAIRS   | Department: DEPARTMENT OF HYDRO-MET SERVICES |
|---|--|
| Program Name: Enhancing Hydrological<br>Network for Water Resources<br>Assessment and Improvement of Flood<br>Information/GLOF Early Warning System | Phase: Approved                              |

|                     | Lor Larry Warning System  |  |  |  |
|---------------------|---|--|--|--|
| Justification:      | There is increasing demand to provide the reliable and useable data/information on weather, climate and water related services to satisfy the increasing multifacet requirement of end users. In particular hydrological information provides a scientific basis& basic inputs for any socio-economic planning and development sectors like hydropower, industry, agriculture, construction, tourism transportation etc.  |  |  |  |
|                     | The hydrological and flood warning/GLOF early warning networks and stations will serve the major solution in enhancing the capacity to manage and mitigate the climate change induced disasters like floods, landslide, and droughts. Further, better understanding of natural disaster of hydrological origins require adequate multi-tier observation network for in-situ data collection in real and near real time to provide reliable flood forecasting and early warning to safe guard the life and properties. This program will continue to put in place effective institutional structure to respond to such disasters.  |  |  |  |
| Strategy:           | <ul> <li>i. Expanding hydrological &amp; flood warning networks by rationalizations of network assessment;</li> <li>ii. Modernizing &amp; upgrading the hydrological stations to automatic real time stations with improved data transmission to server in HQ;</li> <li>iii. Further development &amp; improvement of National Weather Flood Forecasting and Warning Centre(NWFFWC) and trained man power;</li> <li>iv. Expanding GLOF Early Warning System Networks in other river basins.</li> <li>v. Promoting the research &amp; developments in the field of hydrology, glaciology, and climate change impact in collaboration with the relevant national and international organizations/institutions.</li> </ul> |  |  |  |
| Risk<br>Assessment: | <ul> <li>i. Risk of getting land in time;</li> <li>ii. Lack of support &amp; cooperation from local government &amp; relevant agencies to implement the programs;</li> <li>iii. Non-delivery of equipment on time by suppliers</li> <li>iv. Limited access to internet and mobile network(GSM/GPRS)</li> </ul>  |  |  |  |
| Beneficiary:        | <ul> <li>i. Energy/Power sector</li> <li>ii. Agriculture sector</li> <li>iii. Transportation sector</li> <li>iv. Tourism sector</li> <li>v. Health sector</li> <li>vi. Construction sector</li> <li>vii. Disaster management</li> </ul>   |  |  |  |

| NKRA   | SKRA   | SKRA KPI  |  |
|--|--|---|--|
| Improved public service delivery                         | Delivery of weather, climate,<br>GLoF, water and related<br>environmental information and<br>service enhanced. | No. of pamphlets, outlooks, guidance related to extreme hydromet events   |  |
|  | Delivery of weather, climate,<br>GLoF, water and related<br>environmental information and<br>service enhanced. | No. of Research in climate prediction/projection to improve the skills of seasonal, decadal, and longer time scales |  |
| Water security   | Hydrological, meteorological, glacier and snow monitoring network and database established.                    | Hydrological and meteorological observing and monitoring network and services with good national coverage           |  |
|  | Hydrological, meteorological, glacier and snow monitoring network and database established.                    | River flow forecasting(days)  |  |
| Improved public service delivery                         | Delivery of weather, climate,<br>GLoF, water and related<br>environmental information and<br>service enhanced. | No. of pamphlets, outlooks, guidance related to extreme hydromet events   |  |
| Corruption reduced                                       | Enhance effectiveness and efficiency in delivery of public service   | TAT for public services reduced   |  |
| Improved Disaster resilience and management mainstreamed | Hydrological/meteorological risk to historical and cultural properties reduced.                                | No. of Basin wise multi-hazard early warning systems  |  |
| Water security   | Hydrological, meteorological, glacier and snow monitoring network and database established.                    | Glacier Mass Balance<br>Monitoring stations   |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
| Outcome001:Hydrological monitoring network with good national coverage                           | Hydrological monitoring network covering all the major river basins in Bhutan (Nos) | 54        | 32           |
| national coverage  | Snow & Glacier related studies and data collection (Nos)                            | 0         | 2            |
| Outcome 002 : Improved flood/  | Daily river flow forecasting (Nos)  | 0         | 1            |
| GLOF early warning services to minimize the loss of live and property                            | Basin wise Flood/GLOF early warning systems (Nos)                                   | 1         | 3            |
| Outcome 003 : Delivery of hydrological and related   | Access to online hydrological information (%)                                       | 0         | 100          |
| environmental information<br>& services to the public,<br>government and other users<br>enhanced | Climate and water resources studies (Nos)   | 0         | 2            |
| Results Levels(Output)   | Indicators  | Baseline  | Plan Targets |
| Output 001:Hydrological  | Real time hydrological station installed and operational (Nos)                      | 6         | 10           |
| Monitoring Network and Infrastructure expanded   | Hydrological station with real time (upgraded) (Nos)                                | 0         | 15           |
|  | New site office construction (Nos)  | 7         | 13           |
| Output 002:Flood Warning<br>Network and Infrastructure<br>expanded                               | New real time flood warning station installed and operational (Nos)                 | 1         | 2            |
|  | Existing flood warning station upgraded to real time (Nos)                          | 0         | 11           |
|  | New site office constructed (Nos)   | 11        | 13           |
| Output 003:Sediment network expanded   | Sediment sampling stations (Nos)  | 11        | 20           |
|  | Sediment Lab (Nos)  | 2         | 10           |
| Output 004:GLOF Early Warning<br>System installed and operational                                | GLOF EWS in river basin (Nos)   | 1         | 3            |
|  | Flood forecasting and warning center established (Nos)                              | 0         | 1            |
| Outt 205. Canaditation   | Data quality control (%)  |           | 0            |
| Output 005:Capacity in hydrological modeling and glacier mass balance monitoring enhanced        | Hydrological models run and operated (Nos)  |           | 0            |
|  | Glacier monitoring field station established (Nos)                                  |           | 0            |

| Output 006:Hydrological data       | Data book published (Nos)  | 1 |
|------------------------------------|--|---|
| book and research papers published | Pamphlets related to flood advisories printed and uploaded (Nos) | 1 |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Establish hydrological monitoring network and infrastructures                            | 75.850  |
| Establish flood warning network station and related infrastructures                      | 57.840  |
| Establish Sediment Sampling network and Laboratories                                     | 15.200  |
| Install Flood/GLOF Early Warning System in the selected river basins                     | 150.200 |
| Improve hydrological modeling capacity and initiate Glacier Mass Balance study in Bhutan | 11.050  |
| Publication of information for dissemination   | 1.000   |
| Total:   | 311.140 |

Au Name: MINISTRY OF ECONOMIC AFFAIRS Department: DEPARTMENT OF HYDRO-MET SERVICES

Program Name: Strengthening Phase: Approved

Program Name: Strengthening Meteorological Network Coverage and Enhancing

Weather and Climate Information Services

# Justification: Correct information on weather and climatic conditions is required for socioeconomic growth and environment friendly development. The generation of timely meteorological information is therefore important for facilitating sound socio-economic planning and development. Reliable and real-time forecasting information will also help in protecting lives and properties through early warning services. Further, climate data are required for climate modeling & climate change studies.

Further, climate data are required for climate modeling & climate change studies. Considering the topography of the country, a dense climate monitoring network is essential to forecast and study the impact of climate change. The current observation network in Bhutan is inadequate in terms of spatial coverage and representativeness. Hence, strengthening of its coverage with increasing number of hydro-meteorological hazards and well equipped meteorological monitoring stations will be essential to manage the increasing risk posed by climate change.

#### Strategy:

- i. Timely maintenance of stations to improve data collection.
- ii. Advocacy programs to increase public/stakeholders/end users interests on hydro-met products and services
- iii. Promote collaboration with relevant international/national research institutions/organizations for technical HR capacity developments.
- iv. Promote ICT-enabled data collection, transmissions and information disseminations to end users.
- v. Translate the technical and scientific information into formats readily understood by general public through appropriate media and train media persons for proper broadcasting & advocate on hydro-met services.

#### Risk Assessment:

- i. Lengthy land acquisition process.
- ii. Inadequate professionals with required technical knowledge.
- iii. Lack of support & cooperation from stakeholders and other agencies.
- iv. Limited Fund and access to latest ICT technologies & experts for undertaking research/modeling works.
- v. Limited access to internet/mobile facilities.

#### **Beneficiary:**

- i. Energy/Power sector
- ii. Agriculture sector
- iii. Transportation sector
- iv. Tourism sector
- v. Health sector
- vi. Construction sector
- vii. Disaster management

| NKRA  | SKRA   | SKRA KPI  |
|---|--|---|
| Improved public service delivery                      | Delivery of weather, climate,<br>GLoF, water and related<br>environmental information and<br>service enhanced. | No. of pamphlets, outlooks, guidance related to extreme hydromet events   |
|   | Delivery of weather, climate,<br>GLoF, water and related<br>environmental information and<br>service enhanced. | No. of Research in climate prediction/projection to improve the skills of seasonal, decadal, and longer time scales |
| Water security  | Hydrological, meteorological, glacier and snow monitoring network and database established.                    | Hydrological and meteorological observing and monitoring network and services with good national coverage           |
| Carbon Neutral/Green<br>Climate resilient development | Hydrological, meteorological, glacier and snow monitoring network and database established.                    | Hydrological and meteorological observing and monitoring network and services with good national coverage           |
| Corruption reduced                                    | Enhance effectiveness and efficiency in delivery of public service   | Anticorruption Strategy implemented   |
| Improved public service delivery                      | Enhance effectiveness and efficiency in delivery of public service   | Average performance rating (Govt. Performance Management System - GPMS)   |
|   |  | TAT for public services reduced   |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines | Plan Targets |
|---|--|-----------|--------------|
| Outcome001:Improved weather & climate monitoring services with good national coverage                           | Modernised meteorological observing & monitoring network/infrastructure (Nos)  | 40        | 80           |
|   | Access to timely& accurate meteorological information (%)  | NA        | 100          |
|   | Daily Weather & climate forecasting (Days)   | 1         | 3            |
| Outcome 002:Improved delivery of weather, climate & related environmental information & services to the public, | Research, modeling, climate prediction products for climate change, disaster risks reduction & socio-economic benefits (Nos) | 1         | 2            |
| government and other users  | Climate & weather and other meteorological studies (Nos)   | 0         | 4            |
| Results Levels (Output)   | Indicators   | Baseline  | Plan Targets |
| Output001:National Hydro-<br>Meteorological Services Policy<br>framed & adopted                                 | Hydromet policy in place (Nos)   | 0         | 1            |
| Output002:Meteorological Observing Monitoring Network   | Meteorological stations modernized and operational (Nos)   | 9         | 60           |
| and Infrastructure expanded   | Functional regional Offices(Nos)   | 0         | 2            |
|   | Functional field offices (Nos)   | 3         | 5            |
|   | Upper air observation initiated (Nos)  | 0         | 1            |
| Output003:Weather, climate  | Models installed and used (Nos)  | 1         | 2            |
| information & prediction products are improved  | Operational access to NWP products including effective use & interpretations (Nos)   | 0         | 2            |
|   | Route and aviation advisories (Nos)  | 0         | 2            |
|   | Seasonal prediction for socio-<br>economic sector (Nos)  | 0         | 2            |
| Output004:Improved availability & access to reliable, high quality  | Central Data base system with GIS (Nos)  | 0         | 1            |
| hydro-meteorological data   | Availability of observational data to users (%)  | NA        | 100          |
|   | Real time delivery of collected observational data from remote station (%)   | NA        | 100          |
|   | Historical climate data (Nos)  | 0         | 5            |

| Output005:Promote Hydro-met services in political & public profile                                      | Brochures/periodicals published (Nos)  | 0 | 4 |
|---|--|---|---|
|   | Advocacy & Awareness campaigns (Nos)   | 0 | 3 |
| Output006:Enhanced capability to contribute to & draw benefits from regional & global research capacity | Cooperation and partnerships with national, regional & international organizations (Nos) | 0 | 5 |
|   | Collaborative Research projects carried out (Nos)  | 0 | 3 |
|   | Technical assistance sought (Nos)  | 0 | 3 |
| Output007:Hydro-meteorological research papers, Met data book   | Climate, weather & water related research papers (Nos)                                   | 0 | 3 |
| published   | Meteorological data book (Nos)   | 0 | 2 |

Table 2: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Strengthening of Institutional framework for national hydro-met services   | 20.000  |
| Establish Meteorological observation network stations and infrastructures  | 290.600 |
| Enhance provision of useful information to public & socio-economic development sector by use of WRF & MetGIS models. | 64.500  |
| Improved hydro-meteorological information management system  | 24.000  |
| Education and awareness on hydro-met services  | 8.000   |
| Institutional collaboration + technical assistance, research & development   | 15.000  |
| Research, publication & dissemination of hydro- meteorological information   | 6.500   |
| Total:   | 428.600 |

# **ENERGY**

Au Name: MINISTRY OF ECONOMIC AFFAIRS

Program Name: Institutional Reforms and Capacity Building

Department: DEPARTMENT OF HYDRO POWER AND POWER SYSTEM

Phase: Approved

| Justification:      | Hydropower sector is going to be the main backbone of Bhutanese economy. The total hydropower potential of Bhutan is estimated at 30,000 MW but the country has so far harnessed about less than 10% of the total hydropower potential. In an effort towards positioning Bhutan on a self-reliant footing, harnessing the hydropower potential through accelerating the hydropower development will be very crucial. Equally, It would also be important to sustain the huge investment made for the hydropower plants in the past. All of these would warrant continuous institutional reforms and strengthening of the energy sector to cope with difficult challenges.  This program is therefore designed to strengthen the institutional capacity of the energy sector to deliver the mandate of 10,000 MW installed capacity by 2020 and ensure its sustainability. |
|---------------------|---|
| Strategy:           | <ul><li>i. Carry out institutional capacity assessments to identify gaps and deficiencies.</li><li>ii. Conduct organization development exercise to sharpen its focus.</li></ul>  |
| Risk<br>Assessment: | i. Insufficient fund  |
| Beneficiary:        | i. Department of power and power system   |
|                     | ii. Energy Sector   |

| NKRA                             | SKRA   | SKRA KPI  |
|----------------------------------|--|---|
| Improved public service delivery | Enhance effectiveness and efficiency in delivery of public service | Anticorruption Strategy implemented                                     |
| ·                                | Enhance effectiveness and efficiency in delivery of public service | Average performance rating (Govt. Performance Management System - GPMS) |
|                                  | Enhance effectiveness and efficiency in delivery of public service | TAT for public services reduced   |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
| Outcome001:Improved delivery of public services through institutional reforms and capacity                           | Power Sector agencies reforms (Agencification) (Nos)  | 2         | 5            |
|  | Private and PPP participation (Nos)   | 1         | 4            |
|  | Power sector employees<br>specialized in the field of hydro<br>power and Power systems<br>(Nos) | 471       | 591          |
|  | Vacancies for employment (%)  | 0         | 100          |
| ResultsLevels(Output)  | Indicators  | Baseline  | Plan Targets |
| Output 001:Hydropower Projects under PPPs/IPPs mode identified   | PPP/IPP Projects allocated (Nos)  | 1         | 4            |
| Output 002:Unbundling<br>transmission and distribution utility<br>assessed/ Operationalization of<br>System Operator | Study on unbundling utility functions available/ System Operator operationalized (Nos)          | 0         | 1            |
| Output 003:Investments and related studies on Transmission Network   | Feasibility report for transmission network investments available (Nos)                         | 0         | 1            |
| Output 004:Feasibility study for establishment of a Power Trading Company  | Feasibility Report on establishment of PTC (Nos)  | 0         | 1            |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Preparation of Procurement process of IPP/PPP   | 10.000  |
| Viability study for unbundling transmission and distribution utility /Operationalization of System Operator | 10.000  |
| Transmission investments and related studies  | 7.000   |
| Feasibility study and establishment of Power Trading company  | 2.400   |
| Total:  | 29.400  |

| Au Name: MINISTRY OF ECONOMIC AFFAIRS                                   | Department: DEPARTMENT OF HYDRO POWER AND POWER SYSTEM |
|---|--|
| Program Name: Accelerated Hydropower Development & Transmission Network | Phase: Approved  |

| Justification: | The total hydropower potential of Bhutan is estimated at 30,000 MW. But the country has so far been able to harness only about 10% of the total hydropower potential. While the power master plan has identified about 75 project sites, feasibilities and detailed project reports have been carried for few projects. In order to realize the plan objective of self-reliant economy and electricity for all, accelerating hydropower development is the way forward. It will be therefore be appropriate to expeditiously conduct detailed project reports for the potential projects and implement them using sustainable business model.  Further, to keep pace with the accelerated hydropower development, power transmission infrastructure (both lines and substations) will require strengthening to evacuate power from the generating stations to various load centers. Therefore, a full electricity grid interconnection between the western, central and eastern region will be necessary to ensure reliable and adequate power supply to the consumers. This is will also contribute towards the goal of making Bhutan energy secure. |
|----------------|---|
| Strategy:      | i. Commission pre-feasibility studies and reconnaissance studies.      ii. To reduce dependence on bilateral modes of hydropower development,   |
|                | Independent Power Producers(IPP) and Public Private Partnership(PPP) models will be explored  |
|                | iii. Establish Power Training Institute to address manpower deployment in Hydopower projects.   |
|                | iv. Conduct system strengthening works and take up construction of new transmission lines and associated substations.   |
| Risk           | i. Insufficient and timely availability of fund;  |
| Assessment:    | ii. Inadequate skilled manpower.  |
| Beneficiary:   | i. Power/Energy sector  |

| NKRA                      | SKRA  | SKRA KPI  |
|---------------------------|---|---|
| Sustained Economic Growth | Energy security enhanced  | Installed capacity of HPP                                   |
|                           | Energy security enhanced  | Total HV transmission lines constructed                     |
|                           | National Capacity to Design,<br>Build, Operate and<br>Manage HPP developed. | No. of Bhutanese contractors qualifying for bidding for HPP |
|                           | Contribution to GDP, revenue and employment increased.                      | Contribution to domestic revenue (in Mil. Nu)               |
| Employment                | Contribution to GDP, revenue and employment increased.                      | No. of bhutanese employed                                   |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                       | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
| Outcome001:Energy Security                                    | Installed Capacity (MW)                             | 1480      | 4546         |
| Enhanced  | Transmission System network enhanced (km)           | 1296      | 1474         |
|   | Reduction in net import of electricity (million Nu) | 49.50     | 0            |
| Outcome002:Contribution to                                    | Contribution to GDP (million Nu)                    | 51,000    | 103,000      |
| GDP, Revenue and  | Bhutanese employed (Nos)                            | 5853      | 14593        |
| Employment increased  | Contribution to domestic revenue(million Nu)        | 11,240    | 52,000       |
| Outcome003:Natural resources utilized and managed sustainably | Contribution to environmental& social services (%)  | 1         | 2            |
| Results Levels(Output)  | Indicators  | Baseline  | Plan Targets |
| Output001:HPPs commissioned                                   | HPPs commissioned (Nos)                             | 4         | 8            |
| Output002:Construction of HPPs initiated                      | HPPs initiated (Nos)                                | 4         | 12           |
| Output003:DPR prepared for<br>Project Implementation          | DPR prepared for Project Implementation (Nos)       | 8         | 12           |
| Output004:New Transmission<br>Lines Constructed               | Length of new lines constructed(Km)                 | 0         | 178          |
| Output005:PFR of HPPs for DPR Preparation                     | PFR of HPPs for DPR<br>Preparation(Nos)             | 5         | 13           |

| Output006:Reconnaissance<br>Study Report for PFR of HPPs<br>prepared    | Reconnaissance study report for PFR of HPPs (Nos)   | 14    | 21       |
|---|---|-------|----------|
| Output007:New and old sub-station constructed and                       | New sub stations constructed (Nos)  | 0     | 1        |
| upgraded  | Sub Stations upgraded (Nos)   | 0     | 1        |
| Output008:Social and<br>Environmental integrated in HPP<br>construction | Amount incurred towards environment management and development of social infrastructures (million Nu) | 1,052 | 4,631.15 |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital  |
|---|----------|
| DPR of Kuri-Gongri & Rotpashong, Manas Reservoir and Chamkharchhu Integrated  | 805.000  |
| Constructions of 132kV Nganglam-Motanga line (38km) along with augmentation of substation at Motanga and Deothang, 66kV Jimina- Motithang-Parizampa line (20km), 132kV Motanga-Phuntshothang (20km) and 132kV Kanglung-Phuntshothang (58km), 66kV Pangrizampa- Damji(Gasa) (42km) | 235.500  |
| Pre-feasibility study of Dangchhu, Chamkharchhu integrated, Nyera-Amari integrated, Gamrichhu Shongarchhu, Dagachhu-II, Mochhu-I and Manas Reservoir  | 210.000  |
| Reconn. study of Amochhu-I, Amochhu-II, Dhangsiri, Kholongchhu (Yangtse), Samchhu, Pachhu(Chukha) and Pipingchhu  | 60.000   |
| Upgradation of Chumdo S/S to 220/66kV, 2x50MVA GIS substation along with 220kV Chhukha-Semtokha line at Chumdo.   | 0.000    |
| Construction of social infrastructures as integrated part of HPPs, implementation of environmental Management Plan for HPPs and Implementation of Rehabilitation & Resettlement (R&R) Plans for PAFs  | 0.000    |
| Construction of HPPs (Sankosh, Amochhu, Kuri- Gongri, Chamkharchhu-I, Wangchhu, Kholongchhu, Bunakha & Nikachhu)  | 0.000    |
| Commissioning of HPPs (Punatsangchhu-I, Punatsangchhu-II, Mangdechhu & Dagachhu)  | 0.000    |
| Total:  | 1310.500 |

| Au Name: MINISTRY OF ECONOMIC AFFAIRS                          | Department: DEPARTMENT OF RENEWABLE ENERGY |
|--|--|
| Program Name: Promotion and Development of Renewable/Alternate | Phase: Approved                            |

**Energy Technologies** 

| Intergy is deeply fundamental to improving the quality of life. At the national level, energy is an essential and key ingredient for sustainable development. Therefore, better and enhanced access to reliable energy services can greatly help in alleviating poverty through reduction in workloads of poor households, improving living conditions and enhancing opportunities to engage in productive activities. As such, Bhutan has made huge investment in the development of hydro power plants. In order to promote and sustain energy security and mitigate of risk of relying on one energy source, it will be crucial to explore other renewable energy sources.  This program therefore aims to diversify energy supply mix using renewable energy resources like solar, wind, biomass, small hydro and other emerging modern fuels as sources for energy generation and strengthen the institutional capacity for provision of efficient and responsive energy services.  Strategy:  i. Develop Renewable Energy Master Plan, conduct pre-feasibility and feasibility studies to attract the investors in the renewable energy Sector.  ii. Shape energy demand by promoting the use of efficient technologies, processes, products, standards and labels at all levels of supply and demand chain.  iii. Promote biogas plants as alternate source of fuel for cooking, Compact Fluorescent Lamp (CFL) instead of incandescent lamps in the LV category consumers, energy efficient wood stoves to reduce fuel-wood demand and solar water heating systems as alternative means for heating water and space.  iv. Link the supply and demand side for energy services by identifying technologies and process that are applicable in Bhutan or in Bhutanese context by conducting adaptive research activities.  i. Inherent high cost of energy generation from the renewable energy sources like solar, wind, and biomass technologies.  ii. Scattered nature of settlements and daunting challenge both in terms of economic and technological aspects for renewable energy  iii. Availability of functiona |                |   |
|--|----------------|---|
| energy resources like solar, wind, biomass, small hydro and other emerging modern fuels as sources for energy generation and strengthen the institutional capacity for provision of efficient and responsive energy services.  Strategy:  i. Develop Renewable Energy Master Plan, conduct pre-feasibility and feasibility studies to attract the investors in the renewable energy Sector.  ii. Shape energy demand by promoting the use of efficient technologies, processes, products, standards and labels at all levels of supply and demand chain.  iii. Promote biogas plants as alternate source of fuel for cooking, Compact Fluorescent Lamp (CFL) instead of incandescent lamps in the LV category consumers, energy efficient wood stoves to reduce fuel-wood demand and solar water heating systems as alternative means for heating water and space.  iv. Link the supply and demand side for energy services by identifying technologies and process that are applicable in Bhutan or in Bhutanese context by conducting adaptive research activities.  i. Inherent high cost of energy generation from the renewable energy sources like solar, wind, and biomass technologies.  ii. Scattered nature of settlements and daunting challenge both in terms of economic and technological aspects for renewable energy  iii. Availability of functional laboratory for research activities and testing & certification of energy efficient products.  Beneficiary:  i. Rural population,   | Justification: | level, energy is an essential and key ingredient for sustainable development. Therefore, better and enhanced access to reliable energy services can greatly help in alleviating poverty through reduction in workloads of poor households, improving living conditions and enhancing opportunities to engage in productive activities. As such, Bhutan has made huge investment in the development of hydro power plants. In order to promote and sustain energy security and mitigate of risk of relying on one energy source, it will be crucial to explore other renewable energy sources. |
| feasibility studies to attract the investors in the renewable energy Sector.  ii. Shape energy demand by promoting the use of efficient technologies, processes, products, standards and labels at all levels of supply and demand chain.  iii. Promote biogas plants as alternate source of fuel for cooking, Compact Fluorescent Lamp (CFL) instead of incandescent lamps in the LV category consumers, energy efficient wood stoves to reduce fuel-wood demand and solar water heating systems as alternative means for heating water and space.  iv. Link the supply and demand side for energy services by identifying technologies and process that are applicable in Bhutan or in Bhutanese context by conducting adaptive research activities.  Risk  i. Inherent high cost of energy generation from the renewable energy sources like solar, wind, and biomass technologies.  ii. Scattered nature of settlements and daunting challenge both in terms of economic and technological aspects for renewable energy  iii. Availability of functional laboratory for research activities and testing & certification of energy efficient products.  Beneficiary:  i. Rural population,  |                | energy resources like solar, wind, biomass, small hydro and other emerging modern fuels as sources for energy generation and strengthen the institutional   |
| processes, products, standards and labels at all levels of supply and demand chain.  iii. Promote biogas plants as alternate source of fuel for cooking, Compact Fluorescent Lamp (CFL) instead of incandescent lamps in the LV category consumers, energy efficient wood stoves to reduce fuel-wood demand and solar water heating systems as alternative means for heating water and space.  iv. Link the supply and demand side for energy services by identifying technologies and process that are applicable in Bhutan or in Bhutanese context by conducting adaptive research activities.  Risk  Assessment:  i. Inherent high cost of energy generation from the renewable energy sources like solar, wind, and biomass technologies.  ii. Scattered nature of settlements and daunting challenge both in terms of economic and technological aspects for renewable energy  iii. Availability of functional laboratory for research activities and testing & certification of energy efficient products.  Beneficiary:  i. Rural population,   | Strategy:      |   |
| Fluorescent Lamp (CFL) instead of incandescent lamps in the LV category consumers, energy efficient wood stoves to reduce fuel-wood demand and solar water heating systems as alternative means for heating water and space.  iv. Link the supply and demand side for energy services by identifying technologies and process that are applicable in Bhutan or in Bhutanese context by conducting adaptive research activities.  Risk Assessment:  i. Inherent high cost of energy generation from the renewable energy sources like solar, wind, and biomass technologies.  ii. Scattered nature of settlements and daunting challenge both in terms of economic and technological aspects for renewable energy  iii. Availability of functional laboratory for research activities and testing & certification of energy efficient products.  Beneficiary:  i. Rural population,   |                | processes, products, standards and labels at all levels of supply and demand  |
| technologies and process that are applicable in Bhutan or in Bhutanese context by conducting adaptive research activities.  i. Inherent high cost of energy generation from the renewable energy sources like solar, wind, and biomass technologies.  ii. Scattered nature of settlements and daunting challenge both in terms of economic and technological aspects for renewable energy  iii. Availability of functional laboratory for research activities and testing & certification of energy efficient products.  Beneficiary:  i. Rural population,  |                | Fluorescent Lamp (CFL) instead of incandescent lamps in the LV category consumers, energy efficient wood stoves to reduce fuel-wood demand and solar water heating systems as alternative means for heating water and   |
| Assessment:  like solar, wind, and biomass technologies.  ii. Scattered nature of settlements and daunting challenge both in terms of economic and technological aspects for renewable energy  iii. Availability of functional laboratory for research activities and testing & certification of energy efficient products.  Beneficiary:  i. Rural population,  |                | technologies and process that are applicable in Bhutan or in Bhutanese  |
| economic and technological aspects for renewable energy  iii. Availability of functional laboratory for research activities and testing & certification of energy efficient products.  Beneficiary:  i. Rural population,  |                | _ = =: = =:   |
| certification of energy efficient products.  Beneficiary: i. Rural population,   |                |   |
|  |                |   |
| ii. Renewable energy based companies   | Beneficiary:   | i. Rural population,  |
|  |                | ii. Renewable energy based companies  |

| NKRA   | SKRA   | SKRA KPI  |
|--|--|---|
|  |  | Installed capacity of Biomass   |
| Sustained Fannamic Crouth                                  | Energy security enhanced   | Installed small HPP capacity  |
| Sustained Economic Growth                                  | Energy security enhanced   | Installed solar power capacity  |
|  |  | Installed wind power capacity   |
|  |  | Anticorruption Strategy implemented                                     |
| Improved public service delivery                           | Enhance effectiveness and efficiency in delivery of public service | Average performance rating (Govt. Performance Management System - GPMS) |
|  |  | TAT for public services reduced   |
| Sustainable utilisation and management of natural resource | Meaningful and purposeful alternate renewable energy promoted.     | No. of households using bio-<br>fuel as source of cooking/<br>heating   |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines    | Plan Targets |
|---|--|--------------|--------------|
| Outcome1:Energy security enhanced through   | Electricity generation from<br>Renewable Energy Technologies<br>(kW)                         | 8,152        | 21,522       |
| diversification and promotion of renewable energy technologies                                    | Alternate form of energy systems (improved cook stoves, biogas, solar water heater) (Nos)    | 616          | 8,216        |
|   | Policies and rules formulated and adopted (Nos)  | 1            | 3            |
| Outcome002: Revenue increased through demand side management using Compact Fluorescent Lamp(CFL). | Cost of energy for domestic lighting (Nu.)   | 12,490,523.9 | 2,914,455.6  |
| Results Levels(Output)  | Indicators   | Baseline     | Plan Targets |
|   | Wind power plant (Nos)   | 0            | 1            |
|   | Small hydro power plant (Nos)  | 2            | 3            |
|   | Biomass power project (Nos)  | 0            | 1            |
|   | Improved cook stoves (Nos)   | 6            | 5006         |
|   | Biogas plant in place (Nos)  | 600          | 3100         |
| Output001:Alternate/<br>renewable energy  | Solar water heating system in place (Nos)  | 10           | 110          |
| diversified/promoted  | RE Policy, rules and regulation (Nos)  | 0            | 1            |
|   | Renewable Energy Development<br>Fund management and operational<br>frame work in place (Nos) | 0            | 1            |
|   | Solar power plant (Nos)  | 0            | 1            |
|   | Energy efficiency policy and its rules& Regulation (Nos)                                     | 0            | 2            |
|   | RE Master Plan (Nos)   | 0            | 1            |
| Output002: Renewable<br>Energy resource assessment<br>carried out                                 | DPRs on solar, biomass and wind power projects (Nos)   | 0            | 3            |
|   | Feasibilities/DPRs level study on small hydropower projects (Nos)                            | 2            | 5            |
|   | Reconnaissance reports on small hydropower projects (Nos)                                    | 0            | 5            |

| Output003: Improved access to clean and affordable energy                                 | HHs connected with grid electricity (Nos)   | 83,569    | 85,632  |
|---|---|-----------|---------|
|   | Village entrepreneurs knowledge<br>enhanced on O&M of Renewable<br>Energy Technologies (Nos)            | 46        | 166     |
|   | HHs electrified through solar (Nos)   | 2666      | 2966    |
|   | Functional laboratory in place (Nos)  | 0         | 1       |
|   | Research activities initiated and its reports/journal produced (Nos)                                    | 0         | 5       |
| Output004:Applied Research<br>and Development on RE<br>Technologies initiated.            | National energy data directory in place (Nos)   | 1         | 2       |
|   | Appropriate standards and labels developed for import of energy consuming products and appliances (Nos) | 0         | 1       |
|   | Advocacy events on renewable energy and energy efficiency (Nos)   | 2         | 7       |
| Output005:Demand side<br>management using Compact<br>Fluorescent Lamp(CFL)<br>carried out | Quantity of energy for domestic lighting(kWh)   | 3,311,497 | 772,683 |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Installation and commissioning of 1000kW solar power plant                            | 100.000 |
| Construction and commissioning of 360kW wind power plant                              | 54.000  |
| Initiate Construction of at least 1 SHP   | 310.000 |
| Installation and commissioning of 10kW biomass power plant                            | 2.000   |
| Up scaling of improved cook stoves  | 8.000   |
| Up scaling of biogas plants   | 20.000  |
| Up-scaling of solar water heating system  | 15.000  |
| Formulation of RE policy implementation rules and regulation                          | 10.000  |
| Development of Renewable Energy Development Fund management and operational framework | 3.000   |
| Development of Master Plan for Renewable Energy Technologies                          | 50.000  |
| DPR of solar, wind, biomass power projects  | 6.000   |
| Reconnaissance study of 5 SHP sites   | 6.000   |
| Feasibility studies and DPR of 3 best SHP sites                                       | 20.000  |

| Grid electrification of 2063 left-out/off-grid hhs  | 789.000  |
|---|----------|
| Rural electrification of 300 left out hhs through solar photo voltaic system (PV) systems               | 9.000    |
| O & M program for sustenance of RE technologies   | 10.000   |
| Establishment of one functional laboratory  | 10.000   |
| Carry out research on RE technologies and production of journals/reports                                | 1.500    |
| Up-dation of Bhutan Energy data directory 2005  | 10.000   |
| Carry out advocacy program on RE and Energy Efficiency  | 5.000    |
| Development of appropriate standards and labels for import of energy consuming products and appliances. | 3.000    |
| Enhancing electricity export through demand side management using CFL                                   | 50.000   |
| Formulation of energy efficiency policy with implementation rules and regulation                        | 35.000   |
| Total:  | 1526.500 |

# TRADE

Au Name: MINISTRY OF ECONOMIC AFFAIRS | Department: DEPARTMENT OF TRADE

**Program Name: Export Promotion and** 

**Phase: Approved** 

**Market Access** 

| Justification:      | Trade has become increasingly significant for overall socio-economic development of our country. However, due to small domestic market and narrow range of exports, the trade sector could not grow as expected. Over the years, the Department has been making concerted efforts towards development and diversification of our export base and realized that in order to optimally harness the relative comparative advantage, it would be important to strategically enhance our export capacity in the international market through export promotion, niche marketing and facilitating integration into the regional and international trading regime.  Moving forward, given the importance of the trade sector in employment generation, economic diversification and in addressing the growing trade imbalances, growth and development of trade sector has now become very crucial In light of the above, the Department will continue strengthen and sharpen its focus on diversifying exports and expansion of export markets. |
|---------------------|--|
| Strategy:           | <ul> <li>i. Continue to organize and attend annual consultation and bilateral meetings to resolve/address trade related issues. Also explore Preferential Trade Agreement with Nepal, Thailand and continue negotiations on SAFTA and BIMSTEC.</li> <li>ii. Capitalizing on Bhutan's LDC status, engage at the multilateral level for special</li> </ul>   |
|                     | & differential treatment in terms of market access and technical assistance.  iii. Brand Bhutan will be operationalized to accelerate export and will accord priority to the development of dry ports.   |
|                     | iv. Sharpen its engagement in trade fairs, organize trade missions,<br>undertake market study for selected products and have an export showroom<br>to exhibit the export products.   |
| Risk<br>Assessment: | i. The possible change in Government policy on bilateral relations with trading partners and trade policy may hamper the implementation of the bilateral trade.  |
|                     | ii. Regional trade agreements depend on the consensus of the member states.<br>As such, political situation and change in foreign trade policies of the member states may stall or affect the progress.  |
|                     | iii. The land acquisition process entails various stakeholders and agencies which may impede the work process.   |
|                     | iv. Lack of budget may hamper the progress.  |
| Beneficiary:        | i. Local Government and BCCI   |
|                     | ii. Business entrepreneurs   |
|                     | iii. General consumer  |

| NKRA   | SKRA                                     | SKRA KPI  |  |
|--|--|---|--|
| Sustained Economic Growth  | Contribution to GDP and                  | Trade sector contribution to annual GDP growth                                |  |
| Employment   | employment increased                     | No. of Bhutanese employed over plan period                                    |  |
|  | Enabling environment created             | Ease of Doing Business improved in targeted areas                             |  |
| Sustained Economic Growth  |  | Legal framework   |  |
|  |  | No. of dry Ports  |  |
| Corruption reduced   | Enhance effectiveness and                | Anticorruption Strategy implemented   |  |
| Improved public service delivery                                 | efficiency in delivery of public service | Average performance rating<br>(Govt. Performance<br>Management System - GPMS) |  |
|  |  | TAT for public services reduced   |  |
|  |  | No. of new export products  |  |
| Sustained Economic Growth  | Export Promoted                          | Value of exports of goods<br>annually (without electricity) -<br>Nu. billion  |  |
| Carbon Noutral   | Dromata Environment Friendly             | Improve fuel quality  |  |
| Carbon Neutral/<br>Green Climate resilient<br>development        | Promote Environment Friendly Trade       | No. of trade fairs on environment friendly goods facilitated                  |  |
| Indigenous wisdom, arts and crafts promoted for rural livelihood | Strengthened Brand Bhutan                | Brand Bhutan Strategy<br>developed and implemented                            |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)       | Indicators  | Baselines  | Plan Targets |
|-------------------------------|---|------------|--------------|
|                               | Annual value of exports without electricity (million Nu.) | 15 Billion | 21 Billion   |
| Outcome 001 : Export enhanced | Export products (Nos)                                     | 14         | 27           |
|                               | New export market (Nos)                                   | 3          | 6            |

| Results Levels (Output)   | Indicators   | Baseline | Plan Targets             |
|---|--|----------|--------------------------|
| Output 001:Improved market access                                     | Bilateral, regional and multilateral agreements negotiated/renewed and concluded (Nos) | 3        | 6                        |
| Output 002:Capacity and understanding on trade mainstreaming enhanced | Projects implemented under EIF (Nos)   | 0        | 2(Tier I & II)           |
| Output 003:Established functional reference and inquiry centre        | Reference and inquiry centre (Nos)   | 0        | 1(Improved and upgraded) |
| Output 004:Export Promoted  | Exporters (Nos)  | 80       | 120                      |
|   | Functional dry ports (Nos)   | 0        | 2                        |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Organize/host and participate in Bilateral Meetings with current and potential trading partners(India, Bangladesh, Nepal & Thailand) | 0.000   |
| Implement Tier I & II projects   | 10.140  |
| Establish Trade information system, Library and E-Library on relevant legislations and global trade information                      | 2.000   |
| Develop Brand Bhutan   | 15.000  |
| Establishment of Mini- Dry Port /Warehousing & Distribution Complex in Phuntsholing  | 200.000 |
| Promotion & Marketing (Market mission, Trade Fairs, market study)  |         |
| Participate /Host Regional Trade Agreement(s) meeting/negotiations under SAFTA/SATIS & BIMSTEC                                       | 0.000   |
| Engage and participate in multilateral meetings and conferences  | 0.000   |
| Dry port at Toribari, P/ling   | 200.000 |
| Renew existing Bilateral Trade Agreements with Inda and Bangladesh   |         |
| Initiate and conclude Bilateral Trade Agreements with Nepal and Thailand   |         |
| Appoint Trade attaches in Royal Bhutanese Embassies in New Delhi and Bangkok   |         |
| Total:   | 433.140 |

Au Name: MINISTRY OF ECONOMIC AFFAIRS | Department: DEPARTMENT OF TRADE

Program Name: Strengthening Trade Policy Phase: Approved

and Regulatory Framework

| Justification:      | Legal instruments such as consumer protection act, competition policy, and trade development act have been drafted to prevent business malpractices, promote fair competition in the market and promote international best practices in the business environment. However, the implementation of the laws and policies through the revised rules and regulations would be a challenging task. To achieve greater economic efficiency and healthy competition in the trading sector, it is important to continue the efforts of the Department aimed at creating a conducive and enabling environment. This would, amongst others, require development of the managerial skills of the entrepreneurs and improving the efficiency and productivity of the business operations. This program is therefore designed to improve the institutional performance of the trade sector to effectively respond to the impending challenges.                               |
|---------------------|---|
| Strategy:           | <ul> <li>i. In order to implement the Consumer Protection Act, an independent office with required manpower under the Ministry will be created.</li> <li>ii. The legal framework will be strengthened through the drafting and enactment of the competition law/policy and trade development act.</li> <li>iii. Under the market modernization, trainings on skills development and awareness on consumer products will be carried out throughout the country. The training will focus mostly on micro traders.</li> <li>iv. To strengthen trade, feasibility study on establishment of wholesale centres in all border towns will be carried out. Further, the Department will strengthen the monitoring of trading activities within the country.</li> <li>v. In the area of up-gradation of the fuel quality, negotiation with oil companies in India &amp; Government of India for early launch of Euro IV fuel will be initiated expeditiously.</li> </ul> |
| Risk<br>Assessment: | <ul> <li>i. Implementation of Consumer Protection Act, Development of Competition Policy/Law and Trade Development Act might face budget constraint as there is no committed budget from any donor agencies.</li> <li>ii. The relocation of the POL depot entails huge cost and lack of committed budget may deter the relocation work.</li> <li>iii. Lack of adequate skilled professionals might impede the implementation of the above activities</li> </ul>   |
| Beneficiary:        | <ul><li>i. Business entrepreneurs</li><li>ii. Companies and corporations</li><li>iii. General consumer,</li></ul>   |

| NKRA                             | SKRA   | SKRA KPI  |
|----------------------------------|--|---|
| Sustained Economic<br>Growth     | Enabling environment created                                       | Ease of Doing Business improved in targeted areas                       |
|                                  | Enabling environment created                                       | Legal framework   |
| Improved public service delivery | Enhance effectiveness and efficiency in delivery of public service | Average performance rating (Govt. Performance Management System - GPMS) |
|                                  | Enhance effectiveness and efficiency in delivery of public service | TAT for public services reduced   |
| Corruption reduced               | Enhance effectiveness and efficiency in delivery of public service | Anticorruption Strategy implemented                                     |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                    | Indicators   | Baseline | Plan Targets                            |
|--|--|----------|---|
| Outcome 001 : A vibrant                    | Annual trade contribution to GDP (in million.)                     | 4641.79  | 6842.35                                 |
| trading sector with conducive              | Legal framework in place (Nos)                                     | 1        | 3                                       |
| environment created                        | Bhutanese employed in trade sector (Nos)                           | 12505    | 17000                                   |
| Results Levels (Output)                    | Indicators   | Baseline | Plan Targets                            |
| Output 001:Legal and                       | Consumer Protection Act (CPA) (Nos)                                | 0        | 1                                       |
| institutional framework developed          | Competition Law/Policy and Trade<br>Development Act in place (Nos) | 0        | 2                                       |
| Output 002:Market<br>Modernization         | Awareness programs on consumer products (Nos)                      | 8        | All<br>dzongkhags<br>and major<br>towns |
|  | Skill of women entrepreneur (Nos)                                  | 0        | 30%                                     |
|  | Trading firms (Nos)  | 20373    | 30560                                   |
| Output 003:Ease of doing business improved | Wholesale centers in the border towns (Nos)                        | 171      | 343                                     |
|  | Trade services automated (Nos)                                     | 4        | 13                                      |

|  | Simplified trade rules and procedures in place (Nos) | 0        | 1        |
|--|--|----------|----------|
|  | POL retail outlets coverage (%)                      | 70       | 90       |
| Output 004:Improved fuel quality and supply of POL | POL lab (upgradation) (Nos)                          | Clinical | Standard |
| products within the country                        | Operational POL depot (Nos)                          | 0        | 1        |
|  | Fuel quality (Nos)                                   | Euro III | Euro IV  |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Set up of Consumer Protection Office   | 3.000   |
| Frame of Rules and Regulation of CPA   | 1.000   |
| Develop Competition Law/Policy (CPL) and Trade Development Act (TDA) of Bhutan | 4.500   |
| Conduct awareness on Legal Framework   | 1.000   |
| Conduct awareness on consumer products   | 1.000   |
| Organize trade Regulation and Monitoring                                       | 0.500   |
| Streamline of distribution Channel   | 0.500   |
| Operationalized G2C,G2B and other automated services                           | 0.000   |
| Implement the rules and procedures   | 0.000   |
| Increase POL retail outlets  | 0.000   |
| Procure of additional laboratory equipments                                    | 5.000   |
| Operationalize POL depot in Thimchupankha                                      | 280.000 |
| Negotiate with principle oil companies in India & Gol                          | 1.000   |
| Recruit staffs for consumer protection office                                  | 0.000   |
| Conduct skill development training   | 0.500   |
| Total:   | 298.000 |

| Au Name: MINISTRY OF ECONOMIC AFFAIRS                                 | Department: SECRETARIAT |
|---|-------------------------|
| Program Name: Development and Strengthening of Intellectual Property. | Phase: Approved         |

|                     | The Intellectual Property (IP) results from creative efforts through the use of human intellect and is an important tool for sustainable development. Country's industrial and economic progress rests on the promotion of national creative and innovative activity. A well- enforced IP system and modernized administration are essential component for promotion of socio-economic growth.   |  |  |
|---------------------|--|--|--|
| Justification:      | With the growing recognition of the benefits from the IP system and also to keep pace with the international development and emerging technologies there is a need for constant updating and refining of intellectual property legislations, modernization of IP infrastructure and administration in order to make them increasingly user-oriented. This program will continue to build on what was achieved in the past and further strengthen the intellectual property systems and mechanisms. |  |  |
| Strategy:           | <ul> <li>i. Development/review of laws and regulations related to IP</li> <li>ii. Ensure effective enforcement of IP rights</li> <li>iii. Create awareness on IP issues</li> <li>iv. Strengthening institution capacity to implement IP interventions</li> </ul>   |  |  |
| Risk<br>Assessment: | <ul><li>i. Lack of awareness and cooperation</li><li>ii. Non availability of resources</li><li>iii. Retention of skilled and experienced staff.</li></ul>  |  |  |
| Beneficiary:        | <ul> <li>i. All inventors and creators</li> <li>ii. Users of IP products and services</li> <li>iii. General public, policy makers, schools, training institution &amp; business communities</li> </ul>   |  |  |

| NKRA                             | SKRA   | SKRA KPI                                       |
|----------------------------------|--|--|
| Improved public service delivery | Enhance effectiveness and efficiency in delivery of public service | TAT for public services reduced                |
| Sustained Economic Growth        | Contribution to GDP and employment increased.                      | No. of Bhutanese employed over plan period     |
| Employment                       |  | Trade sector contribution to annual GDP growth |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines  | Plan Targets   |
|--|--|--|--|
| Outcome001:Scope<br>and coverage of IP<br>legislations expanded                                  | Registration of IPRs –<br>TM;PT;ID;CR (Nos)                                      | 170  | 1865   |
| Outcome002:<br>Established inventory for   | Traditional knowledge identified (Nos)   | 0  | 2  |
| Traditional Knowledge for preservation and promotion of creative/cultural industries.            | Data base on<br>traditional Knowledge<br>(Nos)                                   | 0  | 1  |
| Outcome003:<br>Contribution to<br>GDP, revenue and<br>employment increased                       | Contribution to<br>revenue from<br>registration of IP<br>(million Nu)            | 7.652  | 11.652   |
|  | Contribution<br>to foreign<br>exchange(million Nu)                               | 0.879  | 1.280  |
|  | Contribution to<br>employment through<br>promotion of creative<br>industries (%) | 9  | 10   |
| Results Levels (Output)  | Indicators   | Baseline   | Plan Targets   |
| Output001:Enabling<br>environment created for<br>promotion of<br>Intellectual Property<br>Rights | Legal framework in place (Nos)   | 3  | 5  |
| Output002:Awareness on IPRs enhanced   | Awareness on IPRs (Nos)  | 765  | 2750   |
|  | Technology and<br>Innovation Support<br>Centre<br>(TISC) on IP (Nos)             | 0  | 1  |
| Output003: Enhanced effectiveness and efficiency in the delivery of IP services.                 | Time taken for IPRs registration   | Trademark= 6<br>months. Patent=2.5<br>years Industrial<br>Designs=6 months<br>Copyright=2 months | Trademark=4<br>months<br>Patent= 2years<br>Industrial Designs=<br>4months<br>Copyright=45days. |

### **Table 2: Programme Plan Outlay Summary**

| Programme Activities   | Capital |
|--|---------|
| Amend, formulate and enact IP legislations/Framing of Rules & Regulations on IP and CMO/A study on joining Patent Cooperation Treaty (PCT), WIPO Internet Treaties and Hague Agreement | 5.000   |
| Design/formulate/develop /coordinate /conduct awareness programs on IPRs in collaboration with relevant stakeholders/Establishment of TISC.  | 10.000  |
| Up gradation of IT infrastructure/Enhancement of existing systems/Establishment of office search facilities.   | 5.000   |
| Submit proposal and seek endorsement for resources   | 4.200   |
| Amend, formulate and enact IP legislations/Framing of Rules & Regulations on IP and CMO/A study on joining Patent Cooperation Treaty (PCT), WIPO Internet Treaties and Hague Agreement | 0.000   |
| Total:   | 24.200  |

**Phase: Approved** 

Au Name: MINISTRY OF ECONOMIC AFFAIRS Department: SECRETARIAT

Program Name: Institutional strengthening of the Secretariat/RTIOs

| Justification:      | The secretariat consists mainly of policy planning division, administration and finance division and human resources division. These divisions play an important role in the overall performance of the Ministry. Given the size and the technical mandate of each Department under the Ministry, strengthening these divisions through institutional reforms and capacity enhancement on areas such as strategic planning, coordination and monitoring would contribute to improving the effectiveness of the technical Departments. Further, the Secretariat also serves as the immediate contact point for addressing cross-cutting issues such as gender, poverty, environment, disasters etc. Proper mainstreaming of these cross cutting issues into the plans and policies would warrant continuous capacity enhancements of the secretariat. |
|---------------------|--|
| Strategy:           | <ul> <li>i. Close coordination amongst RTIOs and Departments on promoting the private sector development in the regions.</li> <li>ii. Facilitate the formulation of laws/policies and accordingly conduct the GNH policy screening exercise within the Ministry.</li> <li>iii. Ensure that the Ministry's outcomes are met through effective monitoring and evaluation on regular basis.</li> <li>iv. Carry out the capacity building in terms of mainstreaming the cross cutting issues into plans and programs.</li> </ul>   |
| Risk<br>Assessment: | i. Availability of adequate fund on time     ii. Human resource constraints  |
| Beneficiary:        | i. Business communities     ii. Small and Cottage enterprises     iii. Potential entrepreneurs   |

| NKRA                    | SKRA   | SKRA KPI  |
|-------------------------|--|---|
| Improved public service | Enhance effectiveness and efficiency in delivery of public service | Average performance rating (Govt. Performance Management System - GPMS) |
| delivery                | Enhance effectiveness and efficiency in delivery of public service | TAT for public services reduced   |
| Corruption reduced      | Enhance effectiveness and efficiency in delivery of public service | National Anti-corruption<br>Strategy implemented                        |
| Employment              | Contribution of GDP and employment increased                       | No. of Bhutanese employed over plan period                              |

| Indigenous wisdom, arts and crafts promoted for rural livelihood | CSMI and Cultural industries promoted | No. of operational CSIs |
|--|---------------------------------------|-------------------------|
|--|---------------------------------------|-------------------------|

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
| Outcome001:11FYP of MoEA implemented according to its strategic focus and good capital budget delivery | Delivery of ministry's outcomes (%)                                   | n.a       | 100          |
|  | Capital budget delivery (%)   | 37        | 100          |
| Results Levels (Output)  | Indicators  | Baseline  | Plan Targets |
| Output001: Efficient and effective planning and  | New Officers Trained on RBM concept and PLaMS                         | 4         | 6            |
| coordination system  | Policies formulated (Nos)   | 2         | 7            |
|  | Strategies/guidelines developed for effective planning (Nos)          | n.a       | 1            |
| Output002:Capacity of RTIOs strengthened to deliver efficient services for private sector growth       | Trainings on business development provided to rural communities (Nos) | n.a       | All gewogs   |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Procurement of Office equipments for RTIO                                | 3.000   |
| Conduct training of PPD officials in RBM and PLaMS                       | 0.200   |
| Organize meetings to sensitize on GNH Policy Protocol and Screening tool | 0.500   |
| Total:   | 3.700   |

# **INDUSTRY**

Au Name: MINISTRY OF ECONOMIC AFFAIRS

**Department: DEPARTMENT OF INDUSTRY** 

Program Name: Promotion of sustainable and environment friendly industrial development

**Phase: Approved** 

| Justification:      | The industrial sector is one of the critical sectors for sustainable growth and poverty reduction. Past investment in the sector has resulted in significant structural changes in the economy with secondary and tertiary sectors taking over primary sector. However, the structural change has not translated into productive employment opportunities, vibrant private sector growth and economic diversification. The economy continues to be driven by hydropower and construction sectors with limited potential for employment creation. Besides, small domestic market, difficult terrain, high transportation costs, lack of skilled human resources and difficult access to finance remain major challenges to the growth of industries which is dominated by few large manufacturing firms based on mineral and metal and are mostly concentrated in Samtse, Phuntsholing and Sarpang.  In light of the above challenges, this program will seek to promote industries that are in sync with the aspiration of the economic development policy of 2010 |
|---------------------|--|
| Strategy:           | <ul> <li>i. Develop and establish Industrial Parks/Special Economic Zones at Bondeyma in Mongar Dzongkhag, Dhandhum in Samtse Dzongkhag, Motanga in Samdrup Jongkhar Dzongkhag and Jigmiling in Sarpang Dzongkhag.</li> <li>ii. Develop and manage Industrial Parks/Special Economic Zones in Jigmeling and Dhamdum. These will be pursued through PPP model.</li> <li>iii. Additional infrastructures in existing industrial estate would be developed and strengthen.</li> </ul>   |
| Risk<br>Assessment: | i. Availability of land     ii. Availability of fund for development of ancillary infrastructures     iii. Potential investors   |
| Beneficiary:        | i. Potential investors     ii. Industries     iii. Citizen at large  |

| NKRA                      | SKRA   | SKRA KPI                                   |  |
|---------------------------|--|--|--|
| Sustained Economic Growth | Contribution of GDP and employment increased | Contribution to GDP Annually (in Nu. Mil.) |  |
| Employment                |  | No. of Bhutanese employed over plan period |  |
| Sustained Economic Growth | Economic expansion and                       | Industrial Estates/SEZ developed           |  |
|                           | diversification enhance                      | No. of large and medium industries         |  |

|  | Enabling environment created               | FDI inflow excluding Hydropower (in Nu.Mil)            |
|--|--|--|
| Carbon Neutral/<br>Green Climate resilient | Promote Green industries and eco-efficient | Industries using low polluting and emission technology |
| development                                | Technologies                               |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines                              | Plan Targets                           |
|--|---|--|--|
| Outcome 001 : Economic expansion and diversification enhanced  | FDI inflow excluding hydropower (million Nu)  | 6,388.10                               | 10,000                                 |
|  | Annual contribution to GDP (million Nu)   | 7044.82                                | 7929.53                                |
| emanced  | Bhutanese employed by large and medium industries (Nos)                             | 6,585                                  | 10,585                                 |
| Outcome 003 : Reduction in industrial pollution  | Pollutant/discharge level within national level (Nos)                               | All industries                         | All industries                         |
| Results Levels (Output)  | Indicators  | Baseline                               | Plan Targets                           |
| Output 001:Industrial infrastructure developed   | Additional infrastructures in existing Industrial Estates and service centers (Nos) | 0                                      | 7                                      |
|  | Industrial Parks/Special<br>Economic Zones developed<br>(Nos)                       | 2                                      | 6                                      |
| Output 002:Identification & land acquisition of sites for development of industrial infrastructure completed | Sites identified for land acquisition (Nos)   | 0                                      | 2                                      |
| Output 003:Increased investment  | Large & medium industries (Nos)   | 353                                    | 478                                    |
| Output 004:Improved environmental compliance   | Functional solid waste management facilities (Nos)                                  | 0                                      | 1                                      |
|  | Compliance of environmental rules and regulations by industries (Nos)               | All delegated<br>list of<br>industries | All delegated<br>list of<br>industries |

Table 2: Programme Plan Outlay Summary

| Programme Activities  |          |  |
|---|----------|--|
| Development of Jigmeling Industrial Park/Special economic zone                      | 800.000  |  |
| Development of Motanga Industrial Park/Special economic zone                        |          |  |
| Development of Bondeyma Industrial Park/Special economic zone                       | 500.000  |  |
| Development of Dhamdum Industrial Park/Special economic zone                        | 300.000  |  |
| Identification & acquisition of land for development of industrial estates          | 5.000    |  |
| Organize FDI promotional activities   | 5.000    |  |
| Design of investment promotion strategy   | 5.000    |  |
| Construction of waste management facilities at Pasakha Industrial Estate (Phase II) | 31.000   |  |
| Development of industrial infrastructure in existing Industrial Estates             | 45.000   |  |
| Strengthening environmental compliance  |          |  |
| Total:  | 1796.000 |  |

Au Name: MINISTRY OF ECONOMIC AFFAIRS
Program Name: Strengthening policy
environment and institutional capacity

**Department: DEPARTMENT OF INDUSTRY Phase: Approved** 

| Justification:      | The manufacturing and industries sector has not grown as rapidly as expected. The sector is constrained by various factors that impede its further development. Bhutan's industries have been affected by low levels of productivity, little or no technological advancement and low levels of human capacity. The relatively slower growth and performance the sector can largely be attributed to inadequate or lack of clear and coherent industrial policy and strategy. While the development of the Economic Development Policy in 2010 has provided the roadmap as to the development of industries, the implementation of the policy has remained relatively weak. Further, the International Finance Corporation/World Bank report on 'Ease of Doing Business' ranked Bhutan 142 of 183 countries, clearly highlighting the deficiencies that needs to be addressed going forward.  There is therefore, the need to further strengthen the policy environment and institutional capacity of the sector to enhance its effectiveness and efficiency in |  |
|---------------------|--|--|
| Strategy:           | <ul> <li>the delivery of its service.</li> <li>i. Accelerate FDI promotional activities</li> <li>ii. Develop and implement promotional strategy for priority sectors</li> <li>iii. Formulate and implement Investment Act</li> <li>iv. Effective enforcement of companies &amp; enterprise law and protecting Investors</li> <li>v. Institutional restructuring and strengthening of company registry division</li> <li>vi. Up-gradation/improvement of Industry information system</li> </ul>   |  |
| Risk<br>Assessment: | While the Department could not foresee any specific risks at the moment, budgetary constraints could be considered as a major risk for all the activities  |  |
| Beneficiary:        | i. Potential investors ii. Business Community  |  |

| NKRA                             | SKRA   | SKRA KPI   |  |
|----------------------------------|--|--|--|
| Corruption reduced               | Enhance effectiveness<br>and efficiency in delivery<br>of public service | Average performance rating (Govt. Performance Management System - GPMS)  TAT for public services |  |
| Improved public service delivery | or public service  | Anticorruption Strategy implemented  |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome) Indicators   |   | Baselines | Plan Targets      |
|--|---|-----------|-------------------|
| Outcome 001 : Enhanced effectiveness and efficiency in public service delivery | Approve business not requiring sectoral & environmental clearances/delegated list (Nos) | 45        | 10/30             |
|  | Institutional re-structuring (Nos)  | 0         | 2                 |
|  | Legal framework in place (Nos)  | 0         | 2                 |
| Results Levels (Output)  | Indicators  | Baseline  | Plan Targets      |
| Output 001:IIDD re-structured as an Authority                                  | Functional Authority in place (Nos)   | 0         | 1                 |
| Output 002:CRD re-<br>institutionalized  | Effective agency in place (Nos)   | 0         | 1                 |
| Output 003:Investment law enacted/ Companies                                   | Amendment of Companies Act 2000 (Nos)   | 0         | 1                 |
| Act amended  | Investment law in place (Nos)   | 0         | 1                 |
| Output 004:Companies<br>Act / Enterprise Law<br>effectively implemented        | Compliance of Act/law   | 0         | All<br>industries |
|  | Study on Import substitution (Nos)  | 0         | 1                 |
|  | Study on industrial linkage & productivity (Nos)  | 0         | 1                 |
| Output 005:Assessments/<br>studies carried out                                 | Study on enhancement of productivity in existing industries (Nos)                       | 0         | 1                 |
|  | Assessment of international/regional conventions and treaties on investment (Nos)       | 0         | 1                 |
| Output 006:Industry information system developed                               | Functional industry information system (Nos)  | 0         | 1                 |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Establishment of an Authority / Agencification of IIDD                      | 5.000   |
| Institutional strengthening of Company Registry Division (CRD)              | 5.000   |
| Formulation of Investment Law/ Amendment of Companies Act, 2000             | 5.000   |
| Promote effective implementation of Companies Act/ Enterprise Law           | 3.000   |
| Assessment of international/regional conventions and treaties on investment |         |
| Study on industrial linkages and cluster                                    |         |
| Study on import substitution  | 4.000   |
| Study on enhancement of productivity in existing industries                 | 4.000   |
| Up-gradation/improvement of Industry information system                     |         |
| Total:  |         |

Au Name: MINISTRY OF ECONOMIC AFFAIRS | Department: DEPARTMENT OF COTTAGE &

SMALL INDUSTRIES

**Program Name: Development of Cottage &** 

**Small Industry in Bhutan** 

**Phase: Approved** 

| Justification: | There is a growing body of evidence suggesting cottage and small scale industries as an engine of economic and employment growth. Development of cottage, micro and small industries is increasingly recognized as an effective instrument for promoting balanced regional development. Given its high relevance and potential in nurturing inclusive development in Bhutan, the government during the 10th FYP established the Department of Cottage and Small Industry (DCSI) to propel the growth and development of the CSI sector. In working towards promoting an effective CSI sector, it will be crucial to address several constraints and challenges impeding the growth of the sector. These challenges relate to limited access to finance by the CSIs, difficulty to access viable markets, limited industrial infrastructure, limited entrepreneurial talent/skills, use of outmoded technology, high transportation costs, low economy of scale and, poor R&D and innovation culture among enterprises.  This program will work towards improving the performance of the private sector development through galvanizing cottage and small industries for industrial and employment generation. |  |
|----------------|---|--|
| Strategy:      | i. Strengthen the Policy Environment and Institutional Framework. ii. Strengthen the Legislative Framework and Enterprise Environment. iii. Facilitate Access to Finance and Incentive; iv. Enhance Competitiveness and Innovation; v. Enhance employment and develop a culture of entrepreneurship vi. Improve market access  i. Availability of adequate resources;   |  |
| Assessment:    | ii. Availability of the land for infrastructures iii. Cooperation from the stakeholders   |  |
| Beneficiary:   | <ul><li>i. Cottage &amp; Small Scale enterprises</li><li>ii. Rural artisans</li><li>iii. Entrepreneurs</li></ul>  |  |

| NKRA   | SKRA                    | SKRA KPI                                      |  |
|--|-------------------------|---|--|
| CSMI and Cultural industries   | CSMI and Cultural       | No. of Business incubation facilities         |  |
| promoted   | industries promoted     | No. of operational CSIs                       |  |
| Sustained Economic Growth  | Contribution of GDP and | Contribution to GDP Annually (in Nu. Mil.)    |  |
| Employment   | employment increased    | No. of Bhutanese employed over plan period    |  |
| Corruption reduced   |                         | Anticorruption Strategy implemented           |  |
| Improved public service Enhance effective delivery and efficiency in d |                         | Average performance rating (Govt. Performance |  |
|  | of public service       | Management System - GPMS)                     |  |
|  |                         | TAT for public services                       |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                | Results Level (Outcome) Indicators                                |          | Plan Targets |
|--|---|----------|--------------|
| Outcome 001 : CSIs contribute                          | Operational CSIs (Nos)  | 13,068   | 19,918       |
| to National Employment and<br>Alleviation of Poverty   | Additional People employed by CSIs (Nos)                          | 34,246   | +17,950      |
| Results Levels (Output)                                | Indicators  | Baseline | Plan Targets |
| Output 001:Enhanced growth and development of CSIs     | Region specific resource inventory for business opportunity (Nos) | 0        | 6            |
|  | Functional pilot business network (Nos)                           | 0        | 1            |
|  | Cottage & small industry incubation facilities (Nos)              | 0        | 1            |
|  | Financial package developed and marketed by FIs (Nos)             | 0        | 1            |
| Output 002:Enhanced human capital & develop culture of | Entrepreneurs trained on business management (Nos)                | 79       | 329          |
| entrepreneurship                                       | Entrepreneurs trained on advance hard skills (Nos)                | 82       | 382          |
|  | Business advocacy workshops to potential entrepreneurs (Nos)      | 108      | 500          |
|  | Annual awards for promising entrepreneurs (Nos)                   | 0        | 15           |

| Output 003:Enhanced capacity of institutions (DCSI, NGO or | Officials trained in strategic CSI development methodologies (nos)   | 0 | 20 |
|--|--|---|----|
| private) supporting CSIs                                   | CSI entrepreneurs learning exchange tour to regional countries (Nos) | 0 | 10 |

Table 3: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Establish new CSIs in rural areas on cost sharing basis with focus on women, youth and other vulnerable groups                                   | 12.000  |
| Collection, analysis of CSMI data and preparation of annual progress report  | 0.500   |
| Conduct national resource (natural resources, human capital, land etc.) inventory study to identify the areas of business opportunities for CSIs | 2.800   |
| Develop incentive scheme plan for CSMI sector to engage in R&D of innovative and green industries  | 3.000   |
| Prepare three year CSMI Action Plan (2015-2017, 2018-2020)   | 0.800   |
| Stimulate the development a pilot business network to facilitate development of CSIs   | 0.500   |
| Conduct feasibility study and develop model(s) for business incubator  | 1.000   |
| Establish viable business incubators   | 15.000  |
| Validate feasibility for establishing apple processing, wood-based, incense manufacturing industry and establish at least two viable clusters    | 5.000   |
| Develop new financial packages in collaboration with lending institutions and disseminate information to CSIs                                    | 1.500   |
| Feasibility study of PPP to development CSI Infrastructures  | 1.000   |
| Determining specific training needs and provide training (outsource) for CSI entrepreneurs'  | 10.000  |
| Develop and implement productivity award system to enhance culture of entrepreneurship   | 1.500   |
| Organize study tour for CSI entrepreneurs to the regional countries  | 3.000   |
| Total:   | 57.600  |

## TRANSPORT AND COMMUNICATION

| Au Name: MINISTRY OF INFORMATION & COMMUNICATIONS        | Department: DEPARTMENT OF CIVIL AVIATION |
|--|--|
| Program Name: Expension & Strengthening of Air Transport | Phase: Draft                             |

| Justification:      | Paro International Airport as the only international airport in the country provides the critical transportation link with the rest of the world. Over the years, passenger volume has increased and air traffic has been growing at the rate of 15 % per annum. This has caused a lot of congestion in the terminal affecting proper delivery of air services and also significantly increasing security issues. Domestic airports are vital and strategic infrastructure on which the tourism and other economic sectors depend upon. It also supports regionally balanced development. In the 10th Plan, three domestic airports were established within minimum infrastructure. In order to operationalize the domestic airports optimally, major investments have to be made to expand the services and security features such as taxiways, aprons, security installations, equipment etc. Institutionally DCA has been tasked with both the regulatory and service provider role which has been resulting in conflict of interest. |
|---------------------|--|
| Strategy:           | <ul> <li>i. To deliver their services better, the regulatory role and service provider responsibilities will be bifurcated. This will promote better service delivery and standards.</li> <li>ii. Given the passenger traffic congestion in Paro International Airport, investments to expand it will be made.</li> <li>iii. The three domestic airports will be made fully operational by enhancing security features, improving drainage and access, and aviation facilities. This will allow for safer and faster transportation links to other regions of the country, thereby facilitating regionally balanced development.</li> <li>iv. HR will be strengthened to achieve LEI targets</li> </ul>  |
| Risk<br>Assessment: | <ul> <li>i) Airlines may not be able to procure smaller aircraft to operate in STOL airstrips.</li> <li>ii) International airlines may be reluctant to operate into Paro.</li> <li>iii) Resource constraints may not hinder implementation of plan.</li> <li>iv) Unavailability of land replacement may affect the expansion works of PIA.</li> <li>v) Inadequate trained staff which may affect achievement of LEI percentage to meet the minimum acceptable level of ICAO.</li> </ul>  |
| Beneficiary:        | Bhutanese and International Air travelers  |

| NKRA               | SKRA  | SKRA KPI   |
|--------------------|---|--|
|                    | Eco-friendly, safe, reliable and affordable surface/ air transport increased. | Increase in ton of air cargo carriage (in million tons)                                  |
| Sustained Economic | Eco-friendly, safe, reliable and affordable surface/ air transport increased. | Lack of effective implementation (LEI) percentage to be reduced to ICAO acceptable level |
| Growth             | Eco-friendly, safe, reliable and affordable surface/ air transport increased. | No. of passengers handled<br>by Paro International Airport<br>annually                   |
|                    | Eco-friendly, safe, reliable and affordable surface/ air transport increased. | No. of passengers using the domestic sector annually                                     |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
|  | No. of frequency of scheduled aircraft movement into or out of Paro.                  | 3069      | 6000         |
|  | No. of airlines operating on<br>Domestic routes                                       | 2         | 2            |
| Outcome 001 : Safe, Efficient and Reliable Air Transport | No. of passengers using the<br>Domestic Sector Annually                               | 1044      | 10,000       |
| (International and Domestic)<br>Enhanced                 | Increase in ton of air cargo carriage (in million tons)                               | 0.62      | 2.20         |
|  | No. of passengers handle by PIA annually  | 160140    | 300,000      |
|  | Lack of Effective Implementation (LEI) % to be reduced to ICAO acceptable level (50%) | 63.5      | 50           |
| Results Levels (Output)                                  | Indicators  | Baseline  | Plan Targets |
| Output 001:Paro International                            | New international routes introduced   | 9         | 13           |
| Airport Expanded   | Cargo access facility   | NA        | 1            |
|  | Aircraft parking area increased   | 5         | 8            |

|   | No. of STOL airstrips certified and operating   | NA   | 5  |
|---|---|------|----|
| Output 002:Domestic Airport<br>Infrastructures Expanded           | Establishment of com./nav. infrastructures in Gelephu domestic airports (in set)              | NA   | 1  |
|   | No. of passenger car parking lot in each airports   | NA   | 3  |
|   | No. of security equipment in placed & operational in Paro & domestic airports.                | 4    | 10 |
|   | No. of runway safety machine  | NA   | 4  |
| Output 003:Enhanced Safe Air<br>Transport Operation               | Up-gradation of com./nav.<br>equipment in Paro & two domestic<br>airports. (in set)           | 3    | 3  |
|   | No. of ambulance services for domestic airports.  | NA   | 3  |
|   | No. of Crash Fire Tender (CFT) for all airports.  | 3    | 7  |
|   | No. of serch and rescue vehicle   | NA   | 1  |
| Output 004: Regulatory and Service Provider Mechanism             | Lack of Effective Implementation<br>(LEI) % to be reduced to minimum<br>ICAO acceptable level | 63.5 | 50 |
| Enhanced  | Separation of regulatory and execution function   | NA   | 1  |
| Output 005:Effective and<br>Efficient Public Service<br>Delivered | Arrival/departure processing time reduced per aircraft (In min.)                              | 60   | 40 |

Table 2: Programme Plan Outlay Summary

| Programme Activities                          | Capital |
|---|---------|
| Construction of new arrival hall (spill over) | 333.000 |
| Construction of Parallel Taxiway              | 188.110 |
| Construction of new apron taxiway             | 30.750  |
| Construction of cargo building                | 25.300  |
| Construction of new hanger                    | 129.200 |
| Runway broadening                             | 167.650 |
| Construction of parallel covered drain        | 20.700  |
| Relocation of Bhutan Oil Corporation          | 17.500  |

| Construction of additional parking   | 4.300  |
|--|--------|
| Relocation of AFE infrastructure   | 0.000  |
| Runway gradation upto 2% and demolishing of hills at Yonphula domestic airport   | 29.700 |
| Construction of runway(1500m) and permanent structures at Yonphula domestic airport  | 0.000  |
| Construction of fire station at Yonphula domestic airport  | 3.000  |
| Access road and car park at Yonphula domestic airport  | 6.536  |
| Resurfacing of runway (Yonphula)   | 18.900 |
| Construction of security quaters at Yonphula domestic airport  | 10.000 |
| Expansion of Bumthang domestic airport runway  | 0.000  |
| Construction of Staff Quarters at Bumthang domestic airport  | 5.000  |
| Construction of taxiway and apron at Bumthang domestic airport   | 28.050 |
| Construction of fire station at Bumthang domestic airport  | 5.000  |
| Access road and car park at Bumthang domestic airport  | 23.730 |
| Perimeter fencing at Bumthang domestic airport   | 6.480  |
| Parallel covered drainage at Bumthang domestic airport   | 20.700 |
| Upgradation/Improvement and establishment of new security facilities in International and three domestic airports  | 50.000 |
| Upgradation and maintenance of Communication and Navigation infrastructures in Paro, Bumthang and Yonphula airports                                      | 30.000 |
| Procurement and installation of Communication and Navigation facilities in Gelephu domestic airport  | 10.000 |
| Establish rescue and fire fighting services in three domestic airports and upgradation of rescue and fire fighting service in Paro international airport | 80.000 |
| Up gradation and maintenance of 11kv/415v substation in Paro International airport   | 50.000 |
| Purchase of runway and airport maintenance machines and additional equipments  | 10.000 |
| Provision of standby power supply in Gelephu domestic airports(100KVA)   | 1.500  |
| Up gradation of central heating system in Paro international AIRPORT   | 31.038 |
| Upgradation,maintenance and provision of advanced meteorologocal equipment in Paro and three domestic airports   | 20.000 |
| Replacement of CCTV in Paro international airport and procurment and installation of CCTV in three domestic airports                                     | 8.000  |
| Upgradation and provision of new ICT facilities in Paro and three domestic airports  | 12.500 |

| Modification of existing terminal building for better accommodation of passengers arriving and departing | 5.108    |
|--|----------|
| Provision of adequate counters ,furniture and equipments at the existing Terminal building               | 0.500    |
| Strengthening of Old Apron   | 26.637   |
| Apron, Taxiway & Operation Office at Gelephu Domestic Airport  | 0.000    |
| Security Quarters at Gelephu Domestic Airport  | 10.000   |
| Airport Perimeter Fencing at Gelephu Domestic Airport  | 15.822   |
| Earth Work Excavation at Gelephu Domestic Airport for International Runway.                              | 50.000   |
| Drainage and River Protection Work at Gelephu Domestic Airport   | 18.576   |
| Access Road to Gelephu Domestic Airport  | 10.000   |
| Construction of Security Quarter (Spill over)  | 45.000   |
| Construction of Security Office/Control/Watch Tower at Gelephu Domestic Airport                          | 5.423    |
| Water Supply Work at Gelephu Domestic Airport  | 3.200    |
| Shifting of Perimeter Fencing at Paro International Airport  | 10. 100  |
| Modification of Existing Drains at Airside   | 0.490    |
| Renovation of Old Hangar   | 0.000    |
| Construction of Fire Station (Spill Over)  | 10.000   |
| Private land compensation for Bumthang airport   | 4.000    |
| G/phu Airport construction (spillover for contact payment)   | 100.000  |
| COSCAP Training  | 7.500    |
| Mandatory Training   | 12.500   |
| In country training (Security, fire and emergency exercises)   | 2.500    |
| New recruit technical training (Airworthiness)   | 20.000   |
| Total:   | 1734.000 |
|  |          |

Au Name: MINISTRY OF INFORMATION & Department: DEPARTMENT OF CIVIL AVIATION COMMUNICATIONS

Program Name: Expension & Strengthening Phase: Draft

of Air Transport

| Justification: | Safe and efficient transportation is an enabler for socio-economic development. Road transportation in Bhutan which is the primary mode of transportation is very expensive due to the mountainous terrain. This coupled with small domestic market for public transportation, on most routes, makes provision of public transportation commercially unviable. While the road infrastructure has expanded, many rural folks are unable to capitalize on it due to lack of affordable transportation. |
|----------------|--|
|                | Road safety and traffic congestion still remains a critical issues that needs to be addressed. Bhutan has the highest road fatality cases in the region which can be attributed mostly to limited enforcement of traffic rules, and poor geometrics of road. The urgency and the need to explore alternative modes of transport, as well as to implement urban transport systems has increased evermore with the rising cost of fuels, increased vehicle numbers and for carbon emission controls.   |
| Strategy:      | i. Improve accessibility, affordability and reliability of urban and inter-district/regional passenger and goods transport through provision of subsidies for public transportation and enhanced monitoring of transport services.   |
|                | ii. Reduce road fatalities through strengthened enforcement, road safety advocacy and trainings.   |
|                | iii. Provide access to transport for differently-abled citizens  |
|                | iv. Promote use of eco-efficient vehicles, explore alternative transport such as rope ways, water ways and railways where feasible   |
| Risk           | i. Inadequate financial resources which will hamper the implementation of plans  |
| Assessment:    | ii. Inadequate human resources which may lead to partial or incomplete implementation of plans.  |
|                | iii. Transportation being a cross cutting issue, lack of support from other key stakeholders may jeopardize the achievements of outcomes   |
| Beneficiary:   | All road users and those availing public and private public transportation within the country.   |

| NKRA   | SKRA  | SKRA KPI  |
|--|---|---|
| Democracy and Governance strengthened                              | Enhance effectiveness and efficiency in delivery of public service            | TAT for public services reduced   |
| Strengthened Bhutanese<br>Identity, social cohesion and<br>harmony | Facilities for senior citizens and those with special needs incorporated.     | Public transport services with facilities for senior citizens, women, children and those with special needs |
| Sustained Economic Growth  | New modes of transport explored/ introduced                                   | Number of alternative modes of transport conducted (ropeway, waterway, and electric public transport).      |
| Sustainable utilization and management of natural resource         | Surface/air transport emission and congestion reduced.                        | Public transport ridership  |
| Sustained Economic Growth  | Eco-friendly, safe, reliable and affordable surface/ air transport increased. | Reduction of annual of road fatalities per 10,000 vehicles  |
| Democracy and Governance strengthened                              | Enhance effectiveness and efficiency in delivery of public service            | TAT for public services reduced   |
| Sustained Economic Growth  | New modes of transport explored/ introduced                                   | Number of alternative modes of transport conducted (ropeway, waterway, and electric public transport).      |
| Sustainable utilization and  | Surface/air transport emission and congestion reduced.                        | Public transport ridership  |
| management of natural resource                                     | Surface/air transport emission and congestion reduced.                        | Vehicular/Aviation emission controlled(Gg)  |
| Sustained Economic Growth  | Eco-friendly, safe, reliable and affordable surface/ air transport increased. | Reduction of annual of road fatalities per 10,000 vehicles  |
| Democracy and Governance   | Enhance effectiveness and efficiency in delivery of public service            | Average performance<br>rating (Govt. Performance<br>Management System - GPMS)                               |
| strengthened   | Enhance effectiveness and efficiency in delivery of public service            | TAT for public services reduced   |

Table 1: Programme Results Level

| Results Level (Outcome)  | Indicators  | Baselines          | Plan Targets  |
|--|---|--------------------|---------------|
|  | % of motorable roads provided with public transport services  | 70                 | 100           |
|  | % of public transport services provided with facilities for differently-abled persons   | NA                 | 20            |
| Outcome 001 : Access to  | % of buses plying as per schedule   | 85                 | 95            |
| adequate, sustainable and inclusive public transport increased.                    | Percentage of urban Public<br>Transport Services (buses) with<br>separate seats/sections for<br>differently-abled and senior<br>citizens. | NA                 | 30            |
|  | Annual % reduction in road crashes  | 9 (2010-<br>201 1) | 20 (Annually) |
|  | Reduction of annual road fatalities per 10,000 vehicles   | 14                 | <10           |
|  | Number of urban areas with public transport services  | 2                  | 5             |
| Outcome 002 : Vehicular  | % of eco-friendly vehicles registered   | <1                 | 1             |
| emission controlled and traffic congestion reduced                                 | Number of road user charging systems introduced   | NA                 | 2             |
|  | Number alternative modes of transport introduced (ropeway, waterway, electric public transport).  | NA                 | 3             |
|  | Reduction in number of road crashes   | 1374               | 687           |
| Outcome 003 : Road Safety enhanced   | Annual reduction in road crashes (%)  | 9                  | 20            |
|  | Reduction of annual road fatalities per 10,000 vehicles   | 17                 | <10           |
| Outcome 004 : Enhanced effectiveness and efficiency in delivery of public services | TAT of commonly availed services reduced (%);   | NA                 | 70            |
| Outcome 005 : Enhanced effectiveness and efficiency in delivery of public services | Average Performance Rating (%)  | NA                 | >90           |

| Results Levels (Output)  | Indicators  | Baseline | Plan Targets |
|--|---|----------|--------------|
| Output 001:Rural accessibility enhanced                          | % of geogs with public transport  | 70       | 90           |
| Output 002:Inter-dzongkhag/<br>regional bus services<br>enhanced | Number of buses operating on inter- Dzongkhag/regional routes   | 209      | 250          |
| Output 003:Facilities for  | Number of wheel chair ramps constructed   | NA       | 5            |
| senior citizens and those with<br>special needs incorporated     | Number of urban Public Transport<br>Services (buses) with separate<br>seats/sections for differently-abled<br>and senior citizens | NA       | 50           |
|  | Road Safety Audits undertaken in collaboration with DoR (Km)  | NA       | 195          |
|  | Number of drivers & pedestrians trained in road safety and traffic discipline   | 8,000    | 15,000       |
|  | Number of driving training schools  | 9        | 15           |
| Output 004: Road Safety<br>Enhanced                              | Number of vehicle testing agents (fitness centres) licensed   | NA       | 10           |
|  | Number of traffic engineer and road safety professionals trained  | NA       | 5            |
|  | Number of road crashes reduced  | 1374     | 687          |
|  | Reduction in annual road fatalities per 10,000 vehicles   | 17       | 13           |
| Output 005:Alternative modes of transport explored/              | Number of feasibility studies on alternative modes of transport carried out by type   | NA       | 2            |
| introduced   | Number of alternative modes introduced  | NA       | 1            |
|  | Number of urban centres with public transport introduced  | 2        | 5            |
| Output 006:Traffic Congestion                                    | Number of buses operating in urban centers  | 36       | 50           |
| Reduced  | Peak hour frequency of city bus services increased (in min.)  | 15       | 10           |
|  | Number of dedicated and safe designated bus sheds built   | 3        | 5            |

|  | Number of eco-friendly buses introduced                                      | NA | 11  |
|--|--|----|-----|
|  | No. of emission testing centers established                                  | 6  | 10  |
|  | Number of towns with pedestrian plaza  | NA | 2   |
| Output 007:Transport emission controlled | Meters/kilometers of bi-cycle tracks constructed by four Thromdeys           | NA | 40  |
|  | No. of public transport with waste bins/bags                                 | NA | 300 |
|  | Facility for disposal of vehicles scrap by four Thromdeys                    | NA | 4   |
|  | No. of e-tickets system introduced   | NA | 1   |
|  | Review Road Safety and Transport<br>Act                                      | NA | 1   |
| Output 008: Public service               | Review and revise road safety and transport regulations                      | NA | 1   |
| delivery improved                        | Carry out transport sector re-<br>organization and restructuring<br>exercise | NA | 1   |
|  | Review vehicle registration and driver licensing procedures                  | NA | 1   |

Table 2: Programme Plan Outlay Summary

| Programme Activities  | Capital |
|---|---------|
| Construct wheel chair ramps at bus terminals/sheds                              | 1.000   |
| Conduct Road Safety Awareness /Trainings  | 20.000  |
| Regulate and license driving training schools                                   | 0.000   |
| Build capacity in Road Safety and Train Traffic Engineers                       | 5.000   |
| Procure road safety equipments (Speed guns, cameras, CCTVs, Pool Vehicles etc.) | 10.000  |
| Fully equipped Rescue Vans for response to road crash incidents                 | 24.000  |
| Conduct Feasibility Study on alternative modes of transport by type             | 5.000   |
| Develop crash recording/reporting system and improve crash data base            | 5.000   |
| Construct/upgradation of new/exisiting bus terminals/sheds                      | 150.000 |
| Professional services for new constructions                                     | 15.000  |
| Review, revise, amend and print RSTA Act and Regulations                        | 2.000   |

| Madate all public transport systems to provide waste bins/bags  | 0.000   |
|---|---------|
| Develop Parking Policy including rules/guidelines on taxi ranking   | 1.000   |
| Provide online applications for licensing and registration of vehicles  | 10.000  |
| Review and Introduce innovative and effective driving testing and licensing systems   | 5.000   |
| Set up fully equipped vehicle fitness and emission testing centres  | 5.000   |
| Subsidy for non-profitable passenger transport services routes including provision of 20% student discounts in city bus fares.  | 0.000   |
| Introduce concessionary fares for students in urban areas and designate seats for senior citizens and people with special needs | 5.000   |
| Introduce Intelligent Transport Systems(ITS): - GPS, Vehicle Tracking , Real Time Information, Traffic Control centres etc.     | 10.000  |
| Opening of Base Office at Panbang   | 0.600   |
| Procurement of office equipment, computers and furniture  | 0.000   |
| Observation of Road Safety Day/Week   | 1.000   |
| Printing and publications of reports  | 0.000   |
| Administration and Direction services (Recurrent Expenses)  | 0.000   |
| Develop guidelines and manual for standard road markings and traffic signs  | 1.000   |
| Develop policy on creation of road side rest facilities and other amenities   | 1.000   |
| Total:  | 276.600 |

# INFORMATION & COMMUNICATION TECHNOLOGY & MEDIA

Au Name: MINISTRY OF INFORMATION & COMMUNICATIONS

Program Name: ICT for good governance and socio economic development

Department: DEPARTMENT OF INFORMATION

TECHNOLOGY & TELECOM

**Phase: Draft** 

| Justification: | IT has revolutionized the way government and businesses interact with citizens and clients. During the 10th Plan, a lot of infrastructural and systems application investments were made to establish a strong ICT backbone network. E-Gov Master Plan was formulated in 2012 with clear vision and strategies to leverage on these networks and to chart a way forward towards knowledge economy. In addition to the implementation of the e-gov master plan, the key issues that need to be addressed in the 11th plan will be inter-operability and security, |
|----------------|--|
|                | optimization of the Tech Park and sustainability of the community centers.   |
| Strategy:      | <ol> <li>Improve reliability and security of IT services and systems through additional<br/>international Telecom gateway, establishment of National Data Centre,<br/>BtCIRT and completion of broadband network.</li> </ol>   |
|                | ii. Ensure inter-operability of Government IT systems through implementation of e-gif.   |
|                | iii. Expand ICT services to all gewogs through expansion and strengthening CCs   |
|                | iv. Opertionalize the Bhutan Tech Park by facilitating the establishment of business incubators and government data centre.  |
|                | v. Strengthening the policy and regulatory framework through implementation of the Telecome and Broadband policy and e-gov policy.   |
|                | vi. Manage e-waste   |
| Risk           | i. Unskilled professionals in the area of cyber security, e-waste management etc.  |
| Assessment:    | ii. Limited financial resources  |
|                | iii. Policy gaps   |
| Beneficiary:   | Service sectors and general public   |

| NKRA                                  | SKRA  | SKRA KPI                                      |
|---------------------------------------|---|---|
| Sustained Economic Growth             | Contribution to GDP and number of job created   | No. of Bhutanese employed (IT/ITES) by gender |
|                                       | Effective and efficient public service delivery | Number of e-services delivered                |
| Democracy and Governance strengthened | Effective and efficient public service delivery | Number of m-services delivered                |
|                                       | Effective and efficient public service delivery | TAT for public services                       |

|  | Effective and efficient public service delivery                   | Anticorruption Strategy implemented  |
|--|---|--|
|  | Effective and efficient public service delivery                   | Average performance<br>rating (Govt. Performance<br>Management System - GPMS)      |
|  | Effective and efficient public service delivery                   | e/m-payment gateway introduced   |
|  | Access to reliable and affordable ICT and media services improved | Broadband monthly<br>subscription charge (Home)<br>(Nu.)                           |
| Sustained Economic Growth  | Access to reliable and affordable ICT and media services improved | Dzongkhag with access to high speed internet services                              |
|  | Access to reliable and affordable ICT and media services improved | Villages with reliable mobile network  |
| Strengthened Bhutanese<br>Identity, social cohesion and<br>harmony | Culture and traditions kept alive through ICT and media.          | Exhibitions, debates, quiz on culture/traditions covered/ facilitated by ICT/media |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines | Plan Targets |
|---|--|-----------|--------------|
| Outcome 001 : Contribution  | % contribution to GDP                                      | NA        | 0.01         |
| to GDP and number of jobs   | No. of Bhutanese employed in IT/<br>ITES Industries        | 964       | 3000         |
|   | % Reduction of TAT for delivery of public services         | NA        | 70           |
| Outcome 002 : Effective   | % increase in average performance rating                   | NA        | >90          |
| and efficient public service delivery   | Number of e-services delivered                             | 49        | >100         |
| delivery  | Number of m-services delivered                             | 3         | 10           |
|   | Multi-Service Delivery Gateway (MSDG) introduced           | NA        | 1            |
|   | % of Villages with reliable mobile network                 | 85        | 100          |
| Outcome 004 : Access to reliable and affordable ICT and media services improved | Broadband monthly subscription charge (Home) (Nu.)         | 399       | <399         |
|   | % of Dzongkhag with access to high speed internet services | 20        | 100          |
| Outcome 005 : E-Waste reduced   | Amount of E-Waste managed                                  | NA        | >10MT/Annum  |

| Outcome 006 : Culture and<br>Traditions kept alive through<br>ICT and Media                        | No. of exhibitions, debates, quiz on culture/traditions covered/facilitated by ICT/media | NA       | 5            |
|--|--|----------|--------------|
| Results Levels (Output)  | Indicators   | Baseline | Plan Targets |
| Output 001:Internet/Telcom infrastructure strengthened   | No. of international telecom gateways established  | 2        | 3            |
| Output 002:Bhutan Tech<br>Village established  | No. of business incubates successfully incubated   | 3        | 10           |
| Village established  | No. of Bhutanese employed  | 964      | 3000         |
| Output 003:Policy support  | % Implementation of Telecom and Broadband Policy   | NA       | 80           |
| enhanced   | % Implementation of eGov master plan   | NA       | 90           |
|  | eGov policy developed  | NA       | 1            |
| Output 0041CT library  | % increase in ICT literacy as a percentage of literate population                        | 10       | 60           |
| Output 004:ICT literacy<br>enhanced  | No. of National/Regional Level ICT promotion programmes/activities conducted             | 3        | 5            |
|  | No. of government agencies accessing common data hubs                                    | NA       | 10           |
| Output 005:Information   | BtCIRT established   | NA       | 1            |
| Infrastructure established   | No. of data hubs established   | NA       | 4            |
|  | Multi-Service Delivery Gateway (MSDG) introduced   | NA       | 1            |
| Output 006: Enterprise architecture (electronic government interoperability framework) established | % e-GIF implemented  | NA       | >90          |
| Output 007:ICT services  | % of ICT Management System for ICT professionals operationalized                         | 5        | 100          |
| reorganised  | Development, O&M of systems outsourced   | NA       | 1            |
|  | No. of gewog offices connected to TWAN   | NA       | 205          |
| Output 008:ICT infrastructure enhanced   | No. of agencies/ministries using government data center                                  | NA       | 11           |
|  | O&M of TWAN Outsourced   | NA       | 1            |
| Output 009:G2C, G2B and G2G implemented  | No. of functional online e-services available  | 49       | 150          |

|  | No. of mobile apps/services developed                                 | 3   | 10  |
|--|---|-----|-----|
| Output 010:Community centers augmented and             | No. of CCs constructed, equipped and connected                        | 121 | 205 |
| operationalized  | No. of CC vendors appointed   | 121 | 205 |
|  | No. of eWaste dealer registered                                       | NA  | 1   |
| Output 011:E-Waste management plan operationalized     | SOPs, manuals, guidelines, notifications, ToR drafted and implemented | NA  | 1   |
|  | No. of agreements signed  | NA  | 1   |
| Output 012:Public Service<br>Delivery system (PSD) and | PSD policy development and e-money regulation review completed        | NA  | 1   |
| access enhanced  | Number of most commonly e-m services developed and delivered          | 10  | 20  |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activites  | Capital |
|--|---------|
| Establish international telecom/internet redundancy via Coz Bazaar, Bangladesh | 20.000  |
| Securing seed fund for BITC incubation   | 15.000  |
| Implement Telecom and Broadband Policy   | 2.000   |
| ICT promotion and awareness  | 10.000  |
| Establish common data hub for citizen, land business and vehicle               | 50.000  |
| Establish BtCIRT   | 25.000  |
| Implement Enterprise Architecture(e-GIF)                                       | 42.000  |
| Outsource development and O&M of systems.                                      | 15.000  |
| Revamp government intranet and extend to gewogs                                | 190.000 |
| Establish Government DataCenter  | 120.000 |
| Outsource O&M of TWAN(Thimphu Wide Area Network)                               | 30.000  |
| Automate G2C,G2B, G2G services   | 100.000 |
| Develop mobile application/services  | 25.000  |
| Establishment of 20 Community Centers  | 50.000  |
| Implement e-waste regulation   | 10.000  |

| Carry out bilateral negotiations (E-waste).  | 0.000    |
|--|----------|
| Assessment for Digital Authentication System for RGoB                                      | 1.000    |
| Establish ADSS connectivity to gewogs (NBMPIP)   | 34.000   |
| Develop e-gov policy   | 1.000    |
| SASEC Information Highway Project  | 102.980  |
| Compensation of Nationalized Fiber Optic asset.  | 4.970    |
| Implement e-gov masterplan   | 1.000    |
| Establish Multi-Service Delivery Gateway (MSDG)  | 103.700  |
| Empowering Rural Communities Reaching the unreached – SDF, 10 <sup>th</sup> Plan Spillover | 47.500   |
| Improve Public Service Delivery (PSD) system and Access – SDC, DG+ Activities              | 52.650   |
| Telecom Subsidy for Internet Connectivity (CCS)  | 71.482   |
| Depreciation and O&M for National Fiber Optic Network                                      | 200.000  |
| SASEC Regional Network Service Agency (Consultancy Service)                                | 19.516   |
| Explore the adoptability of DrukREN into RUB & Research Institutes                         | 1.000    |
| Telecom Subsidy for IT Park  | 24.400   |
| Government support on CC vendors on operation cost difference                              | 23.969   |
| Total:   | 1391.367 |

Au Name: MINISTRY OF INFORMATION & COMMUNICATIONS

Program Name: Promotion and Development of Media

Department: DEPARTMENT OF INFORMATION TECHNOLOGY & TELECOM

**Phase: Draft** 

| Justification: | The Bhutanese society has largely been an oral society with limited documentation. In this age of information and with the introduction of Parliamentary democracy, media is expected to play the role of informing the public and acting as a watch dog. Also media is an effective way to improve transparency and promote our culture and traditions.                     |
|----------------|--|
|                | The media in Bhutan is a relatively new sector with few trained professionals and having issues of sustainability of private media firms due to the limited domestic market for media products. Also overall access to media is very low at 55%. The legal and policy frameworks are not fully established which leads to challenges in trying to regulate the media sector. |
| Strategy:      | i. Strengthening the capacity of media to help them report comprehensively and professionally  |
|                | ii. Strengthening policy and regulatory frameworks to facilitate the development of media sector   |
|                | iii. Facilitating private sector participation in building key infrastructure for multi-media to reduce overheads and improve viability of their projects  |
| Risk           | i. Lack of professional/technical expertise  |
| Assessment:    | ii. Insufficient Resources   |
|                | iii. Terms not attractive or clear for PPP   |
|                | iv. Resistance of agency to introduction of new policies and regulations   |
| Beneficiary:   | i. General Public  |
|                | ii. Media Agencies.  |
|                | iii. Government Agencies   |

| NKRA                                  | SKRA  | SKRA KPI  |
|---------------------------------------|---|---|
| Sustained Economic Growth             | Access to reliable and affordable ICT and media services improved | Villages with reliable mobile network                                   |
| Democracy and Governance strengthened | Effective and efficient public service delivery                   | Average performance rating (Govt. Performance Management System - GPMS) |
|                                       | Effective and efficient public service delivery                   | Number of e-services delivered  |

|  | Effective and efficient public service delivery          | Number of m-services delivered   |
|--|--|--|
|  | Effective and efficient public service delivery          | TAT for public services  |
| Strengthened Bhutanese<br>Identity, social cohesion and<br>harmony | Culture and traditions kept alive through ICT and media. | Exhibitions, debates, quiz on culture/traditions covered/ facilitated by ICT/media |
| Democracy and Governance   | Effective and efficient public service delivery          | Number of e-services delivered   |
| strengthened   | Effective and efficient public service delivery          | TAT for public services  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Plan<br>Targets |
|--|---|-----------|-----------------|
| Outcome 001 : Citizens empowered through access                | % of population media & information literate  | NA        | 40              |
| and effective use of media to make informed decision           | % of increase in access to media  | 55        | 75              |
|  | No. of increase in films with culture and traditional content   | 195       | 220             |
| Outcome 002 : Culture,   | No. of creative media enterprise licensed   | 160       | 200             |
| tradition and contemporary<br>arts kept alive through<br>media | No. of increase in creative media services and products (Increase in no. of original creation registered) | 37        | 62              |
|  | Exhibitions, debates, quiz on culture/<br>traditions covered/ facilitated by ICT/<br>media                | NA        | 500             |
| Results Levels (Output)  | Indicators  | Baseline  | Plan<br>Targets |
| Output 001:Policy &  | National film policy in place   | NA        | 1               |
| regulatory framework   | Social media policy in place  | NA        | 1               |
| strengthened   | Broadcast policy in place   | NA        | 1               |
|  | Infrastructure sharing modalities in place  | NA        | 1               |
|  | Comprehensive Media Policy in place   | NA        | 1               |
|  | Circulation Auditing of Print and<br>Broadcast Media in place   | 1         | 1               |

|  | No. of trained media personnel professionalized  | NA   | 25              |
|--|--|------|-----------------|
|  | No. of workshops, seminars and conference on media   | NA   | 10              |
| Output 002:Print and Broadcast Media personnel professionalized      | No. of trained media focal person in all government agencies                                   | 35   | 50              |
| professionalized   | No. of Bhutanese employed in print and broadcast media   | NA   | 50              |
|  | No. of partnership established in print and broadcast  | NA   | 25              |
|  | No. of schools with media literacy integrated into curriculum                                  | 25   | All the schools |
| Output 003:Nationwide Information and Media                          | No. of teacher trained in media literacy   | 1500 | 3000            |
| Literacy Programme implemented                                       | No. of media literacy awareness programs conducted for the public                              | 2    | 5               |
| ·  | Local content, creative media and film expertise enhanced (%)                                  | NA   | 25              |
| Output 004:Local content, creative media and film expertise enhanced | No. of debates, exhibitions, quiz, drama, film festivals held promoting culture and traditions | NA   | 5               |

Table 2: Programme Plan Outlay Summary

| Programme Activities  | Capital |
|---|---------|
| Draft National film policy  | 1.000   |
| Draft Comprehensive Media Policy  | 1.500   |
| Draft Broadcast Policy, SDC   | 4.000   |
| Establish Infrastructure sharing Modalities   | 14.000  |
| Implement circulation auditing of print and broadcast media   | 1.250   |
| Conduct Training programs in media management and journalism  | 3.000   |
| Organize International and national level workshops, seminars and conference on media                                       | 6.000   |
| Conduct Training programs in Information, media and PR management for media focal persons                                   | 5.000   |
| Organize Internships or apprenticeship programs and building of effective partnership and networking in print and broadcast | 3.000   |
| Integrate Teacher's manual to media and information literacy from PP-X standard into curriculum                             | 5.000   |

| Introduce media and information literacy as an optional/part of social studies subject in classes XI-XII                        | 5.000   |
|---|---------|
| Conduct training in media and information literacy for teachers/NFE trainers/<br>Core groups                                    | 2.000   |
| Organize Media and Information Literacy Advocacy programs for public  | 0.500   |
| Produce audio visuals/animations/comics on media and information literacy   | 3.000   |
| Organize debates, exhibitions, quiz, drama, film festivals held promoting culture and traditions                                | 2.000   |
| Produce comic books, documentation, animations  | 2.250   |
| Organize reality shows focused on culture and tradition   | 2.300   |
| Archive local contents  | 0.500   |
| Conduct trainings on contemporary arts  | 2.100   |
| Conduct Training in Creative media and film   | 5.000   |
| Provide Internships or apprenticeship programs and building of effective partnership and networking in creative media and films | 3.000   |
| Provide Technical Assistance and Institute a grant Scheme in the area of Development, Production, Marketing and Talent          | 10.000  |
| Construct Film Studio   | 10.840  |
| Establish Printing Park   | 0.000   |
| Establish Journalist Association of Bhutan and Bhutan Media Council   | 2.440   |
| Capacity Development of Media Personnel   | 4.000   |
| Review and Revised Existing Media Acts and Policies.  | 1.820   |
| Audience survey for radio and TV  | 1.850   |
| Capacity Assessment of all private media outlets  | 2.490   |
| Annual Journalism Awards  | 1.200   |
| Training Equipment for BMF  | 0.900   |
| Pilot Community Radio   | 17.000  |
| Capital Grants for Radio Stations.  | 3.400   |
| Media Impact Study  | 0.400   |
| Private media diversify revenue   | 9.160   |
| Project Monitoring  | 0.000   |
| High Level Observation visit for media regulation models  | 3.000   |
| Exposure visit of key project implementing staff  | 1.200   |
| Media Development Assessment Study 2015.  | 1.200   |
| Total:  | 142.160 |

Au Name: BHUTAN BROADCASTING SERVICE Department: NA
Program Name: Strengthen quality and Content of BBSC TV and Radio

Justification: To strengthen the reliability of BBS Radio and Television news and programme, it is important to strengthen the terrestrial services of BBS. By establishing satellite earth and regional bureau connectivity, BBS would be able to broadcast news and programme produced in different parts of the country very efficiently. Technology is a key component in the improving and expanding content through automation of Radio studios and procurement of professional equipment. Given the limited capacities of BBS, improvement of the content of TV and radio programmes also depends on acquiring and broadcasting locally produced programmes and films. To provide regionally produced news and programmes, establishment of regional studio at Kanglung is necessary. It will also substitute the HQ in case of emergency. Professional enhancement of staff is also critical for quality of content. Further to preserve programme and news for future referencing, establishment of professional video archive is very important. Strategy: i. Strengthen reliability of BBS radio and Television by installing FM/TV transmitters at strategic locations and connecting the Regional Bureaus with the HQ through E1 link. ii. Improve and expand content of BBS radio and Television by constructing Radio and TV studios at Kanglung, purchasing locally produced programmes, purchase of professional equipment and enhance the capacity of the staff through relevant HRD programmes. Not being able to carry out required land acquisition in time which will affect construction of studio. ii. Unable to acquire befitting programs to meet the audience satisfaction. Risk Assessment: iii. Resource gap to meet the international and domestic standard and quality. iv. Inadequate number of staff being provided which will affect implementation of plans. Beneficiary: BBS audience and viewers.

| NKRA   | SKRA   | SKRA KPI   |
|--|--|--|
| Strengthened Bhutanese<br>Identity, social cohesion and<br>harmony | Culture and traditions kept alive through ICT and media. | Exhibitions, debates, quiz on culture/traditions covered/ facilitated by ICT/media |
| Democracy and Governance strengthened                              | Effective and efficient public service delivery          | TAT for public services  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                       | Indicators                                     | Baselines | Plan Targets |
|---|--|-----------|--------------|
| Outcome 001 : Improved quality and relevance of BBSC programs | Audience satisfaction of the BBSC programs (%) | NA        | 90           |
| Results Levels (Output)                                       | Indicators                                     | Baseline  | Plan Targets |
|   |  |           | _            |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Strengthen FM and TV terrestrial services.                            | 50.000  |
| Establish satellite earth station and regional bureau connectivity    | 45.000  |
| Set-up remote monitoring and control system of transmission stations. | 50.000  |
| Programme acquisition   | 50.000  |
| Set-up a professional audio video archive                             | 25.000  |
| Establish regional production and broadcast studio in Kanglung        | 50.000  |
| Digitization and automation of Radio studios                          | 10.000  |
| Procurement of professional equipment                                 | 50.000  |
| Enhance professional capacity of the staff                            | 10.000  |
| Total:-   | 340.000 |

### **EDUCATION**

Au Name: MINISTRY OF EDUCATION

Department: DEPARTMENT OF SCHOOL
EDUCATION

Program Name: Access and Sustainability of
Phase: Approved

#### Justification:

**School Education** 

Recent statistics shows that good progress has been achieved in providing access to education. Gender parity has been achieved at primary and secondary education level, while it is improving at higher secondary and tertiary level. The current challenge is providing the proverbial "last mile access" to achieve Universal Primary Education. It is estimated that about 2% of primary school age children are not in school. These are children from i) remote and hard to reach area; ii) migrant population; and iii) the urban poor including those with special needs.

The past Five Year Plans saw rapid expansion of school infrastructure to provide access to education. Today, the situation is one where student numbers, especially in rural areas, are declining at primary and secondary levels while demand for higher secondary and tertiary education is increasing. This demand cannot be met without further investments in school infrastructure. Furthermore, the phasing out of donor assistance has posed numerous challenges in terms of sustainability of some of its important programmes.

### Strategy:

- Rationalize small, unsustainable schools where enrolment is low and is likely to decline further.
- Consolidate schools with boarding, bussing services allowing for a critical mass of students that warrants better investments and facilitates provision of resource.
- Strengthen Special Education Services for improving access to schools and ECCD programmes for better preparedness for new entrants to primary schools.
- Facilitate the establishment of private schools and international schools to develop a more sustainable education system and promote Bhutan as an educational hub.
- v. Improve disaster preparedness and response in schools
- vi. Improve preparedness for donor phasing out by developing an Action Plan for replacing WFP's school feeding.

### Risk Assessment:

- i. The continuing teacher shortage in remote schools may affect the proper functioning of schools.
- ii. If adequate budget is not provided, it will affect the implementation of the capital intensive school consolidation plans.
- iii. If reliable data on out-of-school children is not available, it will affect evidence-based planning and decision-making
- iv. Overall human resource shortages both teaching and management should affect the implementation of the plan

#### Beneficiary:

Students, teachers, parents, of school going children, NFE learners and the wider community.

| NKRA   | SKRA  | SKRA KPI   |  |
|--|---|--|--|
|  |   | Adjusted Primary Net Enrollment Ratio                                      |  |
|  | MDGs+ Achieved  | Basic Net Enrolment Ratio(13-16yrs)  |  |
| Deventor and developed (NADC)                            |   | Net Primary enrolment (6-12 yrs)   |  |
| Poverty + reduced/MDG+<br>achieved                       | Health and wellbeing of school children improved            | Attendance rate  |  |
| demeved  |   | Clean toilet initiatives in all schools                                    |  |
|  | improved  | Schools/Institutes with sporting calendar/sporting event                   |  |
| Improved Disaster resilience and management mainstreamed | Eco-efficient & disaster resilient infrastructure developed | New school/institute infrastructures are eco- efficient/disaster resilient |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome 001 : Enrollment                                       | Adjusted Primary Net<br>Enrolment Ratio (%) m/f        | 98        | 100          |
|  | Net Primary Enrolment ratio (%)m/f                     | 96        | 98           |
| in ECCD and school education enhanced                          | Basic Net Enrolment Ratio (13-<br>16yrs old) -m/f      | 94        | 96           |
|  | ECCD Enrolment rate (%) m/f                            | 5         | 10           |
|  | No. of children with special needs enrolled in schools | 297       | 500          |
|  | Attendance rate (%)                                    | 90        | 90           |
| Outcome 002 : Health and wellbeing of school children improved | Schools with sporting calendar/ sporting event (%)     | NA        | 100          |
|  | Clean toilet initiatives in all schools (%)            | NA        | 100          |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets |
|  | No of public ECRs                                      | 109       | 218          |
|  | No of public PS  | 344       | 273          |
| Output 001:Sustainability                                      | No of public LSS                                       | 92        | 65           |
| and access to education infrastructures enhanced               | No of public MSS                                       | 57        | 78           |
|  | No. of public HSS                                      | 34        | 44           |
|  | School education expenditure as of GDP (%)             | 6.9       | 6.9          |

| Output 002:Private sector participation in Education enhanced | No. of International schools established  | NA                   | 3           |
|---|---|----------------------|-------------|
|   | No. of national private schools   | 32                   | 40          |
|   | % of students in private schools  | 6                    | 10          |
| Output 003:Disaster   | % of schools with disaster responsiveness plan  | 20                   | 100         |
| preparedness and response of the education system             | No. of education sector response plan   | NA                   | 1           |
| strengthened  | % of new school infrastructures that are disaster resilient   | NA                   | 100         |
| Output 004:School construction technology                     | Schools designs reviewed and implemented (%)  | NA                   | 100         |
| improved  | New school infrastructures are eco-efficient (%)  | NA                   | 100         |
|   | Transition strategy for school feeding programme implemented  | Under<br>development | Implemented |
| Output 005:Nutritional standards and sustainability           | % of schools augmenting vegetables and livestock requirement met from SAP   | NA                   | 50          |
| of school feeding programme enhanced                          | % of schools buying local farm products for school mess   | 2                    | 20          |
|   | % of schools (boarding and with<br>day meal program) providing<br>school meals as per the<br>standard menu for balanced<br>diet | NA                   | 100         |
| Output 006:Increased  | No. of ECCD centers in place  | 96                   | 300         |
| access to Special Education and ECCD                          | No. of special education centers  | 8                    | 22          |

Table 2: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Establishment of New Community ECCD centers  | 30.000  |
| Develop and implementation of licensing and registration brochures, monitoring checklist for national and international private schools        | 0.200   |
| Develop and implement proper monitoring system for private schools, impact study of private schools, facilitate induction program for teachers | 0.400   |
| Assessment and retro-fitting/reconstruction of vulnerable schools  | 0.000   |
| Develop school emergency plan and guidelines for structural and non-structural mitigation and capacity building of stakeholders                | 15.000  |
| Review and improve school designs  | 0.000   |
| Physical assessment / Survey of existing schools   | 0.000   |
| Build and equip special education centers with all appropriate and relevant facilities   | 200.000 |
| Facilitate improvement of Special Education centers  | 15.000  |
| Review ECCD curriculum and related materials and develop communication packages and resources  | 20.000  |
| Recruit and provide capacity building to ECCD facilitators and other officials   | 10.000  |
| Upgrade ECCD section to Division   | 0.000   |
| Strengthen ECCD Monitoring system  | 1.000   |
| Promote SAP for supplement food production and balanced nutritional intake in school   | 2.000   |
| Improve school mess management   | 87.000  |
| Upgrade SEN Section to Division  |         |
| Total:   | 380.600 |

| Au Name: MINISTRY OF EDUCATION                          | Department: DEPARTMENT OF SCHOOL EDUCATION |
|---|--|
| Program Name: Relevance and Quality of School Education | Phase: Approved                            |

| Justification:      | Access to education must be accompanied and supported by quality in the contents of education. In an increasingly globalized and fast changing world, the education system should not only provide students with the highest standards of learning but also inculcate in them the right values, attitudes and skills so that they are able to lead a happy and productive life.  Although no empirical study has been conducted, there are concerns that the quality of education in Bhutan has declined over the years. Therefore, this Programme complemented by the Teachers Support Services Programme aims to improve relevance and quality of education and support the national aspiration to become a knowledge-based society. |
|---------------------|--|
| Strategy:           | <ul> <li>i. Strengthen the performance management system in schools to ensure that teachers are performing optimally, thereby resulting in better learning outcomes for students. This includes developing an ICT system to make it efficient and tamper proof.</li> <li>ii. Implement the "Educating for GNH initiative" to ensure the philosophy of GNH permeates every aspect of the school.</li> <li>iii. Develop and implement the ICT Masterplan to ensure that students are equipped with ICT skills and knowledge as an important aspect of their learning.</li> </ul>   |
| Risk<br>Assessment: | <ul> <li>i. Adequate human resources especially technical expertise to maintain the IT services, not being available will jeopardize the implementation of this programme</li> <li>ii. Unavailability of teachers to serve in remote schools will negatively impact the student's education</li> <li>iii. Unavailability of resources, including those traditionally supported by Development Partners will impact delivery of those activities.</li> </ul>  |
| Beneficiary:        | Students, teachers, parents of school going children and the wider community.  |

| NKRA   | SKRA   | SKRA KPI  |
|--|--|---|
| Improved Disaster resilience and management mainstreamed | Environmental education enhanced in schools          | % of schools practicing green initiatives                   |
| Strengthened Bhutanese                                   | Knowledge on culture and traditional values enhanced | % of schools above 70% on GNH index                         |
| Identity, social cohesion and harmony                    |  | % of students who can perform traditional dance/songs (M/F) |

| Poverty + reduced/MDG+<br>achieved | Students performance outcome improved | Completion Rates (Secondary)   |
|------------------------------------|---------------------------------------|--------------------------------|
|                                    |                                       | Completion Rates (Primary)     |
|                                    |                                       | Learning outcome scores        |
|                                    |                                       | Learning outcome scores        |
|                                    |                                       | Learning outcome scores        |
|                                    |                                       | Survival Rates ( to class VI ) |
|                                    |                                       | Survival Rates ( to class X)   |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                   | Indicators  | Baselines   | Plan Targets                          |
|---|---|---|---------------------------------------|
|   | Survival rates in % (to class VI) (m- 96.2 & f- 99.2)   | 98.3  | 100                                   |
|   | Survival rates in % (to class X) (m-83.8 & f - 85.4)  | 85.1  | 100                                   |
|   | Completion rates in % (primary)   | 117   | 100                                   |
|   | Completion rates in % (secondary)   | 74  | 95                                    |
| Outcome 001 : Relevance and quality of education improved | Learning outcome scores<br>(average/% taken across<br>Math, English, Science and<br>Dzongkha) for class III | Eng: 60<br>Math:61.5<br>Dzongkha:63.5<br>EVS:65                   | All subjects> 65                      |
|   | Learning outcome scores<br>(average taken across<br>Math, English, Science and<br>Dzongkha) for class VI    | Eng: 48.3<br>Math: 46.1<br>Dzongkha: 60<br>Science: 43.7          | Other<br>subjects: 60<br>Dzongkha: 70 |
|   | Learning outcome scores<br>(average/% taken across<br>Math, English, Science and<br>Dzongkha) for class X   | Eng: 54.11<br>Math: 51.93<br>Dzongkha:<br>67.03 Science:<br>50.26 | Other<br>subjects: 60<br>Dzongkha: 70 |
|   | % of students scoring above 60% in Dzongkha   | 23  | 50                                    |
|   | % of schools achieving at least<br>60% in Academic learning<br>scorecard(ALS)                               | 60  | 80                                    |
|   | % of schools achieving at least<br>70% in Enabling Practices<br>Scorecard(EPS)                              | 87  | 95                                    |

| Results Level (Outcome)  | Indicators   | Baselines                              | Plan Targets                   |
|--|--|--|--------------------------------|
| Output 001:Bhutanese<br>learning system focused on<br>GNH values and principles<br>accelerated | % of schools above 70 on GNH<br>Index                                | 94                                     | 100                            |
| Output 002:Mechanism and capacity for Performance Management System strengthened               | Principals/DEOs trained on PMS                                       | All Existing<br>DEOs and<br>Principals | All new DEOs<br>and Principals |
|  | Subject areas using ICT-<br>based teaching and learning<br>materials | NA                                     | 6                              |
| Output 003.ICT in  | ICT Master plan in Education   | NA                                     | 1                              |
| Output 003:ICT in education enhanced   | Computer to student ratio by level                                   | PS: 1:72<br>Secondary:<br>1:45         | PS: 1:30<br>Secondary:1:10     |
|  | No of schools with internet connectivity                             | 215                                    | All schools                    |
| Output 004: Environmental education strengthened   | % of school practicing green initiatives                             | NA                                     | 100                            |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Implement Educating for GNH values and principles in schools                                    | 32.50   |
| Observe and Celebrate Teachers' Day.  | 2.50    |
| Improve performance management system   | 16.61   |
| ICTisation of PMS   | 2.00    |
| Setting up of computer labs in all schools and provide internet and other related services      | 351.79  |
| Regularize/recruit ICT instructor and capacity building of teachers and computer lab assistants | 30.00   |
| Upgrade the School IT unit to division  | 0.00    |
| Preparation of Education ICT Master Plan  | 1.00    |
| Awareness and advocacy on the basic concepts of environmental education and its application     | 5.00    |
| Promotion of environmentally sound waste management practices in the schools                    | 3.00    |
| Internet connectivity in all schools  | 0.00    |
| Total:  | 444.40  |

Au Name: MINISTRY OF EDUCATION

Department: DEPARTMENT OF CURRICULUM RESEARCH & DEVELOPMENT

Program Name: Curriculum Research and Development

Development

| Justification:      | The quality of the school curriculum and its implementation broadly determines the quality of the learning outcomes for students. In the long term, it will have a strong bearing on the overall quality of human resources of the country. A curriculum of good quality and standards will help the future leaders of our country to navigate the Nation through the 21st century.  A well trained group of curriculum developers would be able to weigh the |
|---------------------|---|
|                     | curriculum through various dimensions. Well trained teachers supported with relevant resources and professional development programmes, will achieve the intent of the curriculum. Currently the department suffers from shortage of staff with expertise in curriculum development and lacks a strong and institutionalized system for monitoring and co-ordination of the introduction of new curricula.  |
| Strategy:           | <ol> <li>Strengthen the existing curriculum for all subjects making it relevant and<br/>meaningful. This will be implemented through close co-ordination and<br/>consultation with all relevant stakeholders and based on scientific review.</li> </ol>   |
|                     | <ul><li>ii. Invest in building capacities of curriculum officers and ensure their expertise<br/>is recognized by RCSC in their management of specialists and professionals.<br/>This is to ensure that their expertise continues to benefit the department.</li></ul>   |
|                     | iii. Strengthen the management system for introducing and monitoring the new curricula.   |
| Risk<br>Assessment: | <ol> <li>Continued shortage of both Curriculum Officers and other staff in the<br/>Department, pose a risk of not being able to implement activities effectively.</li> </ol>  |
|                     | <ul> <li>Lack of training in curriculum design and publishing for the staff is a major<br/>problem and as such our work needs to be outsourced on many occasions.<br/>Outsourcing is also not very effective.</li> </ul>  |
| Beneficiary:        | School teachers, students and the community and nation at large   |

| NKRA   | SKRA                                  | SKRA KPI                       |
|--|---------------------------------------|--------------------------------|
|  |                                       | Learning outcome scores        |
| Davida de la constanta de la c | Students performance outcome improved | Completion Rates (Secondary)   |
| Poverty + reduced/MDG+ achieved  |                                       | Completion Rates (Primary)     |
| 456164   |                                       | Survival Rates ( to class VI ) |
|  |                                       | Survival Rates ( to class X)   |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                       | Indicators   | Baselines   | Plan Targets                          |
|---|--|---|---------------------------------------|
|   | Learning outcome scores<br>in % (average taken across<br>Math, English, Science and<br>Dzongkha) for class III | Eng: 60<br>Math:61.5<br>Dzongkha:63.5<br>EVS:65                   | All subjects:65                       |
|   | Learning outcome scores<br>(average taken across<br>Math, English and Science)<br>for class VI                 | Eng: 48.3<br>Math: 46.1<br>Dzongkha: 60<br>Science: 43.7          | Other<br>subjects: 60<br>Dzongkha: 70 |
| Outcome 001 : Relevance and quality of education improved     | Learning outcome scores<br>(average taken across<br>Math, English and Science)<br>for class X                  | Eng: 54.11<br>Math: 51.93<br>Dzongkha:<br>67.03 Science:<br>50.26 | Other<br>subjects: 60<br>Dzongkha: 70 |
|   | Students scoring greater<br>than 60% in Dzongkha [in<br>grades X and XII                                       | 23  | 50                                    |
|   | Curriculum aligned to<br>National Education<br>Framework   | Under progress  | Implemented                           |
| Results Levels (Output)                                       | Indicators   | Baseline  | Plan Targets                          |
| Output 001:School curricula reviewed, updated and diversified | Number of subjects reviewed, updated, and implemented  | 3   | 6                                     |
| Output 002:Assessment system streamlined                      | % of subjects using streamlined assessment procedures  | NA  | 100                                   |
| Output 003:ICT in curriculum                                  | % of schools using new curriculum  | NA  | 100                                   |
| enhanced  | No. of subjects using ICT-based teaching and learning materials  | NA  | 6                                     |

Table 2: Programme Plan Outlay Summary

| Programme Activities                                       | Capital |
|--|---------|
| Strengthen Language Curriculum                             | 22.00   |
| Strengthen Mathematics, Science and ICT Curriculum         | 52.00   |
| Strengthen Social Science Curriculum                       | 44.00   |
| Strengthen Other Curriculum (HPE, Multi-grade and Braille) | 18.00   |
| Strengthen Diversified Curriculum                          | 25.00   |
| Strengthen Assessment Practices                            | 13.00   |
| Strengthen ICT in curriculum implementation                | 26.00   |
| Annual science exhibitions                                 | 0.00    |
| Total:   | 200.00  |

Au Name: MINISTRY OF EDUCATION Department: DEPARTMENT OF ADULT & HIGHER EDUCATION

**Program Name: Higher Education Services Phase: Approved** 

| Justification:      | Higher education is essential for the development of human capital of any country. Given that Bhutan seeks to pursue the objective transforming into a knowledge-based society, investments in higher education opportunities are vital. Furthermore skilled and specialized human resources are required for providing services in all sectors, especially in the health, technical and education sector. This continues to be addressed through scholarships in important areas/studies.  Moreover investments into expanding access to primary and secondary education have resulted in growing numbers of Bhutanese students seeking higher education every year. Being unable to accommodate all the students, many Bhutanese students pursue their tertiary education outside the country, many in institutions of questionable repute. Facilitating the establishment of |
|---------------------|---|
| Stratomu            | reputable tertiary education institutes will also address this issue.  i. Strengthen the regulatory framework and quality assurance systems to  |
| Strategy:           | i. Strengthen the regulatory framework and quality assurance systems to facilitate establishment of quality tertiary education institutions (TEIs).   |
|                     | ii. Enhance the strategic planning and monitoring system for scholarships to ensure scholarships are well aligned to national needs, managed effectively with sustainability as a key question being addressed.   |
|                     | iii. Strengthen services such as information and advisory services to students, as well as facilitating linkages for TEIs such as accreditations etc.   |
|                     | iv. Encourage participation of girls in tertiary education through policy and other interventions.  |
| Risk<br>Assessment: | i. Lack of adequate resources to implement the programme especially the scholarship activities which are largely dependent on development partners.   |
|                     | ii. Adequate human resources with necessary skills and knowledge to manage tertiary education may not be available which will seriously affect the implementation of the entire programme   |
| Beneficiary:        | Direct beneficiaries will be aspiring and meritorious students seeking tertiary education. Other beneficiaries will be the existing tertiary education institutions, private investors and companies seeking to set up TEIs, corporations, community and the country at large.  |

| NKRA                                | SKRA   | SKRA KPI  |
|-------------------------------------|--|---|
| Poverty + reduced/<br>MDG+ achieved | MDGs+ Achieved   | GER at tertiary level (19-21yrs) both within and outside Bhutan |
| Sustained Economic<br>Growth        | Education sustainability ensured                                 | % of self-financed students in tertiary education (M/F)         |
| Improved public service delivery    | Enhanced efficiency and effectiveness in public service delivery | TAT of commonly availed services                                |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
| Outcome 001 : Relevance and quality of higher education improved  | TEIs accredited to international standards (%)  | 0         | 10           |
|   | GER at tertiary level (%)   | 33        | 40           |
|   | % of tertiary students studying in Bhutan (%)   | 70        | 80           |
| Outcome 002 : Opportunities for higher education enhanced including lateral entry into tertiary education | Ratio of females to males in tertiary education (%)   | 71        | 90           |
|   | Extent to which National HR gap<br>narrowed in critical sectors (%<br>of scholarship slots matching HR<br>requirement.) | 40        | 60           |
|   | % of TTI graduates availing tertiary education  | NA        | 3%           |
| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
| Output 001:A system for   | % of TEIs accredited  | NA        | 90           |
| accreditation of TEIs and recognition of qualifications in place  | % of qualification recognized   | 70        | 75           |

|  |  | ~       |         |
|--|--|---------|---------|
|  | No. of colleges/tertiary institutions approved                                       | 13      | 17      |
| Output 002:Sustainability and  | Rules and Regulations for the Establishment of University in                         | NA      | 1       |
| access to tertiary education   | place.   | NA      | 1       |
| improved   | Tertiary education expenditure as a % of GDP   | 1.91    | 1.9     |
|  | % of self-financed students in<br>tertiary education (in- country<br>and ex-country) | 12      | 30      |
| Output 003:Scholarships implemented as per national HR                               | Number of scholarships implemented as per the plan (Ex country and RTC)              | 600     | 1600    |
| requirements   | Number of bilateral/institutional scholarship slots received                         | 35      | 200     |
| Output 004: Efficiency and effectiveness of scholarship service delivery and support | TAT of commonly availed services   |         |         |
| services improved  | reduced  | 30 days | 14 days |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Provide policy, funding and programme support for tertiary education   | 4.90    |
| Networking and institutional linkages with universities/institutes abroad                                      | 0.00    |
| Participate in University Grants Commissions and Governing Board of South Asian University meetings and events | 1.25    |
| Implement scholarships under GoI funding   | 550.00  |
| Networking/institutional linkages with institutes and universities abroad                                      | 0.00    |
| Support for BSA, student health insurance scheme and other scholarship services                                | 25.00   |
| Implement Accreditation Principles and Bhutan Qualifications framework   | 0.00    |
| Implement scholarships under RGoB funding  | 339.52  |
| Networking/institutional linkages (QAAD)   |         |
| Scholarships by the RGoB under SAARC Chairs, Fellowships and Scholarships Scheme to SAARC Member States        | 6.00    |
| Implementation of APEMS  | 22.50   |
| Implementation of In country scholarship (RTC)   | 24.00   |
| Capacity build BAAC members, accreditors and QAAD officials  | 8.32    |
| Total:   | 981.49  |

Au Name: MINISTRY OF EDUCATION Department: DEPARTMENT OF ADULT &

HIGHER EDUCATION

Program Name: Adult Literacy and Lifelong

Learning

### **Phase: Approved**

### Justification: Literacy is seen as one of the key instruments for poverty alleviation and thus the achievement our development philosophy of GNH. The government started the non-formal education programme in 1991 to provide basic literacy and functional skills to the adult population. The programme has been very effective in providing literacy to our illiterate population bringing adult literacy 52.8% in 2005 to 55.3% in 2012. Undoubtedly literacy has played a big role improving their lives, providing access to information, knowledge. It has also empowered the communities to participate in developmental activities, decision-making and the political process. In the 11th Plan, the primary focus will be to enhance the adult literacy rate to 70%. To achieve this, there has to be a two-pronged approach of enhancing access to education as well as improving the quality through augementing the skills of the instructors Community Learning Centres. Furthermore, the NFE curriculum will need to be revamped to include life skills and other relevant skills, which it currently lacks. In order to institute s system of continuous learning, opportunities will need to be provided to those who could not continue formal education and wish to upgrade their qualifications through the continuing education programme. Strategy: Enhance NFE curriculum by including a functional English curriculum and other life skills, and developing an equivalency framework. ii. Improve the quality of NFE instructors by building their capacities iii. Revitalize Community Learning Centres with provision of basic equipment and other resources. Strengthen monitoring and review system for the Non Formal Education through literacy mapping to target key geographical areas where illiteracy rates are high and also close monitoring of current activities to facilitate sharper interventions. Facilitate provision of Continuing Education Programme to support enhancement of academic qualifications. Risk i. Most activities under the non-formal education programme are supported Assessment: by development partners. With development partners phasing out support from Bhutan, sustainability would be an issue and a risk. ii. Currently the rate of attrition of NFE Instructors is quite high which affects the quality of NFE. If NFE instructors cannot be retained, it will jeopardize the programme. iii. Similarly there is also the risk of being unable to retain trained CE tutors on which the efficacy of the CE depends. The illiterate population, in-service personnel, out of school youths, neo-literates **Beneficiary:** and the wider community.

| NKRA                            | SKRA            | SKRA KPI                    |
|---------------------------------|-----------------|-----------------------------|
| Poverty + reduced/MDG+ achieved | MDGs+ Achieved. | Adult literacy rate 15 yrs+ |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                  | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome 001 : Enrolment in continuing education enhanced | No. of Continuing Education<br>learners completing Class XII         | 1600      | 2400         |
| continuing education enhanced                            | Drop rate (%)  | 20        | <10          |
|  | Completion rate (%)  | 80        | 90           |
| Outcome 002 : Adult literacy improved                    | Adult literacy rate 15 years<br>+ (UNESCO Definition)<br>(66m/45.2f) | 55.3      | 70           |
|  | Drop out rate (%)  | 20        | <10          |
|  | Completion rate (%)  | 80        | 90           |
| Results Levels (Output)                                  | Indicators   | Baseline  | Plan Targets |
| Output 001:Continuing education programme strengthened   | No of Continuing Education graduates                                 | 2000      | 3300         |
|  | No of new NFE centers established                                    | 958       | 1350         |
| Output 002:NFE programme expanded and strengthened       | Equivalency framework in place                                       | NA        | 1            |
|  | No of functional Community<br>Learning Centers                       | 4         | 22           |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Supplies for NFE, CE and CLCs (teaching learning materials and equipment )      | 6.900   |
| Development of equivalency framework and review of NFE programme                | 2.500   |
| Studies and surveys (literacy mapping)  | 2.700   |
| Advocacy programme on NFE and in-country training programme for NFE Instructors | 8.500   |
| Support for NFE Management Information System and monitoring services           | 2.500   |
| Total:  | 23.100  |

| Au Name: MINISTRY OF EDUCATION  | Department: DEPARTMENT OF YOUTH & SPORTS |
|---------------------------------|--|
| Program Name: Youth Development | Phase: Approved                          |

| Justification:        | Economic development of a nation depends on young and productive people. They represent hopes and future aspirations of the country. In Bhutan, youth account for about 35% of our population and constitute a unique group with a positive force and enormous potential to contribute to development. Recognizing their important role in society, numerous programmes and initiatives are in place to improve the well-being of youth.  |
|-----------------------|---|
|                       | Young people today face numerous challenges as a result of the rapid pace of development in the last few decades. This underscores the importance of complementing academic programmes with commensurate interventions to equip our youth with knowledge and skills so that they are able to cope with challenges they are presented with, and fulfill their roles as future custodians of the country. In view of this, youth development will be pursued as a priority programme in the 11th Plan.  |
| Strategy:             | <ul> <li>i. Youth development needs is a cross cutting theme, which requires concerted and coordinated effort amongst many stakeholders. The implementation of a National Youth Action Plan, which has been developed through wide stakeholder consultation, will be an important strategy.</li> <li>ii. Address youth issues in urban centers and dzongkhags with a sizeable youth population through provision of youth friendly integrated services and facilities.</li> <li>iii. Provide resources and opportunities to youth for holistic development through career education, vocational education, cultural, spiritual programs, scouting and life skills programs.</li> <li>iv. Strengthen parenting education to help them provide the necessary support and guidance to their children and wards in this fast changing world.</li> </ul> |
| Risk Assess-<br>ment: | <ul> <li>i. Donor supported projects run the risk of sustainability as donor phase out their support.</li> <li>ii. Adequate resources may not be available which will affect the implementation of the activities.</li> <li>iii. Adequate human resources may not be available which in turn will affect the delivery of activities.</li> </ul>   |
| Beneficiary:          | Youth and their parents as well as the community at large.  |

| NKRA                               | SKRA   | SKRA KPI   |
|------------------------------------|--|--|
|                                    |  | Attendance rate  |
| Poverty + reduced/MDG+<br>achieved | Health and wellbeing of school children improved                       | Schools/Institutes with sporting calendar/sporting event |
|                                    |  | Clean toilet initiatives in all schools                  |
|                                    | School sports strengthened in schools to enable sports for all by 2018 | % of students participating in sports activities         |
| Improved public service delivery   | Improved students discipline and conduct                               | Extent of indiscipline cases in schools                  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines | Plan Targets |
|---|--|-----------|--------------|
|   | % of youth participating in community service and voluntary activities-                                | NA        | 30           |
| Outcome 001 : Youth<br>empowered with appropriate<br>knowledge, skills, attitudes<br>and values | % of youth engaged in productive activities (internship programs, temporary jobs) during holidays etc. | NA        | 50           |
|   | Extent of indiscipline cases in schools  | NA        | < 50         |
| Outcome 002 : Health and well being of school children improved                                 | Attendance rate (%)  | 90        | 90           |
| Results Levels (Output)   | Indicators   | Baseline  | Plan Targets |
| Output 001:Parenting education and school based   | %of parents who find parenting education useful  | NA        | 70           |
| guidance and counseling programme strengthened in schools                                       | % of secondary schools with functional Guidance and Counseling Programme                               | 20        | 80           |
|   | % of schools with trained scout masters  | 70        | 100          |
| Output 002:National Scouting programme strengthened   | No. of National Scout Training<br>Center in place  | NA        | 2            |
|   | No. of students taking up scouting   | 20600     | 25000        |

|  | Dzongkhag Level Scouting program (%)  | NA        | 100                |
|--|---|-----------|--------------------|
|  | National Scout Award system in place (%)  | NA        | 100                |
| Output 002:National Scouting programme strengthened  | Community based scouting established (No.)  | 3         | 10                 |
|  | Scout band strengthened (No.)   | 1         | 2                  |
|  | No. of National and Regional Scout<br>Jamboree and Camps conducted                          | 9         | 16                 |
| Output 003:Youth have  | % of youth availing youth friendly facilities and services                                  | 10        | 50                 |
| access to youth friendly facilities, services and  | No. of functional youth centers   | 8         | 13                 |
| programmes   | National Youth Action Plan implemented  | Developed | Implemented        |
|  | No. of Youth Participating in exchange programmes (regional and international)              | 476       | 800                |
| Output 004:Culture and values education programme  | % of students who can perform at least one traditional dance/songs                          | NA        | 70                 |
| expanded and strengthened  | No. of MSS and HSS availing choeshey programme  | 52        | All MSS and<br>HSS |
|  | Cultural guide line for schools in place  | NA        | 1                  |
| Output 005:Basic vocational skills promoted  | % of secondary schools with vocational clubs  | 30        | 80                 |
| Output 006: School Sports<br>Program Standardized across<br>the schools                                  | National Strategy Framework<br>for School Sports and Physical<br>Activities developed (No.) | NA        | 2                  |
|  | No. of technical books and guidelines developed   | 1         | 6                  |
| Output 007: Mass<br>participation of children and<br>youth in sports and physical<br>activities enhanced | % of students participating in sports and physical activities                               | N/A       | 100                |
|  | School have Wellness Policy and sport calendars   | N/A       | 100%               |
| Output 008:Capacity building in delivery of School Sports Program supported                              | No. of Schools Sports Instructors<br>Recruited and trained                                  | 87        | 179                |
|  | No of invitations/offers received to participate in educational sports forums/courses       | 2         | 7                  |

| Output 009:WASH facilities strengthened                      | % of schools with functional toilet facilities                      | 65  | 100 |
|--|---|-----|-----|
|  | % of boarding schools with bathing facilities                       | NA  | 100 |
|  | % of schools with functional water taps                             | 75  | 100 |
|  | Proportion of schools promoting key health and hygiene behavior (%) | 70  | 100 |
| Output 010: Health<br>Education and Advocacy<br>strengthened | % of students with student health hand book (class PP-VII)          | 100 | 100 |
|  | % of schools with trained school health coordinators                | 70  | 100 |
|  | % of school implementing Life<br>Skill Education (LSE)              | 15  | 100 |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Complement Guidance Programme in the schools through needs relevant initiatives  | 6.20    |
| Provide integrated services/facilities for youth (youth centers)   | 25.00   |
| Implementation of the National Youth Action Plan   | 66.50   |
| Scouting Programme at National and Regional level  | 2.50    |
| Develop and Produce scout resources  | 5.00    |
| Develop two National Scout Centers (West and East )  | 50.00   |
| Set up a Scout shop  | 1.50    |
| Promotion of Culture and Value Education among the Youths  | 5.30    |
| Advanced level training of Scout Leaders (in country)  | 10.00   |
| Capacity building for School Guidance Counselors, Teacher counselors, Focal Persons for parenting programme and vocational programme | 38.53   |
| Youth -to- Youth strategies in youth support and development   | 5.00    |
| Diversify the vocational clubs in the schools  | 5.00    |
| Scout conferences/meeting at International and National level in the region  | 8.50    |
| Youth Exchange Programme (International & National)  | 15.00   |
| Train the Youth Center staff (in country)  | 1.00    |
| Develop & publish National Strategy Framework for School Sports Program & other sport literatures (manuals & guidelines)             | 1.15    |
| Organize Sports Meets and Educational Activities   | 39.08   |

| Institutionalize health and safety guidelines and student health handbook            | 4.00   |
|--|--------|
| Sensitization and advocacy on emerging health issues                                 | 17.00  |
| Capacity building of staff at HQ and Health Coordinators in the Dzongkhag and School | 7.00   |
| National School Health Committee & other coordination meeting                        | 0.50   |
| Procurement of scout materials   | 2.50   |
| Development of Monitoring and evaluation system                                      | 1.15   |
| Develop Communication strategy to inform and educate public on scouting              | 0.30   |
| Establish 2 Scout band in two schools (east and west)                                | 0.70   |
| Annual scouts membership fees  | 0.00   |
| Dzongkhag level scout program (training & camps)                                     | 5.00   |
| Orientation on the new scout framework to Principals/DEOs/TEOs                       | 1.40   |
| Strengthening of community based scouting  | 1.50   |
| Leadership programme for youth (at risks & scouts)                                   | 2.50   |
| Winter engagement program for vulnerable youth                                       | 1.00   |
| Facilitate the provision of wash facilities in schools                               |        |
| Total:   | 329.81 |

Au Name: MINISTRY OF EDUCATION Department: SECRETARIAT

Program Name: Teacher Support Services Phase: Approved

| Justification:      | In all our past Five Year Plans, tremendous amount of capital investments have been made in expanding access to education. This is corroborated by the fast growth rates of Net enrollment rates for primary and secondary education which are currently; Primary Net Enrolment Ratio at 96%, Adjusted Net Enrolment Ratio at 98% and Basic Net Enrolment Ratio at 94%.  One of the primary issues faced by the education sector is improving the quality of education while simultaneously striving to increase enrolment. There is a perception that quality has not kept pace with the expansion of the education system and that there is a need to improve the quality of education. With teachers being the backbone of the education system, the quality of education hinges on the quality of teachers. Hence, there is a need to address the issue of teacher shortages and professionalize the teaching profession. |
|---------------------|---|
| Strategy:           | <ul> <li>i. To professionalize the teaching profession, the INSET Master plan which aims to ensure that all teachers acquire the minimum standard professional development, will be implemented.</li> <li>ii. A Professional Development Division will be set up to solely focus and successfully implement the plans to professionalize the teaching profession.</li> <li>iii. To address the shortage of teachers and unattractiveness of the profession, better living conditions, decent working environment and attractive pay/allowances will be provided</li> <li>iv. HR management of teachers to allow fairness and transparency in decision making will be strengthened. Furthermore, the Teachers' HR policy which among other things looks at institutionalization of career pathways and performance management will be implemented.</li> </ul>  |
| Risk<br>Assessment: | <ul> <li>i. Inadequate financial resources will jeopardize the implementation of INSET, HRD activities.</li> <li>ii. Inadequate HR both managerial and technical will affect implementation of this programme.</li> <li>iii. Other departments and divisions of the Ministry and other relevant stakeholders may not prioritize the implementation of this programme leading to delays and other implementation bottlenecks</li> </ul>  |
| Beneficiary:        | Teachers, students, parents of school going children and the society at large.  |

| NKRA                   | SKRA                | SKRA KPI  |
|------------------------|---------------------|---|
| Poverty + reduced/MDG+ | Teacher performance | % of teacher satisfied with teaching profession |
| achieved               | ·                   | INEST Master Plan implemented                   |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                   | Indicators   | Baselines   | Plan Targets                          |
|---|--|---|---------------------------------------|
|   | Survival rates in % (to class VI)  | 98  | 100                                   |
|   | Survival rates in % (to class X)   | 85  | 90                                    |
|   | Completion rates in % (primary)  | 117   | 100                                   |
|   | Completion rates in % (secondary)  | 74  | 85                                    |
| Outcome 001 : Relevance and quality of education improved | Learning outcome scores<br>in % (average taken across<br>Math, English, Science and<br>Dzongkha) for class III | Eng: 60<br>Math:61.5<br>Dzongkha:65<br>Science:65                     | All subjects:65                       |
|   | Learning outcome scores<br>in % (average taken across<br>Math, English, Science and<br>Dzongkha) for class VI  | Class VI:<br>Eng: 48.3<br>Math: 46.1<br>Dzongkha: 60<br>Science: 43.7 | Other<br>subjects: 60<br>Dzongkha: 70 |
|   | Learning outcome scores<br>in % (average taken across<br>Math, English, Science and<br>Dzongkha) for class X   | Class X: Eng: 54.11 Math: 51.93 Dzongkha:67.03 Science: 50.26         | Other<br>subjects: 60<br>Dzongkha: 70 |
|   | % of students scoring above 60% in Dzongkha  | 23  | 50                                    |
|   | % of teacher satisfied with teaching profession  | 68.3  | 85                                    |

| Results Level (Outcome)                                | Indicators   | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Output 001:Teacher performance outcome improved        | INSET Master plan  | Developed | Implemented  |
|  | % of teachers satisfied with teaching profession                               | 68.3      | 85           |
|  | % of teachers who have<br>availed at least one NBIP in<br>the 11th Plan period | NA        | 100          |
| Output 002:Teacher recruitment and deployment improved | % of teachers recruited as per<br>the subject requirement                      | 19.9      | 100          |
|  | % of teachers deployed as per the requirement                                  | 53.4      | 100          |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Provision of incentives (financial and non- financial) for teachers.                  |         |
| Capacity building of MoE, Dzongkhags and schools support staff (in-country programme) | 9.50    |
| Establishment of PD Division  | 0.00    |
| Provision of professional development at national level (NBIP)                        | 131.00  |
| Professional qualification upgradation (in- country award bearing programme)          | 157.90  |
| Support for Teacher Resource Centers  | 61.00   |
| Total:  | 359.40  |

| Au Name: MINISTRY OF EDUCATION                 | Department: SECRETARIAT |
|--|-------------------------|
| <b>Program Name: Institutional Development</b> | Phase: Approved         |

| Justification:      | The various offices under the Secretariat, which include Policy and Planning Division, Human Resource Division, Administration and Finance Division, Internal Audit Division, Information and Communication Division, and National Commission for UNESCO, provide the Secretariat support services to the technical departments. Specifically, they provide services such as Five and Annual plan formulation, resource mobilization, monitoring, co-ordination and evaluation, providing administrative and procurement services, performing HR functions, ensuring compliance with rules and regulations, etc. |
|---------------------|--|
|                     | Currently, the Ministry faces severe crunch in terms of office space, with many departments and divisions working out of semi-permanent structures and rented spaces. This has not been conducive to service delivery, effective co-ordination and resource sharing within the Ministry.   |
| Strategy:           | <ol> <li>Construct Secretariat building to ease space crunch, promote efficient service<br/>delivery and co-ordination amongst the various departments, divisions of<br/>the Ministry.</li> </ol>  |
|                     | ii. Finalize and implement the National Education Policy.  |
|                     | iii. Strengthen and streamline HR Development and management systems for the large numbers of personnel under the Ministry.  |
|                     | iv. Use IT to strengthen education management information and inventory systems for greater efficiency and cost effectiveness.   |
|                     | v. Strengthen monitoring and implementation of plans, policies and programmes  |
| Risk<br>Assessment: | i. Risk of land for construction of Secretariat building being insufficient due to the current land issue with Dzongkha Development Commission.  |
|                     | ii. Inadequate manpower and technical capacity in the Ministry, which will affect implementation of plans.   |
|                     | iii. Timely adequate financial resources not being provided which will jeopardize the implementation of plans.   |
| Beneficiary:        | The Departments and Divisions within the Ministry, teachers, students, parents, school administrations, Local Governments and the wider community.   |

| NKRA                    | SKRA                            | SKRA KPI                         |
|-------------------------|---------------------------------|----------------------------------|
| Improved public service | Enhanced efficiency and         | Average performance rating       |
| delivery                | effectiveness in public service | Anti-corruption Strategy         |
|                         | delivery                        | implemented                      |
|                         |                                 | TAT of commonly availed services |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines   | Plan Targets                                       |
|---|---|---|--|
|   | Average performance/GPMS rating (%)   | NA  | > 90   |
| Outcome 001 : Efficiency,   | % of expenditure made against the approved budget/Budget utilization rate                             | 87.7  | > 95   |
| effectiveness of MoE enhanced   | Anti-corruption strategy  | NA  | Implemented  |
|   | TAT of commonly availed services  | NA  | >70  |
|   | Number of schools in<br>ASPnet schools and UNESCO<br>Clubs  | 50  | 100  |
| Results Levels (Output)   | Indicators  | Baseline  | Plan Targets                                       |
| Output 001:Systems and mechanisms strengthened for evidence based planning, decision-making and | EMIS upgraded E portal fully functional   | EMIS version 2<br>available (2012<br>development) | EMIS version upgraded to version 3 and implemented |
| monitoring  | No. of research and impact studies conducted  | NA  | 3  |
| Output 002:Safe and conducive working environment in the Ministry                               | New integrated secretariat building in place  | NA  | 1  |
| Output 003:Awareness and information on education services strengthened                         | No of educational media programme produced  | 60  | 120  |
| Output 004:Awareness and education on UNESCO supported  | No. of brochures, TV spots,<br>MTV produced   | NA  | 1  |
| activities and services enhanced  | No of agencies receiving support from the UNESCO  | 13  | 14   |
|   | No. of Ministerial staff<br>trained in Dzongkha speaking<br>and writing skills                        | NA  | 80   |
| Output 005:Dzongkha promotion strengthened in the Ministry                                      | No. of high level steering committee meeting conducted  | NA  | 5  |
| su y  | National level Dzongkha<br>promotion programmes<br>conducted (BBS, Essay<br>competition, Quiz/Debate) | NA  | 2  |

# **Table 2: Programme Plan Outlay Summary**

| Programme Activities   | Capital |
|--|---------|
| Develop/update policy guidelines and implementation strategies             | 1.70    |
| Upgrade ICT unit into a Division and strengthen EMIS                       | 3.50    |
| Annual publications and reports  | 0.00    |
| Conduct gender, policy and planning related forums/workshops               | 5.00    |
| Carry out relevant research and impact studies                             | 2.50    |
| Construction of new Secretariat building                                   | 175.00  |
| Strengthen UNESCO programs and reporting mechanisms                        | 2.70    |
| Implement Dzongkha promotion activities                                    | 3.30    |
| Develop and disseminate information and education materials and programmes | 1.50    |
| Procurement of media equipment   | 3.00    |
| Total:   | 198.20  |

Au Name: ROYAL UNIVERSITY OF BHUTAN **Department: SECRETARIAT** 

Program Name: Enhancing Access to Tertiary Education (in RUB)

**Phase: Approved** 

| Justification:      | Most countries which consider themselves as knowledge-based society are characterized by very high GER over 60 to 70 % of the age cohort between 19 and 23 years of age. However, the GER in Bhutan is only around 18%. The target in the 11 <sup>th</sup> plan is to increase to 35%, of which RUB aims to contribute 15%. This translates to increase in total intake capacity of 14000 by 2018 in the 8 member colleges. It is learned that increasing access to tertiary education increases employment opportunities, reduce poverty, develop social capital, reduce crime and health risk, and boost democratic culture and improve overall quality of life. Currently there are around 9000 students with total academic faculties of 490, and non-academic staff of 286. In order to ensure accommodation of 14,000 students by 2018, there is a need to increase the number of staff and expand infrastructure and facilities such as laboratories, libraries, sports facilities, classrooms, hostels and staff quarters.  Further, as envisioned in vision 2020, the university is expected to enhance continuing education programmes. This provision will enhance access to tertiary education for those who would not have the opportunity to undergo higher studies through the regular full-time mode of study. |  |
|---------------------|--|--|
| Strategy:           | <ul> <li>i. RUB will consolidate and enhance complementary infrastructures to accommodate at least 1000 to 1500 regular students in each of their member colleges. Additional faculty and administrative staff will be recruited to support the expansion plan. Infrastructure and facilities especially ICT will be strengthened to suit the need of continuing education programmes to enable diversified groups of students to access higher education and training programs.</li> <li>ii. RUB will also embrace more private colleges as affiliated colleges of the Royal University of Bhutan to allow private sectors to complement government efforts in expanding access to tertiary education. PPP will also be explored as an option to develop residential facilities.</li> </ul>   |  |
| Risk<br>Assessment: | Inadequate funding might hamper the expansion of the proposed infrastructure and related facilities. The students' accommodations which are planned under PPP modality are subject to the availability of private partners, which is not certain.  |  |
| Beneficiary:        | Students who are able to access the undergraduate and post graduate programs are the direct beneficiaries. Indirectly, the society at large will benefit as RUB will be producing the critical mass of the educated society in the country.  |  |

| NKRA   | SKRA  | SKRA KPI   |  |
|--|---|--|--|
| Poverty + reduced/MDG+<br>achieved                       | MDGs+ Achieved.   | GER at tertiary level (19-21 years)-both within and outside Bhutan             |  |
|  |   | Ratio of females to males in tertiary education                                |  |
| Improved disaster resilience and management mainstreamed | Eco-efficient & disaster resilient infrastructure developed | New school/institutes infrastructures are eco-efficient and disaster resilient |  |
| Improved public service                                  | Enhanced efficiency   | Anti-corruption strategy implemented   |  |
| delivery and effectiveness in public service delivery    | Average performance rating > 90%                            |  |  |
|  | public service delivery                                     | TAT of common availed services reduced by at least 70%                         |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Base Year | Plan Targets |
|--|---|-----------|-----------|--------------|
|  | Gross Enrolment Ratio   | 10 %      | 2013      | 15 %         |
| Outcome 001 : Access to tertiary education (RUB)                             | Total capacity of enrolment in constituent colleges             | 9000      | 2013      | 14000        |
|  | No. of students enrolled in continuing education programmes     | 1000      | 2013      | 2500         |
|  | No. of students enrolled in RUB's affiliated (private) colleges | 1000      | 2013      | 3000         |
| Results Levels (Output)  | Indicators  | Baseline  | Base Year | Plan Targets |
| Output 001:Infrastructure  | Total area of academic spaces (sq. m)                           | 21588     | 2013      | 24787        |
| and facilities developed<br>to support quality of<br>education and expansion | Total area of residential spaces (sq. m)                        | 72383     | 2013      | 40270        |
|  | Total area for other miscellaneous spaces (sq. m)               | 19800     | 2013      | 20605        |
| Output 002:Adequate  | No. of teaching staff on campus                                 | 600       | 2013      | 1000         |
| number of staff recruited  | No. of non-teaching staff (including GSC and ESP)               | 300+      | 2013      | 700          |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activities   | Capital<br>Outlay |
|--|-------------------|
| Construction of 2 classrooms (60 capacity each), 1 lecture theatre (150 capacity), 4 Labs (30 capacity each) & offices furnished with modern teaching aids for diploma in ECE at JNP | 49.860            |
| Remodeling and refurbishment of Rimpung campus for ECCD at PCE   | 10.000            |
| Construction of academic block for science laboratory, classrooms, offices for lecturers, IT labs, lecture theater of 200 capacity etc. (of RIHS size) at CNR                        | 180.000           |
| Construction of 4 mid size room (70 capacity) and 4 nos of large classroom (100 capacity) at SC  | 40.000            |
| Construction of 2 labs for Media and EVS Course at SC  | 25.000            |
| Construction of human development centre (ILCS size) at GCBS   | 11.000            |
| Construction of additional hostels (288 capacity) at JNP   | 70.000            |
| Construction of 5 block hostels at ILCS (250 capacity)   | 120.000           |
| Construction of hostels (50 capacity-3 blocks) at SC   | 47.500            |
| Improve existing water network, identify new water source and carry out line connection at JNP   | 9.750             |
| Remodel staff's work station (cubicles) at SCE   | 7.000             |
| Construction of football ground at SCE   | 3.000             |
| Construction of multipurpose hall (1000 capacity) at CNR   | 60.000            |
| Construction of sewerage treatment plant at SC   | 5.000             |
| Construction of 1 basket ball court for upper campus at SC   | 2.000             |
| Construction of water treatment plant and replacement of pipes at GCBS   | 5.000             |
| Major repair and maintenance of academic buildings, staff residences and hostels at GCBS   | 5.000             |
| Completion of auditorium and IT building at OVC  | 45.000            |
| Aluminum frame partition for lecturers' cubicles (40 cubicles) at PCE  | 4.400             |
| Construction of proper sewage at SCE   | 2.000             |
| Construction of new water reservoir at SCE   | 2.000             |
| Establishment of college of interdisciplinary studies  | 0.000             |
| Construction of fencing/boundary wall at ILCS  | 5.000             |
| Refurbishing of existing library building at CST   | 20.000            |
| Construction of water treatment plant at SC  | 10.000            |
| Construction of library building at GCBS   | 40.000            |
| Total  | 778.510           |

Au Name: ROYAL UNIVERSITY OF BHUTAN

Program Name: Enhancing Quality and Relevance of Tertiary Education

**Department: SECRETARIAT** 

**Phase: Approved** 

#### Justification:

Enhancing the quality of teaching and learning has been a crucial factor for ensuring employability. The RUB has to enhance the quality of teaching and learning in order to ensure that the graduates are not only employable within the country but are also readily absorbed in the international job market. RUB is also required to graduate students who would not only look for jobs but create jobs as entrepreneurs since the private sector is still very small and employers in the current job market is limited.

Also due to changing technology and emergence of new knowledge in the market, university is expected to diversify programs for the up keep of the relevance of the knowledge and skills that are required in the job market. Therefore a number of new programmes both at undergraduate and post graduate levels need to be introduced.

RUB believes that achieving qualifications and securing 'employment' alone is not sufficient to measure the quality of its graduates. The quality of its graduates should also include high level of personal development with mindset and behavior that demonstrates qualities such as conscientiousness, compassion, loving care, respect for others and sense of responsibility to the society. Therefore, development of GNH inspired education that embraces personal development studies will be a critical aspect of quality of education in the RUB.

#### Strategy:

To ensure quality of teaching and learning in the colleges, RUB will further strengthen the quality assurance system. Infrastructure and facilities will be upgraded including ICT and libraries to support the changing needs and quality of the academic programmes. Quality of faculty will be ensured with rigorous implementation of human resource development plan and with introduction of initiatives that boost staff motivation.

RUB will also connect students to the world of works, creating opportunities for students to take up field based skills such as vocational programmes, internship, on-the-job training and other related activities. Students' services will also be enhanced to promote environment that is conducive to quality teaching-learning. The existing Entrepreneurship Cells will be further developed so that they become vibrant and dynamic centers for aspiring entrepreneurs with exciting ideas and incubation of businesses.

A GNH values & holistic education modules and critical pedagogy & contemplative education modules will be instituted across the colleges as a foundation of all programmes. Such an approach is expected to make learning more consistent with GNH values and principles. Spiritual development activities, mindfulness practices, community services and related activities will be encouraged and supported all across colleges for personal growth and development, and to inculcate sense of responsibility to the society and the environment. Ideas and activities leading to the development of green campuses will be promoted.

| Risk<br>Assessment: | Due to limited number of qualified and competent people in the market, RUB may not be able to get adequate pool of people for the development and delivery of programmes as per the plan. Therefore, this might risk the delivery of programmes as per the plan, unless RUB works out a dynamic HR strategy to address staff shortage. |
|---------------------|--|
| Beneficiary:        | Students and faculties of the member colleges will be benefited directly. However with improvement in quality of teaching and learning, nation as a whole will benefit as RUB will be producing a critical mass of educated citizens, which is key to economic growth of the country.  |

| NKRA   | SKRA   | SKRA KPI   |
|--|--|--|
| Improved Disaster resilience and management mainstreamed     | Environmental education enhanced in schools          | % of schools/institutes practicing green initiatives               |
| Poverty + reduced/MDG+<br>achieved                           | MDGs+ Achieved.                                      | GER at tertiary level (19-21 years)-both within and outside Bhutan |
|  |  | Ratio of females to males in tertiary education                    |
| Improved public service delivery Enhanced efficiency ar      |  | Average performance rating > 90%                                   |
|  | effectiveness in public service delivery             |  |
|  |  | TAT of common availed services reduced by at least 70%             |
|  | Teacher performance outcome improved                 | % of teacher satisfied with teaching profession                    |
| Poverty + reduced/MDG+<br>achieved                           | Health and wellbeing of school children improved     | Schools/Institutes with sporting calendar/sporting event           |
| Strengthened Bhutanese identity, social cohesion and harmony | Knowledge on culture and traditional values enhanced | % of schools above 70% on GNHC index                               |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
| Outcome 002 : Quality<br>and relevance of tertiary<br>education (learners'<br>experience) enhanced | % of graduates employed within 6 months after graduation  | 88        | 90           |
|  | No. of students recruited on-<br>campus annually  | >200      | 500          |
|  | % of students under professional programmes undergone field attachments                           | 100       | 100          |
|  | % of students participated in mindfulness practices   | NA        | 50           |
|  | % of students participated in community services  | NA        | 50           |
|  | % of students taking GNH/value education modules  | NA        | 100          |
| Results Levels (Output)  | Indicators  | Baseline  | Plan Targets |
| Output 001:Quality of learners' experiences enhanced   | Annual cohort progression rate (%) & % of students with "very good" and "outstanding performance" | 23        | 36           |
|  | No. of new programmes (awards) launched   | NA        | 40           |
|  | No. of nominations for CAELT  | 5         | 10           |
| Output 002:Student services strengthened   | No. (type) of new student services initiated  | 13        | 18           |
|  | No. of students participating in student service activities                                       | 488       | 755          |
|  | Student service guidelines and standards put in place   | NA        | 8            |
| Output 003:Staff<br>qualification and<br>motivation enhanced                                       | Attrition rates at the minimum %  | 3.9       | 3.7          |
|  | % of teaching staff with PhD  | 8         | 20           |
|  | % of teaching staff with Masters  | 77        | 88.5         |
|  | % of staff undergone professional development programmes  | 4.9       | 11           |
|  | No. of international faculty  | 135       | 137          |

| Output 004:Infrastructure<br>and facilities upgraded/<br>improved to support<br>quality education | No. of online journals subscribed   | ProQuest<br>made<br>available in<br>all colleges                         | One additional online database estb. in each college   |
|---|---|--|--|
|   | % of modules available on e-learning system                                       | 62   | 82   |
|   | No. of existing facilities updated  | NA   | Labs, IT and related facilities updated as per the need of the programme                     |
| Output 005:Good<br>governance enhanced  | % of students satisfied with the management services                              | NA   | 76   |
|   | % of staff satisfied with the management services                                 | NA   | 76   |
|   | e-governance tools for internal administration and management put in place        | Management<br>of Finance,<br>Plan, student<br>admission,<br>and library. | Online system<br>developed for all<br>major services<br>including HR and<br>student services |
|   | Institutional analysis review carried out   | NA   | 1 (for RUB)  |
| Output 006:GNH based education promoted   | No. of GNH related activities organized   | 77   | 105  |
|   | % of staff covered by critical pedagogy and contemplative education workshops     | 5  | 100  |
|   | GNH values and holistic education modules introduced as foundation in all courses | offered in<br>CST<br>and GCBS  | Compulsory<br>course in all<br>colleges  |
|   | No. of development activities consistent with green practices                     | 40   | 69   |

Table 3: Programme Plan Outlay Summary

| Programme Activities   |         |
|--|---------|
| Review and improve existing learning and teaching practices  |         |
| Strengthen Quality Assurance System  |         |
| Develop and offer 40 new programmes  |         |
| Develop and offer all student services as per the guideline  |         |
| Human Resource Development (includes PhDs, Masters and short-term trainings)                                       | 200.000 |
| Improve library resources and services   |         |
| Develop ICT to facilitate teaching and learning  |         |
| Upgrade labs and other related facilities as per the changing needs of the programmes                              |         |
| Develop good governance tools and carry out review exercises   |         |
| Develop IT based management systems  |         |
| Develop GNH value and holistic education modules and offer it as a foundation of all programmes in the University. |         |
| Total:   |         |

| Au Name: ROYAL UNIVERSITY OF BHUTAN | Department: SECRETARIAT |
|-------------------------------------|-------------------------|
|-------------------------------------|-------------------------|

Program Name: Promoting Research, Innovation and Phase: Approved Enterprise

### Justification:

Research and development is one of the core functions of the University. The Royal Charter mandates the RUB to promote and conduct research, and to contribute to the creation of knowledge of relevance to Bhutan. As mandated and to emphasize the crucial role of research, the Department of Research was established in 2005 and was entrusted with the task of promoting research in the university.

However, the department is faced with many challenges including developing research capacity, creating an enabling research environment, enhancing academic knowledge of publication and lack of access to financial support. In view of these RUB plans to promote research and development in the 11<sup>th</sup> plan and endeavors to develop itself as a 'think-tank' to meaningfully contribute to the academic engagement, scholarship, technological innovation in government agencies and industry. It also includes academic support in the formulation of

### Strategy:

To promote research, innovation and development, RUB will adopt some of the following key strategies:

policies and other decision making processes. RUB will also offer research based masters and PhD programs to help build research capacities in the country.

- Consolidate structures and institutions to meaningfully engage the university with the economy, government and the larger society.
- Enhance the culture of research by encouraging incorporation of research and inquiry in the undergraduate programmes where possible and introducing postgraduate studies through research leading to PhD.
- Build research capacity by enhancing number of faculty with PhDs to 25% by the end of 11th plan.
- To encourage research, faculties will be engaged in research by reducing 4% of the teaching workload, engage in collaboration with other research institutes, organize workshops, seminars, international conferences.
- Diversify sources of income such as endowment, gifts, donations, shortcourses, research, consultancy services and rents to ensure financial sustainability of the university.
- Integrate research achievement in the performance evaluation.

### Risk Assessment:

The shortage of faculties in the university may limit faculty to take up research works. Moreover, if the proposed research grant does not come through, the research works may not take off as RUB on its own does not have any research fund to support research and innovation in the university.

#### Beneficiary:

The promotion of research and innovation will benefit students, faculties, industries, government and society at large.

| NKRA   | SKRA   | SKRA KPI   |
|--|--|--|
| Sustained Economic   | Education sustainability                             | % of self-financed students in tertiary education                  |
| Growth   | ensured  | Tertiary education expenditure as % of GDP                         |
|  | Enhanced efficiency and                              | Anti-corruption strategy implemented                               |
| Improved public service delivery                             | effectiveness in public service delivery             | Average performance rating > 90%                                   |
|  |  | TAT of common availed services reduced by at least 70%             |
| Strengthened Bhutanese Identity, social cohesion and harmony | Knowledge on culture and traditional values enhanced | % of schools above 70% on GNHC index                               |
| Poverty + reduced/   | MDGs+ Achieved.                                      | GER at tertiary level (19-21 years)-both within and outside Bhutan |
| MDG+ achieved  | Teacher performance outcome improved                 | % of teacher satisfied with teaching profession                    |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                       | Indicators   | Baselines              | Plan Targets |
|---|--|------------------------|--------------|
| Outcome 001 : Research and innovations developed and promoted | No. of research projects/studies carried out annually  | 150                    | 300          |
|   | No. of grants generated annually through research, innovation and services beside govt. allocation               | 20                     | 40           |
|   | No. of papers presented and/or published annually  | 85                     | 200          |
|   | No. of papers published in peer reviewed journal annually  | 30                     | 60           |
|   | Proportion of self-financed students admitted each year  | 30%                    | 30%          |
| Outcome 002 Llang term  | Proportion of government supported students each year.   | 70%                    | 70%          |
| Outcome 002 : Long term sustainability of the RUB ensured     | Proportion of annual income generated from sources other than tuition fees                                       | NA                     | 10 %         |
|   | Proportion of international students<br>enrolled from the overall total<br>enrollment (up to 3% of total intake) | 0.0001 (3<br>students) | 3 %          |

| Results Levels (Output)  | Indicators   | Baseline | Plan Targets |
|--|--|----------|--------------|
|  | Proportion of staff involved in research   | 15.9     | 34.8         |
|  | Proportion of students involved in research  | 12       | 17.6         |
| Output 001: Research and   | No. of papers published in RUB/<br>national level publications                                     | 85       | 197          |
| innovations developed and promoted, and adequate   | No. of papers published in international level publications  | 27       | 56           |
| number of staff recruited  | No. of research studies/innovation projects undertaken by faculty                                  | 154      | 316          |
|  | No. of research/innovation grants received   | 20       | 42           |
|  | % of annual budget dedicated to research   | 1.75     | 2.8          |
|  | Formation of alumni association and number of members  | 2005     | 5580         |
|  | No. of joint programmes offered  | 4        | 11           |
| Output 002: RUB image  | No. of international students enrolled   | 54       | 162          |
| promoted both nationally and internationally   | Membership to professionals and international organizations  | 15       | 45           |
|  | No. of student and staff exchange programmes conducted annually                                    | 19       | 41           |
|  | No. of programmes offered to people outside Bhutan   | 11       | 21           |
|  | Amount of funds raised through sources other than tuition fees from regular students (Nu. Million) | 26.652   | 82.275       |
| Output 003:Income streams diversified to augment government support for RUB to ensure long-term sustainability | Amount invested to generate funds to support operational expenses of the RUB (Nu. in Million)      | 2.83     | 7.2          |
|  | Diversified services in terms of programmes, research and consultancy services                     | 49       | 99           |
|  | % increase in income (against 2013 income)   | 4.9      | 11           |
|  | % of annual income generated through international student fees                                    | 0.002    | 5%           |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Develop research capacity by organizing trainings, seminars, workshops and conferences etc. | 1.000   |
| Strengthen research centres and institutes in the University                                | 8.000   |
| Upgrade laboratory and related facilities to support research, innovation and services      | 5.000   |
| Develop branding and promotional strategy   | 1.800   |
| Identify training needs and develop short-term courses for the industries                   | 0.660   |
| Initiate EDP through the development of business incubations in the colleges                | 10.000  |
| Total:  | 26.460  |

### Au Name: ROYAL EDUCATION COUNCIL

**Department: SECRETARIAT** 

Program Name: Strengthen and Promote Innovation, Creativity Phase: Approved

| and Enterprise in Education |  |
|-----------------------------|--|
|                             |  |

| Justification: | Education plays a crucial role in building a productive work force, reducing   |  |  |
|----------------|--|--|--|
| Justification. | poverty and ultimately in improving the prospects for the emergence of a   |  |  |
|                | knowledge-based society in Bhutan. REC will continue to strengthen its research  |  |  |
|                | capacity through instituting a culture of research and research-based approaches   |  |  |
|                | to planning and policy development. It will also conduct credible research and   |  |  |
|                | publish both at national and international levels and develop into a pioneering  |  |  |
|                | autonomous educational research organization in Bhutan.  Through its research activities, it will develop new approaches to education, |  |  |
|                | educational policies and programs/curriculum which are strongly grounded on  |  |  |
|                | evidence, to enhance innovation, creativity and enterprise in education. Their   |  |  |
|                | research will translate into pilot projects in SEED schools before recommendations   |  |  |
|                | will be made for adoption into the mainstream education system.  |  |  |
| Strategy:      | i. Collaborate and seek support from relevant stakeholders, such as the Ministry   |  |  |
|                | of Education, the Royal University of Bhutan and others in implementing its  |  |  |
|                | recommendations.   |  |  |
|                | ii. Research and pilot innovative educational approaches and related programs  |  |  |
|                | in educational institutions, including schools and colleges.   |  |  |
|                | iii. Develop effective mechanism to implement, monitor, and support its  |  |  |
|                | programs.  |  |  |
|                | iv. Share responsibilities in supporting relevant agencies especially their pilot  |  |  |
|                | agencies with technical backstopping and guidance.   |  |  |
|                | v. Monitor and initiate timely evaluation of its activities through quarterly and  |  |  |
|                | annual reports to the REC Council and GNHC.  |  |  |
| Risk           | i. REC as a research think-tank must rely on its key stakeholders, such as the   |  |  |
| Assessment:    | Ministry of Education, Royal   |  |  |
|                | ii. University of Bhutan, Colleges and schools etc. to access information and  |  |  |
|                | carry out research activities. It is not an implementing agency therefore, its   |  |  |
|                | achievements and impact depend on the relevant stakeholder's input   |  |  |
|                | iii. Limited human resource capacity within REC may hamper in realization of its   |  |  |
|                | vision, mission and mandates.  |  |  |
| Beneficiary:   | Ministry of Education, Royal University of Bhutan, Ministry of Labour and  |  |  |
|                | Human Resources, MoAF, NGOs, Dratshang Lhentshog, DDC and Private Sectors,   |  |  |
|                | Teachers, Students and Academicians  |  |  |

| NKRA                             | SKRA   | SKRA KPI                   |
|----------------------------------|--|----------------------------|
| Poverty + reduced/MDG+ achieved  | Students performance outcome improved                            | Learning outcome scores    |
| Improved public service delivery | Enhanced efficiency and effectiveness in public service delivery | Average performance rating |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines  | Plan Targets  |
|--|---|------------|---------------|
|  | % of policy recommendation adopted/implemented by MoE   | 20         | 50            |
|  | % of policy recommendation adopted/implemented by RUB   | 5          | 20            |
|  | % of policy recommendation adopted/implemented by MoLHR & MoAF  | NA         | 10            |
| Outcome 001 : Evidence based decision making                               | % of recommendation on curricular, pedagogical and assessment approaches adopted/implemented by BCSEA & MoE       | 25         | 60            |
| in improving quality of education strengthened                             | % of recommendation on curricular, pedagogical and assessment approaches adopted/implemented by RUB               | NA         | 20            |
|  | % of curricular and pedagogical recommendation adopted/ implemented by Private Sectors (schools and institutions) | 10         | 40            |
|  | % of curricular and pedagogical recommendation adopted/ implemented by Dratshang Lhentshog and nunneries          | NA         | 20            |
| Outcome 002 :<br>Strengthened institutional<br>capacity and sustainability | % Increase in external support (Monetary and in kind/technical)   | USD 20,000 | USD 1 Million |

| Results Level (Outcome)   | Indicators   | Baselines | Plan Targets |
|---|--|-----------|--------------|
|   | No. of successfully adopted SEED schools   | 6         | 21           |
|   | No. of teacher trained on 21st century teaching pedagogy                                 | 300       | 700          |
| Output 001: Successfully cascaded practices of SEED schools to a representative | No. of curriculum framework recommended to relevant agencies and implemented             | NA        | 8            |
| sample of schools in 4 regions  | No. of diversified curriculum at<br>HSS recommended and adopted<br>for class 11 & 12     | NA        | 24           |
|   | % of student performance of SEED schools improved  | 50        | 70           |
|   | No. of policy document/text books published  | 15        | 20           |
|   | No. of in-service teachers and principals trained in credit-bearing program              | NA        | 125          |
|   | No. of credit bearing programs developed   | NA        | 2            |
|   | No. of need based in-service professional development programs developed and implemented | 3         | 13           |
|   | Registered and affiliated the institute to a recognized university (%)                   | NA        | 100          |
| Output 002:Successfully established teacher                                     | Recruited/Developed adequate no. of faculty and staff (%)                                | 13        | 40           |
| education institute   | No. of credit bearing programs validated   | NA        | 2            |
|   | No. of credit bearing programs developed   | NA        | 2            |
|   | No. of need based in-service professional development programs developed and implemented | 3         | 13           |
| Output 003:Conducted research in education and related areas                    | No. of researches conducted and published  | 16        | 32           |
|   | No. of advocacy program for educational change   | NA        | 4            |

|  | No. of research paper presented at national/international forum | 3                    | 8           |
|--|---|----------------------|-------------|
| Output 004:Royal                         | Fund raising strategy developed and implemented                 | Under<br>development | Implemented |
| Education Council Endowment Fund created | Amount of USD in million in<br>Endowment Fund                   | 0.002                | 1.000       |

# **Table 2: Programme Plan Outlay Summary**

| Programmes/Activities   | Capital |
|---|---------|
| Cascade best practices from REC SEED (pilot) schools  | 16.42   |
| Operationalze Centenary Institute of Education  | 16.89   |
| Human Resource Development  | 15.00   |
| Develop in-service professional development programs for in-service teachers and principals | 39.08   |
| Conduct in-service professional development programs for in-service teachers and principals | 38.00   |
| Conduct research  | 46.61   |
| Infrastructure construction for CIE   | 120.00  |
| Total:  | 292.00  |

Au Name: ROYAL INSTITUTE OF MANAGEMENT

**Program Name: Management Program in Support of** 

**Good Governance** 

Department: SECRETARIAT

**Phase: Approved** 

### Justification:

The Royal Institute of Management was established in 1986 and was incorporated as an autonomous institute in 1990 under the Royal Charter with a Board of Directors as its governing authority. It is mandated to impart, promote and improve professional knowledge and skills in management and pubic administration in both public and private sector. RIM therefore aims to accomplish as the premier centre of excellence in management development to produce socially and professionally responsible, proactive leaders and managers.

During the 11<sup>th</sup> plan, RIM will be expanding its training programmes including the post graduate diploma, masters and management development programs to meet the needs of the civil service, corporate, private and civil society organization. A total of around 15000 personnel will be trained through regular and in-service management development programs with an annual turnover of almost 3000 personnel against existing annual turnover of 500-600 personnel. The pre-service programs are designed to impart managerial skills and facilitate employability of graduates and the in-service programs are expected to upgrade the professional skills of managers/leaders across all organization including corporations and non-governmental organizations. The expansion of programs further demands expansion of infrastructure facilities and faculties.

### Strategy:

To ensure institutionalization and delivery of masters program, RIM will continue to work with the University of Canberra, Australia, under the RGoB and AusAID support. RIM will establish institutional linkages with other renowned institutes/universities and explore volunteer professors to address faculty shortages.

RIM will closely work with RCSC to design and deliver MDP programs at all levels of the civil service and with the concerned agencies on the customized training courses like procurement management, ethics and integrity, local governance, etc.

Research and development will be promoted to enhance quality of teaching and sustainability of the RIM.

### Risk Assessment:

The delivery of newly developed masters program and proposed MDP program will depend on the availability of funding support from the government and development partners such as AusAID. Further, it also depends on the availability of qualified faculties and the ability to retain and motivate those faculties to deliver the proposed programs.

### **Beneficiary:**

At large the students who have completed class-XII, graduates and in-service personnel who avail the diploma, masters program will be the direct beneficiaries. The in-service MDP programs are expected to upgrade the professional skills of managers/leaders across all organizations and facilitate good governance and better public service delivery.

| NKRA                                | SKRA  | SKRA KPI  |
|-------------------------------------|---|---|
| Sustained Economic<br>Growth        | Education sustainability ensured                        | Tertiary education expenditure as of GDP                          |
| Improved public service delivery    | Enhanced efficiency and effectiveness in public service | Anti-corruption strategy implemented                              |
|                                     | delivery  | Average performance rating  |
|                                     |   | TAT of commonly availed services                                  |
|                                     | Full employment achieved                                | Youth unemployment  |
|                                     | (97.5%)   | % of job seeking graduates employed within 6 months of graduation |
| Poverty + reduced/<br>MDG+ achieved | MDGs+ Achieved.   | GER at tertiary level (19-21yrs) both within and outside Bhutan   |
|                                     |   | Ratio of female to male in tertiary education                     |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baseline | Plan Targets |
|---|---|----------|--------------|
| Outcome 001 : RIM strengthened as the premier centre of excellence in management development to produce socially and professionally responsible and proactive leaders and managers. | No. o f regional/international accreditation obtained.                      | 0        | 1            |
|   | % of RIM trainees taking up executive and professional/management positions | 50       | 70           |
|   | % of graduates employed within 6 months after graduation                    | 70       | 90           |
|   | No. of professional linkages and networking established                     | 7        | 10           |
| Results Levels (Output)   | Indicators  | Baseline | Plan Targets |
|   | Up-gradation of existing facilities   | 40%      | 70%          |
| Output 001:Strengthened infrastructure facilities and learning resources  | Construction of bridge over Olarongchhu.                                    | 1        | 2            |
| rearming resources  | Internet bandwidth capacity   | 10 mbps  | 14 mbps      |
| Output 002:Enhanced quality and diversified management development and professional programs  | No. of post graduate diploma and diploma program                            | 3        | 4            |

|   | No. of masters program   | 2                | 4                 |
|---|--|------------------|-------------------|
| Output 002:Enhanced quality and diversified management development and professional | No. of in-service professional management development program  | 4                | 25                |
|   | Dependence on the external masters programs in Public Administration, Management, Business Administration and Supply Chain Management reduced. | NA               | 70%               |
| programs  | Entrepreneurship center established  | 0                | 1                 |
|   | No of senior government officials trained under UNAPCICT Academy   | 40               | 250               |
|   | No. of personnel trained/certified on integrity and ethical values   | 1,500            | 17,000            |
|   | No. of professional linkages and networking established  | 7                | 10                |
|   | No. of faculty/staff with specialization and professional training   | 15               | 80                |
| Output 003: Strengthened human resource capacity.                                   | Average performance rating of the RIM  | NA               | >90%              |
|   | No. of faculty members with PhD  | 3<br>(ongoing)   | 16                |
|   | No. of faculty with masters degree   | 18               | 23                |
|   | No. of annual publication of research works  | 3                | 10                |
| Output 004:Promoted self-<br>sustenance of RIM                                      | No. of consultancies and advisory services   | 5                | 15                |
|   | Creation of endowment fund   | Nu.12<br>million | Nu. 50<br>million |

Table 3: Programme Plan Outlay Summary

| Programme Activities  | Capital<br>Outlay |
|---|-------------------|
| Conduct regulatory impact assessment (RIA) training.  | 4.5000            |
| Construction of a bridge over Olarongchhu.  | 8.000             |
| Renovate classrooms, hostels (acquired from ILCS), facilities (acquired from mushroom center, Chang gewog and other existing facilities).     | 14.000            |
| Up-gradation of internet bandwidth capacity.  | 5.000             |
| Purchase of furniture, equipment, installation of collapse wall, ceiling for MPH and site development works including river protection works. | 15.000            |
| Accreditation/Affiliation   | 5.000             |
| Linkage, networking and professional services   | 10.000            |
| Masters program (MPA, MM, MBA and Msc. Supply Chain Management)   | 150.000           |
| Post graduate diploma and diploma programs  | 5.000             |
| Management Development Programs (MDPs)  | 5.000             |
| Entrepreneurship development program  | 1.500             |
| E-governance program including TOT under UNAPCICT Academy   | 4.5000            |
| Completion of MPH construction  | 34.000            |
| E-learning program on ethics and integrity management   | 6.500             |
| Research and development  | 5.000             |
| Total   | 273.000           |

# **HEALTH**

| Au Name: MI    | NISTRY OF HEALTH   | Department: DEPARTMENT OF MEDICAL SERVICES   |
|----------------|--|--|
| Program Nam    | e: Medical Services  | Phase: Approved  |
|                |  |  |
| Justification: | services and increase acce   | the 'Medical Services' is to deliver quality medical less to all citizens of the country. In terms of health le great improvements in most parameters related to   |
|                | in the burden of non-comn<br>diabetes while it still has<br>malaria. In addition there<br>it emerging issues of adole  | re of epidemiological transition marked by an increase nunicable and lifestyle diseases such as hypertension, the task of tackling communicable diseases like TB, has also been major demographic shifts bringing with escent health and aging health issues. We have also le and natural disasters in the recent years which has properties.  |
|                | includes nomadic, migrato delivery, the general perce  | nade accessible for the unreached population, which<br>ry and peri-urban communities. In terms of service<br>ption is that it needs to be improved and made more<br>nere is increasing pressure for efficient delivery of<br>standards.  |
| Strategy:      | ii. Improve access to population throug other innovative a iii. Explore feasibility Referral Hospitals iv. Enhance prepared Health Facilities a EMS Division, im | health services across all health institutions. To healthcare services by reaching the unreached the mobile camps, ORCs, construction of sub-post and pproaches of granting autonomy to JDWNRH and Regional mess and response to emergencies and disasters in the and provide access to emergency services by creating proving HHC, establishing trauma centers, EMONC, services, and High Altitude Medicine Program |
|                | v. Improve access a<br>endoscopy faciliti<br>enabled health ca   | and delivery of services by establishing CT scan & es in the two regional hospitals and by using ICT re solutions such as telemedicine g care services by creating Nursing Division  |
| Risk           | <del> </del>   | financial resources will jeopardize the implementation   |
| Assessment:    | of the plans.  |  |
|                | 1  | y will affect timely implementation of the plans.  |
|                | iii. There is the pos  | sibility that inter-sectoral collaboration/community   |

partnership may not be forthcoming

General Public

**Beneficiary:** 

| NKRA                                       | SKRA  | SKRA KPI   |
|--|---|--|
|  | Curative and Rehabilitative<br>Healthcare Services Provided                           | % of population within 3 hrs walking distance                                    |
| Poverty + reduced/MDG+<br>achieved         | Curative and Rehabilitative Healthcare Services Provided                              | Average Nationwide OPD waiting time from 9 AM to 11 AM                           |
|  | nealtricare Services Provided   | Independent Patient satisfaction rate  |
| Carbon Neutral/<br>Green Climate resilient | Eco-efficient, disaster resilient and differently-abled health infrastructure ensured | All new health infrastructure/<br>facilities eco-efficient/disaster<br>resilient |
| development                                | Medical waste management improved   | Hospital Acquired infections   |
| Poverty + reduced/MDG+<br>achieved         | Curative and Rehabilitative<br>Healthcare Services Provided                           | Nurse to bed ratio   |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                      | Indicators  | Baselines | Base Year | Plan Targets |
|--|---|-----------|-----------|--------------|
|  | Percentage of population within 3 hours walking distance                        | 90        | 2012      | 95           |
|  | Average OPD waiting time from 9 to 11 am (in Minutes)                           | 23        | 2012      | Maintained   |
| Outcome 001 : Im-  | Patient satisfaction rate (%)   | 85        | 2012      | >95          |
| proved quality of health<br>services and increased<br>access | Number of district<br>hospitals assessed<br>for disaster resilient<br>component | NA        | 2012      | 20           |
|  | No of dzongkhags<br>proportionately utilizing<br>HHC                            | 16        | 2012      | 20           |
|  | Percentage of hospital acquired infection (HAI)                                 | 27.7      | 2012      | <20          |
| Results Levels (Output)                                      | Indicators  | Baseline  | Base Year | Plan Targets |

| Output 001:Services of<br>the Mongar Regional Re-<br>ferral hospital strength-<br>ened  | OPD waiting time (in minutes)  | 32  | 2013 | 15 (winter) & 20 (summer) |
|---|--|-----|------|---------------------------|
| Output 002:Services of<br>the Central Regional re-<br>ferral hospital strength-<br>ened | OPD Waiting Time (in minutes)  | 38  | 2013 | 15 (winter) & 20 (summer) |
| Output 003:Services of the Phuntsholing hospital strengthened                           | OPD Waiting Time (in minutes)  | 49  | 2013 | 15 (winter) & 20 (summer) |
|   | No. of health infrastructure constructed withEco-efficient component   | 2   | 2013 | 8                         |
| Output 004: Eco-ef-   | No of district hospital<br>& BHU's surveyed for<br>structural safety   | 0   | 2013 | 28 & 14                   |
| ficient and disaster resilient health infra-  | No of hospital constructed   | 28  | 2013 | 36                        |
| structure promoted  | No of infrastructures(excluding hospitals) constructed   | N/A | 2013 | 4                         |
|   | No of spillover projects constructed.  | 3   | 2013 | 3                         |
| Output 005:Improved   | No of coordination plan/<br>MOU available  | 3   | 2013 | 5                         |
| coordination and monitoring of health services in the districts                         | No. of ENT, Restorative<br>Surgical and Cleft palate<br>camps conducted                                      | 25  | 2013 | 50                        |
| Output 006:Strength-  | No of Health Facilities<br>adhering to national<br>laboratory policies,<br>standards, guidelines and<br>SOPs | 35  | 2013 | 48                        |
| ened diagnostic ca-<br>pacities in the health<br>facilities                             | Functionality of lab equipments (%)  | 65  | 2013 | 100                       |
|   | Percentage of blood units collected from voluntary blood donors  | 55  | 2013 | 75                        |
|   | Internal Quality Control<br>Scores (%)   | 91  | 2013 | 100                       |

|   |   |   |      | 1   |
|---|---|---|------|---|
|   | Number of Health<br>centers implementing a.<br>Health Sector Emergency<br>Contingency Plan and SOP                              | 0   | 2013 | 20  |
| Output 007: Enhanced preparedness and response to the emergen-  | No. of mock drills conducted in the hospitals around the country  | 3<br>(Bumthang,<br>Riserboo<br>& Trashi-<br>gang) | 2013 | 2 times a<br>year by all<br>HFs               |
| cies and disasters  | No of Health centers with required infrastructure and technical capacities to respond to emergency/trauma                       | 3 Trauma<br>Center                                | 2013 | 10 HFs  |
|   | No. of High altitude<br>medical services fully<br>functional  | 5   | 2013 | 15  |
| Output 008:Improved capacity for delivery of primary eye care, oral health and hearing                  | No of low cost spectacles provided  | 2500<br>frames and<br>2000 pairs<br>of lenses     | 2013 | 3000 frames<br>and 3000<br>pairs of<br>lenses |
| services  | No of mobile eye camp conducted   | 15  | 2013 | 20  |
|   | No. of schools participating in the school adoption program   | NA  | 2013 | 20  |
| Output 009:Improved Infection Control and   | No. of hospitals with waste treatment facility  | 0   | 2013 | 4   |
| waste management practices in Health Facilities   | Percentage of patients with post operative surgical site infection  | NA  | 2013 | <5  |
|   | No of hospitals and<br>BHU-I connected with<br>Telemedicine facilities  | 4 BHU I,<br>10 District<br>hospitals              | 2013 | 20 hospitals<br>+ 10 BHU-I                    |
| Output 010: Enhanced access to ICT enabled health services through improved capacity and integration of | No. of districts with<br>at least 2 functional<br>ambulances Total number<br>of Emergency calls<br>(Hospital to hospital calls) | 19  | 2013 | 20  |
| telemedicine and HHC  | Total number of<br>Emergency calls (Hospital<br>to hospital calls)  | 10173   | 2013 | NA  |

| Output 011:Geriatric<br>health care services<br>promoted and<br>integrated with primary<br>health care | Number of Health Facilities<br>providing Community-<br>based Medical Care for the<br>Elderly | 21 BHUs                           | 2013 | 198 BHUs<br>and 27<br>hospitals  |
|--|--|-----------------------------------|------|----------------------------------|
| Output 012:Capacity on early detection   | No of Diabetes clinics<br>established in hospitals<br>and BHU Is                             | 18<br>hospitals<br>and<br>2 BHU-I | 2013 | 9 hospitals<br>and 18 BHU-<br>Is |
| on diabetes and<br>Management in Health<br>Facilities strengthened                                     | Proportion of pregnant women screened for diabetes (%)                                       | NA                                | 2013 | 100                              |
| Output 013:Essential<br>Surgical Services<br>established at strategic<br>hospitals in the country      | No of Health facilities with<br>Essential surgical services<br>established                   | 0                                 | 2013 | 10                               |
| Output 014: Medicolegal services including forensic  | No. of health workers<br>trained on Forensic<br>science and placed at<br>JDWNRH              | 3                                 | 2011 | 10                               |
| laboratory facilities strengthened   | Number of services developed and operational   | 0                                 | 2011 | 2                                |
| Output 015:Nursing<br>Care services<br>strengthened  | Nurse to bed ratio   | 1.9                               | 2012 | 1.6                              |
| Output 016:Adequate<br>support rendered to<br>University Medical<br>Services of Bhutan                 | Level of professional support provided for institutional development (%)                     | NA                                | 2013 | 100                              |

Table 3: Programme Plan Outlay Summary

| Programme Activities  | Capital |
|---|---------|
| Capacity Building of health workers of MRRH   | 2.500   |
| Workshops/meetings of MRRH  | 0.000   |
| Procurement and supplies for improving services of MRRH   | 2.000   |
| Construction/ repair and maintenance (staff quarter, traditional medicine unit, Mental ward, canteen etc)         | 35.000  |
| Monitoring and supervision of MRRH activities   | 0.000   |
| Research Studies  | 0.000   |
| Carry out public health activities in Mongar dzongkhag  | 0.000   |
| Installation of OPD call system machine and split type AC in drug store   | 1.300   |
| Institute and implement hospital contingency plan   | 0.000   |
| Setting up of care and nutrition rehabilitation unit  | 0.000   |
| Capacity Building of health workers of CRRH   | 0.000   |
| Meetings/ workshops of CRRH   | 0.000   |
| Monitoring and supervision of CRRH activities   | 0.000   |
| Procurement supplies for improving services of CRRH   | 2.500   |
| Carry out public health activities in Gelephu dungkhag  | 0.900   |
| Construction repair and maintenance of staff quarters, disposal facilities at Gelephu Hospital                    | 20.000  |
| Build/install electronic OPD patient call system and Hospital Information system                                  | 0.500   |
| Development and implementation of emergencies & disaster contingency plan.  | 0.000   |
| Capacity Building of health workers of Phuntsholing Hospital  | 0.000   |
| Meetings/workshops of Phuntsholing Hospital   | 0.000   |
| Monitoring/supervision of Phuntsholing Hospital activities  | 0.000   |
| Procurement and supplies for improving services of Phuntsholing hospital  | 1.500   |
| Construction of staff quarter, waste disposal facilities, patient laundry and drying unit, mortuary and OPD block | 45.000  |
| Carry out public health activities in Phuntsholing dungkhag   | 0.000   |
| Rent two units of building to open two sattelite clinics in the city area (Phuntsholing main town and Pasakha)    | 0.000   |
| Development and implementation of emergencies & disaster contingency plan.  | 0.000   |
| PPP activities  | 0.000   |
| Build/install electronic OPD patient call system  | 0.500   |
| Institute steam bath/treatment (Traditional Medicine)   | 0.000   |
| Capacity building of HIDD staff on anchoring/bracing, HVAC & EPABX designs  | 1.200   |

| Conduct assessment of structural and none structural safety of Hospitals & BHUS                              | 0.000 |
|--|-------|
| Development and printing of guidelines to facilitate Health Infrastructure development                       | 1.800 |
| Capacity building of health workers to strengthen district health services                                   | 3.000 |
| Conduct monitoring and supervision of the hospitals and BHUs in the country including coordination meetings. | 0.000 |
| Develop computerized supervisory checklist software and format into an Ipad.                                 | 0.900 |
| Develop comprehensive urban work plan and implement.   | 0.000 |
| Strengthen community participation   | 0.000 |
| Improve services to the un-reached population  | 3.000 |
| Conduct health camps   | 0.000 |
| Capacity building to strengthen diagnostic services  | 2.000 |
| Improve laboratory and diagnostic services   | 1.000 |
| Blood Donation Activities  | 0.000 |
| Capacity building for health workers to respond to emergencies and disaster preparedness                     | 0.486 |
| Development and implementation of emergency & disaster contingency plan.                                     | 0.570 |
| Equipment/Infrastructure to improve emergency medical services   | 1.000 |
| Research/Survey/Mapping/assessment   | 0.000 |
| IEC activities on emergency preparedness & responses during disasters  | 0.520 |
| Develop SOP and High Altitude Kit.   | 0.000 |
| Capacity Building of Health workers on primary eye care  | 2.000 |
| Provide low cost spectacles.   | 0.700 |
| IEC activities and out reach clinics including observation of World Sight Day                                | 0.000 |
| Purchase office automation   | 0.100 |
| Research and rapid assessment on eye NCDs:   | 0.000 |
| Capacity Building for Oral Health Program  | 1.300 |
| Oral Health Camp and services  | 3.700 |
| National Oral Survey   | 1.200 |
| Dental Mobile Van  | 2.700 |
| Salt fluoridation Program  | 0.800 |
| Establishment of institutional linkage   | 0.100 |
| Supervision and monitoring visit including school adoption programme   | 0.900 |
| Capacity Building of health workers on infection control and waste management                                | 1.200 |
| Monitor and review of infection control activities in Health Facilities                                      | 0.000 |
| Procurement/ supplies of infection control equipment   | 7.000 |
|  |       |

| Develop procurement procedure and mechanism to reduce radioactive chemical and Pharmaceutical waste at the source                                | 0.000  |
|--|--------|
| Construct liquid waste treatment plant at the national and regional hospitals.   | 35.000 |
| Development/revision and printing of guidelines and IEC materials on Infection control and waste Management                                      | 0.300  |
| Capacity Building of health workers on telemedicine and HHC  | 2.000  |
| Procure telemedicine equipments and vehicles (ambulance)   | 50.000 |
| Recruitment of a National Consultant for 2 months to improve service delivery of $\ensuremath{HHC}$  | 0.530  |
| Meeting & workshop for telemedicine and HHC services   | 0.000  |
| Develop SoPs, Email Client templates and web portal for email archives including integration with email client                                   | 0.800  |
| Integrate HHC system with Telemedicine   | 0.750  |
| Develop Institutional linkage with Kolkatta, Vellore, New Delhi to establish Telereferral link   | 1.800  |
| Construct new HHC building & staff quarters/ambulances garages   | 35.000 |
| Advocacy/sensitization of 112 to create awareness about 112 among the general population   | 0.000  |
| Maintain and replace the non functional equipment in the server and call centre annually   | 4.000  |
| Capacity building of health workers on elderly care  | 2.000  |
| Conduct annual review meeting to improve geriatric care services   | 0.000  |
| Print medical check-up guidelines and forms for geriatric care services  | 0.000  |
| Capacity building for health workers on diabetes treatment and management  | 3.000  |
| Establish Diabetes Clinics (service centers) in all hospitals and BHU-I - support supplies   | 0.000  |
| Develop IEC materials on Diabetes and other NCDs, printing and distribution to all health centers  | 0.000  |
| Advocacy and awareness on Diabetes   | 0.000  |
| Establish the assessment of diabetes and other NCDs risk factors among students at higher and secondary schools in promoting healthy lifestyles. | 0.000  |
| Strengthen the Dialysis Units at RR hospitals - support supplies (equipments and reagents)   | 4.500  |
| Study prevalence of diabetes and its risk factors to find out the baseline information and develop appropriate interventions                     | 0.000  |
| Establish/strengthen surgical & endoscopic services  | 1.000  |
| Capacity building for health workers to establish surgical services  | 1.000  |
| Procurement of autopsy equipment, chemicals and tools  | 8.000  |
|  |        |

| Procurement of various laboratory equipment, chemicals, reagents, consumables, etc  Development and standardization of standard operating procedures, reporting forms and charts  Draft, review and finalize training curriculum /manual for different stakeholders  Conduct structured training to medical doctors, nurses, ACOs, technicians on forensic principles and techniques including management of gender-based violence in healthcare settings  Attachment training for 30 nurses on specialized areas in JDWNRH for 2-3 weeks  Infection control and waste management s training for 300 clinical nurses for 5 days  Pedagogical skills training for 20 nurses for 3 weeks  Update and print nursing administration manuals and service standard guidelines  Conduct orientation for 55 nurses involved on expectation of their performance, supervision and staff appraisal, nursing rules and regulation for 3 days  Review the current staff strength of all the hospitals  Assess the workload based staffing need  Conduct in-country patient safety workshop for 500 nurses for 3 days  Organize seminar/meeting outside country  Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  Onounce observe International Nurses Day by 600 nurses annually  Onounce Observe International Nurses Day by 600 nurses annually  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of Public Health Laboratory (spillover)  Construction of Public Health Laboratory (spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of A0 bedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  Construction of Vector Borne Disease Control Program Office, Gelephu                          |   |         |
|--|---|---------|
| Forms and charts  Draft, review and finalize training curriculum /manual for different stakeholders  Conduct structured training to medical doctors, nurses, ACOs, technicians on forensic principles and techniques including management of gender-based violence in healthcare settings  Attachment training for 30 nurses on specialized areas in JDWNRH for 2-3 weeks  Infection control and waste management s training for 300 clinical nurses for 5 days  Pedagogical skills training for 20 nurses for 3 weeks  Update and print nursing administration manuals and service standard guidelines  Conduct orientation for 55 nurses involved on expectation of their performance, supervision and staff appraisal, nursing rules and regulation for 3 days  Review the current staff strength of all the hospitals  Assess the workload based staffing need  Conduct in-country patient safety workshop for 500 nurses for 3 days  Organize seminar/meeting outside country  4.000  Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  O.000  Monitor and evaluate the use of the records and reports  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  Observe International Nurses Day by 600 nurses annually  O.000  Observe International Nurses Day by 600 nurses annually  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  O.000  Construction of Public Health Laboratory (spillover)  Construction of Oedded Samtse Hospital (Spillover)  Construction of Gentral Regional Referral Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing (Spillover)  Construction of Hobedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  62.580   |   | 30.000  |
| Conduct structured training to medical doctors, nurses, ACOs, technicians on forensic principles and techniques including management of gender-based violence in healthcare settings  Attachment training for 30 nurses on specialized areas in JDWNRH for 2-3 weeks  Infection control and waste management s training for 300 clinical nurses for 5  days  Pedagogical skills training for 20 nurses for 3 weeks  Update and print nursing administration manuals and service standard guidelines  Conduct orientation for 55 nurses involved on expectation of their performance, supervision and staff appraisal, nursing rules and regulation for 3 days  Review the current staff strength of all the hospitals  Assess the workload based staffing need  Conduct in-country patient safety workshop for 500 nurses for 3 days  Organize seminar/meeting outside country  4.000  Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  O.000  Monitor and evaluate the use of the records and reports  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  Observe International Nurses Day by 600 nurses annually  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (FORRH (HIS for OPD &IPD as used in JDWNRH)  Installation of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Gentral Regional Referral Hospital (Spillover)  Construction of Hoedical Supply Depot, Phuntsholing(Spillover)  Construction of National Rehabilitative Resource Centre, Gidakom | ' - '   | 0.500   |
| rensic principles and techniques including management of gender-based violence in healthcare settings  Attachment training for 30 nurses on specialized areas in JDWNRH for 2-3 weeks  Infection control and waste management s training for 300 clinical nurses for 5 days  Pedagogical skills training for 20 nurses for 3 weeks  Update and print nursing administration manuals and service standard guidelines  Conduct orientation for 55 nurses involved on expectation of their performance, supervision and staff appraisal, nursing rules and regulation for 3 days  Review the current staff strength of all the hospitals  Assess the workload based staffing need  Conduct in-country patient safety workshop for 500 nurses for 3 days  Organize seminar/meeting outside country  4.000  Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  Oono  Monitor and evaluate the use of the records and reports  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  Observe International Nurses Day by 600 nurses annually  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  Oono  Purchase of Vehicle (Hilux for MD)  Construction of Public Health Laboratory (spillover)  Construction of A0 bedded Samtse Hospital (Spillover)  Construction of Gentral Regional Referral Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of 40 bedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  Construction of National Rehabilitative Resource Centre, Gidakom  Construction of National Rehabilitative Resource Centre, Gidakom   | Draft, review and finalize training curriculum /manual for different stakeholders | 0.500   |
| Infection control and waste management s training for 300 clinical nurses for 5 days  Pedagogical skills training for 20 nurses for 3 weeks  Update and print nursing administration manuals and service standard guidelines  Conduct orientation for 55 nurses involved on expectation of their performance, supervision and staff appraisal, nursing rules and regulation for 3 days  Review the current staff strength of all the hospitals  Assess the workload based staffing need  Conduct in-country patient safety workshop for 500 nurses for 3 days  Organize seminar/meeting outside country  4.000  Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  Monitor and evaluate the use of the records and reports  Observe International Nurses Day by 600 nurses annually  Observe International Nurses Day by 600 nurses annually  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  Oconstruction of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Hoedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  Construction of National Rehabilitative Resource Centre, Gidakom  62.580   | rensic principles and techniques including management of gender-based violence    | 1.800   |
| daysPedagogical skills training for 20 nurses for 3 weeks0.560Update and print nursing administration manuals and service standard guidelines0.000Conduct orientation for 55 nurses involved on expectation of their performance, supervision and staff appraisal, nursing rules and regulation for 3 days0.000Review the current staff strength of all the hospitals0.000Assess the workload based staffing need0.000Conduct in-country patient safety workshop for 500 nurses for 3 days0.000Organize seminar/meeting outside country4.000Develop and printing of guidelines0.602Review /revise and improve nursing recording and reporting system.0.000Monitor and evaluate the use of the records and reports0.000Conduct bi-annual Nursing Conference for 3 days for 60 nurses0.000Observe International Nurses Day by 600 nurses annually0.000Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)0.000Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)0.000Construction of Public Health Laboratory (spillover)240.000Construction of Gentral Regional Referral Hospital (Spillover)195.000Construction of Medical Supply Depot, Phuntsholing(Spillover)12.970Construction of Therapy Unit (Spillover)10.000Construction of A0 bedded Detoxification Centre150.000Construction of National Rehabilitative Resource Centre, Gidakom62.580   | Attachment training for 30 nurses on specialized areas in JDWNRH for 2-3 weeks    | 0.000   |
| Update and print nursing administration manuals and service standard guidelines  Conduct orientation for 55 nurses involved on expectation of their performance, supervision and staff appraisal, nursing rules and regulation for 3 days  Review the current staff strength of all the hospitals  Assess the workload based staffing need  Conduct in-country patient safety workshop for 500 nurses for 3 days  Organize seminar/meeting outside country  4.000  Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  Monitor and evaluate the use of the records and reports  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  Observe International Nurses Day by 600 nurses annually  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  Oconstruction of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of A0 bedded Detoxification Centre  150.000  Construction of National Rehabilitative Resource Centre, Gidakom  62.580  |   | 0.000   |
| Conduct orientation for 55 nurses involved on expectation of their performance, supervision and staff appraisal, nursing rules and regulation for 3 days  Review the current staff strength of all the hospitals  O.000  Assess the workload based staffing need  O.000  Conduct in-country patient safety workshop for 500 nurses for 3 days  Organize seminar/meeting outside country  4.000  Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  O.000  Monitor and evaluate the use of the records and reports  O.000  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  O.000  Observe International Nurses Day by 600 nurses annually  O.000  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  O.000  Construction of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Gentral Regional Referral Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of 40 bedded Detoxification Centre  150.000  Construction of National Rehabilitative Resource Centre, Gidakom  62.580  | Pedagogical skills training for 20 nurses for 3 weeks                             | 0.560   |
| supervision and staff appraisal, nursing rules and regulation for 3 days  Review the current staff strength of all the hospitals  0.000  Assess the workload based staffing need  0.000  Conduct in-country patient safety workshop for 500 nurses for 3 days  0.000  Organize seminar/meeting outside country  4.000  Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  0.000  Monitor and evaluate the use of the records and reports  0.000  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  0.000  Observe International Nurses Day by 600 nurses annually  0.000  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  0.000  Construction of Public Health Laboratory (spillover)  240.000  Construction of 40 bedded Samtse Hospital (Spillover)  195.000  Construction of Medical Supply Depot, Phuntsholing(Spillover)  12.970  Construction of Therapy Unit (Spillover)  10.000  Construction of A0 bedded Detoxification Centre  150.000  Construction of National Rehabilitative Resource Centre, Gidakom  62.580   | Update and print nursing administration manuals and service standard guidelines   | 0.000   |
| Assess the workload based staffing need  Conduct in-country patient safety workshop for 500 nurses for 3 days  0.000  Organize seminar/meeting outside country  4.000  Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  0.000  Monitor and evaluate the use of the records and reports  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  0.000  Observe International Nurses Day by 600 nurses annually  0.000  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  O.000  Purchase of Vehicle (Hilux for MD)  Construction of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Central Regional Referral Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of 40 bedded Detoxification Centre  150.000  Construction of National Rehabilitative Resource Centre, Gidakom  62.580  | supervision and staff appraisal, nursing rules and                                | 0.000   |
| Conduct in-country patient safety workshop for 500 nurses for 3 days  O.000 Organize seminar/meeting outside country  4.000 Develop and printing of guidelines  0.602 Review /revise and improve nursing recording and reporting system.  0.000 Monitor and evaluate the use of the records and reports  0.000 Conduct bi-annual Nursing Conference for 3 days for 60 nurses  0.000 Observe International Nurses Day by 600 nurses annually  0.000 Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH) Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  0.000 Purchase of Vehicle (Hilux for MD)  0.000 Construction of Public Health Laboratory (spillover)  240.000 Construction of 40 bedded Samtse Hospital (Spillover)  195.000 Construction of Medical Supply Depot, Phuntsholing(Spillover)  12.970 Construction of Therapy Unit (Spillover)  10.000 Construction of 40 bedded Detoxification Centre  150.000 Construction of National Rehabilitative Resource Centre, Gidakom  62.580   | Review the current staff strength of all the hospitals                            | 0.000   |
| Organize seminar/meeting outside country  Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  O.000  Monitor and evaluate the use of the records and reports  O.000  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  O.000  Observe International Nurses Day by 600 nurses annually  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  O.000  Construction of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of 40 bedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  62.580  | Assess the workload based staffing need   | 0.000   |
| Develop and printing of guidelines  Review /revise and improve nursing recording and reporting system.  0.000  Monitor and evaluate the use of the records and reports  0.000  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  0.000  Observe International Nurses Day by 600 nurses annually  0.000  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  0.000  Purchase of Vehicle (Hilux for MD)  0.000  Construction of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  195.000  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  10.000  Construction of A0 bedded Detoxification Centre  150.000  Construction of National Rehabilitative Resource Centre, Gidakom  62.580  | Conduct in-country patient safety workshop for 500 nurses for 3 days              | 0.000   |
| Review /revise and improve nursing recording and reporting system.  0.000  Monitor and evaluate the use of the records and reports  0.000  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  0.000  Observe International Nurses Day by 600 nurses annually  0.000  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  0.000  Purchase of Vehicle (Hilux for MD)  Construction of Public Health Laboratory (spillover)  240.000  Construction of 40 bedded Samtse Hospital (Spillover)  195.000  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  10.000  Construction of 40 bedded Detoxification Centre  150.000  Construction of National Rehabilitative Resource Centre, Gidakom  62.580  | Organize seminar/meeting outside country  | 4.000   |
| Monitor and evaluate the use of the records and reports  Conduct bi-annual Nursing Conference for 3 days for 60 nurses  0.000  Observe International Nurses Day by 600 nurses annually  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  O.000  Purchase of Vehicle (Hilux for MD)  Construction of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Central Regional Referral Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of 40 bedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  62.580  | Develop and printing of guidelines  | 0.602   |
| Conduct bi-annual Nursing Conference for 3 days for 60 nurses  O.000 Observe International Nurses Day by 600 nurses annually O.000 Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH) Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH) O.000 Purchase of Vehicle (Hilux for MD) Construction of Public Health Laboratory (spillover) Construction of 40 bedded Samtse Hospital (Spillover) Construction of Central Regional Referral Hospital (Spillover) Construction of Medical Supply Depot, Phuntsholing(Spillover) Construction of Therapy Unit (Spillover) Construction of 40 bedded Detoxification Centre 150.000 Construction of National Rehabilitative Resource Centre, Gidakom 62.580  | Review /revise and improve nursing recording and reporting system.                | 0.000   |
| Observe International Nurses Day by 600 nurses annually  Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  O.000  Purchase of Vehicle (Hilux for MD)  Construction of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Central Regional Referral Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of 40 bedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  62.580   | Monitor and evaluate the use of the records and reports                           | 0.000   |
| Installation of hospital information system for CRRH (HIS for OPD &IPD as used in JDWNRH)  Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  O.000  Purchase of Vehicle (Hilux for MD)  Construction of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Central Regional Referral Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of 40 bedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  62.580  | Conduct bi-annual Nursing Conference for 3 days for 60 nurses                     | 0.000   |
| JDWNRH)Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)0.000Purchase of Vehicle (Hilux for MD)0.000Construction of Public Health Laboratory (spillover)240.000Construction of 40 bedded Samtse Hospital (Spillover)195.000Construction of Central Regional Referral Hospital (Spillover)620.000Construction of Medical Supply Depot, Phuntsholing(Spillover)12.970Construction of Therapy Unit (Spillover)10.000Construction of 40 bedded Detoxification Centre150.000Construction of National Rehabilitative Resource Centre, Gidakom62.580   | Observe International Nurses Day by 600 nurses annually                           | 0.000   |
| Purchase of Vehicle (Hilux for MD)  Construction of Public Health Laboratory (spillover)  Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Central Regional Referral Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of 40 bedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  62.580  |   | 0.000   |
| Construction of Public Health Laboratory (spillover)240.000Construction of 40 bedded Samtse Hospital (Spillover)195.000Construction of Central Regional Referral Hospital (Spillover)620.000Construction of Medical Supply Depot, Phuntsholing(Spillover)12.970Construction of Therapy Unit (Spillover)10.000Construction of 40 bedded Detoxification Centre150.000Construction of National Rehabilitative Resource Centre, Gidakom62.580  | Installation of hospital information system (HIS for OPD &IPD as used in JDWNRH)  | 0.000   |
| Construction of 40 bedded Samtse Hospital (Spillover)  Construction of Central Regional Referral Hospital (Spillover)  Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of 40 bedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  195.000  12.970  10.000  10.000  10.000  10.000   | Purchase of Vehicle (Hilux for MD)  | 0.000   |
| Construction of Central Regional Referral Hospital (Spillover)620.000Construction of Medical Supply Depot, Phuntsholing(Spillover)12.970Construction of Therapy Unit (Spillover)10.000Construction of 40 bedded Detoxification Centre150.000Construction of National Rehabilitative Resource Centre, Gidakom62.580   | Construction of Public Health Laboratory (spillover)                              | 240.000 |
| Construction of Medical Supply Depot, Phuntsholing(Spillover)  Construction of Therapy Unit (Spillover)  Construction of 40 bedded Detoxification Centre  Construction of National Rehabilitative Resource Centre, Gidakom  62.580   | Construction of 40 bedded Samtse Hospital (Spillover)                             | 195.000 |
| Construction of Therapy Unit (Spillover)10.000Construction of 40 bedded Detoxification Centre150.000Construction of National Rehabilitative Resource Centre, Gidakom62.580   | Construction of Central Regional Referral Hospital (Spillover)                    | 620.000 |
| Construction of 40 bedded Detoxification Centre 150.000 Construction of National Rehabilitative Resource Centre, Gidakom 62.580  | Construction of Medical Supply Depot, Phuntsholing(Spillover)                     | 12.970  |
| Construction of National Rehabilitative Resource Centre, Gidakom 62.580  | Construction of Therapy Unit (Spillover)  | 10.000  |
|  | Construction of 40 bedded Detoxification Centre                                   | 150.000 |
| Construction of Vector Borne Disease Control Program Office, Gelephu 40.000  | Construction of National Rehabilitative Resource Centre, Gidakom                  | 62.580  |
|  | Construction of Vector Borne Disease Control Program Office, Gelephu              | 40.000  |

# Eleventh Five Year Plan - Programme Profile - Volume II

| Construction of Center for Tropical and Zoonotic Diseases, Gelephu   | 120.000  |
|--|----------|
| Construction of GMP complaint facility equipped with HVAC, walk in stability chamber and purified water systems at Gidakom   | 172.000  |
| Construction of retaining wall and RCC storm water drainage at MSD, Pling  | 3.540    |
| Construction of 40 bedded hospital in Thimphu  | 190.000  |
| Construction of 20 bedded Hospital at Tsirang  | 150.000  |
| Construction of 40 bedded hospital at Deothang   | 110.000  |
| Construction of staff quarter at Samtse Hospital (4 unit staff quarter type 2, 4 unit staff quarter type 3, doctors quarter) | 33.000   |
| Construction of Forensic Laboratory and autopsy complex  | 0.000    |
| Construction of 3 satellite clinics in Thimphu   | 17.000   |
| Construction of Rehabilitation Center (East)   | 80.000   |
| Policy support for UMSB  | 1.000    |
| Total:   | 2543.608 |

Au Name: MINISTRY OF HEALTH Department: DEPARTMENT OF MEDICAL SERVICES

Program Name: Traditional Medical Phase: Approved

Services

| Justification: | The Ministry of Health envisages integration of traditional medicine with the modern health care system with nation's rich bio-diversity and proven medical qualities of plants. The maintenance of traditional medicine not only adds dimensions to the nation's system of health care, but also provides an alternative choice of health care service. It should also be regarded as a conscious decision to conserve a part of our rich and varied cultural heritage.  Recognizing the importance of expansion coverage of traditional medicine services to unreached rural populations to curb morbidity statistics in the country, traditional medicine services planning capacity will be strengthened. To reduce underutilization in some locations, streamlining traditional medicine service through development of standard operating procedures will be pursued.   |
|----------------|---|
| Strategy:      | <ul> <li>i. Strengthen the traditional medicine services by up-gradation of TM Division to Department of TM, and expanding services, wherever necessary,</li> <li>ii. Optimize operation and improve efficiency by corporatizing MSP and commercializing its products;</li> <li>iii. A Good Manufacturing Practice (GMP) compliant facility to be established to ensure production of quality and safe medicines that addresses the demand for it.</li> <li>iv. Strengthen the production of Herbal health products and introduce new products to encourage business entities institute SPA therapies and wellness centers.</li> <li>v. Collaborate with relevant stakeholders to promote sustainable sourcing of raw materials by establishing medicinal herb gardens and promote domestication of rare and endangered species of medicinal plants.</li> <li>vi. Strengthen research capacity to promote evidence based treatments and services and facilitate integration of TM with allopathic medicine</li> </ul> |
| Risk           | i. Demand for traditional medicine services may not be met if GMP is not  |
| Assessment:    | constructed.  |
|                | <ul> <li>ii. If sufficient and qualified personnel are not available, integration of TM with modern medicine as well as development of new products will be affected.</li> <li>iii. Unavailability of Inadequate financial resources will affect implementation of plans.</li> </ul>  |
| Beneficiary:   | Patients, general public and business firms engaged with wellness centers.  |

| NKRA   | SKRA  | SKRA KPI   |
|--|---|--|
| Poverty + reduced/MDG+<br>achieved                               | Curative and Rehabilitative Healthcare Services Provided          | Average Nationwide OPD waiting time from 9 AM to 11 AM |
| acmeved  | Treattricare Services Frovided                                    | Independent Patient satisfaction rate                  |
| Indigenous wisdom, arts and crafts promoted for rural livelihood | Traditional medicinal services strengthened in sustainable manner | No. of new cases per TM Unit                           |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Base Year | Plan Targets |
|--|--|-----------|-----------|--------------|
| Outcome 001 : Traditional medicine services strengthened, integrated with the allopathic                   | No. of district hospitals providing TM services  | 22        | 2012      | 30           |
|  | Department of Traditional<br>Medicine Services<br>established (number)                                 | 0         | 2012      | 1            |
| medicine and promoted as a centre of excellence  | No. of services standardized   | 5         | 2012      | 10           |
| Outcome 002 : Niche  | Increased output production of traditional medicines (in tons & %)                                     | 10 (55)   | 2012      | 30 (80)      |
| market for traditional<br>medicine services<br>promoted  | Revenue from sales of<br>traditional medicines and<br>Commercial products<br>increased (Nu in million) | 13.2      | 2012      | 20           |
| Results Levels (Output)  | Indicators   | Baseline  | Base Year | Plan Targets |
| Output 001:HR Capacity   | No. of Menpas qualification upgraded   |           | 2012      | 22           |
| and management in traditional medicine strengthened  | Department of Traditional<br>Medicine Established  |           | 2012      | Established  |
| Output 002:Research promoted and services standardized for TM including local healing and spiritual health | No. of research centers established  | 0         | 2012      | 2            |
|  | Information management system for TM developed   | 0         | 2012      | 1            |

| No. of Drying centers up-<br>graded and new centers<br>established  | 2  | 2012   | 4  |
|---|--|--|--|
| Development and publication of Monographs                           | 2  | 2012   | 4  |
| Development and publication of Pharmacopeia                         | 0  | 2012   | 1  |
| No. of institutional linkages established                           | 0  | 2012   | 2  |
| GMP complaint facility constructed (No)                             | 0  | 2012   | 1  |
| Management Information<br>System (MIS/SAP)<br>developed (No)        | 0  | 2012   | 1  |
| No. of Production technology and equipments procured                | 0  | 2012   | 9  |
| No. of market surveys and international markets explored            | 0  | 2012   | 3  |
| No. of guidelines and<br>SOPs published for<br>effective monitoring | 0  | 2012   | 3  |
| No. of health promoting,<br>Spa and wellness<br>products developed  | 12   | 2012   | 22   |
| No. of Partnerships established with hotels and resorts             | 0  | 2012   | 5  |
|   | graded and new centers established  Development and publication of Monographs  Development and publication of Pharmacopeia  No. of institutional linkages established  GMP complaint facility constructed (No)  Management Information System (MIS/SAP) developed (No)  No. of Production technology and equipments procured  No. of market surveys and international markets explored  No. of guidelines and SOPs published for effective monitoring  No. of health promoting, Spa and wellness products developed  No. of Partnerships established with hotels | graded and new centers established  Development and publication of 2 Monographs  Development and publication of 0 Pharmacopeia  No. of institutional linkages established  GMP complaint facility constructed (No)  Management Information System (MIS/SAP) 0 developed (No)  No. of Production technology and equipments procured  No. of market surveys and international markets explored  No. of guidelines and SOPs published for effective monitoring  No. of health promoting, Spa and wellness products developed  No. of Partnerships established with hotels | graded and new centers established  Development and publication of Monographs  Development and publication of Pharmacopeia  No. of institutional linkages established  GMP complaint facility constructed (No)  Management Information System (MIS/SAP) developed (No)  No. of Production technology and equipments procured  No. of market surveys and international markets explored  No. of guidelines and SOPs published for effective monitoring  No. of Partnerships established with hotels  2 2012 2012 2012 2012 2012 2012 2012 2 |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activities                                   | Capital |
|--|---------|
| Recruitment of Staffs                                  | 0.000   |
| Establishment of Department of Traditional Medicine    | 0.000   |
| Establish TM library including digitization of library | 3.000   |
| Appointment and establishment of key management staff  | 0.000   |
| Advertise various post for the Department              | 0.000   |

| Establish institutional linkage with at least 1 institution in Thailand, India, Japan, Australia, UK and Germany          | 2.500  |
|---|--------|
| Conduct survey for herbs garden and establish TM herbal garden  | 2.800  |
| Publication and information collection for TM   | 0.000  |
| Procure and implement MIS (management information system)/SAP (system automation processes)                               | 1.000  |
| Upgrade existing drying centres (2 nos) and establish at least 2 new drying centres                                       | 2.800  |
| Survey alternative sources for raw materials  | 0.000  |
| Initiate and establish contract farming agreements with farmer groups for at least 10 species                             | 0.500  |
| Establish medicinal herbs gardens in Lingshi & Gidagom (field trails and identification trainings)                        | 1.000  |
| Development and publication of Monographs and information for collection of TM  | 0.150  |
| Establish third party testing lab and procure standards for all opathic medicines   | 0.000  |
| Procurement of Research Technology, equipments, spares and pharmacopeias and development of inventory                     | 4.500  |
| Acquire QC technologies   | 3.200  |
| Establish dedicated commercial production unit separate from TMs  | 0.500  |
| Develop and launch new products (10)  | 0.000  |
| Conduct market surveys and explore international markets  | 1.600  |
| Automation of production processes  | 9.000  |
| Institute overtime payment and shift system   | 0.000  |
| Refurbish store and re-orient quarantine areas  | 0.700  |
| Development and printing of SOPs relating to systems and processes, Product development protocols                         | 0.500  |
| Establish Spa services at NTMH to provide practical classes (procurement of tubs, boilers, linens, heaters, trolleys etc) | 0.000  |
| Institute short term training program for Sowa Rigpa spa assistants   | 0.000  |
| Product development and promotion activities  | 0.000  |
| Technical consultation on instituting Spa and wellness centers in the region  | 1.600  |
| Procure research equipments and reagents  | 4.000  |
| Conduct research activities   | 1.000  |
| Construction of retaining wall behind the decoction building  | 0.000  |
| Expansion of drying unit in Lingzhi   | 0.000  |
| Construction of 4 storied staff quarter   | 0.000  |
| Total:  | 40.350 |

Au Name: MINISTRY OF HEALTH

Program Name: Medicines, Technologies and Logistics

Department: DEPARTMENT OF MEDICAL SERVICES

Phase: Approved

| Justification:      | The efficient and effective delivery of health services depends on steady and adequate stock of medical supplies like medicines equipment and machines. However, the health sector continues to face the insufficient of stock of essential medicines, irrational use of essential medicines, inappropriate/under utilization of high-end health technologies, and sometimes-irrational introduction of Health technologies. |
|---------------------|--|
|                     | The main reason for these gaps is due to a clear strategy/guidelines that ensures proper planning and co-ordination among the relevant Departments/Divisions and Units within the Ministry. These factors can contribute to lack of access to, or inappropriate utilization and inefficient utilization of essential medical services and products, and waste of financial resources.  |
| Strategy:           | <ul> <li>Strengthening procurement system for essential drugs to ensure timely and<br/>adequate supplies. This includes developing an ICT based indenting and<br/>store management system.</li> </ul>  |
|                     | ii. Strengthening monitoring and evaluation on utilization of medicines and technologies to address the issues of irrational and inappropriate use of medicines and technologies.  |
|                     | iii. Enhance evidence and value-based decisions in assessing the technologies to ensure selection of useful and cost effective technologies. This includes investment in building HR capacities in essential medicines and technologies.   |
|                     | iv. Strengthening the system for maintenance for specialized medical equipment to allow for their efficient and effective functioning.   |
| Risk<br>Assessment: | <ul> <li>i. If adequate and skilled personnel are not available, it will affect the selection<br/>and maintenance of specialized medical equipment.</li> </ul>   |
|                     | ii. Dependency on suppliers and vendors and 100% advance payment which delays in availability of spare parts, hence delays repair and service of equipments.   |
| Beneficiary:        | Patients, Medical practitioners, general public  |

| NKRA                    | SKRA                                 | SKRA KPI                     |
|-------------------------|--------------------------------------|------------------------------|
| Improved public service | Enhance efficiency and effectiveness | Average Turn Around Time for |
| delivery                | of public service delivery           | commonly availed services    |

Table 1: Programme Results Level

| Results Level (Outcome)  | Indicators  | Baselines | Base Year | Plan Targets |
|--|---|-----------|-----------|--------------|
| Outcome 001 : Availability of adequate, reliable and cost effective medical supplies and functionality | Proportion of health facilities with 95% of essential medicines available at any point of time (%). | NA        | 2012      | 100          |
| ensured  | Proportion of equipment uptime at all point of time (%)   | 80        | 2012      | 90           |
|  | % of health centers reporting rational drug use monitoring  | 40        | 2012      | 100          |
| Results Levels (Output)  | Indicators  | Baseline  | Base Year | Plan Targets |
| Output 001:Capacity on health technology   | Proportion evidence based health technology Assessed (%)  | 0         | 2012      | 100          |
| assessment and monitoring strengthened   | Number of research and evaluation tools developed for rational use of medicines and technologies    | 0         | 2012      | 2            |
| Output 002:Functionality of medical equipment ensured  | Proportion of equipment functional in all centers at all times (%)                                  | 80        | 2012      | 90           |
| Output 003:Timely procurement and distribution of medical supplies                                     | Proportion of districts submitting indents on time (%)  | NA        |           | 100          |
|  | Web based quantification, distribution and management system (%)                                    | NA        |           | 100          |

Table 2: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Capacity building of health workers on assessing, indenting, rational use of medicine and technology | 5.000   |
| Develop software and web site to report utilization of medicine and technology                       | 1.500   |
| Assessment of technology including Health Technology Assessment Panel Meetings                       | 0.000   |
| Develop research and evaluation tools for rational use of medicines and technologies                 | 0.000   |
| Develop M & E tools for utilization and cost effectiveness of technology/medicine                    | 0.000   |

| Develop promotional activities and tools for Rational use of medicine and technology   | 0.000   |
|--|---------|
| Survey of rational use of medicine and technology  | 0.000   |
| Annual maintenance contract of High-end sophisticated medical equipments   | 0.000   |
| After sale services and preventive maintenance and increased availability of essential spares  | 0.000   |
| Liaison with professionals from outside the country  | 1.800   |
| Workshop on basic equipment maintenance and Management   | 0.000   |
| Development of SOPs, guidelines, log books   | 0.000   |
| Standardization of equipment and services throughout the country   | 0.000   |
| Test equipment, instrument and tools available   | 3.500   |
| Procurement of Spares, accessories and consumables readily available   | 53.000  |
| Procurement of drugs and non drugs   | 379.000 |
| Preparation/ compilation of intents, tender opening, evaluation, selection and awarding meeting)                                       | 0.000   |
| Capacity building of health workers on indenting system, mobilization, store management and reporting of shortages                     | 2.000   |
| Formation of Committees and convening  | 0.000   |
| Development and printing of user guidelines, standard list   | 0.000   |
| Terms of Reference of the IT consultant defined  | 0.000   |
| Tendering and selection of consultant  | 0.000   |
| Execution of the up-gradation work   | 0.000   |
| Monitoring and Evaluation  | 0.000   |
| Conduct in-country meetings and workshops on medical supplies  | 0.000   |
| Purchase of new vehicles and transportation equipments   | 5.000   |
| Designing, tendering, evaluation, selection & award of tender for construction of staff quarters and renovation of existing facilities | 3.740   |
| Renovation of building to enhance safety of work place   | 0.000   |
| Develop pre Installation guidelines and revision, printing & distribution of Equipment log book  | 0.000   |
| Procurement of uniforms, extensions and kits   | 0.500   |
| Service manuals, hand books, journals maintained   | 0.000   |
| Attend conference, meetings Medical Trade Fair and Seminars related to Bio-Medical Engineering   | 1.000   |
| Introduction of new specialty services CT, endosscopy, polposcopy, mammography   | 274.500 |
| Development of web based indenting and store management system   | 2.000   |
| Capacity building of health workers on bio- medical engineering  | 7.000   |
| Total:   | 739.540 |

Au Name: MINISTRY OF HEALTH Department: SECRETARIAT

Program Name: Institutional Strengthening & Monitoring Phase: Approved

### Justification:

The various offices under the Secretariat, which include Policy and Planning Division, Human Resource Division, Administration and Finance Division, Internal Audit Division and Bhutan Health Trust Fund provide the Secretariat support services to the technical departments. Specifically, they provide services such as Five and Annual plan formulation, resource mobilization, monitoring, coordination and evaluation, providing administrative and procurement services, performing HR functions, ensuring compliance with rules and regulations, etc. Amongst them, the Human Resource Division is one of the critical divisions which has to address the issues of i) the shortages of medical and technical professionals in specific categories, ii) Limited specialized skills of the health care providers and iii) low motivation of the health care providers.

Health planning and monitoring and evaluation capacity at central and local government level (including analysis and use of health information has to be strengthened. The capacities to conduct health economic policy research and analysis are very limited and needs to be enhanced. This is important given the future sustainability issues of health services.

Quality of services needs to be enhanced through standardization of services, monitoring and regulation of health professionals and practices. To allow for greater effectiveness of health services, inter-sectoral collaboration and community partnership with private sector and NGOs needs to be developed.

### Strategy:

- i. Strengthen HR management and coordination to increase skills and number of health professionals.
- ii. Strengthen health planning and monitoring through using results based planning approach and developing a robust Health Information System.
- iii. Strengthen the legal and regulatory framework for Health sector through enactment of Health Act.
- iv. Improve sustainability of health care financing through exploring alternative options such as introduction of billing system and charging of non-Bhutanese and improving off-hour clinic.
- v. Developing capacity and systems for health research to allow for better preparedness and targeting of vulnerable groups, areas and periods.
- vi. Expanding ICT-enabled health care services such as telemedicine, video consultations etc.
- vii. Institute Continuous Quality Improvement (CQI) in health facilities.
- viii. Strengthening of the BMHC and BHTF Secretariats to improve regulatory and financing functions.

| Risks        | <ul> <li>i. If adequate human resource are not provided, it will affect the implementation of plans.</li> <li>ii. Due rapid change in health system and advancement in medical technologies, it is costly to procure and maintain them. If adequate resources are not made available, it will jeopardize the implementation of plans.</li> <li>iii. Health cuts across sectors and depends on the co-ordination and co-operation from other stakeholders. If this is not forthcoming, it will affect the plans.</li> </ul> |
|--------------|--|
| Beneficiary: | Patients, Medical Personnel and General Public   |

| NKRA                                  | SKRA   | SKRA KPI   |
|---------------------------------------|--|--|
|                                       |  | % of population within 3 hrs walking distance          |
| Poverty + reduced/MDG+                | Curative and Rehabilitative                              | Average Nationwide OPD waiting time from 9 AM to 11 AM |
| achieved                              | Healthcare Services Provided                             | Independent Patient satisfaction rate                  |
|                                       |  | Nurse to bed ratio                                     |
|                                       |  | Nurse to Doctor Ratio                                  |
| Improved public service delivery      | Strengthened Accountability                              | Civil Service performance /GPMS rating                 |
| Democracy and Governance strengthened | Transparency, Efficiency and Effectiveness in Governance | TAT for public services                                |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                          | Indicators  | Baselines | Base Year | Plan Targets |
|--|---|-----------|-----------|--------------|
|  | Proportion of district with three medical officers (%)        | 65        | 2012      | 100          |
|  | Nurse to bed ratio  | 1:09      | 2012      | 1:06         |
| Outcome 001 : Efficient and effective healthcare | Proportion of BHU IIs with three health workers (%)           | 39        | 2012      | 100          |
| services provided                                | Proportion of BHU IIs with one female worker (%)              | 73        | 2012      | 100          |
|  | Proportion of health facilities equipped with ICT-enabled HIS | 10        | 2012      | 90           |

| Outcome 001 : Efficient and effective healthcare services provided   | Proportion of health expenditure financed through domestic sources (%)  | 82                | 2012                 | 90                  |
|--|---|-------------------|----------------------|---------------------|
|  | No. of private selective diagnostics services introduced  | 6                 | 2012                 | 15                  |
|  | Proportion of health<br>professionals registered<br>with BMHC (%)   | 90                | 2012                 | 100                 |
|  | Proportion of health facilities with functional CQI in place (%)  | 00                | 2012                 | 50                  |
|  | Patient satisfaction rate   | 85                | 2012                 | 90                  |
|  | Turn- Around-Time for public service delivery (%)   | NA                | 2012                 | >70                 |
| Outcome 002 :<br>11 FYP of MoH   | Delivery of Ministry's outcome (%)  | 90                | 2012                 | >95                 |
| implemented according<br>to its strategic focus<br>and good capital budget<br>delivery   | 11FYPCapital budget<br>delivery of of MoH (%)   | NA                | 2012                 | 100                 |
| delivery   |   |                   |                      |                     |
| Results Levels (Output)  | Indicators  | Baseline          | Base Year            | Plan Targets        |
| Results Levels (Output) Output 001:Health  | Indicators  Proportion of training component of HR master plan (%)  | Baseline<br>NA    | Base Year            | Plan Targets<br>100 |
| Results Levels (Output)  | Proportion of training component of HR master   |                   |                      |                     |
| Results Levels (Output)  Output 001:Health human resource capacity developed   | Proportion of training component of HR master plan (%)  Number of health  | NA                | 2012                 | 100                 |
| Results Levels (Output)  Output 001:Health human resource capacity developed  Output 002:Appropriate number and type of health professionals | Proportion of training component of HR master plan (%)  Number of health professionals upgraded  Number of staffs recruited and deployed as per the Health Human Resource   | NA<br>164         | 2012                 | 100<br>342          |
| Results Levels (Output)  Output 001:Health human resource capacity developed  Output 002:Appropriate number and type of                      | Proportion of training component of HR master plan (%)  Number of health professionals upgraded  Number of staffs recruited and deployed as per the Health Human Resource Master Plan  Proportion of health facilities staffed in line with | NA<br>164<br>3950 | 2012<br>2011<br>2011 | 100<br>342<br>4354  |

| Output 004: Enhanced central and local governments' capacity in result-based health planning and monitoring | Number of RBM trainings conducted  | 0  | 2011 | 05 |
|---|--|----|------|----|
| Output 005:National health research   | Number of coordinated research conducted by Departments/Divisions/ Units under Ministry          | 10 | 2011 | 50 |
| governance, systems and capacity strengthened   | No of REBH approved research protocols/proposal published in national and international journals | 00 | 2012 | 05 |
| Output 006: Robust  | Proportion of health<br>facilities with defined health<br>data- sets and indicators (%)          | NA | 2012 | 90 |
| and dynamic health<br>information system<br>instituted  | Proportion of health facilities with improved data quality standards and control mechanism (%)   | 10 | 2011 | 90 |
| Output 007: Delivery<br>of health care services<br>expanded through ICT<br>and ICT enabled                  | Proportion of health<br>facilities equipped with ICT-<br>enabled HIS (%)                         | 10 | 2011 | 90 |

Table 3: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Establish and enhance Institutional linkages   | 1.590   |
| Develop staffing pattern/service delivery standard for all levels of health facilities | 0.000   |
| Develop rational deployment/transfer guideline   | 0.000   |
| Recruit and Deploy as per the workload assessment of the health facilities             | 0.000   |
| Conduct Training Need Analysis   | 0.000   |
| Dzongkha development activities  | 2.000   |
| Capacity building of planners and district health workers                              | 2.000   |
| Monitoring and Evaluation (Review)   | 2.000   |
| Workshop/seminars/meetings(ex and in- country)   | 2.500   |
| National Health conferences  | 0.000   |
| Planning, budgeting and consultation including of 12th FYP                             | 0.000   |
| Donor coordination   | 0.000   |

| capacity building of health workers to conduct research  | 0.800 |
|--|-------|
| Development of national Health Research Strategy and Policy through stakeholder consultation                       | 0.000 |
| Develop M&E tool for health Research system  | 0.000 |
| Review and strengthen system for ethical review process  | 0.000 |
| Advocacy on health research promotion  | 0.000 |
| Publication of Bhutan Health journal   | 1.000 |
| Establish linkages and twining program with national and international research institutes                         | 1.000 |
| Health Research Unit upgraded to health research and development Division  | 0.000 |
| Conduct priority research not covered by stakeholders  | 0.000 |
| Institute functional scientific review Committee   | 0.000 |
|  | 0.000 |
| Support Professional development of REBH, and Scientific Review Committee  | 1.000 |
| Conduct quarterly REBH Meeting   | 0.000 |
| Technical expertise & support (TA)   | 0.700 |
| Revise and publish BMHIS gridlines, HIS policy, national standard of coding, reporting system                      | 0.000 |
| Review of national health data-sets & indicators   | 0.000 |
| HMIS taskforce meetings and other consultative meetings  | 0.000 |
| Periodic review of BHMIS information assessment and feedback mechanism   | 0.000 |
| Capacity building of health workers on ICD-1 coding, data analysis, GIS mapping, BHMIS software usage              | 3.000 |
| Design, develop and install BHMIS software for BHUs level  | 0.000 |
| Identify training needs and curriculum development on data use and analysis (statistics) & ICD-10 coding with RIHS | 0.000 |
| Web-based BHMIS software design, development and roll-outs   | 5.000 |
| Conduct National Health survey (NHS)/DHS   | 5.000 |
| Web-based stock management system  | 1.500 |
| POEMS  | 0.000 |
| Online learning system   | 1.000 |
| ICT equipment and facilities   | 1.800 |
| Conduct Policy and feasibility studies   | 1.700 |
| PPP Initiatives and private investments in health  | 0.000 |
| Establishment of international linkages for fund mobilization  | 1.500 |
| Hire professional Investment Fund Manager  | 1.500 |

| Up-gradation of BHTF's website  | 0.000  |
|---|--------|
| Printing of BHTF pamphlet & others  | 0.000  |
| Development/revision and printing of SOP, standards, Guild lines, curriculum for medical and health council                     | 0.000  |
| Monitoring and evaluation of standard training program in training institutes and service delivery in all the health facilities | 0.000  |
| Institutional linkage for accreditation and recognition   | 1.600  |
| Agencification of BMHC  | 0.800  |
| Amendment of BMHC Act and review of regulation  | 0.000  |
| Conduct of Competency Examination for registration(quarterly)   | 0.000  |
| Conduct core meetings of BMHC   | 0.000  |
| Advertisement   | 0.000  |
| Development /revision and printing of SOP, standards, guidelines, M&E checklist for quality assurance and standardization       | 0.000  |
| Institutionalization of CQI project in one pilot hospital and BHUII   | 0.800  |
| Capacity building of health workers on CQI and quality assurance  | 1.300  |
| Establishment of effective M&E team   | 0.000  |
| Establish regional/international institutional linkage on QA and Standards  | 0.800  |
| Promotion of BHTF and resource mobilization activities  | 0.200  |
| Development of regulatory tools including formulation of National Health Bill   | 0.000  |
| Establishment of hospital Billing system (JDWNRH)   | 0.500  |
| Upgrade Council Software and website  | 0.800  |
| Workshop on Risk Management/Patient Safety (20 District Hospitals)  | 1.500  |
| Capacity building of health workers on hospital administration and management   | 8.000  |
| Monitoring and supervision of HAMT activities   | 0.000  |
| Develop HAMT reporting software   | 0.500  |
| Procure office equipments for improving HAMT services   | 0.800  |
| Total:  | 54.190 |
|   |        |

Au Name: MINISTRY OF HEALTH

Program Name: Public Health Services

Phase: Draft

### Justification:

The socio-economic development of a country depends on the productivity and well being of its citizens which in turn, amongst many other things, also depends on their state of health. In terms of health indicators, Bhutan has made great improvements in most parameters related to the achievement of MDGs.

Today, Bhutan is at a juncture of epidemiological transition marked by an increase in the burden of non-communicable diseases while it still has the task of tackling communicable diseases like TB, malaria, coupled with emerging and reemerging diseases due to climate change. Sedentary lifestyles with traditionally high fat based diets coupled with consumption of tobacco and alcohol has lead to increasing rate of diabetes, hypertension, cancers etc. The cost of treating NCDs is very expensive and hence there is a need to intensify our efforts on health promotion to prevent the onset of these diseases and manage them better for reduced morbidity. Similarly, efforts towards preventive actions for communicable disease must continue to ensure better health for our citizens.

### Strategy:

- i. Strengthen capacity for event based surveillance (EBS) and indicator based surveillance towards all hazard approach and establish link with other sectors for risk assessment and response to public health events.
- ii. Develop and implement an integrated national strategy for sanitation and hygiene.
- iii. Operationalize PHL to improve efficiency and effectiveness of laboratory based disease surveillance, response system, to act as national reference laboratory for quality assessment of water; food and drug testing; and other special testing services.
- Develop and strengthen National Initiative for improving nutrition and micro-nutrient deficiencies.
- v. Advocate for Health in all Policies for ensuring mainstreaming of health concerns in the planning and implementation of all sectors' programmes.
- vi. Integrate management of Neonatal and Childhood illness with MCH, CDD, ARI and nutrition programmes to improve health of mother and child.
- vii. Scale up and intensify implementation, management and monitoring of key programmes of HIV and TB
- viii. Implement Health Strategies for vulnerable groups of youth, differently abled and elderly persons.
- ix. Integrate prevention and advocacy of NCDs with PHC???
- x. Strengthen outreach of health services through urban and village health workers and maintenance of current vaccines and expansion of new vaccines.

| Risk         | Possible Risks are:  |
|--------------|--|
| Assessment:  | <ul> <li>i. Lacks of Funds- Most of the Public Health Programs are donor funded. Phasing out of donors is seen as a possible risk which might hamper the implementation of the plan and achieving the targets as set.</li> <li>ii. Turnover of key technical staff and lack of adequate trained HR may affect the implementation of the plan.</li> <li>iii. Responsibility of improving health status is spread beyond health sector. Inter-sectoral/multi-sectoral collaboration and community participation is required in furthering the cause of health promotion and effectiveness of its strategies. If this is not forthcoming, it will jeopardize the plan.</li> </ul> |
| Beneficiary: | Vulnerable groups, patients, mothers, children and community.  |

# **Program and SKRA Linkages**

| NKRA                                | SKRA   | SKRA KPI   |
|-------------------------------------|--|--|
|                                     | Preventative, Promotive<br>and Rehabilitative Health-<br>care services | IMR per 1000 live births                                   |
|                                     |  | Malaria incidence per 10,000 population                    |
| Poverty + reduced/<br>MDG+ achieved |  | Percentage of rural pop with access to improved sanitation |
|                                     |  | U5 MR per 1000 live birth                                  |
|                                     |  | TB Prevalence rate per 100,000 population                  |
|                                     |  | Diabetes incidence per 10,000 population                   |
|                                     |  | Hypertension incidence 10,000 population                   |
|                                     |  | MMR per 100,000 live births                                |
|                                     |  | Stunting ( Height for age )                                |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                 | Indicators  | Baselines | Base Year | Plan Targets |
|---|---|-----------|-----------|--------------|
|   | Under 5 Mortality Rate                            | 60.1      | 2010      | 30           |
|   | Infant Mortality rate per<br>1000 live birth      | 47        | 2010      | <20          |
| Outcome 001 :                           | Immunization coverage (%)                         | 94.4      | 2011      | >95          |
| Morbidity & mortality                   | HIV Prevalence (%)                                | 0.04      | 2011      | maintained   |
| due to communicable<br>diseases reduced | Malaria incidence per<br>10000 population at risk | 0.5       | 2012      | 0.35         |
|   | Tuberculosis prevalence rate Per 10000 population | 230       | 2012      | <200         |
|   | Elimination of Leprosy (<1 per 10,000 population) | <1        | 2011      | Sustained    |

|   | Percentage of rural population with access to improved sanitation                      | 54.8       | 2010      | >80          |
|---|--|------------|-----------|--------------|
|   | Percentage of rural population with access to improved drinking water supply(coverage) | 94.8       | 2010      | >95          |
|   | Maternal Mortality Rate per 100,000 live birth   | 255        | 2000      | <100         |
|   | Height for Age/Stunting (%)  | 33.5       | 2010      | <30          |
| Outcome 002 :<br>Morbidity and                              | Institutional Delivery Rate (%)  | 56         | 2010      | >70          |
| Mortality due to Non-<br>communicable diseases              | Incidence of Diabetes per 10,000 population  | 47         | 2011      | <50          |
| controlled  | Elimination of Iodine<br>Deficiency Disorder   | Eliminated | 2002      | Sustained    |
|   | Hypertension Incidence per 10,000 population   | 343        |           | <400         |
| Results Levels (Output)                                     | Indicators   | Baseline   | Base Year | Plan Targets |
|   | Center for Tropical<br>and Zoonotic Disease<br>established                             | 0          | 2012      | 1            |
|   | Number of research papers published in international and national Journal by the CTZD  | 0          | 2012      | 5            |
| Output 001:Reduced caseload of tropical and                 | Number of epidemiological mapping for tropical and zonootic diseases conducted         | NA         | 2012      | 4            |
| zoonotic diseases and<br>elimination of malaria<br>achieved | Number of surveillance and mapping for medically important entomological conducted     | NA         | 2012      | 1            |
|   | Number of malaria death reported in the country  | 2          | 2012      | 0            |
|   | Percentage of households with at least two LLIN in risk areas                          | NA         | 2012      | 100          |
|   | Number of Indigenous malaria cases   | 436        | 2010      | 130          |

|  | Surveillance system<br>for zoonotic diseases<br>established and integrated  | NA   | 2012 | Integrated |
|--|---|------|------|------------|
|  | Number of health center<br>with kala Azaar diagnostic<br>facility   | 3    | 2011 | 11         |
|  | Number of health center with Dengue diagnostic facility   | 2    | 2011 | 10         |
|  | HIV Cases detected  | 270  | 2012 | 450        |
|  | Incidence of STIs per<br>10,000 population  | 12   | 2012 | <10        |
|  | Prevalence of HIV /STIs among MARPS population (%)  | 4.4  | 2012 | ~1         |
| Output 002:Improved                                      | % of women 15-49 years who gave birth in the last 2 years and have attended ANC who received pre-test counseling, HIV testing and test result with post test counseling | 33.8 | 2012 | 50         |
| case detection,<br>treatment and Care of<br>STIs and HIV | Proportion of people living with advanced HIV infection currently receiving treatment (%)   | 32   | 2012 | 70         |
|  | % of pregnant women who are HIV infected put on PMTCT   | 100  | 2012 | 100        |
|  | % of adults enrolled in HIV care who had TB status assessed and recorded during their last visit  | NA   | 2012 | 100        |
| Output 003:Elimination status of Leprosy sustained       | Leprosy Cure Rate (%)   | 100  | 2012 | 100        |
| Outrout 00 Advances of                                   | Case notification rate<br>(all forms) / 100,000<br>population / year  | 161  | 2012 | <145       |
| Output 004:Improved TB case detection and management     | Treatment success rate among new smear positive cases (%)   | 91   | 2012 | >90        |

|   | % of districts with DTP-<br>Hep-Hib3 (Penta3)<br>coverage > 90%                    | 93   | 2011 | 100  |
|---|--|--|------|--|
| Output<br>005:Immunization<br>coverage sustained over<br>95%  | Eradication/Elimination of vaccine preventable diseases                            | Polio- Zero case measles and Rubella- Under control Neonatal Tetanus- Eliminated | 2012 | Polio-<br>eradicated<br>Measles<br>Rubella-<br>Eliminated<br>Neonatal<br>Tetanus-<br>Sustain |
| Output 006:Integrated   | Incidence of diarrhea per 10,000 U5 population (%)                                 | 24   | 2011 | 15   |
| Management of<br>Neonatal and Childhood<br>illness achieved   | Incidence of pneumonia<br>per 10,000 U5 population<br>(%)                          | 11   | 2011 | 7  |
| Output 007: Response<br>to emerging, re-<br>emerging and public<br>health emergencies<br>strengthened | No. of districts implementing pandemic plan  | 0  | 2012 | 20   |
|   | Percentage of rural population with access to improved sanitation                  | 54.8   | 2010 | >80  |
|   | % of HHs with hand washing facilities and soap                                     | 80.9   | 2010 | >95  |
| Output 008:Improved water, sanitation and hygienic facilities   | % of rural population with access to improved and functional drinking water supply | 93   | 2010 | 95   |
|   | No. of public health related innovative technologies explored                      | 0  | 2012 | 4  |
|   | Incidence of hypertension per 10,000 population                                    | 325  | 2011 | <400   |
| Output 009:Reduced burden of non-   | Incidence of Cancers per 10,000 population   | 14   | 2011 | <20  |
| communicable diseases<br>/lifestyle related<br>diseases   | Incidence of alcohol and liver diseases per 10,000 population                      | 29   | 2011 | <35  |

|   | % Health facilities providing<br>Youth Friendly Health                                       | NA                                | 2012 | 50   |
|---|--|-----------------------------------|------|--|
| Output 010:Increased access to improved adolescent health   | Services (HFHS)  |                                   |      | 30   |
|   | Reduced prevalence<br>of tobacco use among<br>adolescents and youth (10-<br>24 yrs) (%)      | NA                                | 2012 | 20   |
| services  | Reduce prevalence<br>of alcohol use among<br>adolescents and youth (10-<br>24 yrs) (%)       | NA                                | 2012 | 20   |
| Output 011:Response<br>to Health impact due<br>to environmental<br>and climate change<br>strengthened | Establishment of integrated surveillance system for monitoring climate sensitive health risk | Model<br>developed<br>and piloted | 2012 | Roll out to<br>remaining<br>Districts (if<br>the pilot is<br>successful) |
|   | Climate change and health adaptation developed and implemented                               | NA                                | 2012 | Developed  |
|   | Incidence of Depression per 10,000 population  | 7                                 | 2011 | <10  |
| Output 012:Prevention and management  | Incidence of Anxiety per 10,000 population   | 8                                 | 2011 | <10  |
| of mental disorders strengthened  | Incidence of psychosis per 10,000 population   | 1.3                               | 2011 | <3   |
|   | Weight for height  | 5.9                               | 2010 | 3  |
|   | Weight for age   | 12.7                              | 2010 | 5  |
| Output 013:Nutritional status of general  | Exclusive breastfeeding for 6 months (%)   | 48.7                              | 2010 | 50   |
| population improved   | Prevalence of anemia<br>among 6-36 months<br>children (%)                                    | 81                                | 2002 | <60  |
|   | Low birth weight infant (%)  | 9.9                               | 2010 | <5   |
| Output 014:<br>Reproductive and child<br>health services improved                                     | ANC coverage (at least 4 visits) (%)   | 77                                | 2011 | 80   |
|   | Contraceptive prevalence rate (%)  | 48                                | 2010 | 70   |
|   | % of mother attending 1st PNC visit (within 1 week)  | 77                                | 2011 | 80   |

|   | % Women aged 20–60 screened by pap smear for at least once for detecting cervical cancer | 25   | 2011 | 70                                      |
|---|--|--|------|---|
| Output 015:Increased  | % of VHW retained  | NA   | 2012 | >70                                     |
| community participation   | Number of Urban Health<br>Workers Trained  | NA   | 2012 | 50                                      |
| Output 016:Improved<br>Occupational Health and<br>Safety                        | Incidence of work related injuries   | 27929  | 2011 | <35000                                  |
| Output 017: Paducad   | Proportion of disabled people rehabilitated (%)  | 30   | 2011 | 70                                      |
| Output 017: Reduced disability and injuries                                     | Reduce deaths and injuries<br>due to road traffic crashes<br>per 100,000 population (%)  | 15   | 2011 | 8                                       |
|   | % reduction in the number of tobacco users among youth and adult                         | 22   | 2008 | 10                                      |
| Output 018: Healthy<br>lifestyle achieved                                       | % reduction in the number of alcohol users among youth and adult                         | 11.1   | 2008 | 5                                       |
| through health<br>promotion   | Health promotion policy developed  | NA   | 2012 | 1                                       |
|   | Proportion of communication activities developed and conducted (%)                       | NA   | 2012 | 90                                      |
|   | Laboratory data available<br>on diseases of Public<br>Health importance                  | 4  | 2011 | 6                                       |
| Output<br>019:Strengthened<br>capacity and services<br>public health laboratory | Laboratory data on outbreaks investigation in place                                      | 20<br>outbreaks<br>confirmed<br>from 40<br>outbreaks<br>reported | 2011 | All<br>outbreaks<br>confirmed<br>by lab |
|   | Laboratory data available on water quality (%)   | NA   | 2012 | 100 for urban areas                     |

|   | Laboratory data available on pharmaceutical drugs quality  | 0  | 2012 | 100 drugs |
|---|--|----|------|-----------|
|   | Number of special testing introduced                       | 5  | 2012 | 10        |
|   | Number of international institutes collaborated and linked | 2  | 2012 | 5         |
| Output 020:International<br>Health Regulation<br>strengthened | IHR core capacities in place (%)                           | 50 | 2012 | 100       |
| Output 021:Early Child<br>Care Development<br>Enhanced        | Establishment of day care services in MOH (No)             | 00 | 2011 | 1         |

Table 3: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Sustain malaria prevention and control activities among population at risk             | 35.000  |
| Monitoring of insecticides efficacy  | 2.000   |
| Sustain accessibility to early diagnosis, prompt treatment and Tracing (3Ts)           | 2.000   |
| Printings and development of manuals/Guidelines  | 0.000   |
| Procurement of essential diagnostics, pharmaceutical and others health products        | 7.000   |
| Surveillance and Vector control activities   | 1.600   |
| Information, education and communication and BCC                                       | 4.000   |
| Consultancy services   | 1.800   |
| Infrastructure development and establishment cost                                      | 1.400   |
| Strengthen Rapid Response team   | 1.200   |
| Development of standards, strategies , SOPs guidelines and IEC materials               | 2.800   |
| Organize regular workshop/meeting between stakeholders to strengthen the collaboration | 0.000   |
| Capacity building of health workers on zoonotic disease management                     | 1.800   |
| Conduct operational need based research studies on identified diseases                 | 1.000   |
| Conduct awareness to general public on identified Zoonotic disease                     | 1.500   |
| Prevention of STI and HIV  | 24.000  |
| Care and treatment for people living with HIV  | 15.000  |
| Institutional Strengthening  | 5.000   |
| Strategic Information, Monitoring and Evaluation, Research                             | 4.000   |

| Partnership and coordination  | 5.000  |
|---|--------|
| Development and printing of guidelines, standards and IEC materials   | 0.000  |
| Conduct Survey  | 0.000  |
| Procurement of aids and appliances for Leprosy patients   | 0.000  |
| IEC Activities including observation of World Leprosy Day   | 0.000  |
| Monitoring and evaluation of leprosy management and sustaining activities                                   | 0.000  |
| Improve TB services including TB/HIV collaborative activities   | 15.000 |
| Improve community participation and partnership   | 4.000  |
| Procurement and supply management of anti-TB drugs  | 13.000 |
| Monitoring and evaluation of TB control activities  | 3.000  |
| Development and printing of guidelines, forms and IEC materials   | 0.000  |
| Improve immunization coverage and strengthen and sustain services including reduction of wastage            | 4.000  |
| Feasibility study on the disease burden, financial sustainability for new vaccine introduction              | 0.000  |
| Meetings, seminars, trainings and workshops for VPDP  | 0.500  |
| Procurement of Vaccines, syringes, refrigerators, EPI vans, cold boxes and autoclaves                       | 7.000  |
| IEC Activities on improving and sustaining immunization coverage  | 2.000  |
| Meetings workshops and seminars for IMNCI activities  | 0.000  |
| Development of guidelines, IEC materials, protocols on IMNCI  | 0.000  |
| Auditing under five mortality and other social factors to find the cause                                    | 0.000  |
| Feasibility study to introduce pneumococcal and Rota Virus Vaccine  | 0.000  |
| ECCD and Child friendly health services   | 2.300  |
| Monitoring and evaluation of IMNCI activities   | 0.000  |
| Procurement and supplies for IMNCI  | 2.000  |
| Mop-up activities to meet MDG +   | 0.000  |
| Finalization and implementation of district pandemic plan and review and update of NIPPP                    | 0.500  |
| Meetings, workshops and seminars for response and preparedness activities                                   | 0.500  |
| Procurement of Rapid test kits and distribution to district hospitals                                       | 1.500  |
| Develop and revise guidelines, protocols, SOPs and IEC materials on outbreaks and public health emergencies | 1.500  |
| IEC activities on outbreaks and public health emergencies   | 0.000  |
| Policy studies outbreaks and public health emergencies  | 0.600  |
| Introduction of seasonal influenza vaccine  | 2.000  |
| Improvement of quarantine facilities  | 5.000  |
|   |        |

| Identification and up gradation of icalation recome in designated district begainsted.   | 1 000  |
|--|--------|
| Identification and up-gradation of isolation rooms in designated district hospitals (5 hospitals) for management of cases with infectious diseases | 1.000  |
| Improving safe drinking water facility and access including water safety plan  | 10.000 |
| Community Development for Health and CPM activities  | 3.500  |
| Development and review of guidelines, standards, strategies, IEC materials, policies on safe drinking water and sanitation facilities              | 0.900  |
| Capacity building (In-country) for PHED  | 2.700  |
| Piloting and up scaling of indoor air pollution reduction in rural households  | 0.300  |
| Programmatic studies for PHED  | 0.650  |
| Meetings, workshops and seminars for PHED  | 1.000  |
| Design alternative vaccine storage in cold region without power supply   | 0.070  |
| Development, revision and printing of protocols, guidelines, IEC posters, SOPs and EDL, including PEN protocols                                    | 1.700  |
| Procurement and supplies to strengthen prevention and management of NCDs   | 0.000  |
| Capacity building of health workers on control, prevention and management of NCDs  | 3.000  |
| IEC activities on NCDs   | 0.000  |
| Meetings, Workshops and seminars for LSRD  | 1.000  |
| Cancer Registry activities   | 1.000  |
| Technical Assistance consultant for LSRD   | 0.000  |
| Monitoring and Evaluation of NCD activities  | 0.000  |
| Develop the standards, strategies, and guideline on AFHS   | 2.000  |
| Capacity building of health workers on AH  | 1.500  |
| IEC activities on adolescent health  | 1.000  |
| Integrate adolescent health with livelihood programme  | 0.000  |
| Conduct relevant research on adolescent health and development   | 0.000  |
| Strengthen multi-sectoral collaboration  | 0.000  |
| Establish telephone helpline at health information and service center  | 1.000  |
| IEC activities on health hazards due to impact of environment and climate change   | 0.000  |
| Capacity building of health workers on EH and Climate change aspects   | 1.000  |
| Multi-sectoral Collaboration and partnership for improving services of EH Program  | 1.500  |
| Meetings, workshops and seminars for EH Program  | 0.000  |
| Surveillance activities for environmental health and hazards due to impact of climate change   | 0.000  |
| Incorporation of environmental health risk monitoring into health surveillance systems (i. e temp/precipitation/water quality)                     | 0.950  |
|  |        |

| Finalize and enforce National policy and strategic framework to reduce harmful use of alcohol                     | 5.000  |
|---|--------|
| IEC activities on prevention and management of Mental Health Disorders  | 0.000  |
| Capacity building of health workers on prevention and management of mental disorders                              | 2.000  |
| Meetings, workshops and seminars for Mental Health  | 0.000  |
| Development, revision and printing of guidelines, SOPs, strategies, IEC materials and protocols for mental health | 2.000  |
| Development and printing of guidelines, SOPs, strategies and protocols for nutrition                              | 2.800  |
| Capacity building of health workers and other stakeholders on improving nutrition status                          | 2.500  |
| Strengthen community based nutrition initiatives  | 2.000  |
| Establishment of lactation clinics and nutrition Rehabilitation Unit  | 6.000  |
| Nutrition, Anemia and IYCF survey   | 5.000  |
| Meetings, workshops and seminars for nutrition  | 0.000  |
| Procurement and supplies for improving nutritional status   | 2.400  |
| Double fortification of salt with iron and iodine   | 20.000 |
| Capacity building of health workers on reproductive and child health services                                     | 2.300  |
| Procurement and supply of contraceptives  | 0.000  |
| Development and Revision of guidelines, protocols, strategies, IEC materials and standards for RH                 | 0.000  |
| Strengthen line listing and follow up of pregnant women   | 0.000  |
| Multi-sectoral collaboration to improve RH services   | 0.000  |
| IEC activities on RH and Child Health Services  | 0.000  |
| Monitoring and evaluation of RH activities  | 0.000  |
| Establish colposcopy and cryotherapy in 6 cEmONC centers  | 0.000  |
| Research studies on RH  | 0.000  |
| RH commodity security   | 0.000  |
| Gender mainstreaming and addressing gender based violence   | 0.000  |
| Teenage Pregnancy activities  | 0.000  |
| Review of RH indicators   | 0.000  |
| Establishment and piloting of CHAG  | 0.000  |
| Training and re-fresher training of VHWs  | 8.000  |
| Capacity building of health workers and other stakeholders (ToT)  | 1.200  |
| Training of urban health workers  | 1.500  |
| IEC activities on improving occupational safety   | 0.000  |
|   |        |

|  | 2.000   |
|--|---------|
| Development of guidelines, standards, SOPS, protocols, data base and IEC material on Occupational Health | 2.000   |
| Meetings, workshops, and seminars for Occupational Health  | 0.500   |
| Multi-sectoral collaboration for improving occupational health   | 0.500   |
| Assessment of workplace for prevention of hazards  | 0.000   |
| Monitoring and Supervision of Occupational Health activities   | 0.400   |
| Review and develop national strategy on disability prevention & rehabilitation program                   | 0.000   |
| IEC Activities of DPR  | 0.000   |
| Capacity building of health workers and other stakeholders on DPR  | 1.000   |
| Development and revision of SOPs, guidelines and IEC materials on DPR                                    | 0.000   |
| Multi-sectoral collaboration to improve DPR  | 0.800   |
| Establish pediatric physiotherapy ( 3 Referral Hospital)   | 0.000   |
| Development of health promotion strategy   | 0.000   |
| Strengthen national communication to meet MDGs   | 2.500   |
| Enhance community participation and multi- sectoral collaboration  | 2.500   |
| Capacity building of health workers and stakeholders on health promotion                                 | 3.000   |
| Strategies to reduce harmful effects of tobacco and alcohol  | 2.000   |
| Legislative agenda for health promotion action   | 0.000   |
| Strategies to improve health seeking behavior  | 0.000   |
| IEC activities on health promotion   | 0.000   |
| Procurement and supply for strengthening health promotion activities                                     | 3.000   |
| Procurement and supplies of laboratory equipments, test kits, reagents                                   | 160.000 |
| Monitoring and supervision including outbreak investigation  | 0.000   |
| Research Studies   | 0.000   |
| Institutional linkage with international institutes/agencies on strengthening PHL                        | 0.000   |
| Meetings, workshops and seminars for VHWs  | 0.000   |
| Communication, advocacy and supplies to support functions of National IHR                                | 0.250   |
| Hire Professional caregivers for the child   | 0.500   |
| Establishment of Gym in health ministry  | 0.500   |
| Training of teachers (school health coordinators) and peer educators                                     | 3.000   |
| Conduct awareness campaigns and health screening in schools  | 0.000   |
| Conducting CSHP Impact Assessment Study  | 0.000   |
| Develop IEC/AV material materials for improving health in schools  | 0.000   |
| Total:   | 461.420 |
|  | *       |

| Au Name: UNIVERSITY OF MEDICAL SCIENCE OF BHUTAN              |
|---|
| Program Name: University of Medical Sciences of Bhutan (UMSB) |

Department: NA Phase: Draft

| Justification:      | Despite tremendous initiatives through increase of under graduate medical slots, recruitment of expatriate doctors and expansion for postgraduate programs, health sector still faces acute shortage of medical doctors, nurses and technicians. This trend is expected to continue to due to the expansion of health facilities across the country. With growing socio-economic development and demographic transition, there is rising expectation from the people on the quality of health care services. Changes in morbidity pattern and the rapid medical technological advancement are also putting increasing pressure on health services. Therefore, there is an urgent need for establishment of a medical university in the country to train and provide knowledge and skills to our people. Also, to strengthen the development and integration of indigenous/traditional medicines with allopathic medicines in the country. |
|---------------------|---|
| Strategy:           | <ul> <li>i. To have UMSB fully operational in the 11th FYP, the JDWNRH, RIHS, NITM and NTMH shall be incorporated under it.</li> <li>ii. Develop institutional linkages and affiliations with renowned health institutions to access resources and ensure quality and standards in teaching.</li> <li>i. Faculty recruitment and development, curriculum and teaching materials development and engage both national and international faculties to form a balanced team of faculty.</li> <li>ii. Construction of infrastructure shall be implemented in tandem and in a phased manner starting from 2013.</li> <li>iii. To improve future financial sustainability, attract international students through competitive fee structure.</li> </ul>   |
| Risk<br>Assessment: | <ul> <li>i. If adequate human resources are not provided, it will affect the implementation of plans, especially specialized health professional from outside Bhutan are critical for the University's academic programme to take off.</li> <li>ii. If adequate financial resources are not made available, it will jeopardize the implementation of plans.</li> </ul>  |
| Beneficiary:        | Ministry of Health, Dzongkhag Hospitals, BHU-I, BHU-II and ORCs, Pvt Pharmacies, Pvt Diagnostic firms, Patients and Public at large.  |

# **Program and SKRA Linkages**

| NKRA  | SKRA  | SKRA KPI   |  |
|---|---|--|--|
| Carbon Neutral/ Green<br>Climate resilient development  | Eco-efficient, disaster resilient and differently-abled health infrastructure ensured | All new health infrastructure/<br>facilities eco-efficient/disaster<br>resilient |  |
|   | Curative and Rehabilitative   | Average Nationwide OPD waiting time from 9 AM to 11 AM                           |  |
| Poverty + reduced/MDG+<br>achieved                      | Healthcare Services Provided  | Independent Patient satisfaction rate  |  |
|   | Curative and Rehabilitative<br>Healthcare Services Provided                           | Nurse to bed ratio   |  |
| Improved public service delivery                        | Enhance efficiency and ef-<br>fectiveness of public service<br>delivery               | Average Turn Around Time for commonly  |  |
| Carbon Neutral/Green Cli-<br>mate resilient development | Medical waste management improved   | Hospital Acquired infections   |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                       | Indicators  | Baselines | Base Year | Plan Targets |
|---|---|-----------|-----------|--------------|
|   | No of faculties established.  | 2         | 2012      | 3            |
| Outcome 001:  | No of faculties accredited / affiliated.  | 0         | 2012      | 3            |
| University of Medical Science established and                 | No of Medical Journals established  | 0         | 2012      | 1            |
| functional.   | Proportion of eco-efficient/<br>disaster resilient buildings<br>constructed (%) | 0         | 2012      | 100          |
| Outcome 002:<br>Qualitative health care<br>services provided. | No. of patients' referral outside Bhutan reduced per year.                      | 870       | 2012      | 620          |
|   | No. of neonatal and paediatric outpatient services strengthened per year.       | 50,000    | 2012      | 25,000       |
|   | No. of neonatal and paediatric inpatient services strengthened per year.        | 1200      | 2012      | 2500         |

|  | Proportion of OPD waiting time reduced (hr).                                       | 1/2-1     | 2012      | <1/2         |
|--|--|-----------|-----------|--------------|
|  | Waiting time for GI endoscopy at JDWNRH (in months).                               | 1-2       | 2012      | <1           |
|  | Proportion of shorter waiting time for routine operation in days.                  | 30        | 2012      | <15          |
| Outcome 002:   | No. of incidence of cervical cancer reduced per 100,000.                           | 20        | 2012      | 15           |
| Qualitative health care services provided.                                     | No. of mortality due to cervical cancer reduced per 100,000.                       | 10        | 2012      | 5            |
|  | No. of perinatal mortality which is contributing to IMR reduced (per 1000 births). | 38        | 2012      | 20           |
|  | % of Institutional delivery among JDWNRH catchment area clients                    | 70        | 2012      | 100          |
|  | Nurse to patient ratio improved.   | 1:15      | 2012      | 1:06         |
| Results Level (Outcome)  | Indicators   | Baselines | Base Year | Plan Targets |
| Output 001: Existing health institutes incorporated and faculties established. | No of existing health institutions incorporated under UMSB                         | 0         | 2012      | 3            |
|  | No. of Curriculum, guidelines and standards framed.                                | 0         | 2012      | 3            |
|  | Satisfaction of the students with the quality of teaching.                         | Medium    | 2012      | High         |
| Output 002:<br>Quality Medical<br>Education provided.                          | No. of Medical councils recognizing the Medical degree.                            | 2         | 2012      | 3            |
|  | No. of new programmes introduced   | 0         | 2012      | 5            |
| l .  |  |           |           |              |

| Output 003: HR capacity strengthened.                            | No of qualified teaching faculties recruited                       | 30 | 2012 | 40  |
|--|--|----|------|-----|
|  | No. of administrative and support staff recruited.                 | 30 | 2012 | 60  |
|  | No. of ToTs trained.   | NA | 2012 | 5   |
| Output 004:<br>Eco-efficient and disaster                        | Proportion of infrastructure developed                             | 0  | 2012 | 5   |
| resilient infrastructure and facilities developed.               | No. of IT facilities improved and established                      | 0  | 2012 | 6   |
| Output 005: Governance and administrative structure established. | No. of boards and committees constituted.                          | 2  | 2012 | 10  |
| Output 006:<br>Accreditation and<br>Affiliation of Faculties.    | No. of institutional linkages and exchange programmes established. | 0  | 2012 | 2   |
| Output 007: R&D and Publication Department established.          | No. of research projects conducted                                 | 0  | 2012 |     |
| Output 008: Patient's referral outside Bhutan reduced.           | No of clinical consultations and services introduced.              | 0  | 2013 | 5   |
| Output 009: Medical  | No. of cardiac ICU established and strengthened.                   | 0  | 2012 | 3   |
| department services strengthened.                                | No. of CAPD established.   | 0  | 2012 | 2   |
| strengtheneu.  | No. of medical oncology unit established.                          | 5  | 2012 | 7   |
|  | No. of pediatric ICU strengthened.                                 | 0  | 2012 | 6   |
|  | No. of NICU strengthened.  | 1  | 2012 | 2   |
| Output 010: Pediatric<br>& Neonatal Services<br>strengthened.    | No. of pediatric cardiology services established.                  | 0  | 2012 | 1   |
|  | No. of high risk infant follow-<br>up strengthened.                | 0  | 2012 | 500 |
|  | No. of childhood disability center established.                    | 0  | 2012 | 1   |
|  | No of MICU improved.   | 1  | 2012 | 2   |

| Output 011: Dermatological and venereological services improved.      | No. of dermatological and venereological services improved.                        | 1               | 2012 | 2               |
|---|--|-----------------|------|-----------------|
|   | No. of ECT facility established.   | 0               | 2012 | 1               |
| Output 012: Psychiatric services improved and strengthened.           | No. of EEG facility established.   | 0               | 2012 | 1               |
| strengtheneu.   | No. of Counseling services established.  | 0               | 2012 | 1               |
| Output 013: Surgical and related sub-specialty services strengthened. | No. of additional surgical sub-specialty services introduced.                      | 4               | 2012 | 6               |
|   | Proportion of gynecological services and infertility management improved.          | 0               | 2012 | 2               |
| Output 014: Obstetrics and Gynecological services strengthened.       | No. of minimal access surgical services in gynaecology established.                | 0               | 2012 | 1               |
|   | No. of routine operation days increased.   | 3 days/<br>week | 2012 | 5 days/<br>week |
| Output 015:Orthopedics services improved                              | No. of specialized orthopedic surgery/procedures introduced.                       | 0               | 2012 | 2               |
| Output 016: Eye care services strengthened                            | No. of essential subspecialty services strengthened.                               | 5               | 2012 | 7               |
|   | No. of non- infected babies<br>born to HIV infected mothers<br>in JDWNRH detected. | NA              | 2012 | 0               |
| Output 017:Community<br>Health Services<br>Strengthened               | % of mothers in JDWNRH practicing Exclusive Breast feeding for 6 months            | NA              | 2012 | 80              |
|   | No. of AEFIS following vaccination   | 0               | 2012 | 0               |
|   | % of adolescents accessing<br>ARSH services in JDWNRH<br>AFHS unit                 | NA              | 2012 | 70              |
| Output 018: Pharmacy services strengthened                            | No. of patients serviced by the pharmacy department                                | 314,864         | 2012 | 783,483         |

|   | No. of Department of Clinical laboratory separated   | 1    | 2012 | 4   |
|---|--|------|------|-----|
|   | No. of newer essential laboratory tests introduced.  | 7    | 2012 | 10  |
| Output 019: Clinical  | No. of TB culture facilities established JDWNRH.   | 0    | 2012 | 1   |
| Laboratory Services strengthened.                                     | % of Laboratory policy,<br>standards, guidelines<br>and SOPs developed and<br>distributed.       | 0    | 2012 | 100 |
|   | No. of internal and external laboratory quality systems in all RHs established and strengthened. | 0    | 2012 | 1   |
|   | No. of Pediatric ICU established.  | 0    | 2012 | 6   |
|   | No. of surgical ICU established.   | 0    | 2012 | 4   |
| Output 020:ICU services strengthened                                  | No. of cardiac ICU beds established.   | 0    | 2012 | 2   |
|   | No. of medical ICU beds established.   | 4    | 2012 | 5   |
|   | No. of surgical Step-down ICU created.   | 0    | 2012 | 4   |
| Output 021:ENT services   | No. of ENT sub-specialty services introduced.  | 0    | 2012 | 2   |
| strengthened  | No. of audiological services strengthened.   | 1    | 2012 | 2   |
| Output 022: Nursing   | No. of nurse: patient ratio improved.  | 1:15 | 2012 | 1:6 |
| services strengthened.  | No. of Specialized nursing services introduced.  | 10   | 2012 | 20  |
| Output 023: Radio-<br>diagnostic and imaging<br>services strengthened | No of interventional radio-<br>imaging services introduced                                       | 4    | 2012 | 8   |
| Output 024: Medico-<br>Legal Services<br>Strengthened                 | No. of forensic laboratory facilities established.   | 0    | 2012 | 1   |

| Output 025:Hospital administration and management strengthened | Proportion of mechanism for clinical, financial and administrative governance put in place. | 0 | 2012 | 100 |
|--|---|---|------|-----|
| Output 026: Traditional  | No. of research center introduced.  | 0 | 2012 | 1   |
| Medicine service strengthened.                                 | No of traditional medicine care unit strengthened   | 1 | 2012 | 2   |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Conduct of stake holders meeting.                                     | 0.000   |
| Incorporation of JDW NR & NTMH as teaching hospital.                  | 0.000   |
| Establishment of Faculty of Medicine.                                 | 2.000   |
| Development of curriculum, guidelines and standards framed.           | 0.000   |
| Study on students' satisfaction with the quality of teaching.         | 0.000   |
| Study on faculty member's satisfaction with teaching profession.      | 0.000   |
| Enumeration of foreign students seeking admission.                    | 0.000   |
| Graduation of student as per academic achievements of the University. | 0.000   |
| Study on employers' satisfaction with graduates.                      | 0.000   |
| Recognition of medical and health's degrees by the Medical councils.  | 0.000   |
| Launch up-gradation programme for Menpa                               | 0.000   |
| Introduction of PG/Masters degree programme.                          | 0.000   |
| Launch Short Programmes in English                                    | 0.000   |
| Introduce VLE programme with self assessment tools                    | 0.000   |
| Improve existing culture to enhance students self assessment          | 0.000   |
| Conduct review by external examiner                                   | 0.000   |
| Conduct review by BMHC  | 0.000   |
| Conduct Institute review by DAA                                       | 0.000   |
| Carrying out Choeshed Layrim for staff and students                   | 1.500   |
| Conduct meditation on Sangay Menla                                    | 1.800   |
| Conduct mind and mindfulness training related to sowa rigpa           | 2.000   |
| Initiation of community services                                      | 1.000   |
| Creation of green campus  | 1.000   |
| Training of staff on GNH based pedagogy, use of SSIMS, etc            | 1.500   |
| Review programmes through GNH lenses                                  | 1.500   |

| Development of capacity to provide mind and mindfulness trainings                              | 2.500   |
|--|---------|
| Selection, recruitment and appointment of teaching faculties, technicians & general staff      | 5.000   |
| Recruitment of teaching faculty on contract/Deputation   | 0.000   |
| Selection and training of staff for Specialization/ Masters courses                            | 2.500   |
| Training of recruited technical staff on subject specific techniques and practices             | 4.000   |
| Training of faculties and other staff as ToTs for teaching methodology and others as relevant. | 4.500   |
| Management training of administrative staff.   | 2.000   |
| Training of nurses and other technical staff   | 2.000   |
| Seminars, workshops and short term trainings   | 5.000   |
| Construction of academic & Administrative block  | 160.000 |
| Construction of hostels.   | 40.000  |
| Construction of staff quarters (Types I, II & III).  | 30.000  |
| Construction of UMSB's office  | 20.000  |
| Renovation and refurbishment of auditorium   | 5.000   |
| Procurement of vehicle   | 0.000   |
| Procurement of computers for comp lab  | 2.500   |
| Procurement of other IT servers and equipment  | 2.500   |
| Increase bandwidth   | 0.000   |
| Procurement of AVA for classrooms and conference hall  | 3.000   |
| Installation of wireless facility  | 0.000   |
| Development of library automation system (KOHA)  | 0.000   |
| Procurement of books and journals  | 2.000   |
| Procurement of anatomical and dummy models   | 4.000   |
| Procurement of medical Thankas and therapy tools   | 1.000   |
| Procurement of medicine manufacturing tools for demonstration                                  | 3.500   |
| Procurement of furniture   | 1.500   |
| Setting-up of museum   | 1.700   |
| Establishment and functioning of Governing Council, other Boards and Committees.               | 0.000   |
| Establishment of Medical Education coordination division/department.                           | 2.000   |
| Implementation of programs and other activities as enshrined in the UMSB Act.                  | 0.000   |
| Conduct Annual organizational development exercise (OD)  | 0.500   |
| Development of information desk service  | 0.000   |
| Development of student information system/ data base   | 0.000   |
| Development of reprographic service centers  | 0.000   |

| Recreation centre (audio visual centers plus indoor game facilities) Introduction of bookshop and cafeteria O.000 Administrative services and counseling services O.000 Provision of adequate stipend Introduction of student body for student services Introduction of student body for student services O.000 Introduction of student body for student services Introduction of student body for student services O.000 Monitoring of training programs conducted by Faculties. O.000 Coordination with MoH and other relevant sectors for the employment of graduates. Coordination of on campus recruitment of graduates by relevant agencies. O.000 Undertaking study tour to select institutions. O.000 Invitation of officials from select group of institutions from abroad and sign MoU for linkages. Invitation of visiting faculty from institutions from abroad for exchange programmes.  Development and incorporation exchange programmes in the UMSB curriculum. O.000 Application of membership to professional bodies. Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation. Apply for accreditation Participation in international seminars and conferences Supporting publicity activities (sponsoring) 1.500 Evelopment of print brochures and prospectus Establishment of Research and Publication office. Procurement of books O.000 Procurement of books O.000 Procurement of books O.000 Establishment of Research and Ethics Review Board. O.000 Institution of Editorial Board and train. Establishment of Institutional Research Board. O.000 Training of Research and Ethics Review Board. O.000 Training of Research ond Editorial Board members. Establishment of Institutional Research Board. O.000 Conduct research workshop for the teaching faculty O.000 Organizing international seminar   |   |       |
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| Administrative services and counseling services  Provision of adequate stipend  0.000  Introduction of student body for student services  0.000  Introduction of best students award  0.000  Monitoring of training programs conducted by Faculties.  0.000  Coordination with MoH and other relevant sectors for the employment of graduates.  Coordination of on campus recruitment of graduates by relevant agencies.  0.000  Invitation of onficials from select group of institutions from abroad and sign MoU for linkages.  Invitation of visiting faculty from institutions from abroad for exchange programmes.  Development and incorporation exchange programmes in the UMSB curriculum.  Application of membership to professional bodies.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  2.000  Apply for accreditation  Participation in international seminars and conferences  2.000  Supporting publicity activities (sponsoring)  1.500  Development of Research and Publication office.  Procurement of books  0.000  Procurement of sesearch and Publication office.  0.000  Procurement of sesearch labs  Subscription to online journals  Institution of Scientific and Ethics Review Board.  0.000  Institution of Editorial Board and train.  Establishment of Research and Editorial Board members.  0.000  Establishment of Institutional Research Board.  0.000  Conduct research workshop for the teaching faculty  | Recreation centre (audio visual centers plus indoor game facilities)      | 0.000 |
| Provision of adequate stipend 0.000 Introduction of student body for student services 0.000 Introduction of best students award 0.000 Monitoring of training programs conducted by Faculties. 0.000 Coordination with MoH and other relevant sectors for the employment of graduates. 0.000 Invaluates. 0.000 Invaluation of on campus recruitment of graduates by relevant agencies. 0.000 Invitation of officials from select institutions. 0.000 Invitation of officials from select group of institutions from abroad and sign MoU for linkages. Invitation of visiting faculty from institutions from abroad for exchange programmes. Development and incorporation exchange programmes in the UMSB curriculum. 0.000 Application of membership to professional bodies. 0.000 Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees. Develop regulations, guidelines and SoPs for accreditation/affiliation. 2.000 Apply for accreditation 0.000 Participation in international seminars and conferences 2.000 Supporting publicity activities (sponsoring) 1.500 Development of Print brochures and prospectus 3.000 Establishment of Research and Publication office. 0.000 Procurement of books 0.000 Institution of Scientific and Ethics Review Board. 0.000 Institution of Scientific and Ethics Review Board. 0.000 Institution of Research and Editorial Board members. 0.000 Establishment of Research collaboration. 0.000 Establishment of Research and Editorial Board members. 0.000 Establishment of Institutional Research Board. 0.000 Conduct research workshop for the teaching faculty 0.000 Conduct research workshop for the teaching faculty 0.000   | Introduction of bookshop and cafeteria                                    | 0.000 |
| Introduction of student body for student services  Introduction of best students award  O.000  Monitoring of training programs conducted by Faculties.  O.000  Coordination with MoH and other relevant sectors for the employment of graduates.  Coordination of on campus recruitment of graduates by relevant agencies.  Undertaking study tour to select institutions.  Invitation of officials from select group of institutions from abroad and sign MoU for linkages.  Invitation of visiting faculty from institutions from abroad for exchange programmes.  Development and incorporation exchange programmes in the UMSB curriculum.  Application of membership to professional bodies.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  Apply for accreditation  Participation in international seminars and conferences  Supporting publicity activities (sponsoring)  Development of print brochures and prospectus  Establishment of Research and Publication office.  Procurement of books  Development of research labs  Subscription to online journals  Institution of Scientific and Ethics Review Board.  D.000  Institution of Editorial Board and train.  Establishment of Research and Editorial Board members.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  O.000  Organizing international seminar  | Administrative services and counseling services                           | 0.000 |
| Introduction of best students award  Monitoring of training programs conducted by Faculties.  Coordination with MoH and other relevant sectors for the employment of graduates.  Coordination of on campus recruitment of graduates by relevant agencies.  Undertaking study tour to select institutions.  Invitation of officials from select group of institutions from abroad and sign MoU for linkages.  Invitation of visiting faculty from institutions from abroad for exchange programmes.  Development and incorporation exchange programmes in the UMSB curriculum.  Application of membership to professional bodies.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  Apply for accreditation  Participation in international seminars and conferences  Supporting publicity activities (sponsoring)  Development of Research and Publication office.  Procurement of books  Development of research labs  Subscription to online journals  Institution of Scientific and Ethics Review Board.  Development of Research and Editorial Board members.  Establishment of Research and Editorial Board members.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  Ocodo  | Provision of adequate stipend   | 0.000 |
| Monitoring of training programs conducted by Faculties.  Coordination with MoH and other relevant sectors for the employment of graduates.  Coordination of on campus recruitment of graduates by relevant agencies.  O.000  Undertaking study tour to select institutions.  Invitation of officials from select group of institutions from abroad and sign MoU for linkages.  Invitation of visiting faculty from institutions from abroad for exchange programmes.  Development and incorporation exchange programmes in the UMSB curriculum.  Application of membership to professional bodies.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  2.000  Apply for accreditation  Participation in international seminars and conferences  Supporting publicity activities (sponsoring)  Development of print brochures and prospectus  Supporting publicity activities (sponsoring)  Development of research and Publication office.  Procurement of books  Development of research labs  O.000  Institution of Scientific and Ethics Review Board.  Institution of Editorial Board and train.  Establishment of Research collaboration.  Training of Research and Editorial Board members.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  Organizing international seminar   | Introduction of student body for student services                         | 0.000 |
| Coordination with MoH and other relevant sectors for the employment of graduates.  Coordination of on campus recruitment of graduates by relevant agencies.  O.000 Undertaking study tour to select institutions.  Invitation of officials from select group of institutions from abroad and sign MoU for linkages.  Invitation of visiting faculty from institutions from abroad for exchange programmes.  Development and incorporation exchange programmes in the UMSB curriculum.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  Apply for accreditation  Participation in international seminars and conferences  Supporting publicity activities (sponsoring)  Development of print brochures and prospectus  Satishisment of Research and Publication office.  Procurement of books  Development of research labs  O.000  Institution of Scientific and Ethics Review Board.  Institution of Editorial Board and train.  Establishment of Research and Editorial Board members.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  Organizing international seminar  O.000  Organizing international seminar  | Introduction of best students award                                       | 0.000 |
| graduates.  Coordination of on campus recruitment of graduates by relevant agencies.  0.000 Undertaking study tour to select institutions. 0.000 Invitation of officials from select group of institutions from abroad and sign MoU for linkages. Invitation of visiting faculty from institutions from abroad for exchange programmes.  Development and incorporation exchange programmes in the UMSB curriculum.  Application of membership to professional bodies.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  2.000 Apply for accreditation 0.000 Participation in international seminars and conferences 2.000 Supporting publicity activities (sponsoring) 1.500 Development of print brochures and prospectus 3.000 Establishment of Research and Publication office. 0.000 Procurement of books 0.000 Development of research labs 0.000 Institution of Scientific and Ethics Review Board. 0.000 Institution of Editorial Board and train. 0.000 Establishment of Research and Editorial Board members. 0.000 Establishment of Institutional Research Board. 0.000 Conduct research workshop for the teaching faculty 0.000 Crganizing international seminar   | Monitoring of training programs conducted by Faculties.                   | 0.000 |
| Undertaking study tour to select institutions.  Invitation of officials from select group of institutions from abroad and sign MoU for linkages.  Invitation of visiting faculty from institutions from abroad for exchange programmes.  Development and incorporation exchange programmes in the UMSB curriculum.  Application of membership to professional bodies.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  2.000  Apply for accreditation  Participation in international seminars and conferences  2.000  Supporting publicity activities (sponsoring)  Development of print brochures and prospectus  3.000  Establishment of Research and Publication office.  Procurement of books  Development of research labs  Subscription to online journals  Institution of Scientific and Ethics Review Board.  Institution of Editorial Board and train.  0.000  Establishment of Research and Editorial Board members.  5.000  Conduct research workshop for the teaching faculty  O.000  Organizing international seminar  0.0000  Organizing international seminar  |   | 0.000 |
| Invitation of officials from select group of institutions from abroad and sign MoU for linkages.  Invitation of visiting faculty from institutions from abroad for exchange programmes.  Development and incorporation exchange programmes in the UMSB curriculum.  Application of membership to professional bodies.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  2.000  Apply for accreditation  Participation in international seminars and conferences  2.000  Supporting publicity activities (sponsoring)  Development of print brochures and prospectus  3.000  Establishment of Research and Publication office.  Procurement of books  Development of research labs  0.000  Institution of Scientific and Ethics Review Board.  Destablishment of Research and Editorial Board amembers.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  Organizing international seminar  0.000  Organizing international seminar   | Coordination of on campus recruitment of graduates by relevant agencies.  | 0.000 |
| linkages.  Invitation of visiting faculty from institutions from abroad for exchange programmes.  Development and incorporation exchange programmes in the UMSB curriculum.  Application of membership to professional bodies.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  2.000  Apply for accreditation  Apply for accreditation  Participation in international seminars and conferences  2.000  Supporting publicity activities (sponsoring)  Development of print brochures and prospectus  3.000  Establishment of Research and Publication office.  Procurement of books  Development of research labs  0.000  Development of research labs  0.000  Institution of Scientific and Ethics Review Board.  Institution of Editorial Board and train.  Establishment of Research collaboration.  Training of Research and Editorial Board members.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  O.000  Organizing international seminar  | Undertaking study tour to select institutions.                            | 0.000 |
| programmes.  Development and incorporation exchange programmes in the UMSB curriculum.  Application of membership to professional bodies.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  Apply for accreditation  Participation in international seminars and conferences  2.000  Supporting publicity activities (sponsoring)  Development of print brochures and prospectus  3.000  Establishment of Research and Publication office.  Procurement of books  Development of research labs  0.000  Development of research labs  0.000  Institution of Scientific and Ethics Review Board.  Institution of Editorial Board and train.  Establishment of Research and Editorial Board members.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  0.000  Organizing international seminar  0.0000  |   | 0.000 |
| Application of membership to professional bodies.  Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  2.000  Apply for accreditation  O.000  Participation in international seminars and conferences  2.000  Supporting publicity activities (sponsoring)  Development of print brochures and prospectus  3.000  Establishment of Research and Publication office.  O.000  Procurement of books  O.000  Development of research labs  O.000  Subscription to online journals  O.000  Institution of Scientific and Ethics Review Board.  O.000  Institution of Editorial Board and train.  O.000  Establishment of Research and Editorial Board members.  O.000  Establishment of Institutional Research Board.  O.000  Conduct research workshop for the teaching faculty  O.000  Organizing international seminar   |   | 0.000 |
| Development of regulations, guidelines and SoPs for reciprocal recognition of UMSB programmes/ degrees.       0.000         Develop regulations, guidelines and SoPs for accreditation/affiliation.       2.000         Apply for accreditation       0.000         Participation in international seminars and conferences       2.000         Supporting publicity activities (sponsoring)       1.500         Development of print brochures and prospectus       3.000         Establishment of Research and Publication office.       0.000         Procurement of books       0.000         Development of research labs       0.000         Subscription to online journals       0.000         Institution of Scientific and Ethics Review Board.       0.000         Institution of Editorial Board and train.       0.000         Establishment of Research collaboration.       0.000         Training of Research and Editorial Board members.       0.000         Establishment of Institutional Research Board.       0.000         Conduct research workshop for the teaching faculty       0.000         Organizing international seminar       0.000  | Development and incorporation exchange programmes in the UMSB curriculum. | 0.000 |
| programmes/ degrees.  Develop regulations, guidelines and SoPs for accreditation/affiliation.  Apply for accreditation  Participation in international seminars and conferences  2.000  Supporting publicity activities (sponsoring)  1.500  Development of print brochures and prospectus  3.000  Establishment of Research and Publication office.  Procurement of books  0.000  Development of research labs  0.000  Subscription to online journals  0.000  Institution of Scientific and Ethics Review Board.  0.000  Institution of Editorial Board and train.  0.000  Establishment of Research collaboration.  7.000  Training of Research and Editorial Board members.  0.000  Establishment of Institutional Research Board.  0.000  Conduct research workshop for the teaching faculty  0.000  Organizing international seminar   | Application of membership to professional bodies.                         | 0.000 |
| Apply for accreditation 0.000 Participation in international seminars and conferences 2.000 Supporting publicity activities (sponsoring) 1.500 Development of print brochures and prospectus 3.000 Establishment of Research and Publication office. 0.000 Procurement of books 0.000 Development of research labs 0.000 Subscription to online journals 0.000 Institution of Scientific and Ethics Review Board. 0.000 Institution of Editorial Board and train. 0.000 Establishment of Research collaboration. 0.000 Training of Research and Editorial Board members. 0.000 Establishment of Institutional Research Board. 0.000 Conduct research workshop for the teaching faculty 0.000 Organizing international seminar 0.000  |   | 0.000 |
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| Supporting publicity activities (sponsoring)  Development of print brochures and prospectus  Establishment of Research and Publication office.  Procurement of books  Development of research labs  Subscription to online journals  Institution of Scientific and Ethics Review Board.  Institution of Editorial Board and train.  Establishment of Research collaboration.  Training of Research and Editorial Board members.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  Organizing international seminar  1.500  1.500  1.500  1.500  1.500  1.500  1.500  1.500  1.500  1.500  1.500  1.500  1.50000  1.50000  1.50000  1.50000  1.50000 | Apply for accreditation   | 0.000 |
| Development of print brochures and prospectus  Establishment of Research and Publication office.  O.000  Procurement of books  O.000  Development of research labs  O.000  Subscription to online journals  Institution of Scientific and Ethics Review Board.  Institution of Editorial Board and train.  O.000  Establishment of Research collaboration.  Training of Research and Editorial Board members.  O.000  Establishment of Institutional Research Board.  O.000  Conduct research workshop for the teaching faculty  Organizing international seminar  O.000   | Participation in international seminars and conferences                   | 2.000 |
| Establishment of Research and Publication office.  Procurement of books  0.000  Development of research labs  0.000  Subscription to online journals  0.000  Institution of Scientific and Ethics Review Board.  0.000  Institution of Editorial Board and train.  0.000  Establishment of Research collaboration.  0.000  Training of Research and Editorial Board members.  0.000  Establishment of Institutional Research Board.  0.000  Conduct research workshop for the teaching faculty  0.000  Organizing international seminar  | Supporting publicity activities (sponsoring)                              | 1.500 |
| Procurement of books  Development of research labs  0.000  Subscription to online journals  Institution of Scientific and Ethics Review Board.  Institution of Editorial Board and train.  0.000  Establishment of Research collaboration.  Training of Research and Editorial Board members.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  Organizing international seminar  0.000   | Development of print brochures and prospectus                             | 3.000 |
| Development of research labs  0.000 Subscription to online journals  0.000 Institution of Scientific and Ethics Review Board.  0.000 Institution of Editorial Board and train.  0.000 Establishment of Research collaboration.  0.000 Training of Research and Editorial Board members.  0.000 Establishment of Institutional Research Board.  0.000 Conduct research workshop for the teaching faculty  0.000 Organizing international seminar  | Establishment of Research and Publication office.                         | 0.000 |
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| Institution of Scientific and Ethics Review Board. 0.000 Institution of Editorial Board and train. 0.000 Establishment of Research collaboration. 0.000 Training of Research and Editorial Board members. 0.000 Establishment of Institutional Research Board. 0.000 Conduct research workshop for the teaching faculty 0.000 Organizing international seminar 0.000   | Development of research labs  | 0.000 |
| Institution of Editorial Board and train.  Establishment of Research collaboration.  Training of Research and Editorial Board members.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  Organizing international seminar  0.000  | Subscription to online journals   | 0.000 |
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| Training of Research and Editorial Board members.  Establishment of Institutional Research Board.  Conduct research workshop for the teaching faculty  Organizing international seminar  0.000   | Institution of Editorial Board and train.                                 | 0.000 |
| Establishment of Institutional Research Board. 0.000  Conduct research workshop for the teaching faculty 0.000  Organizing international seminar 0.000   | Establishment of Research collaboration.                                  | 0.000 |
| Conduct research workshop for the teaching faculty  Organizing international seminar  0.000  | Training of Research and Editorial Board members.                         | 0.000 |
| Organizing international seminar 0.000   | Establishment of Institutional Research Board.                            | 0.000 |
|  | Conduct research workshop for the teaching faculty                        | 0.000 |
| Publication of scientific research conducted. 0.000  | Organizing international seminar  | 0.000 |
|  | Publication of scientific research conducted.                             | 0.000 |

| Carry out joint research on documentation of local healing practices 0.000 Conducting case studies on most common medical problems 0.000 Carrying out joint research on documentation of medicinal raw materials 0.000 Develop and offer short programs 0.000 Seek membership to international organizations 0.000 Conducting staff exchange programmes 0.000 Conducting student exchange programmes 0.000 Conducting student exchange programmes 0.000 Establish business management unit 0.000 Develop business plan 1.500 Establish institution to direct and guide business 0.000 Develop and offer short courses 0.000 Explore outsourcing of services (mess, photocopying, security, cleaning) 0.000 Coordination with other specialists and diagnostic service. 0.000 Introduction or strengthening of other specialized services. 3.000 Training of super or sub-specialties. 15.000 Set up of Cardiac ICU & Procurement of Cardiac ICU equipment 7.000 Procurement of CAPD equipment 5.000 Set up oncology unit 0.000 Operationalize additional beds 1.000 Training of doctors, nurses, technicians & other staffs (includes all departments & administration) Increase no of OPD chambers 2.500 Increase patient turnover 1.500 Reduce re-admission 0.000 Do follow up visits 0.000 Set up 6-bedded ICU 4.000 Procure ICU equipment 9.000 Strengthen ongoing CME training/workshop to the staffs (includes (high frequency) 4.000 Strengthen ongoing CME training/workshop to the staffs (second procure ICU equipment 9.000 Strengthen ongoing CME training/workshop to the staffs (second procure ICU equipment 9.000 Strengthen ongoing CME training/workshop to the staffs (second procure ICU equipment 9.000 Strengthen ongoing CME training/workshop to the staffs (second procure ICU equipment 9.000 Strengthen ongoing CME training/workshop to the staffs 1.000 Set up childhood disability center 3.000 Increase the number of inpatient beds 3.000 Increase the number of inpatient beds 3.000 |   |        |
|---|---|--------|
| Carry out joint research on documentation of local healing practices 0.000 Conducting case studies on most common medical problems 0.000 Carrying out joint research on documentation of medicinal raw materials 0.000 Develop and offer short programs 0.000 Seek membership to international organizations 0.000 Conducting staff exchange programmes 0.000 Conducting student exchange programmes 0.000 Conducting student exchange programmes 0.000 Establish business management unit 0.000 Develop business plan 1.500 Establish institution to direct and guide business 0.000 Develop and offer short courses 0.000 Explore outsourcing of services (mess, photocopying, security, cleaning) 0.000 Coordination with other specialists and diagnostic service. 0.000 Introduction or strengthening of other specialized services. 3.000 Training of super or sub-specialties. 15.000 Set up of Cardiac ICU & Procurement of Cardiac ICU equipment 7.000 Procurement of CAPD equipment 5.000 Set up oncology unit 0.000 Operationalize additional beds 1.000 Training of doctors, nurses, technicians & other staffs (includes all departments & administration) Increase no of OPD chambers 2.500 Increase patient turnover 1.500 Reduce re-admission 0.000 Do follow up visits 0.000 Set up 6-bedded ICU 4.000 Procure ICU equipment 9.000 Strengthen ongoing CME training/workshop to the staffs (includes (high frequency) 4.000 Strengthen ongoing CME training/workshop to the staffs (second procure ICU equipment 9.000 Strengthen ongoing CME training/workshop to the staffs (second procure ICU equipment 9.000 Strengthen ongoing CME training/workshop to the staffs (second procure ICU equipment 9.000 Strengthen ongoing CME training/workshop to the staffs (second procure ICU equipment 9.000 Strengthen ongoing CME training/workshop to the staffs 1.000 Set up childhood disability center 3.000 Increase the number of inpatient beds 3.000 Increase the number of inpatient beds 3.000 | Introduction of institute research award of the year  | 0.000  |
| Conducting case studies on most common medical problems  O.000 Carrying out joint research on documentation of medicinal raw materials  O.000 Develop and offer short programs  O.000 Seek membership to international organizations  O.000 Conducting staff exchange programmes  O.000 Conducting student exchange programmes  O.000 Establish business management unit  O.000 Develop business plan  I.500 Establish institution to direct and guide business  O.000 Develop and offer short courses  Explore outsourcing of services (mess, photocopying, security, cleaning)  O.000 Introduction or strengthening of other specialized services.  O.000 Introduction or strengthening of other specialized services.  Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  Procurement of CAPD equipment  Set up oncology unit  Operationalize additional beds  Training of doctors, nurses, technicians & other staffs (includes all departments & administration) Increase no of OPD chambers  Reduce re-admission  O.000 Procure ICU equipment  Procurement of LOPD equipment  Set up 6-bedded ICU  Procure ICU equipment  Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  Increase the number of inpatient beds  Increase the number of inpatient beds  Sound  Increase the number of inpatient beds  Increase the number of inpatient beds  | Integration of research achievement in annual performance evaluation                                | 0.000  |
| Carrying out joint research on documentation of medicinal raw materials  Develop and offer short programs  0.000  Seek membership to international organizations  0.000  Conducting staff exchange programmes  0.000  Establish business management unit  0.000  Establish business management unit  0.000  Establish institution to direct and guide business  0.000  Establish institution to direct and guide business  0.000  Explore outsourcing of services (mess, photocopying, security, cleaning)  0.000  Explore outsourcing of services (mess, photocopying, security, cleaning)  0.000  Coordination with other specialists and diagnostic services.  0.000  Introduction or strengthening of other specialized services.  15.000  Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  7.000  Procurement of CAPD equipment  5.000  Set up oncology unit  2.000  Operationalize additional beds  1.000  Training of doctors, nurses, technicians & other staffs (includes all departments & administration)  Increase no of OPD chambers  1.500  Reduce re-admission  0.000  Do follow up visits  0.000  Do follow up visits  0.000  Procure ICU equipment  Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  Institutionalize follow-up on high-risk infants  0.000  Set up childhood disability center  3.000  Increase the number of inpatient beds  3.000  Increase the number of inpatient beds  | Carry out joint research on documentation of local healing practices                                | 0.000  |
| Develop and offer short programs  Seek membership to international organizations  Conducting staff exchange programmes  0.000  Conducting student exchange programmes  0.000  Establish business management unit  0.000  Develop business plan  1.500  Establish institution to direct and guide business  0.000  Develop and offer short courses  0.000  Explore outsourcing of services (mess, photocopying, security, cleaning)  Coordination with other specialists and diagnostic service.  0.000  Introduction or strengthening of other specialized services.  3.000  Training of super or sub-specialites.  15.000  Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  7.000  Procurement of CAPD equipment  5.000  Operationalize additional beds  1.000  Training of doctors, nurses, technicians & other staffs (includes all departments & administration)  Increase patient turnover  Reduce re-admission  0.000  Procure ICU equipment  4.000  Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  Institutionalize follow-up on high-risk infants  Set up dedicated STI clinics  2.000  Increase the number of inpatient beds  3.000  Increase the number of inpatient beds  3.000  Increase the number of inpatient beds   | Conducting case studies on most common medical problems   | 0.000  |
| Seek membership to international organizations  O.000 Conducting staff exchange programmes  O.000 Establish business management unit  Develop business plan  1.500 Establish institution to direct and guide business  O.000 Develop and offer short courses  Explore outsourcing of services (mess, photocopying, security, cleaning)  Coordination with other specialists and diagnostic service.  O.000 Introduction or strengthening of other specialized services.  3.000 Training of super or sub-specialties.  Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  7.000 Procurement of CAPD equipment  Set up oncology unit  Querationalize additional beds  1.000 Training of doctors, nurses, technicians & other staffs (includes all departments & administration)  Increase no of OPD chambers  Increase patient turnover  Reduce re-admission  Do follow up visits  O.000 Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  Institutionalize follow-up on high-risk infants  Set up dedicated STI clinics  Explored Total STI clinics  Lood  Increase the number of inpatient beds  3.000  Increase the number of inpatient beds  3.000  Increase the number of inpatient beds  3.000  Increase the number of inpatient beds  | Carrying out joint research on documentation of medicinal raw materials                             | 0.000  |
| Conducting staff exchange programmes 0.000 Conducting student exchange programmes 0.000 Establish business management unit 0.000 Develop business plan 1.500 Establish institution to direct and guide business 0.000 Develop and offer short courses 0.000 Explore outsourcing of services (mess, photocopying, security, cleaning) 0.000 Coordination with other specialists and diagnostic service. 0.000 Introduction or strengthening of other specialized services. 3.000 Training of super or sub-specialties. 15.000 Set up of Cardiac ICU & Procurement of Cardiac ICU equipment 7.000 Procurement of CAPD equipment 5.000 Set up oncology unit 2.000 Operationalize additional beds 1.000 Training of doctors, nurses, technicians & other staffs (includes all departments & 5.000 administration) Increase no of OPD chambers 2.500 Increase patient turnover 1.500 Reduce re-admission 0.000 Do follow up visits 0.000 Set up 6-bedded ICU 4.000 Procure ICU equipment 4.000 Procurement of high-tech equipments like advanced ventilators (high frequency) 4.000 Strengthen ongoing CME training/workshop to the staffs 1.500 Institutionalize follow-up on high-risk infants 0.000 Set up childhood disability center 3.000 Increase the number of inpatient beds 3.000 Increase the number of inpatient beds 3.000  | Develop and offer short programs  | 0.000  |
| Conducting student exchange programmes  0.000 Establish business management unit  0.000 Develop business plan  1.500 Establish institution to direct and guide business  0.000 Develop and offer short courses  0.000 Explore outsourcing of services (mess, photocopying, security, cleaning)  0.000 Coordination with other specialists and diagnostic service.  0.000 Introduction or strengthening of other specialized services.  3.000 Training of super or sub-specialties.  15.000 Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  7.000 Procurement of CAPD equipment  5.000 Set up oncology unit  2.000 Operationalize additional beds  1.000 Training of doctors, nurses, technicians & other staffs (includes all departments & administration) Increase no of OPD chambers  1.500 Increase patient turnover  8.2500 Increase patient turnover  8.2500 Procure ICU equipment  9.0000 Set up 6-bedded ICU Procure ICU equipment  4.000 Procurement of high-tech equipments like advanced ventilators (high frequency) Strengthen ongoing CME training/workshop to the staffs Institutionalize follow-up on high-risk infants  0.000 Set up childhood disability center  3.000 Increase the number of inpatient beds  3.000 Increase the number of inpatient beds   | Seek membership to international organizations  | 0.000  |
| Establish business management unit  Develop business plan  1.500  Establish institution to direct and guide business  0.000  Develop and offer short courses  Explore outsourcing of services (mess, photocopying, security, cleaning)  Coordination with other specialists and diagnostic service.  Introduction or strengthening of other specialized services.  3.000  Training of super or sub-specialites.  5.000  Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  7.000  Procurement of CAPD equipment  5.000  Set up oncology unit  2.000  Operationalize additional beds  1.000  Training of doctors, nurses, technicians & other staffs (includes all departments & administration)  Increase no of OPD chambers  2.500  Increase patient turnover  8.5000  Reduce re-admission  0.000  Do follow up visits  0.000  Procure ICU equipment  4.000  Procure ICU equipment  4.000  Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  1.500  Set up childhood disability center  3.000  Set up dedicated STI clinics  2.000  Increase the number of inpatient beds  3.000  Increase the number of inpatient beds   | Conducting staff exchange programmes  | 0.000  |
| Develop business plan  Establish institution to direct and guide business  0.000  Develop and offer short courses  Explore outsourcing of services (mess, photocopying, security, cleaning)  Coordination with other specialists and diagnostic service.  0.000  Introduction or strengthening of other specialized services.  3.000  Training of super or sub-specialites.  Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  7.000  Procurement of CAPD equipment  5.000  Set up oncology unit  2.000  Operationalize additional beds  1.000  Training of doctors, nurses, technicians & other staffs (includes all departments & administration)  Increase no of OPD chambers  1.500  Reduce re-admission  0.000  Do follow up visits  0.000  Procure ICU equipment  4.000  Procure ICU equipment  Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  1.500  Set up childhood disability center  3.000  Set up dedicated STI clinics  2.000  Increase the number of inpatient beds  3.000  Increase the number of inpatient beds  | Conducting student exchange programmes  | 0.000  |
| Establish institution to direct and guide business 0.000  Develop and offer short courses 0.000  Explore outsourcing of services (mess, photocopying, security, cleaning) 0.000  Coordination with other specialists and diagnostic service. 0.000  Introduction or strengthening of other specialized services. 3.000  Training of super or sub-specialities. 15.000  Set up of Cardiac ICU & Procurement of Cardiac ICU equipment 7.000  Procurement of CAPD equipment 5.000  Set up oncology unit 2.000  Operationalize additional beds 1.000  Training of doctors, nurses, technicians & other staffs (includes all departments & 3.000  administration)  Increase no of OPD chambers 2.500  Increase patient turnover 1.500  Reduce re-admission 0.000  Do follow up visits 0.000  Set up 6-bedded ICU 4.000  Procure ICU equipment 4.000  Procurement of high-tech equipments like advanced ventilators (high frequency) 4.000  Strengthen ongoing CME training/workshop to the staffs 3.500  Institutionalize follow-up on high-risk infants 0.000  Set up childhood disability center 3.000  Increase the number of inpatient beds 3.000  | Establish business management unit  | 0.000  |
| Develop and offer short courses  Explore outsourcing of services (mess, photocopying, security, cleaning)  Coordination with other specialists and diagnostic service.  0.000  Introduction or strengthening of other specialized services.  3.000  Training of super or sub-specialites.  15.000  Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  7.000  Procurement of CAPD equipment  5.000  Set up oncology unit  2.000  Operationalize additional beds  1.000  Training of doctors, nurses, technicians & other staffs (includes all departments & administration)  Increase no of OPD chambers  2.500  Increase patient turnover  Reduce re-admission  0.000  Do follow up visits  0.000  Set up 6-bedded ICU  4.000  Procure ICU equipment  4.000  Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  Set up childhood disability center  3.000  Set up dedicated STI clinics  2.000  Increase the number of inpatient beds  3.000  | Develop business plan   | 1.500  |
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| Coordination with other specialists and diagnostic service.  Introduction or strengthening of other specialized services.  3.000 Training of super or sub-specialities.  15.000 Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  7.000 Procurement of CAPD equipment  5.000 Set up oncology unit  2.000 Operationalize additional beds  1.000 Training of doctors, nurses, technicians & other staffs (includes all departments & 5.000 administration) Increase no of OPD chambers  2.500 Increase patient turnover  8.2500 Reduce re-admission  0.000 Do follow up visits  0.000 Set up 6-bedded ICU  4.000 Procure ICU equipment  4.000 Procure ICU equipment  4.000 Strengthen ongoing CME training/workshop to the staffs Institutionalize follow-up on high-risk infants  0.000 Set up childhood disability center  3.000 Increase the number of inpatient beds  3.000   | Develop and offer short courses   | 0.000  |
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| Training of super or sub-specialties.  Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  7.000  Procurement of CAPD equipment  5.000  Set up oncology unit  2.000  Operationalize additional beds  1.000  Training of doctors, nurses, technicians & other staffs (includes all departments & administration)  Increase no of OPD chambers  2.500  Increase patient turnover  8.500  Reduce re-admission  0.000  Do follow up visits  0.000  Set up 6-bedded ICU  4.000  Procure ICU equipment  4.000  Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  1.500  Set up childhood disability center  3.000  Set up dedicated STI clinics  2.000  Increase the number of inpatient beds  3.000  | Coordination with other specialists and diagnostic service.   | 0.000  |
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| Procurement of CAPD equipment 5.000  Set up oncology unit 2.000  Operationalize additional beds 1.000  Training of doctors, nurses, technicians & other staffs (includes all departments & administration)  Increase no of OPD chambers 2.500  Increase patient turnover 1.500  Reduce re-admission 0.000  Do follow up visits 0.000  Set up 6-bedded ICU 4.000  Procure ICU equipment 4.000  Procurement of high-tech equipments like advanced ventilators (high frequency) 4.000  Strengthen ongoing CME training/workshop to the staffs 3.500  Institutionalize follow-up on high-risk infants 0.000  Set up dedicated STI clinics 2.000  Increase the number of inpatient beds 3.000  | Training of super or sub-specialties.   | 15.000 |
| Set up oncology unit  Operationalize additional beds  1.000  Training of doctors, nurses, technicians & other staffs (includes all departments & administration)  Increase no of OPD chambers  Increase patient turnover  Reduce re-admission  Do follow up visits  Set up 6-bedded ICU  Procure ICU equipment  Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  Institutionalize follow-up on high-risk infants  Set up dedicated STI clinics  Set up dedicated STI clinics  1.000  2.000  2.000  3.000  3.000  3.000  3.000  3.000   | Set up of Cardiac ICU & Procurement of Cardiac ICU equipment  | 7.000  |
| Operationalize additional beds 1.000  Training of doctors, nurses, technicians & other staffs (includes all departments & administration)  Increase no of OPD chambers 2.500  Increase patient turnover 1.500  Reduce re-admission 0.000  Do follow up visits 0.000  Set up 6-bedded ICU 4.000  Procure ICU equipment 4.000  Procurement of high-tech equipments like advanced ventilators (high frequency) 4.000  Strengthen ongoing CME training/workshop to the staffs 3.500  Institutionalize follow-up on high-risk infants 0.000  Set up childhood disability center 3.000  Set up dedicated STI clinics 2.000  Increase the number of inpatient beds 3.000   | Procurement of CAPD equipment   | 5.000  |
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| administration)  Increase no of OPD chambers 2.500  Increase patient turnover 1.500  Reduce re-admission 0.000  Do follow up visits 0.000  Set up 6-bedded ICU 4.000  Procure ICU equipment 4.000  Procurement of high-tech equipments like advanced ventilators (high frequency) 4.000  Strengthen ongoing CME training/workshop to the staffs 3.500  Institutionalize follow-up on high-risk infants 0.000  Set up childhood disability center 3.000  Set up dedicated STI clinics 2.000  Increase the number of inpatient beds 3.000   | Operationalize additional beds  | 1.000  |
| Increase patient turnover 1.500  Reduce re-admission 0.000  Do follow up visits 0.000  Set up 6-bedded ICU 4.000  Procure ICU equipment 4.000  Procurement of high-tech equipments like advanced ventilators (high frequency) 4.000  Strengthen ongoing CME training/workshop to the staffs 3.500  Institutionalize follow-up on high-risk infants 0.000  Set up childhood disability center 3.000  Set up dedicated STI clinics 2.000  Increase the number of inpatient beds 3.000   | Training of doctors, nurses, technicians & other staffs (includes all departments & administration) | 5.000  |
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| Do follow up visits  Set up 6-bedded ICU  Procure ICU equipment  4.000  Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  1.500  Institutionalize follow-up on high-risk infants  2.000  Set up childhood disability center  3.000  Set up dedicated STI clinics  2.000  Increase the number of inpatient beds  3.000   | Increase patient turnover   | 1.500  |
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| Procure ICU equipment 4.000  Procurement of high-tech equipments like advanced ventilators (high frequency) 4.000  Strengthen ongoing CME training/workshop to the staffs 3.500  Institutionalize follow-up on high-risk infants 0.000  Set up childhood disability center 3.000  Set up dedicated STI clinics 2.000  Increase the number of inpatient beds 3.000   | Do follow up visits   | 0.000  |
| Procurement of high-tech equipments like advanced ventilators (high frequency)  Strengthen ongoing CME training/workshop to the staffs  3.500 Institutionalize follow-up on high-risk infants  0.000 Set up childhood disability center  3.000 Set up dedicated STI clinics  2.000 Increase the number of inpatient beds  3.000   | Set up 6-bedded ICU   | 4.000  |
| Strengthen ongoing CME training/workshop to the staffs  3.500 Institutionalize follow-up on high-risk infants  0.000 Set up childhood disability center  3.000 Set up dedicated STI clinics  2.000 Increase the number of inpatient beds  3.500   | Procure ICU equipment   | 4.000  |
| Institutionalize follow-up on high-risk infants  Set up childhood disability center  3.000 Set up dedicated STI clinics  2.000 Increase the number of inpatient beds  3.000   | Procurement of high-tech equipments like advanced ventilators (high frequency)                      | 4.000  |
| Set up childhood disability center3.000Set up dedicated STI clinics2.000Increase the number of inpatient beds3.000  | Strengthen ongoing CME training/workshop to the staffs  | 3.500  |
| Set up dedicated STI clinics 2.000 Increase the number of inpatient beds 3.000  | Institutionalize follow-up on high-risk infants   | 0.000  |
| Increase the number of inpatient beds 3.000   | Set up childhood disability center  | 3.000  |
| ·   | Set up dedicated STI clinics  | 2.000  |
| Procurement of ECT machine 5.000  | Increase the number of inpatient beds   | 3.000  |
|   | Procurement of ECT machine  | 5.000  |

| Procurement of ECG machine   | 5.000 |
|--|-------|
| Increase endoscopy clinic days   | 0.000 |
| Increase cancer clinics  | 3.000 |
| Increase surgical operation days   | 0.000 |
| Set up dedicated burns ward, neurosurgical unit, urology unit, pediatric surgery unit,                       | 4.000 |
| Revitalize PaP smear and health education activities   | 0.000 |
| Strengthen Colposcopy and LEEP surgery services  | 3.500 |
| Strengthen ANC services with focus on early identification and proper management of on high-risk pregnancies | 0.000 |
| Introduce infertility clinics  | 2.000 |
| Strengthening of access surgical services in gynecology.   | 0.000 |
| Re-scheduling and increase of routine operation days.  | 0.000 |
| Allocate more OT days for orthopedics  | 0.000 |
| Strengthen spine and arthroscopic surgical services  | 0.000 |
| Introduce hip and knee replacement surgical facilities   | 5.000 |
| Set up new ophthalmology services  | 2.000 |
| Step up PMTCT services   | 2.000 |
| Initiate breast feeding clinics  | 0.000 |
| Expand immunization activities through outreach clinics and target unreached population                      | 0.000 |
| Strengthen Colposcopy and LEEP surgery services  | 3.500 |
| Strengthen ANC services with focus on early identification and proper management of on high-risk pregnancies | 0.000 |
| Introduce infertility clinics  | 2.000 |
| Strengthening of access surgical services in gynecology.   | 0.000 |
| Re-scheduling and increase of routine operation days.  | 0.000 |
| Allocate more OT days for orthopedics  | 0.000 |
| Strengthen spine and arthroscopic surgical services  | 0.000 |
| Introduce hip and knee replacement surgical facilities   | 5.000 |
| Set up new ophthalmology services  | 2.000 |
| Step up PMTCT services   | 2.000 |
| Initiate breast feeding clinics  | 0.000 |
| Expand immunization activities through outreach clinics and target unreached population                      | 0.000 |
| Create awareness of AEFI in the community and health workers   | 0.000 |
| Make the maternity services more women friendly by improving environment, staffs attitude, and care          | 0.000 |
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| Set up Adolescent friendly service center at JDWNRH  | 0.000 |
|--|-------|
| Set up counseling facilities   | 2.000 |
| Increase no of pharmacy counters at the OPD  | 0.000 |
| Improve inpatient and emergency pharmacy services  | 0.000 |
| Create separate departments of pathology, microbiology, and biochemistry                                       | 3.500 |
| Create a separate blood transfusion services department  | 2.500 |
| Mycology and Anaerobic culture facilities established in JDWNRH  | 3.000 |
| Viral load testing established in NRRH and if possible in the RRHs.  | 3.000 |
| Immuno-florescence facility set up for extended biopsy services in like Nephrology                             | 3.000 |
| Newer essential laboratory tests introduced  | 3.000 |
| TB culture facilities established JDWNRH   | 3.500 |
| National laboratory policy, standards, guidelines and SOPs developed and implemented                           | 0.000 |
| Internal and external laboratory quality systems in all RHs and general hospitals established and strengthened | 0.000 |
| Development of Emergency Services SoP and guidelines   | 0.000 |
| Strengthen trauma registry   | 0.000 |
| Procurement of equipment   | 3.500 |
| Introduce additional services  | 1.700 |
| Set up services for rehabilitation and counseling services   | 3.000 |
| Set up pediatric ICU   | 3.500 |
| Set up surgical ICU  | 3.500 |
| Set up cardiac ICU   | 3.500 |
| Set up Medical ICU   | 3.500 |
| Set up surgical step down ICU  | 3.500 |
| Improve audiological unit  | 2.000 |
| Procurement of additional equipment for interventional services  | 3.500 |
| Set up autopsy facilities  | 3.500 |
| Set up basic toxicological testing facilities  | 3.000 |
| Set up narcotics drugs screening & testing facilities  | 3.500 |
| Automation of forensic database management   | 4.000 |
| Organizational development and creation of additional sections/units/department                                | 2.000 |
| Develop Policy documents, ToR, SoP, guidelines and other documents   | 0.000 |
| Establish TM library   | 2.500 |
| Procure research equipments and reagents   | 3.500 |
| Conduct research activities  | 2.000 |
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| Conduct survey for herbs garden  | 0.000   |
|--|---------|
| Execute herbal gardening tasks   | 0.000   |
| Finalized architectural/designing works  | 3.000   |
| Construction of staff quarter for JDW  | 70.000  |
| Major renovation of OT at JDW NRH  | 2.000   |
| Procurement of Co2 Fire Extinguishers  | 0.500   |
| Detail designing, drawing & preparing tender documents for the infrastructure development              | 30.000  |
| Refurbishment of old Operation Threatre as Pathology Department  | 1.000   |
| Initiate site development, internal approach roads, water & power supplies                             | 3.000   |
| Procurement of reagents & other consumables for the pre-clinical, para-clinical & clinical departments | 5.000   |
| Construction of Academic Block (Spillover RIHS)  | 5.000   |
| Construction of Hostel & Provost quarter (spillover-RIHS)  | 2.000   |
| Construction of sub-station (RIHS)   | 2.000   |
| Installation of Gearless MRL Elevator system (RIHS)  | 3.000   |
| Wireless Wi-Fi networking (RIHS)   | 1.656   |
| Construction of water harvesting tank (RIHS)   | 0.767   |
| Compund Lighting system (RIHS)   | 0.259   |
| Compund fencing & grilling system (RIHS)   | 1.000   |
| Kitchen equipment for dining hall (RIHS)   | 1.115   |
| Procurement of furniture & equipment (RIHS)  | 0.878   |
| Additional work at academic block (NITM)   | 5.000   |
| Additional work at Hostel (NITM)   | 0.834   |
| Kitchenette for dinning hall (NITM)  | 0.986   |
| Procurement of vehicles (NITM)   | 0.000   |
| Purchase of OT equipments  | 100.000 |
| HRD UMSB   | 80.000  |
| Total:   | 823.695 |

# EMPLOYMENT AND HUMAN RESOURCE DEVELOPMENT

| Au Name: MINISTRY OF LABOUR & HUMAN RESOURCES             | Department: DEPARTMENT OF EMPLOYMENT |
|---|--------------------------------------|
| Program Name: Promotion of full and productive employment | Phase: Approved                      |

### Justification:

Access to decent and gainful employment is necessary to enable individuals to lead socially productive life and to achieve economic stability. It is estimated that out of 140,000 job seekers who will be entering the labour market during the plan period, about 88,000 will be the youth. Therefore, this program will focus mainly on the advocacy and counseling, school to work transition activities, promoting youth entrepreneurship, strengthening employment services and providing timely and reliable labour market information to enable effective planning and informed decision making in training and employment opportunities. This program will build synergies and linkages among various stakeholders in adopting multi-pronged and holistic approaches to employment creation and promotion strategies.

### Strategy:

- i. Restructuring the school to work transition program for the youth and school leavers to provide necessary skills, work attitude and on the job experience to enhance their employability
- ii. Encouraging self-employment for youth through entrepreneurship development program
- Revamping of ploughing back of youth to rural areas in collaborative program with the MoAF and MoEA to provide better sources of employment and livelihood
- iv. Strengthening the employment service centres both in the regions and head quarter for timely and effective information on employment opportunities. This includes revamping of job portal system to improve the delivery of employment facilitation services as well as periodic market surveys and studies to provide up to date and relevant information on employment matters.
- v. Developing innovative strategies for creating awareness on career and employment opportunities in collaboration with other relevant stakeholders for students, school leavers and parents.
- vi. 7. Implementing employment facilitation and promotion in close consultation and collaboration with stakeholders on PPP model.

# Risk Assessment:

- i. Employment being cross-sectoral in nature, the success of this programme will depend on the commitment and cooperation of various stakeholders in the Government as well as in the private sector.
- ii. The availability of jobs depends on a stable and sound economic growth to boost employment and investment opportunities.
- iii. Availability of budget and manpower to implement the plans effectively.
- iv. 4. Willingness of the youth to take up employment and training opportunities.

### **Beneficiary:**

Job Seekers and the public at large.

# **Program and SKRA Linkages**

| NKRA            | SKRA             | SKRA KPI   |
|-----------------|------------------|--|
| Full Employment | Full employment  | Youth unemployment   |
|                 | achieved (97.5%) | % of employee with education level of higher secondary and above   |
|                 |                  | % of job seeking graduates employeed within 6 months of graduation |
|                 |                  | % of regular paid employee   |
|                 |                  | Chronic/long term unemployeement                                   |
|                 |                  | Female youth unemployment  |
|                 |                  | Rural unemployment maintained                                      |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                          | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
|  | Unemployment rate(%)  | 2.1       | 2.5          |
| Outcome 001 - Maintain                           | Youth unemployment rate(%)  | 7.3       | 2.5          |
| Outcome 001 : Maintain full employment           | Female youth unemployment rate(%)                                 | 7.2       | 5            |
|  | % of job seeking graduates employed within 6 months of graduation | NA        | 90           |
|  | Chronic unemployment reduced                                      | NA        |              |
| Results Levels (Output)                          | Indicators  | Baseline  | Plan Targets |
| Output 001:Youth undertake entrepreneurship as a | No. of youth trained in entrepreneurship (BEC, CEC and AEC)       | 621       | 3000         |
| preferred career option                          | No. of new business start-ups                                     | <400      | >600         |
|  | No of Entrepreneurship course integrated in all TTIs & IZCs       | 0         | 8            |
|  | No of National Appreciation award system instituted               | 0         | 1            |
|  | No of National Entrepreneurship<br>Strategy developed             | 0         | 1            |

| Output 002:Reliable and timely labour market | No. of Labour Force survey reports published  | 5                  | 10                 |
|--|---|--------------------|--------------------|
| information                                  | No. of Establishment Census reports published   | 3                  | 5                  |
|  | No. of Labour Market Study reports published  | 0                  | 2                  |
|  | No. of labour market guidebooks published   | 2                  | 10                 |
| Output 003:Enhanced employability of         | % of jobseekers employed in various agencies  | 35                 | 80                 |
| registered jobseekers                        | % of Job seekers placed directly by<br>Employment<br>Service Centres (ESC)                    | 20                 | 35                 |
|  | % of youth placed through<br>Apprenticeship Training<br>Program (ATP)                         | 85                 | 90                 |
|  | % of youth placed through Pre-<br>employment<br>Engagement Program (PEEP)                     | 20                 | 30                 |
|  | % of youth placed through University<br>Graduate<br>Internship Program (UGIP)                 | 0                  | 20                 |
|  | No. of educated youth engaged in home based tourism activities in rural areas                 | NA                 | 615                |
|  | Implementation of National<br>Employment Policy (NEP)   | NEP<br>developed   | NEP<br>implemented |
| Output 004:Enhanced                          | No. of National Graduate Orientation<br>Program (NGOP) conducted                              | 5                  | 5                  |
| employment awareness and advocacy            | No. of TVET Orientation Programme conducted   | 0                  | 5                  |
|  | No. of Job Fairs conducted  | 5                  | 20                 |
|  | Career/Employment Counseling in all<br>HSS & MSS conducted (Including Out<br>of School Youth) | All MSS and<br>HSS | All MSS and<br>HSS |
|  |   |                    |                    |

| Output 005:School                     | No. of graduates undergone UGIP                                   | NA   | 3000 |
|---------------------------------------|---|------|------|
| to Work Transition Programme enhanced | No. of youth undergone<br>Apprenticeship Programme                | 437  | 2000 |
|                                       | No. of youth undergone Pre-<br>Employment Engagement<br>Programme | 3000 | 3000 |
|                                       | No. of students undergone National<br>Social Service Programme    | NA   | 5000 |
|                                       | No. of students undertaking youth entrepreneurship Camps          | NA   | 500  |

Table 2: Programme Activities
Table 3: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Conduct Basic Entrepreneurship Course  | 18.000  |
| Conduct Comprehensive Entrepreneurship Course  | 23.000  |
| Conduct advance entrepreneurship course  |         |
| Support new businesses including establishment of Business Incubation Centers in TTIs and IZCs   | 4.000   |
| Integrate entrepreneurship courses in TVET   | 0.500   |
| Institute National appreciation award for successful entrepreneurs on world entrepreneurship day | 0.000   |
| Implementing youth entrepreneurs exchange program  | 0.000   |
| Develop and implement entrepreneurship strategy  | 1.000   |
| Conduct Bi-Annual Labour Force Surveys.  | 2.500   |
| Conduct Establishment Census/Job Prospecting Survey  | 3.000   |
| Conduct specific labour market studies.  | 0.250   |
| Publish labour market guidebook for classes X, XII & the university graduates                    | 0.500   |
| Analyze and publish the comprehensive labour statistics  | 0.000   |
| Conduct the annual labour market forum   | 1.000   |
| Web-based Bhutan Labour Market Information System strengthened                                   | 0.250   |
| Placement, referral and recruitment  | 0.250   |
| Plough-back and retain youth in rural areas  | 5.000   |
| Youth Employment Fund  | 8.000   |

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| Sector Skills Council                               | 0.000   |
|---|---------|
| Improving the attitude and self-esteem of the youth |         |
| Tracer study of jobseekers                          |         |
| Conduct National Graduates Orientation              |         |
| Conduct Orientation Course for TVET graduates       | 0.300   |
| Conduct National and Regional Job Fairs             | 3.000   |
| Counseling and advocacy in HSS & MSS                | 0.250   |
| Procurement of Vehicle                              | 1.450   |
| University Graduate Internship Programme            | 29.000  |
| Apprenticeship Programme                            | 40.000  |
| Pre-Employment Engagement Programme                 | 25.000  |
| Socially Useful and Productive Work program         | 1.000   |
| Youth entrepreneurship program (camps)              | 1.000   |
| Construction of One Stop Service Centers in Thimphu | 0.000   |
| Total:  | 183.750 |

Au Name: MINISTRY OF LABOUR & HUMAN De

**Department: DEPARTMENT OF LABOUR** 

**RESOURCES** 

Programme Name: Promotion of decent working conditions and work environment

Phase: Approved

### Justification:

This programme aims to provide decent and happy working environment in the private sector through effective enforcement of the Act and Regulations governing working conditions and OHS in workplaces. As an integral part of the grievances settlement mechanism, Labour Tribunal will be established to offer quick, informal and inexpensive way of settling disputes arising out of work or workplaces.

This programme will also address delivery of prompt and efficient public services pertaining to the foreign workers recruitment and labour inspection services through the Labour Net, Labour Inspection Reporting Systems and decentralization of foreign worker approval. Private sector will be made attractive by facilitating the establishment of retirement benefits, provident fund/pension schemes, disability insurance and insurance for employees with disability and redundant employees. Foreign workers fee system will be introduced to regulate and streamline recruitment of foreign workers in the country.

### Strategy:

- i. Enforcement of Labour and Employment Act and its regulations through awareness and advocacy, development of guidelines and procedures and periodic labour inspection services.
- Instituting a Social Protection System by developing national social protection policy and reviewing of the national minimum wage and introducing retirement benefits and other social security schemes for the national work force.
- iii. Introducing insurance scheme for workers who have been disabled and insurance for workers in between jobs (redundancy).
- iv. Augmenting the administration of foreign workers by improving the foreign workers recruitment procedures and introducing foreign workers fee system.
- v. Strengthening the capacity of regional employment and labour offices to effectively deliver the services related to labour administration.

## Risk Assessment:

- i. Labour market is dependent on the economic direction of the country which in turn decides overall need of workers in the country???.
- Manpower and budget constraint in implementing the programme could be a potential risk.
- iii. There could be also lack of cooperation from employers and employees in implementing and improving the policies and regulations.

### Beneficiary:

Employees, foreign workers, employers in the public and private sector.

# **Programme and SKRA Linkages**

| NKRA                             | SKRA   | SKRA KPI  |
|----------------------------------|--|---|
| Improved public service delivery | Enhance effectiveness and efficiency in delivery of public service | Foreign Labour management service TAT                   |
| Full Employment                  | Full employment achieved (97.5%)                                   | Youth unemployment                                      |
|                                  |  | Improved working conditions                             |
| Food secure and sustained        | Working environment in private sector improved                     | Social protection for private sector employees promoted |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
| Outcome 001 : Enhanced   | % of employment in Pvt. sector  | 22.7      | 30           |
| employment in private sector   | Ratio of foreign workers to local worker  | 1:6       | 1:8          |
| Results Level (Output)   | Indicators  | Baselines | Plan Targets |
|  | No. of workplaces inspected   | 2827      | 5000         |
| Output 001:Improved working condition                                      | No. of Internal Service Rules endorsed  | 168       | 350          |
|  | No. of enterprises complying with the Labour and Employment Act 2007                | 1822      | 3116         |
| Output 002:Adopt safety  | % of workplace accidents  | 1.4       | 1            |
| culture at workplace   | No. of enterprise with OHS Committee  | NA        | 20           |
| Output 003:Labour Dispute prevention and settlement mechanism strengthened | % of enterprises with workplace grievance procedure                                 | NA        | 25           |
|  | % of disputes resolved  | 76        | 100          |
|  | No. of Workers' Association formed  | NA        | 20           |
|  | Social Protection Policy developed  | NA        | 1            |
| Output 004:Social  | % of enterprises with social protection scheme                                      | NA        | 45           |
| protection for private   | % of workers with disability insurance  | NA        | 30           |
| sector employees<br>enhanced   | % of workers in between jobs with insurance   | NA        | 30           |
|  | % of population above 70 years who are below poverty line receive old age insurance | NA        | 100          |
| Output 005:Foreign workers administration in the country strengthened      | No. of foreign workers within government ceiling                                    | 53292     | 45000        |

Table 3: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Awareness and advocacy on the Labour and Employment Act                            | 2.000   |
| Bhutan's accession and participation in the ILO meetings and conference            | 1.200   |
| Enforcement and implementation of Labour and Employment Act 2007                   | 9.700   |
| Revision of National OHS Policy  | 1.000   |
| Introduce systematic data base system for OHS                                      | 1.000   |
| Capacity building of Stakeholders on OHS   | 6.000   |
| Development of strategies, guidelines and procedures                               | 1.000   |
| Enforcement of OHS regulations and standards                                       | 2.500   |
| Mainstreaming OHS in Technical Training Institutes and other vocational institutes | 3.800   |
| Prepare guidelines for workplace grievance procedures                              | 1.000   |
| Capacity building on workplace grievances and Alternative Dispute Resolution (ADR) | 1.000   |
| Establishment of Labour tribunal   | 1.000   |
| Facilitate in formation of Workers' Associations.                                  | 1.500   |
| Capacity building on ADR and industrial relations                                  | 0.000   |
| Develop Social Protection Policy   | 1.000   |
| Develop National Pension Policy  | 110.000 |
| Revision of National Minimum Wage Rate and wage rates for national workforce       | 1.000   |
| Fixation of MWR for skilled workers  | 0.000   |
| Centralized automated fund for PF and gratuity introduced                          | 4.000   |
| Implement retirement scheme for national workforce                                 | 2.000   |
| Introduce insurance for disabled workers and workers in between jobs               | 1.700   |
| Recruit foreign workers where Bhutanese are not available                          | 0.000   |
| Introduce foreign workers fee system   | 2.000   |
| Strengthen foreign workers recruitment procedure                                   | 1.500   |
| Total:   | 155.900 |

Au Name: MINISTRY OF LABOUR & HUMAN RESOURCES

Program Name: Improving the quality of skilled workers

Department: DEPARTMENT OF OCCUPATIONAL STANDARDS

Phase: Approved

| Justification:      | Quality of skilled workers is essential for the growth and productivity of the economy. The quality of workers has to be enhanced through appropriate skills training in the technical institutes, where training standards meet the expectations of the labour market demand as well registration and accreditation standards. This programme aims to improve the quality, relevance and competitiveness of TVET graduates and skilled workers in the country in line with industry requirement. To achieve these outcomes, the Bhutan Vocational Qualifications Framework and Quality Assurance System must be implemented. The skill needs of the industries will be captured through the development of National Competency Standards based on which the TVET training programmes will aligned and strengthened, thereby enhancing the quality and relevance of TVET delivery. |
|---------------------|--|
| Strategy:           | <ul> <li>i. The BVQF will be implemented in close consultation and involvement of relevant stakeholders. Similarly, National Competency Standards and Assessment Resources will be developed and Competency Based Assessments conducted in line with the BVQF by involving field experts from the industries and training providers.</li> <li>ii. The QAS will be strengthened to ensure that TVET providers meets the quality standards required to deliver quality TVET programmes. All the training providers will be registered, monitored and graded based on compliance to the Registration Regulation 2010. Accreditation of training programmes will be implemented to ensure that the training programmes meet the standards set in the Accreditation guidelines. The accredited TVET programmes will be eligible for the National Certification.</li> </ul>              |
| Risk<br>Assessment: | i. Lack of active participation of stakeholders will impact the overall implementation of BVQF and QAS     ii. Lack of budgetary and human resources especially in the TVET institutes will affect the quality of the work   |
| Beneficiary:        | Students of technical education and Potential Employers  |

| NKRA                                | SKRA  | SKRA KPI  |
|-------------------------------------|---|---|
| Poverty + reduced/<br>MDG+ achieved | Quality and Relevance Competency based TVET curricula based on NOSS |   |
|                                     |   | performance of the instructors                          |
|                                     |   | Ratio to local worker to foreign worker                 |
|                                     |   | TVET graduates employed in four months                  |
|                                     |   | Improved working conditions                             |
| Employment                          | Working environment in private sector improved                      | Private Sector employment                               |
|                                     |   | Social protection for private sector employees promoted |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines           | Plan Targets |
|--|--|---------------------|--------------|
| Outcome 001 : Quality  | % of TTI/IZC graduates certified through BVQF  | 15                  | 100          |
| and relevance of TVET graduates and skilled                    | No. of skilled workers certified through RPL   | 136                 | 1500         |
| workers improved   | % of employers satisfied with the competence of TTI/IZC graduates                                  | NA                  | 75           |
| Results Levels (Output)  | Indicators   | Baseline            | Plan Targets |
|  | No of National Competency Standards (NCS) developed  | 41 (in 10th<br>FYP) | 81           |
|  | No of existing NCS reviewed and revised  | 0                   | 20           |
| Output 001:TVET  | No of Assessment Resources developed and revised in priority occupations                           | 5                   | 30           |
| qualifications awarded   | No of Assessments Centers established  | 0                   | 8            |
| through Bhutan<br>Vocational Qualification<br>Framework (BVQF) | No of skilled workers assessed and certified (Foreign workers 1000 & national skilled workers 500) | 0                   | 1500         |
|  | No of Skills Competitions conducted and publicity activities implemented                           | 7                   | 5            |
|  | No of National Technical Innovation competition organized  | 0                   | 3            |

| Output 002:Ouglity of  | % of Courses in TTIs and IZCs accredited                 | 25  | 100 |
|--|--|-----|-----|
| Output 002:Quality of<br>TVET improved through<br>implementation of<br>Quality Assurance<br>System (QAS) | % of Training providers registered                       | 100 | 100 |
|  | % of Courses in private training providers accredited    | 0   | 20  |
|  | % of Trainers registered                                 | 5   | 100 |
|  | % of Assessment centers accredited                       | 0   | 100 |
|  | % of Assessors and accreditors registered and accredited | 0   | 100 |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Development of NCS in priority occupations                                      | 8.000   |
| Development of Assessment Resources, Training of Assessors                      | 22.000  |
| Establishment of Assessment Centers   | 2.000   |
| Assessessment and certification of Foreign Workers in Construction Sector       | 2.000   |
| Coordinate and conduct Skills Competition and implementation of publicity tools | 15.000  |
| Organize National Technical Innovation competition                              | 3.000   |
| Accreditation of courses in TTIs and IZCs                                       | 6.000   |
| Registration of Training Providers  | 5.300   |
| Accreditation of Assessment Centers   | 1.000   |
| Accreditation of assessors and accreditors                                      | 0.100   |
| Registration of trainers  | 0.100   |
| Accreditation of courses  | 0.500   |
| Total:  | 65.000  |

Au Name: MINISTRY OF LABOUR & HUMAN RESOURCES

Department: DEPARTMENT OF HUMAN RESOURCES

**Program Name: National HRD programme** 

Phase: Approved

#### Justification:

The shortage of skilled and qualified human resources is a continuing challenge the country faces. Investments in building and strengthening necessary human capital at various levels across sectors are crucial. The National HRD policy has been developed with the objective to align the overall HRD plans and policies of different sectors. Similarly, national HRD road map is expected to guide the overall development of human resources in the country in consistent with the economic growth and long-term development goals. This in turn is expected to steer socio-economic development plans and programs and enhance overall productivity in the economy.

Although the private and corporate sector is considered an engine of socioeconomic development, the private sector in particular is constrained with qualified and adequate manpower. This program will continue to implement need based HRD programs and services that will generate growth and employment in the sector. Furthermore, this program will support the private sector in carrying out its own HRD planning and implementation.

#### Strategy:

- Strengthen the management of HRD portfolio for improved planning, coordinating, implementing and monitoring of the National HRD Policy and master plan.
- ii. Developing and implementing the national HRD master plan in particular for the private and corporate sector. This will provide the strategic overview and coherence in planning and implementing HRD. Furthermore, the Master plan will be continuously monitored and reviewed to ensure that the activities are relevant to changing socio-economic scenarios.
- Publishing national HRD advisory series on periodic basis to guide and streamline overall HR planning, investment and development for the short and medium term.
- Continue to diversify and strengthen the TVET training programs to provide relevant vocational and technical skills and knowledge to youth entering the job market.

### Risk Assessment:

- i. Inadequate human resources being provided to the Department to implement the National HRD Policy. This will greatly affect the efficacy of its plans.
- ii. Inadequate financial resources being provided for timely and effective implementation.
- iii. Lack of support from HRD implementing agencies, especially the private sector to invest in HR for their staff.
- iv. The development of the comprehensive and coherent HRD master plan can be jeopardized if the co-operation of key stakeholders in the HR sector is not forthcoming.
- v. Similarly, there is also the risk that potential trainees may not be willing to participate in the trainings.

#### Beneficiary:

Potential job seekers, employers and the Employees

| NKRA   | SKRA                                   | SKRA KPI   |
|--|--|--|
|  | Full employment achieved (97.5%)       | Youth unemployment   |
|  |  | % of job seeking graduates employed within 6 months of graduation                |
|  |  | Chronic/long term unemployment   |
| Full Employment                                |  | Female youth unemployment  |
|  | Quality and Relevance of TVET improved | Competency based TVET curricula developed based on National Competency Standards |
|  |  | performance of the instructors   |
|  |  | Ratio of foreign workers to local workers  |
|  |  | TVET graduates employed in four months   |
| Working environment in private sector improved |  | Private Sector employment  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators                                       | Baselines | Plan Targets |
|--|--|-----------|--------------|
| Outcome 001 :  | Full employment rate (%)                         | 97.9      | 97.5         |
| Strengthened efficient   | Labour force participation rate (%)              | 62        | 65           |
| and effective National<br>Human Resources<br>development and<br>management | Ratio of foreign worker to national labour force | 1:6       | 1:8          |
|  | Decrease in Foreign Workers                      | 54,000    | 45000        |
| Outcome 002 : TVET   | Youth unemployment rate (%)                      | 7.3       | 2.5          |
| programmes diversified and strengthened                                    | Female youth unemployment rate (%)               | 7.2       | 2.5          |
|  | Subscription to TVET programmes(%)               | 65        | 70           |

| Results Levels (Output)                      | Indicators  | Baseline | Plan Targets |
|--|---|----------|--------------|
| Output 001:Enhanced synergy of HRD plans and | % of Key HR agencies coordinating with MoLHR for HRD planning | 15       | 80           |
| policies across all HRD agencies             | % of Tertiary graduates employed in 6 months                  | NA       | TBD          |
|  | % of TVET graduates employed in 4 months                      | 60       | 90           |

| Output 002:Developed relevant HR supply in the critical sectors | No. of students trained through formal programmes (TTIs & IZCs)        | 2640 | 7142 |
|---|--|------|------|
|   | No. of students trained through alternate modes (ATP, STP)             | 4126 | 7410 |
| Output 003:Enhanced   | No. of in-service trained in short term                                | 842  | 1300 |
| capacity of the workforce engaged in the critical sectors       | No. of in-service trained in long term                                 | 84   | 200  |
| Output 004: TVET  | No. of female friendly courses   | 6    | 11   |
| Programs diversified  | % of female enrollment in formal training                              | 39.7 | 50   |
|   | No of new courses introduced annually                                  | 0    | 6    |
| Output 005:Support<br>services for TVET<br>strengthened         | % of certified trainers in TTIs & IZCs,                                | 80   | 100  |
|   | % of certified trainers in Private training Institutes                 | >10  | 60   |
|   | No. of new curricula developed<br>b) Revised curricula                 | NA   | 30   |
|   | No of curricula revised  | NA   | 10   |
|   | Satisfaction rating of TTIs & IZC by trainees(%)                       | NA   | 60   |
|   | No. of employers/ industries partnering with TVET provider             | NA   | 50   |
| Output 006:Quality of TVET Programs strengthened                | % of TVET graduates employed in 4 months                               | NA   | 90   |
|   | No. of courses accredited  | 6    | 30   |
|   | % of trainers with outstanding performance ratings as per the M&E form | NA   | 90   |
|   | Institute rating as per DOS  | C/B  | А    |
|   | % of employers satisfied with TVET graduates performance at work       | NA   | 100  |

Table 3: Programme Plan Outlay Summary

| Programme Activities  | Capital |
|---|---------|
| Develop HRD Projections and Plans   | 59.250  |
| Review and develop HR Policies and regulations  | 9.650   |
| Carryout HRD advocacy, coordination and partnership   | 21.000  |
| Enhance capacity of HRD agencies/stakeholders in workforce planning and development                                 | 13.000  |
| Implement HRD programmes for pre-service in the critical sectors as per the Masterplan through STP                  | 250.000 |
| Implement long-term HRD programmes for the in-service workforce   | 11.000  |
| Implement short-term HRD programmes for the in-service workforce  | 102.100 |
| Implement training programmes   | 0.000   |
| Review and streamline ATP system and guideline  | 5.000   |
| Introduce at least 5 new courses that are geared towards encouraging female enrolment                               | 1.000   |
| Introduce at least 3 new courses every year that take into consideration local industry and community needs         | 1.000   |
| Introduction of E-based training programme  | 0.100   |
| Introduction of entrepreneurship modules in TTIs and IZCs   | 0.000   |
| Introduce higher level courses  | 5.000   |
| Strengthen informal and non-formal skills development programmes for traditional skills                             | 0.000   |
| Diversify training courses to meet the local skills demand for traditional skills                                   | 0.000   |
| Revive dying arts and crafts  | 0.300   |
| Enhance research and innovation for product diversification for arts and crafts                                     | 1.000   |
| Introduce environment friendly methodology and technology   | 1.000   |
| Introduce environment modules in the curricula  | 1.000   |
| Strengthen, streamline and decentralize implementation of SSDP to NGOs  | 3.000   |
| Strengthen, streamline and decentralize implementation of VSDP to Local Governments (Dzongkhags/ Dungkhags/ Gewogs) | 3.000   |
| NITE established with basic institute facilities  | 20.000  |
| All professional staff trained in pedagogy, management, curriculum development courses                              | 25.000  |
| Institutional linkages with at least 2-3 renowned institutes developed in the region for NITE                       | 8.700   |
|   | 20.000  |

| Develop at least 10 new courses for the TTIs& IZCs & 15 new short courses 5.000 Review & revise at least 10 existing regular courses 3.400 Carry out research and consultancy in TVET as required /demand 3.000 Strengthen partnerships with key industries 0.000 Institutionalize M&E System and practices in the Department and its Institutes 0.000 Review and improve M&E tools 0.000 Monitor & Evaluate formal training programmes 0.200 Monitor & Evaluate alternate training programmes 0.200 Conduct tracer studies - 2 2.000 Conduct tracer studies - 2 2.000 Institute recognition and awards for best performing institutes/Principal/Student/ Trainer 2.000 Establish Alumni Association for TVET graduates 2.000 Strengthen TVETMIS 2.000 Strengthen TVETMIS 2.000 Strengthen institute-industry linkages 0.000 Conceptualize and develop advocacy programmes 10.000 Strengthen coordination and support from TVET stakeholders 1.000 Strengthen PPP 0.500 Facilitate linkages between local training providers and FDI/industry 0.000 Coordinate between private TVET providers and NITE for professional service delivery Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation 1.000 Corodinate and establish self help groups 2.000 Promote traditional skills 2.000 Consolidate courses and resources under COEs 0.000 Strengthen partnerships with key industries 0.000 Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services Reform and restructure institute management/organization 0.000 Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs 1.000 Evelop human resource capacity of the institutes 1.0000 | Conduct training of skilled supervisors from industries               | 4.000  |
|---|---|--------|
| Review & revise at least 10 existing regular courses  Carry out research and consultancy in TVET as required /demand  3.000  Strengthen partnerships with key industries  0.000 Institutionalize M&E System and practices in the Department and its Institutes  0.000 Review and improve M&E tools  0.000 Monitor & Evaluate formal training programmes  0.200 Monitor & Evaluate alternate training programmes  2.000 Conduct tracer studies - 2 2.000 Institute recognition and awards for best performing institutes/Principal/Student/ Training Establish Alumni Association for TVET graduates  2.000 Strengthen TVETMIS 2.000 Strengthen TVETMIS 2.000 Streamline institute-industry linkages 0.000 Conceptualize and develop advocacy programmes 10.000 Strengthen coordination and support from TVET stakeholders 1.000 Strengthen PPP 0.500 Facilitate linkages between local training providers and FDI/industry 0.000 Coordinate between private TVET providers and NITE for professional service delivery Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation Coordinate and establish self help groups 2.000 Promote traditional skills 2.000 Cenerate Institute Development Fund through R&D and Training cum Production/ Consultancy services Reform and restructure institute management/organization 6.000 Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services Reform and restructure institute management/organization 6.000 Comply with accreditation criteria for training courses 0.0000   |   |        |
| Carry out research and consultancy in TVET as required /demand  Strengthen partnerships with key industries  0.000 Institutionalize M&E System and practices in the Department and its Institutes  0.000 Review and improve M&E tools  0.000 Monitor & Evaluate formal training programmes  0.200 Monitor & Evaluate alternate training programmes  2.000 Conduct tracer studies - 2 Institute recognition and awards for best performing institutes/Principal/Student/ Trainer  Establish Alumni Association for TVET graduates  2.000 Strengthen TVETMIS  2.000 Establish ILP Units in the Department and the Institutes  Streamline institute-industry linkages  Conceptualize and develop advocacy programmes  10.000 Strengthen coordination and support from TVET stakeholders  1.000 Strengthen PPP  0.500 Facilitate linkages between local training providers and FDI/industry  0.000 Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  Promote traditional skills  2.000  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  0.000 Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  Comply with accreditation criteria for training courses  | -   | 0.000  |
| Strengthen partnerships with key industries 0.000 Institutionalize M&E System and practices in the Department and its Institutes 0.000 Review and improve M&E tools 0.000 Monitor & Evaluate formal training programmes 0.200 Monitor & Evaluate alternate training programmes 2.000 Conduct tracer studies - 2 2.000 Institute recognition and awards for best performing institutes/Principal/Student/ Trainer 2.000 Strengthen TVETMIS 2.000 Strengthen TVETMIS 2.000 Establish ILP Units in the Department and the Institutes 1.000 Strengthen institute-industry linkages 0.000 Conceptualize and develop advocacy programmes 10.000 Strengthen coordination and support from TVET stakeholders 1.000 Strengthen PPP 0.500 Facilitate linkages between local training providers and FDI/Industry 0.000 Coordinate between private TVET providers and NITE for professional service delivery Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation Coordinate and establish self help groups 2.000 Promote traditional skills 2.000 Consolidate courses and resources under COEs 0.000 Strengthen partnerships with key industries 0.000 Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services Reform and restructure institute management/organization 0.000 Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs Establish QMS in the TTIs/IZCs Comply with accreditation criteria for training courses  |   |        |
| Institutionalize M&E System and practices in the Department and its Institutes  Review and improve M&E tools  Monitor & Evaluate formal training programmes  0.200  Monitor & Evaluate alternate training programmes  2.000  Conduct tracer studies - 2  Institute recognition and awards for best performing institutes/Principal/Student/ Trainer  Establish Alumni Association for TVET graduates  2.000  Strengthen TVETMIS  2.000  Establish ILP Units in the Department and the Institutes  Streamline institute-industry linkages  0.000  Conceptualize and develop advocacy programmes  10.000  Strengthen coordination and support from TVET stakeholders  Strengthen PPP  0.500  Facilitate linkages between local training providers and FDI/industry  0.000  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  Promote traditional skills  2.000  Strengthen partnerships with key industries  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  6.000  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCS  5.000  Comply with accreditation criteria for training courses  |   |        |
| Review and improve M&E tools  Monitor & Evaluate formal training programmes  0.200  Monitor & Evaluate alternate training programmes  2.000  Conduct tracer studies - 2  2.000  Institute recognition and awards for best performing institutes/Principal/Student/ Trainer  Establish Alumni Association for TVET graduates  2.000  Strengthen TVETMIS  2.000  Establish ILP Units in the Department and the Institutes  1.000  Streamline institute-industry linkages  0.000  Conceptualize and develop advocacy programmes  10.000  Strengthen coordination and support from TVET stakeholders  1.000  Strengthen PPP  0.500  Facilitate linkages between local training providers and FDI/industry  0.000  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  Promote traditional skills  2.000  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCS  5.000  Comply with accreditation criteria for training courses  0.000   |   |        |
| Monitor & Evaluate formal training programmes       0.200         Monitor & Evaluate alternate training programmes       2.000         Conduct tracer studies - 2       2.000         Institute recognition and awards for best performing institutes/Principal/Student/       0.000         Trainer       2.000         Establish Alumni Association for TVET graduates       2.000         Strengthen TVETMIS       2.000         Establish ILP Units in the Department and the Institutes       1.000         Streamline institute-industry linkages       0.000         Conceptualize and develop advocacy programmes       10.000         Strengthen coordination and support from TVET stakeholders       1.000         Strengthen PPP       0.500         Facilitate linkages between local training providers and FDI/industry       0.000         Coordinate between private TVET providers and NITE for professional service delivery       0.000         Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation       0.000         Coordinate and establish self help groups       2.000         Promote traditional skills       2.000         Consolidate courses and resources under COEs       0.000         Strengthen partnerships with key industries       0.000         Generate Institute Development Fund through R&D   |   |        |
| Monitor & Evaluate alternate training programmes 2.000  Conduct tracer studies - 2 2.000  Institute recognition and awards for best performing institutes/Principal/Student/ 7.000  Trainer 5.000  Establish Alumni Association for TVET graduates 2.000  Strengthen TVETMIS 2.000  Establish ILP Units in the Department and the Institutes 1.000  Streamline institute-industry linkages 0.0000  Conceptualize and develop advocacy programmes 10.000  Strengthen coordination and support from TVET stakeholders 1.000  Strengthen PPP 0.500  Facilitate linkages between local training providers and FDI/industry 0.000  Coordinate between private TVET providers and NITE for professional service delivery 4.2000  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation 2.000  Coordinate and establish self help groups 2.000  Promote traditional skills 2.000  Consolidate courses and resources under COEs 0.000  Strengthen partnerships with key industries 0.000  Generate Institute Development Fund through R&D and Training cum Production/ 0.000  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs 1.000  Comply with accreditation criteria for training courses 0.0000   |   |        |
| Conduct tracer studies - 2  Institute recognition and awards for best performing institutes/Principal/Student/ Trainer  Establish Alumni Association for TVET graduates  2.000  Strengthen TVETMIS  2.000  Establish ILP Units in the Department and the Institutes  1.000  Streamline institute-industry linkages  0.000  Conceptualize and develop advocacy programmes  10.000  Strengthen coordination and support from TVET stakeholders  1.000  Strengthen PPP  0.500  Facilitate linkages between local training providers and FDI/industry  0.000  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  2.000  Promote traditional skills  2.000  Consolidate courses and resources under COEs  0.000  Strengthen partnerships with key industries  0.000  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  0.000  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  1.000  Comply with accreditation criteria for training courses  0.000   | 5.75  | 0.200  |
| Institute recognition and awards for best performing institutes/Principal/Student/ Trainer  Establish Alumni Association for TVET graduates  2.000  Strengthen TVETMIS  2.000  Establish ILP Units in the Department and the Institutes  1.000  Streamline institute-industry linkages  0.000  Conceptualize and develop advocacy programmes  10.000  Strengthen coordination and support from TVET stakeholders  1.000  Strengthen PPP  0.500  Facilitate linkages between local training providers and FDI/industry  0.000  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  2.000  Promote traditional skills  2.000  Consolidate courses and resources under COEs  0.000  Strengthen partnerships with key industries  0.000  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  0.000  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  1.000  Comply with accreditation criteria for training courses  0.000   | Monitor & Evaluate alternate training programmes                      | 2.000  |
| Trainer  Establish Alumni Association for TVET graduates  2.000  Strengthen TVETMIS  2.000  Establish ILP Units in the Department and the Institutes  1.000  Streamline institute-industry linkages  0.000  Conceptualize and develop advocacy programmes  10.000  Strengthen coordination and support from TVET stakeholders  1.000  Strengthen PPP  0.500  Facilitate linkages between local training providers and FDI/industry  0.000  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  2.000  Promote traditional skills  2.000  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  0.000  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCS  1.000  Comply with accreditation criteria for training courses  0.000  | Conduct tracer studies - 2  | 2.000  |
| Strengthen TVETMIS  Establish ILP Units in the Department and the Institutes  1.000  Streamline institute-industry linkages  0.000  Conceptualize and develop advocacy programmes  10.000  Strengthen coordination and support from TVET stakeholders  1.000  Strengthen PPP  0.500  Facilitate linkages between local training providers and FDI/industry  0.000  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  2.000  Promote traditional skills  2.000  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  0.000  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  7.000  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCS  1.000  Comply with accreditation criteria for training courses  0.000   |   | 0.000  |
| Establish ILP Units in the Department and the Institutes1.000Streamline institute-industry linkages0.000Conceptualize and develop advocacy programmes10.000Strengthen coordination and support from TVET stakeholders1.000Strengthen PPP0.500Facilitate linkages between local training providers and FDI/industry0.000Coordinate between private TVET providers and NITE for professional service delivery0.000Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation0.000Coordinate and establish self help groups2.000Promote traditional skills2.000Consolidate courses and resources under COEs0.000Strengthen partnerships with key industries0.000Generate Institute Development Fund through R&D and Training cum Production/Consultancy services3.000Reform and restructure institute management/organization0.000Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs1.000Establish QMS in the TTIs/IZCs1.000Comply with accreditation criteria for training courses0.000   | Establish Alumni Association for TVET graduates                       | 2.000  |
| Streamline institute-industry linkages  Conceptualize and develop advocacy programmes  10.000  Strengthen coordination and support from TVET stakeholders  1.000  Strengthen PPP  0.500  Facilitate linkages between local training providers and FDI/industry  0.000  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  2.000  Promote traditional skills  2.000  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  0.000  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  0.000  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCS  1.000  Comply with accreditation criteria for training courses  0.000   | Strengthen TVETMIS  | 2.000  |
| Conceptualize and develop advocacy programmes  Strengthen coordination and support from TVET stakeholders  1.000  Strengthen PPP  0.500  Facilitate linkages between local training providers and FDI/industry  0.000  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  2.000  Promote traditional skills  2.000  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  0.000  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  0.000  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCS  1.000  Comply with accreditation criteria for training courses  0.000   | Establish ILP Units in the Department and the Institutes              | 1.000  |
| Strengthen coordination and support from TVET stakeholders  Strengthen PPP  0.500  Facilitate linkages between local training providers and FDI/industry  0.000  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  2.000  Promote traditional skills  2.000  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  0.000  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  6.000  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  1.000  Comply with accreditation criteria for training courses  0.500   | Streamline institute-industry linkages                                | 0.000  |
| Strengthen PPP 0.500  Facilitate linkages between local training providers and FDI/industry 0.000  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups 2.000  Promote traditional skills 2.000  Consolidate courses and resources under COEs 0.000  Strengthen partnerships with key industries 0.000  Generate Institute Development Fund through R&D and Training cum Production/Consultancy services  Reform and restructure institute management/organization 0.000  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs 1.000  Comply with accreditation criteria for training courses 0.000  | Conceptualize and develop advocacy programmes                         | 10.000 |
| Facilitate linkages between local training providers and FDI/industry  Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  Promote traditional skills  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCS  Comply with accreditation criteria for training courses  0.000  | Strengthen coordination and support from TVET stakeholders            | 1.000  |
| Coordinate between private TVET providers and NITE for professional service delivery  Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  Promote traditional skills  2.000  Consolidate courses and resources under COEs  O.000  Strengthen partnerships with key industries  O.000  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  1.000  Comply with accreditation criteria for training courses  | Strengthen PPP  | 0.500  |
| Assess Pvt. Training Provider capacity for delivery of economically viable courses and hand over implementation  Coordinate and establish self help groups  2.000  Promote traditional skills  2.000  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  0.000  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCS  1.000  Comply with accreditation criteria for training courses  0.000   | Facilitate linkages between local training providers and FDI/industry | 0.000  |
| and hand over implementation  Coordinate and establish self help groups  2.000  Promote traditional skills  2.000  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  0.000  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  1.000  Comply with accreditation criteria for training courses  0.000  | ·   | 0.000  |
| Promote traditional skills  Consolidate courses and resources under COEs  Strengthen partnerships with key industries  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  Comply with accreditation criteria for training courses  2.000  0.000  1.000   |   | 0.000  |
| Consolidate courses and resources under COEs  Strengthen partnerships with key industries  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  Comply with accreditation criteria for training courses  0.000   | Coordinate and establish self help groups                             | 2.000  |
| Strengthen partnerships with key industries  Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  Comply with accreditation criteria for training courses  0.000   | Promote traditional skills  | 2.000  |
| Generate Institute Development Fund through R&D and Training cum Production/ Consultancy services  Reform and restructure institute management/organization  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  Comply with accreditation criteria for training courses  3.000  1.000   | Consolidate courses and resources under COEs                          | 0.000  |
| Consultancy services  Reform and restructure institute management/organization  Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  Comply with accreditation criteria for training courses  0.000   | Strengthen partnerships with key industries                           | 0.000  |
| Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  Comply with accreditation criteria for training courses  0.000   | ,   | 3.000  |
| region for TTIs/IZCs  Establish QMS in the TTIs/IZCs  Comply with accreditation criteria for training courses  0.000  | Reform and restructure institute management/organization              | 0.000  |
| Comply with accreditation criteria for training courses 0.000   | _ :   | 0.000  |
|   | Establish QMS in the TTIs/IZCs  | 1.000  |
| Develop human resource capacity of the institutes 0.000   | Comply with accreditation criteria for training courses               | 0.000  |
|   | Develop human resource capacity of the institutes                     | 0.000  |

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| Total:  | 960.200 |
|---|---------|
| strengthened)   | 0.000   |
| Optimize the use of existing infrastructure (Shift system, day scholarship, etc.  | 0.000   |
| Construction of Technical Training Institute, Dolungang (spill over of 10th FYP)  | 129.000 |
| Enhance research and innovation for product diversification for arts and crafts   | 1.000   |
| Construction of one Power Training Institute (PTI)                                | 0.000   |
| Review and streamline placement of TVET programme graduates                       | 0.000   |
| Enhance physical resources, support services and teaching materials of institutes | 225.000 |

# CULTURE

| Au Name: DRATSANG LHENTSHOG              | Department: NA  |
|--|-----------------|
| Program Name: Strengthening of Dratshang | Phase: Approved |

| Justification:      | The objective of the Dratsang is to strengthen spiritual education system from primary till tertiary level in the country. This is to establish a strong foundation grounded on Buddhist values and spiritual practices of our age-old tradition. The construction of Tango Buddhist college was also initiated in the 10 <sup>th</sup> plan primarily to facilitate access to higher Buddhist studies in the country. There are monastic institutions established across the country both at primary and secondary level, but an institution where access to higher level spiritual education was limited. Currently, there are around 4500 students enrolled in monastic institutions that are established across the country. The target is to increase to 5500 students by the end of 11 <sup>th</sup> plan. Monastic institutions are increasingly becoming a primary avenue for the children from the socially and economically disadvantaged groups to access education. In view of this, it is proposed to strengthen monastic institutions to promote Buddhist studies and also facilitate the development of tsamkhangs and meditation centers for the elderly people to continue their spiritual practices and pursuits. |
|---------------------|---|
| Strategy:           | <ul> <li>i. Improve the academic and hostel facilities of dratsangs, rabdeys, shedras, gomdeys and other monastic institutions which currently have very limited facilities.</li> <li>ii. At the primary education level, improve the nutrition and sanitation in the monastic institutes through financial support.</li> <li>iii. Upgrade existing monastic institutions to accommodate the students graduating from the primary level to improve access to secondary and higher level of Buddhist studies.</li> </ul>   |
| Risk<br>Assessment: | i. Inadequate financial resources will jeopardize the implementation of plan activities.  |
|                     | ii. Inadequate HR both managerial and technical may affect implementation of the programme.   |
| Beneficiary:        | Monks, nuns, lay persons and general public   |

| NKRA   | SKRA                                 | SKRA KPI   |
|--|--------------------------------------|--|
| Strengthened Bhutanese Identity, social cohesion and | Enhanced access to quality spiritual | Completion rates for primary and secondary level religious education |
| harmony  | education and spiritual pursuits     | Completion rates for tertiary level religious education              |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                 | Indicators  | Baselines        | Plan Targets |
|---|---|------------------|--------------|
| Outcome 001 : Quality of spiritual education enhanced   | % of completion rates for primary and secondary level religious education | 30               | 60           |
| spiritual education enhanced                            | % of completion rates for tertiary level religious education              | 30               | 60           |
|   | Increase in meditation by public (GNH index)                              | less than<br>10% | 30%          |
| Outcome 002 : Enhanced resources for spiritual pursuits | Rules and regulations for tshamkhang construction developed               | NA               | Developed    |
| pursuits  | No. of meditation centers built for communities                           | NA               | 1            |
| Results Levels (Output)                                 | Indicators  | Baseline         | Plan Targets |
| Output 001:Strengthened                                 | No. of spiritual education institutions consolidated and centralized.     | 15               | 20           |
| spiritual institutions                                  | No. of students enrolled in formal monastic institutions                  | 4500             | 5500         |
| Output 004:Strengthened infrastructures for             | No. of meditation centers built for public                                | NA               | 1            |
| meditation and retreat services                         | No. of Tsamkhang construction facilitated                                 | NA               | 1            |
| Output 006: Environment                                 | % reduction in use of firewood  | 15               | 90           |
| friendly energy sources promoted                        | No. of waste management plans initiated                                   | NA               | 20 Rabdeys   |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Expansion of Tango Buddhist College   | 150.000 |
| Construction of Student's dormitory at Sangachoekhor Shedra at Paro   | 10.000  |
| Upgradation of Khotha Rinchenling Shedra to Thorim Wogma  | 10.000  |
| Construction of Zhirim Lobdra in Gelephu  | 50.000  |
| Renovation of Bap Nyizergang Lobdra   | 3.000   |
| Facilitate construction of civilian meditation center at Talakha, Thimphu   | 10.000  |
| Boundary wall for Phuentsholing shedra and construction of Ekra type class rooms and dining/kitchen for Lekshey Jungney Shedra, Punakha | 2.000   |

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| Installation of electric bulk cookers in monastic centers across the country.                        | 3.000   |
|--|---------|
| Construction of zhirim lobdra in Samtse  | 50.000  |
| Construction of nunnery in kilikhar, Mongar  | 30.000  |
| Facilitation of tshamkhang construction(Basic amenities)   | 5.000   |
| Monitoring and Evaluation by PPD   | 1.000   |
| Dzongkhag Rabdey Services  | 10.000  |
| Shedras and Lobdras services   | 8.000   |
| Drubdeys and Goendeys services   | 5.000   |
| Yenla Dratsangs' Services  | 5.000   |
| Renovation and conversion of old ILCS campus into Dratsang Training center                           | 15.000  |
| Construction of aqua-privy toilets and bathhouses and safe drinking water supply to Monastic schools | 2.000   |
| Punthim Dratsang/Zhung Dratsang Tewa Services  | 10.000  |
| Total:   | 379.000 |

| Au Name: MINISTRY OF HOME & CULTURAL AFFAIRS         | Department: DEPARTMENT OF CULTURE |
|--|-----------------------------------|
| Program Name: Preservation and Promotion of Culture. | Phase: Approved                   |

|                     | T   |
|---------------------|---|
| Justification:      | Preservation and promotion of Bhutan's cultural heritage has always been accorded a high priority on the development agenda and the relevance of culture to development outcomes cannot be underestimated. It is deemed vital for the country's survival and socio-economic progress as it provides a strong basis for building national identity and unity. Bhutanese tradition and culture also plays a vital role in protecting and conserving the country's rich natural environment. It stands as a material and spiritual representation of aspirations, achievements, expressions and expertise of renowned spiritual and historical figures over centuries.  The mounting pressure from the forces of globalization has put considerable strain on conservation and promotion efforts.  The Department of Culture under the Ministry of Home and Cultural Affairs continuously strives to preserve and promote Bhutan's rich and unique cultural heritage. The long-term objective of the department is to integrate holistically the preservation, promotion and development of the cultural heritage of Bhutan into all areas of sustainable development. |
| Strategy:           | <ul> <li>i. Inventorying, classification and documentation of tangible cultural heritage.</li> <li>ii. Preservation and promotion of cultural properties and heritage sites.</li> <li>iii. Strengthen institutions responsible for preservation, conservation and promotion of cultural heritage.</li> <li>iv. Development of a strategic cross-cutting plan for preservation and promotion of our cultural heritage.</li> </ul>  |
| Risk<br>Assessment: | <ul> <li>i. The risk foreseen while implementing the planned activities would be the availability of adequate fund and its timely release.</li> <li>ii. It may also be highlighted that inadequate human resources in general and the lack of skilled professionals in the field of conservation in particular might also hamper proper and timely execution of the planned activities.</li> </ul>  |
| Beneficiary:        | All sections of the society, artisans, linguistic, tourism sector, religious institutions/ organizations and minor communities will benefit from this programme.  |

| NKRA  | SKRA  | SKRA KPI   |
|---|---|--|
| Indigenous wisdom, arts and crafts promoted for | Cultural industries promoted                | No. of rural households engaged in cultural industries |
| rural livelihood                                | Contribution to GDP and employment enhanced | No. of jobs created by cultural industries             |

| Strengthened Bhutanese Identity, social cohesion | Intangible cultural heritage preserved and promoted | No. of tshechus /cultural events developed/promoted |
|--|---|---|
| and harmony                                      | Tangible cultural heritage                          | No. of new heritage structures built                |
|  | preserved and promoted                              | No. of structural heritage maintained               |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines      | Plan Targets   |
|--|--|----------------|--|
| Outcome 001 : Intangible cultural heritage preserved and promoted.             | No. of documents published on revival of indigenous wisdom.  | NA             | Carry out research on indigenous wisdom.   |
|  | No. of Tshechus/cultural events revived/promoted   | NA             | 12   |
| preserved and promoted.  | Strategy on promotion of culture developed and implemented   | NA             | 1  |
|  | No. of structural heritage maintained.   | 5              | 9  |
| Outcome 002 : Tangible cultural heritage                                       | No of new heritage structures built  | 2              | 5  |
| preserved and promoted.  | No. of archeological sites identified.   | 4              | 9  |
|  |  |                |  |
| Results Levels (Output)  | Indicators   | Baseline       | Plan Targets   |
| Output 001:Oral traditions, history,   | No. of different performing arts and expressions researched and documented.                        | Baseline<br>NA | Plan Targets 50 Boedra, 40 Zhungdra, 30 Zhay, 10 Zhems, 200 Lozeys and Tsangmos, 5 mask dances and 7 tshechus.   |
| Output 001:Oral traditions, history, arts and objects, living expressions, and | No. of different performing arts and expressions researched  |                | 50 Boedra, 40<br>Zhungdra, 30 Zhay,<br>10 Zhems, 200 Lozeys<br>and Tsangmos, 5<br>mask dances and 7              |
| Output 001:Oral traditions, history, arts and objects, living                  | No. of different performing arts and expressions researched and documented.  No. of publication on | NA             | 50 Boedra, 40<br>Zhungdra, 30 Zhay,<br>10 Zhems, 200 Lozeys<br>and Tsangmos, 5<br>mask dances and 7<br>tshechus. |

|  | ,  |  |  |
|--|--|--|--|
| Output 002: Performing   | No. of tshechus/festivals/<br>rituals revived to original<br>practices and promoted.   | 2  | 5  |
| arts, social practices,<br>tshechus, rituals and<br>festivals preserved and<br>promoted.               | No. of Driglam Namzha<br>training/sensitization 5<br>workshop organized.               |  | 10   |
| promoted.  | No. of religious discourses organized.   | 4  | 20   |
|  | No. of promotions programs held on different themes.                                   | NA   | 15   |
|  | No. of publications/<br>information/journal<br>published and made<br>available online. | NA   | 10   |
| Output 003:Advocacy and access of general public on history, culture, living                           | No. of exhibitions and colloquiums on different themes.                                | Exhibition- 2<br>Colloquiums<br>1-6 (12 voll)    | Exhibition- 5<br>Colloquiums -3                          |
| expression and traditions expanded.  | No. of training and conference on history, culture and Living expressions organized.   |  | 15   |
|  | No. of knowledge centers developed.  | NA   | 3  |
|  | No. of new information system developed and installed.                                 | 2  | 5  |
|  | No. of cultural and historical sites restored and conserved.                           | 4 dzongs   | 4 dzongs, Phajoding<br>Goenpa and Paro Ta-<br>dzong.     |
| Output 004: Cultural heritage sites conserved and constructed with DRR measures (disaster resilience). | No. of archeological sites identified, researched and excavated.                       | 4 archeological sites identified and 1excavated. | Carry out 10 inventories of archeological sites.         |
|  | No. of new heritage sites constructed.   | 2 dzongs   | 5 dzongs   |
|  | No. of cultural properties re-verified and preserved.                                  | 2007<br>Ihakhangs                                | Research and publications in 1000 lhakhangs out of 2007. |

|   | No. of artisans/craftsman trained on preservation/conservation.  | NA  | 50                             |
|---|--|-----|--------------------------------|
| Output 005: Capacity and skills enhanced on culture heritage. | No. of trainings on weaving/dyeing/construction skills provided. | NA  | 10                             |
|   | No. of artisans recognized annually.                             | NA  | 25                             |
|   | No. of museum arts and objects conserved and promoted.           | 250 | 500                            |
| Output 006: Arts, objects and historical documents            | No. of archival documents conserved.                             | NA  | 5 Dzongkhags                   |
| conserved, restored and promoted.                             | No. of textile artifacts conserved.                              | 350 | 725( new target 375)           |
|   | No. of murals paintings, thangkhas, images conserved.            | 11  | 25 Thangkas and 25 sculptures. |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Cultural heritage survey and documentation.  | 0.500   |
| Conservation and restoration of arts and objects.  | 1.000   |
| Researched and documentation of performing arts (Lozay, Zhungdra, Zhey, Tsangmo and Mask dance). | 1.000   |
| Tshechus/festivals/rituals revived to original practices and promoted.                           | 1.000   |
| Advocacy/sensitization programme on history, religions, tradition and culture.                   | 1.000   |
| Publication of thematic exhibition, catalogues, colloquium, literary survey and research work.   | 1.000   |
| Conduct exhibitions and colloquiums on culture, religion, traditions and living expressions.     | 1.000   |
| Skill building trainings/workshops on conservation and restoration related expects.              | 2.300   |
| Development and installation of information systems and database.                                | 0.500   |
| Inspection, re-verification, computerization and photography of cultural properties.             | 0.500   |
| Preparation of master plan and execution of conservation works of Trashigang Dzong.              | 180.000 |
| Identification, survey, research on potential archeological sites in Bhutan.                     | 3.000   |
| Conservation of wall paintings, thangkas and sculptures.   | 2.000   |
| Initiate archival survey in 3 dzongkhags and document collection.                                | 1.000   |
| Carving of Peling-Chag Zo wood block prints.   | 0.500   |

| Establishment of yarn bank for rural weavers and acquisition of textile artifacts.                        | 1.000    |
|---|----------|
| Acquisition of museum artifacts and object, rare and important archival documents and library collection. | 3.000    |
| Microfilming, fumigation and digitization for archival purposes.  | 1.000    |
| Development of policy documents and legal frameworks for cultural heritage.                               | 5.000    |
| Development of safe and secure library and archival system.   | 1.000    |
| Modern library infrastructure development.  | 5.000    |
| Infrastructure development, maintenance and purchase of equipments for National Museum of Bhutan          | 3.000    |
| Infrastructure development, maintenance and purchase of equipments for Ta-Dzong Musuem, Trongsa.          | 3.000    |
| Preparation of master plan and execution of conservation works of Gasa Dzong.                             | 100.000  |
| Construction of new Sarpang dzong   | 200.000  |
| Construction of new Wangdue dzong   | 1000.000 |
| Construction of new Pemagatshel dzong.  | 150.000  |
| Advocacy/sensitization programme on history, religions, tradition and culture.                            | 1.000    |
| Skill building trainings/workshops on conservation and restoration related expects.                       | 1.000    |
| Training/workshop/meetings /seminars on different themes on cultural heritage.                            | 0.000    |
| Construction of boys hostel for RAPA.   | 15.000   |
| Consolidation of Lingzhi Dzong.   | 100.000  |
| Conservation of Phajoding Lhakhang.   | 100.000  |
| Construction of National Conservation Laboratory.   | 33.000   |
| Major renovation of Ta-dzong, Paro.   | 60.000   |
| Coordination and recognition of artisans and local skill craftsmen.                                       | 2.000    |
| Strengthening of Library and its management.  | 3.000    |
| Total:  | 1983.300 |
|   |          |

Au Name: MINISTRY OF ECONOMIC AFFAIRS | Department: DEPARTMENT OF COTTAGE &

SMALL INDUSTRIES
Phase: Approved

Program Name: Promotion and Development of the Craft Industry

Justification:

Strategy:

Risk

Assessment:

Beneficiary:

| A vibrant & economically sustaining crafts industry is essential for enhancing employment, rural income & economic growth. While there exists promising potential for development of craft industries is Bhutan, the sector could not efficiently harness the potential due to several constraint such as lack of research and development programs, limited access to finance by the craftsmen, limited human resource capability, use of conventional tools, low economy of scale, limited infrastructure and transport facilities, absence of market information and competition from import similar crafts products.  In cognizant to above constrains, the Agency for Promotion of Indigenous Craft (APIC) was create during the 10 <sup>th</sup> FYP to steer the craft industry. During the 11 <sup>th</sup> FYP period, the agency will continue its commitment to accelerating the growth and development of the craft industry on a sustainable footing. |
|--|
| <ul> <li>i. Rigorously promote product innovation and design bank</li> <li>ii. Establish functional craft clusters,</li> <li>iii. Develop and promote business enablers,</li> <li>iv. Strengthen distribution, marketing &amp; product promotions</li> </ul>   |
| <ul><li>i. Availability of land for construction of permanent craft bazaar</li><li>ii. Availability of timely and adequate fund.</li><li>iii. Availability of skilled man power</li></ul>  |
|  |

## **Program and SKRA Linkages**

ii. Craft vendorsiii. Unemployed youth

| NKRA   | SKRA  | SKRA KPI   |
|--|---|--|
| Indigenous wisdom, arts and crafts promoted for rural livelihood | Contribution to GDP and employment enhanced | No of jobs created by Cultural industries              |
|  | Cultural industries promoted                | No. of rural households engaged in cultural industries |

Both urban and rural artisans,

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
|   | Bhutanese employed (Nos)  | 1200      | 2500         |
| Outcome 001 : Indigenous Arts & Crafts promoted   | Rural house hold engaged in indigenous crafts (Nos)   | 202       | 2000         |
| p   | Functional registered crafts industries (Nos)   | 80        | 200          |
| Results Levels (Output)   | Indicators  | Baseline  | Plan Targets |
| Output 01:Infrastructures   | Raw material banks (Nos)  | 1         | 3            |
| for Craft industries/   | Functional craft clusters (Nos)   | 2         | 5            |
| clusters established  | Vibrant craft bazaars (Nos)   | 1         | 2            |
|   | Artisans/craft dealers trained on basic book keeping, price fixation, customer care & stock inventory (Nos) | 80        | 160          |
|   | Craft bazaar artisans/ dealers trained on packaging & souvenir making (Nos)                                 | 0         | 100          |
|   | Quality improvement on Zorig-chusum products (Nos)  | 0         | 10           |
| Output 002:Enhanced capacity of the craft   | Youths trained on cane & bamboo weaving skills (Nos)  | 0         | 100          |
| workers( artisans & vendors)  | Artisans trained on wood turning, lacquering & material seasoning (Nos)                                     | 0         | 30           |
|   | Artisans trained on new product designs (Nos)   | 0         | 100          |
|   | Artisans trained on resource management (Nos)   | 0         | 100          |
|   | Artisans trained on quality improvement of present metal products (Nos)                                     | 0         | 80           |
| Output 003:Enhanced capacity of institutions (APIC & relevant stakeholders involved in promoting craft sectors) | Officials trained on promotion & management of craft sectors (Nos)  | 0         | 25           |
| Output 004:Research &   | Documentations and catalogs (Nos)   | 2         | 5            |
| development of arts and   | Memorandum of understanding (Nos)   | 3         | 7            |
| crafts strengthened   | Baseline study on craft sector (Nos)  | 0         | 1            |

| Output 005:Awareness on the arts & crafts enhanced |  | 50 | 200 |  |
|--|--|----|-----|--|
|--|--|----|-----|--|

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Set up new craft clusters   | 20.000  |
| Create market linkage between craft clusters and bazaars.                 | 1.000   |
| Set up new craft bazaar   | 40.000  |
| Establish additional raw material banks                                   | 3.000   |
| Develop training need assessment  | 1.000   |
| Training artisan & crafts dealers with 70% participation by women & youth | 10.000  |
| Catalogue and document crafts products                                    | 6.000   |
| Conduct Baseline survey for craft sector                                  | 5.000   |
| Research and development of new craft products                            | 5.000   |
| External networking and participation in fairs and exhibition             | 8.000   |
| Marketing & promotions  |         |
| Total:  | 104.500 |

# **ENVIRONMENT**

Au Name: MINISTRY OF AGRICULTURE AND FORESTS Department: DEPARTMENT OF FOREST

Program Name: Sustainable Management of Forest | Phase: Approved Landscapes and Conservation of Biodiversity

#### Justification:

With increasing pace for developmental activities across the country, the natural resources are placed under severe pressure. Prioritized developmental activities are takes place increasingly inside the protected areas and critical watersheds. Such pressures, if left unchecked will pose grave threat to the biodiversity resources and will ultimately affect the functioning of the natural system.

As a country which displayed excellent track record in the area of environment conservation, nature conservation will continue to be an integral aspect of the Bhutan's development. The management of parks and protected areas which consists of about 51.44% of the total land area would be a major challenge at a time when the country is undergoing rapid economic growth. This program will focus on maintaining a healthy balance between meeting the development needs of the people without undermining or damaging the natural environment.

#### Strategy:

- The program is strictly designed in-line with the National Forest Policy of 2011. The focus on the program will be on promoting sustainable utilization of the protected area resources for the benefit of the resident communities based on functional zones.
- Designated core zones of the protected areas will be strictly protected for biodiversity conservation purposes.
- Innovative interventions based on scientific research will be designed to secure the integrity of the parks and the biological corridors.
- iv. As a means of linking environmental conservation to development, ecotourism activities will be strongly pursued in the protected areas in close collaboration with the Tourism Council.
- Additionally, the program will, aside from promoting sustainable use of forest resources including NWFPs, design effective interventions to mitigate human wildlife conflict.

#### Risk Assessment:

- Ownership of natural resources by the local communities.
- Adverse impact of climate change on the natural systems.
- Inadequate technical capacity and resources.
- Over emphasis on economic development over conservation. iv.

#### **Beneficiary:**

- i. **Farmers**
- ii. Communities living in and around Pas
- International communities

| NKRA   | SKRA   | SKRA KPI  |
|--|--|---|
| Strengthened Bhutanese Identity, social cohesion and harmony | Enhanced efficiency and effectiveness of RNR service delivery                                      | Role of Park & Forest Services in protecting and promoting ecotourism developed       |
| Carbon Neutral/<br>Green Climate resilient<br>development    | Negative impact on environment minimized from development activities                               | Population status of umbrella species (tiger) (DoFPS)                                 |
| Sustainable utilization                                      | Opportunities for livelihood   | Human wildlife conflict incidences (no. of cases in a year)                           |
| and management of natural resource                           | strengthened   | Proportion of farming HH citing wildlife as major constraints to farming (GNH survey) |
| Poverty + reduced/MDG+<br>achieved                           | Generate additional employment opportunities and increase mean annual rural household cash income. | Percent contribution of agriculture income to total hh income (%) - (BLSS)            |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets                   |
|---|---|-----------|--------------------------------|
| Outcome 001 : Enhanced biodiversity conservation to improve natural habitats and maintain species persistence | Population status of selected endangered species [mammals] - (Nos)  | N/A       | To be decided after survey     |
|   | Population status of selected endemic species-birds - (Nos)   | N/A       | To be decided after the survey |
|   | Proportion of land area under effective protected area management (%)   | 51.44     | 51.44                          |
|   | Human Wildlife Conflict incidences reduced (number of cases in a year)  | 162       | 50                             |
|   | Proportion of Nature Based<br>Tourists increased through Nature<br>Recreation and Community Based<br>Ecotourism (%) | 13        | 30                             |

| Results Levels (Output)  | Indicators  | Baseline | Plan Targets |
|--|---|----------|--------------|
| Output 001:Management plans for protected areas, biological corridors and recreational areas prepared  | Management plans for PAs developed/revised (Nos)  | 9        | 17           |
|  | Community Based Conservation Program (CBCP) implemented in PAs (Nos)                              | 6        | 12           |
|  | Management plans for nature parks with Environment Education model developed (Nos)                | 0        | 3            |
|  | Conservation programs for endangered and endemic species developed (Nos)                          | 1        | 5            |
|  | Protected areas managed based on functional zones to integrate conservation and development (Nos) | 3        | 10           |
|  | Faunal population status updated (Nos)  | 1        | 59           |
| Output 002:Conservation  | National Tiger population revalidated region-wise (Nos)   | 0        | 3            |
| of endangered and endemic species enhanced   | Endemic floral population status updated (Nos)  | 105      | Updated      |
|  | Predator -prey dynamics for species established (Nos)   | 0        | 7            |
|  | HWC hotspots mapped for 9 parks and 10 TFDs (Nos.)  | NA       | 19           |
| Output 003:Human Wildlife<br>Conflict (HWC) mitigation<br>measures enhanced                            | Functional gewog HWC management committees (Nos)  | 11       | 126          |
| measures cimaneed  | Pilot innovative biological measures initiatives (Nos.)   | 0        | 5            |
|  | World Natural Heritage Sites established (Nos)  | 0        | 4            |
| Output 004:Natural<br>heritage, nature recreation,<br>heritage forests and<br>greening zones increased | New nature recreation, cultural sites, and heritage forests identified and operationalized (Nos)  | 9        | 37           |
|  | Man and biosphere reserve established (Nos)   | 0        | 1            |
|  | Eco-landscaping & beautification initiatives (Nos)  | 3        | 15           |
| Output 005:Waste management in GRF & PAs improved  | Waste management plans implemented (Nos.)   | 0        | 20           |

| Output 006:Commitment<br>to international and<br>regional conventions<br>maintained | Transboundary conservation initiatives (Nos.)    | 0 | 2  |
|---|--|---|----|
| Output 007:Community  | Community based ecotourism sites in GRFs (Nos)   | 5 | 19 |
| based ecotourism promoted   | Biking trail identified & operationalized (Nos.) | 0 | 5  |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Operationalize Khaling Wildlife Sanctuary   | 1.500   |
| Development and implement conservation management plans for BCs   | 10.000  |
| Revise conservation management plans for PAs  | 10.000  |
| Prepare and implement action plan for community-based conservation program  | 35.000  |
| Develop management plans with EE models for existing nature parks   | 2.000   |
| Establish Area specific population status of larger mammals (Takin, Musk deer, Red Panda,Golden Langur, Gaur, Water Buffalo, Spotted deer, Blue Sheep)                                | 3.000   |
| Survey population status of lesser known species (invertebrates, herpeto-fauna, small mammals, aquatic fauna and flora)   | 2.000   |
| Survey population status of the schedule I bird species (Black necked crane, Rufous necked hornbill, white bellied heron, pheasants)  | 2.000   |
| Conduct revalidation survey of tiger population and its distribution;   | 8.000   |
| Conduct nationwide survey of endemic floral species   | 2.000   |
| Assess dispersal, territory and home range size using habitat modeling for Snow leopard, Asiatic Elephants, Himalayan Black bear, Tibetan Wolf, Wild dog and Clouded leopard, Leopard | 2.000   |
| Corry out analysis of scat and hair using TLC and DNA methods to determine dietary pattern  | 2.000   |
| Map area under HWC hotspots   | 1.000   |
| Institutionalize Gewog Human Wildlife Conflict Management Group for implementing crop and livestock insurance programs  | 47.000  |
| Prepare heritage management plans as per the tentative list endorsed for RMNP, BWS, SWS & JDNP  | 3.000   |
| Identify and operationalize of heritage forest sites  | 1.500   |
| Identify and operationalize of recreational sites   | 25.000  |
| Create of Biosphere Reserve   | 0.000   |
| Provide eco-landscaping & beautification services   | 2.500   |

| Study and understand the causes of Human Wildlife Conflict  | 0.000   |
|---|---------|
| Introduce biological measures   | 7.000   |
| Support implementation of management plan   | 10.000  |
| Conduct advocacy on Waste Management and manage waste in GRF as per WPMR.   | 2.000   |
| Participate in trans-boundary meetings with India, China and Nepal on illegal wildlife trade.   | 0.000   |
| Attend or host Assembly/meetings of conventions of GTF, SAWEN, CITES, IUCN, IPBES, CBD, CMS, UNESCO   | 3.000   |
| Conduct feasibility study on Buxa-Duar and Toorsa corridor and conduct Regional consultation  | 2.000   |
| Develop and implement management plan of TraMCA area to promote ecological resilience and adaptation processes and conduct regional consultation. | 3.500   |
| Operationalize of Waste Management System   | 0.000   |
| Prepare vision and strategy document for the nature recreation and ecotourism programme with subsidiary guideline in the country                  | 1.500   |
| Enhance community -based ecotourism in and outside the protected areas  | 40.000  |
| Develop and organize park festivals   | 7.000   |
| Identify and operationalize of biking trails in potential areas   | 1.500   |
| Total:  | 237.000 |

Au Name: MINISTRY OF AGRICULTURE AND Department: DEPARTMENT OF FOREST

**FORESTS** 

Program Name: Sustainable Management Phase: Approved

of State Forests

| Justification:      | The Department of Forest and Park Services has over the years tried to maintain a balance between conservation and economic development. The concept of sustainable forest management plays an important role in maintaining the health of the ecosystem and in upholding the constitutional mandate of maintaining a minimum of 60% forest covers for all times to come, without compromising people demand for timer and other forest produce.  While Forest Management Units (FMUs) & Working Schemes (WS) cater to the demand of timber for domestic and commercial purpose, the community forest and Non-wood Forest Produce (NWFP) management groups also help in improving the living standards of the rural people through sale of forest produce and non-wood forest produce from their managed area. Going forward, the Department will continue to work toward promoting the sustainable management and utilization of forest and other biodiversity resources for livelihood and economic development. |
|---------------------|--|
| Strategy:           | <ul> <li>i. Implementation of all the activities will be carried out in coherence with the National Forest Policy, 2011. The Department will start to implement various strategies, road maps and documents developed in the 10<sup>th</sup> FYP for carrying out the planned interventions of the program.</li> <li>ii. In the interest of ownership and sustainability, the implementation of the activities will be entrusted to the field divisions (Territorial Divisions, Parks, Dzongkhag Forestry Sector) in close collaboration with other relevant stakeholders such as NRDCL.</li> <li>iii. Since most of the activities are co-ordinated at the central level, the central agencies will plan and monitor all the activities in the field. Technical backstopping to the field offices will be provided by the functional divisions.</li> </ul>  |
| Risk<br>Assessment: | i. Inadequate skilled human resources     ii. Timely adequate funding     iii. Impact of Climate Change  |
| Beneficiary:        | <ul><li>i. Farmers</li><li>ii. Communities living in town and cities</li><li>iii. Wood based Industries and factories</li><li>iv. International communities</li></ul>  |

| NKRA   | SKRA  | SKRA KPI  |
|--|---|---|
|  |   | Percent recovery rate of wood from upgraded technology (RNR Stats. 2012)        |
|  | timber enhanced   | Forest area brought under sustainable forest management (RNR stats. 2012)       |
| Strengthened Bhutanese Identity, social cohesion and harmony | Enhanced efficiency and effectiveness of RNR service delivery | Role of Park & Forest Services in protecting and promoting ecotourism developed |
| Sustainable utilization and management of natural resource   | Opportunities for livelihood strengthened                     | Annual Income generated from sale of NWFP per HH                                |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
| Outcome 001 : Promoted sustainable management and utilization of state forests | Forest area under sustainable management (ha)   | 184611    | 218542       |
|  | Proportion of local communities and institutions participating in sustainable forest management (%) | 28        | 50           |
|  | Proportion of wood recovery increased by using upgraded technology in forest based enterprises (%)  | 64        | 70           |
|  | Income from sale of forest products from CF & NWFP groups (Nu/HH/Annum)                             | 2000      | 4000         |
|  | Employment generated through NWFP based enterprises   | 350       | 750          |
| Results Levels (Output)  | Indicators  | Baseline  | Plan Targets |
| Output 001:Enhanced sustainable harvesting of timber and NWFP                  | Forest management units & working schemes (Nos)   | 17        | 34           |
|  | Forest areas managed outside FMU (Nos)  | 14        | 38           |
|  | Forest areas under scientific thinning plan ( hac)  | 4050      | 20000        |

| Output 002:National forest inventory & carbon stock                                 | Carbon assessment report produced (Nos)                                | 0   | 1    |
|---|--|-----|------|
| assessment conducted  | Cluster plots surveyed ( Nos)  | 0   | 2424 |
| Output 003:Improved technologies by wood based industries encouraged                | New technologies by wood based industries adopted (Nos)                | 2   | 50   |
| 0 1 1004 0 11   | CFs established and functional (Nos)                                   | 485 | 750  |
| Output 004:Community participation in forest management and conservation increased  | CFs & NWFP groups registered as Farmers Groups/Cooperatives            | 11  | 31   |
|   | New NWFP management groups formed and functioning                      | 70  | 140  |
| Output 005:Income and employment generation through NWFP based enterprise supported | New NWFP products developed (Nos)                                      | 9   | 18   |
| Output 006:Forest information system streamlined and strengthened                   | Functional forest information database (Nos)                           | 1   | 1    |
|   | G2C services functional in all Dzongkhags (Nos)                        | 10  | 20   |
| Output 007:Institutional capacity in natural resources management strengthened      | Graduates with certificate in forestry and environmental studies (Nos) | 650 | 800  |
|   | Training on other ecological themes conducted (Nos)                    | 48  | 413  |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Sustainable management of forest management units & working schemes                     | 3.000   |
| Management of forests areas outside FMU system through scientific planning & monitoring | 2.100   |
| Carry out scientific thinning of GRF areas  | 4.700   |
| Conduct National Forest Inventory   | 18.000  |
| Establish national forest inventory database system.                                    | 4.500   |
| Carry out remote sensing exercises parallel to NFI.                                     | 7.000   |
| Publish state of forest reports   | 0.300   |
| Carryout carbon assessment.   | 3.000   |
| Development & implementation of up-gradation guidelines                                 | 2.500   |
| Diversification and value addition of NWFP products                                     | 6.000   |
| Development of skills on NWFP product design, development and marketing                 | 5.000   |

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| Formation of new CFMGs & strengthening of existing groups                | 54.000  |
|--|---------|
| Conduct studies on NWFPs and CF groups                                   | 0.000   |
| Support to formation of new NWFP groups                                  | 3.500   |
| Improving productive assets of existing producer groups                  | 12.000  |
| Strengthen spatial & non spatial data pertaining to DoFPS                | 3.000   |
| Upgrade the existing web site of the Department                          | 0.500   |
| Establishment & up-gradation of a national database on forestry offences | 2.500   |
| Conduct certificate course in forestry and environmental studies         | 0.000   |
| Conduct theme based training   | 0.000   |
| Support registration of CF & NWFP groups to Farmers Groups/Cooperatives  | 3.000   |
| Total:   | 135.000 |

Au Name: MINISTRY OF AGRICULTURE AND FORESTS
Program Name: Integrated Watershed Management to ensure Sustainable Environmental Services

Department: DEPARTMENT OF FOREST
Phase: Approved

| Justification:      | Well managed watersheds play a pivotal role in supplying a wide range of goods and services both on-site and downstream. They are the basis for sustainable agriculture, forestry and pastoral pursuits, sustaining biodiversity and providing other environmental benefits as well as water for local and downstream use. The production of hydro power for export and internal use, contributes about 24% to Bhutan's GDP and this is expected to rise further with the planned construction of more hydro plants, making electricity generation the single biggest contributor to the economy. Consequently, a reliable supply of quality water is the most valuable commercial product derived from watersheds. It is evident that the maintenance and improvement of the country's watersheds is a high management priority, not only for hydro power, but also for domestic use and irrigation.  This program will continue to work toward maintaining environmentally and economically healthy watersheds. |
|---------------------|---|
| Strategy:           | <ul> <li>i. The program implementation shall pursue a two-pronged approach that will distinguish activities to be carried out on its own at the strategic level, and those activities that must be integrated, incorporated and harmonized into the implementation plans of other area- based development, conservation and management programs within and outside the Ministry. These include the regular development plans of the Dzongkhags and Geogs as well as the land-use specific planning frameworks such as those that apply to FMUs, Pas and CFs.</li> <li>ii. The focus will be on identification and assessment of critical watershed and designing watershed specific interventions.</li> <li>iii. Identify and inventory the significant wetland of Bhutan and promote its conservation through appropriate interventions.</li> </ul>  |
| Risk<br>Assessment: | <ul> <li>i. Environmental protection remains a priority for the Bhutan;</li> <li>ii. Bhutanese economy continue to grow and will remain supportive of the sector initiatives by provisioning adequate resources in achieving the 11th FYP targets;</li> <li>iii. Integrated Watershed management approach is acceptable to concerned agencies.</li> </ul>   |
| Beneficiary:        | <ul> <li>i. Farmers (drinking water and irrigation)</li> <li>ii. Residents of town and cities ( drinking water and other uses)</li> <li>iii. Factories and industries ( cooling and other purposes)</li> <li>iv. International communities</li> <li>v. Hydropower companies</li> </ul>  |

| NKRA           | SKRA   | SKRA KPI  |
|----------------|--|---|
| Water security | Integrated Water Utilization and Management enhanced | River specific minimum environmental flow established (NEC)         |
|                | Integrated Water Utilization and Management enhanced | Long term mean annual flow of the entire country (WRMP, MoEA, 2003) |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
|   | Landscapes under Integrated<br>Water Resource Management<br>Plan (Nos.)   | 2         | 10           |
| Outcome 001 : Water security and ecosystem services ensured   | Forest fire incidences per year (Nos.)  | 80        | 40           |
| through effective IWRM practices in selected watersheds   | Forestry offence cases per year (Nos)   | 444       | <250         |
|   | Areas under afforestation and reforestation in watersheds (ha)  | 24404     | 26658        |
| Results Levels (Output)   | Indicators  | Baseline  | Plan Targets |
| Output 001:REDD+ Readiness activities initiated to implement  | Experimental or observatory plots in different ecological zones established (Nos.)                                      | 0         | 10           |
| climate change adaptation in watersheds   | National REDD+ strategy developed   | 0         | 1            |
|   | REDD+ scheme piloted  | 0         | 1            |
|   | Watershed assessed (Nos)  | 71        | 111          |
| Output 002:Management plans<br>for watersheds within major<br>river basins developed and<br>implemented | Management plans for<br>degraded watersheds<br>developed ( Mangdechhu,<br>Kurichu, Punatsangchhu and<br>Wangchhu) (Nos) | 2         | 8            |
| Output 003:Conservation and   | Wetland inventory conducted (Nos)   | 0         | 1            |
| management of wetlands enhanced   | Ramsar site declared (Nos)  | 2         | 4            |
| eimanceu  | Wetland complex (Nos)   | 5         | 6            |

| Output 004:Payment for Environmental Services ( PES)                                | PES Framework in place (Nos)                                  | 0      | 1     |
|---|---|--------|-------|
| schemes in selected watersheds increased  | Functional PES scheme (Nos)                                   | 1      | 3     |
| Output 005:Plantation in barren and degraded forest areas                           | Plantation established and managed sustainably in GRF land    | 22858  | 24858 |
| increased   | Plantation in FMU   | 1546   | 1800  |
| Output 006:Incidences of forest   | Forest protection & service delivery improved (Rating)        | medium | high  |
| fire, poaching and illegal trade of forests and wildlife products reduced           | People made aware of watershed management significance (%)    | 10     | 20    |
| Output 007:Education and awareness activities on                                    | EE Master plan for GRFs developed and implemented (Nos)       | 0      | 1     |
| sustainable use of biological resources improved                                    | People made aware of conservation significance (%)            | 10     | 50    |
| Output 008:Forest Legislations revised  | Forest Act, Rules and Strategies revised                      | 2      | 2     |
|   | Biodiversity valuation researches conducted (Nos)             | 10     | 11    |
|   | Species conservation researches conducted (Nos)               | 12     | 26    |
| Output 009:Forest Research on various theme conducted to generate knowledge,        | Sustainable forest management researches conducted n(Nos)     | 5      | 20    |
| information and technology  | Socio-economic researches conducted (Nos)                     | 0      | 18    |
|   | Water resources and climate change researches conducted (Nos) | 1      | 14    |
| Output 010:Facilities and infrastructure for delivering effective services improved | New constructions and renovation (Nos)                        | NA     | 227   |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Conduct awareness and education programs on forest fire management, forestry offences, crime and legislations | 5.000   |
| Enhance capacity in forest fire management  | 5.000   |
| Streamlining information management in forest fire and forestry offences                                      | 3.000   |
| Strengthen regulatory functions and surveillance  | 3.000   |
| Enhance communication network   | 10.000  |
| Develop and implement EE Master Plan for Bhutan   | 1.000   |
| Conduct environmental education awareness programmes  | 0.250   |
| Develop EE material sineages  | 0.250   |
| Revise forest Act, rules and strategies   | 5.000   |
| Increase water resources and climate change knowledge   | 0.000   |
| Watershed management Research   | 2.000   |
| Conduct nature conservation research  | 0.000   |
| Conduct conservation biology researches   | 5.000   |
| Conduct research on sustainable Forestry  | 5.000   |
| Initiate research on socio-economics and policy sciences  | 0.000   |
| Conduct spatial information and data Management   | 0.000   |
| Develop and implement National REDD+ Strategy   | 2.000   |
| Initiate National Forest Monitoring for MRV ( Monitoring, Reporting and Verification)                         | 8.300   |
| Conduct climate change vulnerability assessment   | 1.000   |
| Conduct watershed assessment  | 2.000   |
| Plan and implement watershed management activities in the critical watersheds                                 | 6.000   |
| Conduct inventory of all wetlands in the river basins and significant wetlands identified                     | 3.000   |
| Develop management plan for Ramsar  | 5.000   |
| Establish PES schemes in selected watersheds  | 2.000   |
| Develop National PES framework  | 1.500   |
| Creation/maintenance of plantation in barren and degraded areas and in FMUs                                   | 35.800  |
| Develop infrastructure in field offices (Parks & Territorial Divisions)                                       | 167.400 |
| Maintenance of infrastructure in all offices  | 0.000   |
| Develop infrastructure in Functional Division & allied field offices  | 239.500 |
| Total:  | 518.000 |

Au Name: MINISTRY OF HOME & CULTURAL

Department: DEPARTMENT OF DISASTER MANAGEMENT

**AFFAIRS** 

Program Name: Enhanced Disaster Preparedness, Phase: Approved

Response and Relief Capacity.

| Justification:      | Bhutan is located in one of the most fragile and vulnerable ecosystem in the eastern Himalayas. Increasingly it has witness high frequency and intensity of disaster due to the effect of climate change, emerging socioeconomic pressure and changing demographic patterns. Bhutan also falls under one of the most seismically active zones (Zone IV and V) in the world. This is evident from the 21st September, 2009 and 18th September 2011 earthquakes, which caused widespread damages in the country. Further, GLOFs is one the most serious potential natural hazard due to the effects of global warming, and rapid glaciers retreats in the Himalayas. Bhutan was hit by GLOF in the past in 1957, 1960, and 1968 and recently in 1994. |
|---------------------|---|
|                     | In view of the above, the DDM proposed to strengthen disaster preparedness, reduce disaster risk and ensure disaster resilient infrastructure development at all levels of the government and community at large.   |
| Strategy:           | <ul> <li>i. Continue to create awareness and inculcate a mindset of disaster prevention, mitigation and preparedness in the pre-disaster phase,</li> <li>ii. Develop effective disaster response capabilities at various levels for post disaster services. Disaster preparedness and response ability at the community level will be strengthen and accord high priority.</li> <li>iii. Efforts to mainstream disaster resilient infrastructure development into the development of policies and plans.</li> </ul>   |
| Risk<br>Assessment: | Though there is strong political commitment from the government, establishment of disaster management institutes at various levels of the government agencies and Dzongkhags, and preparation of disaster management plan for all 20 Dzongkhags and relevant agencies would be a daunting task for the DDM in the 11 <sup>th</sup> plan. As in the past, enforcement of the plans and delivering emergency response on time would continue to be a challenge in the 11 <sup>th</sup> plan.  |
| Beneficiary:        | Public of 205 Gewogs under 20 Dzongkhags  |

| NKRA  | SKRA   | SKRA KPI  |
|---|--|---|
| Improved disaster resilience and management mainstreamed  | Disaster resilience,<br>preparedness and<br>responsiveness strengthened            | Response time ( no. of hours within which emergency response time reaches site of disaster) (DDM) |
|   |  | No. of disaster response teams trained and equipped in disaster management (DDM)                  |
|   | Environmental impacts from snow and glacier melt reduced.                          | Climate Change induced GLOF risk mitigated  |
| Sustained Economic<br>Growth                              | Eco-friendly/disaster resilient, innovative and good quality construction promoted | % coverage of eco-efficient/<br>disaster resilient technologies<br>(DES)                          |
| Carbon Neutral/<br>Green Climate resilient<br>development | Eco-friendly/disaster resilient, innovative and good quality construction promoted | % coverage of eco-efficient/<br>disaster resilient technologies<br>(DES)                          |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines                | Plan Targets  |
|---|---|--------------------------|---|
| Outcome 001: Enhanced disaster preparedness at all levels.                                  | Disaster risk reduction mainstreamed in key sectors.                              | 0                        | 5 ministries and 20 Dzongkhags.   |
|   | No. of Dzongkhags with<br>Disaster Management and<br>Contingency Plan.            | 0                        | 20  |
|   | Functional National Disaster<br>Management Authority                              | 0                        | 1   |
|   | No. of Dzongkhag Disaster<br>Management Committee                                 | 0                        | 20  |
| Outcome 002:<br>Strengthened capacity<br>of disaster response and<br>recovery coordination. | No. of trained response team formed.  | 1(NaSART)                | 20 dzongkhags   |
|   | No. of policy documents formulated  | NDRMF and<br>DM Act 2013 | Rules & Regulations, bye- laws, SoP and Standards for relief and compensation |
|   | Response time (No. of hours within which emergency team reaches site of disaster) | NA                       | Within 2 hours of disaster  |

| Results Levels (Output)  | Indicators   | Baseline   | Plan Targets   |
|--|--|--|--|
| Output<br>001:Strengthened<br>capacities for DRR at all<br>levels        | No. of disaster preparedness & response training/awareness for institutions conducted.               | 16<br>Dzongkhags<br>(CBDRM), 20<br>Dzongkhags<br>(School DM<br>Training) | 20 Dzongkhags,<br>205 Gewogs and<br>all other relevant<br>agencies |
|  | No. of agencies and focal persons trained on Mainstreaming DRR into plans and policies.              | Focal persons of 10 ministries & 20 Dzongkhags                           | 20 dzongkhags,<br>all agencies and<br>private sectors              |
| Output 002: Planning and disaster  | No. of Disaster Management and Contingency Planning  | 1 School   | 2 schools  |
| preparedness strategies strengthened                                     | Guidelines developed.  | NA   | 20 Dzongkhags  |
| Output 003:Response and reporting mechanisms enhanced                    | No. of institutions networked with functional DM information and reporting system at all level       | 1 (DDM )   | 20 Dzongkhags<br>and all relevant<br>agencies                      |
|  | No. of Disaster rapid response<br>team constituted and<br>equipped with SAR equipments               | 1 (National<br>Search &<br>Rescue Team<br>formed)                        | 20 Dzongkhag, 3<br>Thromde   |
|  | No. of functional Emergency<br>Operation Centre established  | NA   | 1 (national), 4 (regional)   |
| Output 003: Effective and efficient recovery protocol mechanism in place | No. of Standard Operating<br>Procedures (SOP) and<br>guidelines developed for relief<br>and recovery | NA   | 2 (SOP for Relief<br>and Response)                                 |
| Output<br>004:Strengthened<br>capacity of DDM                            | No. of infrastructure established  | NA   | DDM office<br>cum National<br>Emergency<br>Operation Centre        |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Formulation of DM and contingency plans.   | 1.500   |
| Training of response teams and supply of basic equipments.                         | 15.000  |
| Procurement and installation of NEOC and DEOC equipments.                          | 15.000  |
| Capacity building of relevant officials on standard reporting system/format(SOP).  | 2.000   |
| Develop standard recovery protocol.  | 0.500   |
| Construction of National Emergency Operation Centre cum Disaster Management Office | 50.000  |
| Total:   | 84.000  |

Au Name: NATIONAL ENVIRONMENT COMMISSION

Program Name: Conservation and Sustainable Environmental

Management

Department: SECRETARIAT Phase: Approved

#### Justification:

With the aim to achieve sustainable development in the country, the activities of the 11 FYP for NEC has been formulated incorporating the urgent needs that should be in place to ensure judicious use of natural resources along with policy and regulatory measures that enable and facilitate this commitment. At present, Bhutan has a pristine environment with 70.46 percent forest coverage and 19,751 square kilometers of land under protected areas and biological corridors but growing population, urbanization, infrastructure expansion and industrialization among many others, place increasing demand of natural resources along with pressure on the state of the environment like air and water quality and land pollution. The commitment to remain carbon neutral and maintain forest cover of 60% at all times to come has becoming increasingly challenging as we open up to meet the new development needs of the country. NEC therefore will continue to support towards strengthening and enforcement of legislations and policies, advocate environment mainstreaming, promote green development, ensure water security, enhance service delivery, thereby ensuring sustainable development and minimize negative impact on environment.

#### Strategy:

- In order to ensure minimum negative impact on environment from development activities, continued efforts will be made through strengthening of environmental laws and regulations, policies and plans and national capacity. Mainstreaming of environment in the sectoral policies plans and programmes with support from GNHC will be promoted through awareness and capacity building both at the central and local level.
- ii. Water security will be strengthened through the development of integrated water resource management plan and better coordination. This will be further supported through the enforcement of Water Act and development of water regulation. Further environmental assessment process will be strengthened through establishment of four regional environment offices which also aims to deliver prompt, professional and effective public services.

#### Risk Assessment:

- In order to effectively carry out these activities, some of the risks foreseen are the sector implementation of the legislation, mainly due to the lack of human resources and capacity at all levels. In addition, one of the biggest risks is the availability of resources to carry out these prioritized activities which is linked to the realization of the SKRAs and NKRAs.
- Inadequate budget for TA/DA and fuel might hamper effective compliance monitoring and site visits to the field. This was one of the problems encountered in the 10<sup>th</sup> plan, which hampered carrying out of other activities as well.

#### Beneficiary:

Local households and individuals are expected to have built capacity, immense benefits from sustainable use of natural resources, enjoy clean air and water and ensure water security.

At the national level, the successful implementation of the plan will help maintain pristine environment, maintain green house gas emission within sequestration capacity of our forest.

| NKRA                                | SKRA   | SKRA KPI  |  |
|-------------------------------------|--|---|--|
| Water security                      | Integrated Water Utilization and Management enhanced | IWRM Plan developed                                   |  |
|                                     |  | Long term mean annual flow of the entire country      |  |
|                                     |  | River specific minimum environmental flow established |  |
|                                     |  | Ambient water quality                                 |  |
| Carbon Neutral/                     | Negative impact on environment                       | Ambient air quality                                   |  |
| Green climate resilient development | minimized from development activities                | Green house gas emission controlled                   |  |
| Improved public service             | Enhanced efficiency and                              | Average Performance rating                            |  |
| delivery                            | effectiveness of public service delivery             | TAT of commonly availed services reduced              |  |
|                                     |  | Anti-corruption strategy implemented                  |  |

**Table 1: Programme Results Level** 

| Results Level<br>(Outcome)  | Indicators  | Baselines   | Plan Targets   |
|---|---|---|--|
| Outcome 001 :<br>Negative impact on<br>environment from<br>development activities<br>minimized or avoided | Ambient air qualit5y  | National Ambient<br>Air Quality<br>standards 2010         | Revised standards<br>as per the national<br>circumstances  |
|   | Green House Gas emission controlled   | 1559.56 Gg CO 2   | < 6309.6 Gg Co2  |
|   | Integrated Water Resources<br>Management Plan (IWRM)<br>Developed                                 | 0   | 1 (IWRM)   |
|   | Waste management strengthened   | Waste<br>Prevention and<br>Management<br>(WPM) Act , 2009 | Regulation on<br>WPM Act revised,<br>National Strategy<br>on Integrated Solid<br>Waste Management<br>developed |
|   | All activities undergo EA process as per the regulation for environmental clearance projects 2002 | 2 projects did not<br>go through EA<br>process            | All projects go<br>through EA process  |
|   | Rivers specific minimum environmental flow established  | 0   | All rivers which<br>are planned for<br>hydropower plants   |
|   | Ambient water quality   | National Ambient<br>Water Quality<br>standards 2010       | Revised national standards to include new parameters   |
|   | Time limit set for projects requiring major EIA   | Negotiable  | 180 days   |
| Outcome 002 :<br>Environmental<br>management services<br>improved   | Time limit set for projects requiring minor EIA   | Negotiable  | 90 days  |
|   | Time to obtain<br>environmental clearance<br>reduced by 50% for projects<br>not requiring EIA     | 90 days   | 45days   |
|   | Average performance rating of NEC   | 0   | > 90%  |
|   | Anti-Corruption Strategy implemented  | 0   | National Anti-<br>Corruption Strategy<br>implemented   |

| Results Levels<br>(Output)  | Indicators  | Baseline                            | Plan Targets  |
|---|---|-------------------------------------|---|
| Output 001:Riverine ecosystem conserved and water resource management and coordination strengthened                       | Protect river system from all development activities.                                     | 0                                   | 1   |
|   | Water resources inventory conducted   | 1 (Punakha)                         | 19 dzongkhags   |
|   | River basin management plan developed   | 0                                   | 1   |
|   | Ambient Water Quality<br>Standards (WQS)  | National<br>standard 2010           | Revised to include<br>new parameters-<br>total hardness,<br>ammonia, oil and<br>grease.                         |
|   | No. of water monitoring sampling stations   | 69                                  | 103   |
|   | National drinking water quality standards developed                                       | WHO                                 | National Standards<br>developed and<br>implemented  |
|   | Nationally appropriate mitigations actions (NAMAs) Developed                              | 0                                   | 3 NAMAs (road<br>transport, housing<br>and solid waste)<br>and<br>2 low emission<br>development<br>strategy     |
|   | National Adaptation Plans (NAP) developed   | 0                                   | 1   |
| Output 002:National policies, plans and capacity strengthened to achieve carbon neutral and climate resilient development | 2nd National Adaptation<br>Programme of Action (NAPA)<br>project implemented              | 1st NAPA project completed          | 2nd NAPA<br>implemented   |
|   | National Strategy for Climate<br>Resilient and Carbon<br>Neutral Development<br>developed | National<br>Environment<br>Strategy | National strategy<br>for climate resilient<br>and carbon neutral<br>development<br>developed and<br>implemented |
|   | ECP mainstreamed in polices, plans and projects at the central and local level            | 11FYP                               | ECP mainstreaming<br>in polices, plans<br>and projects at the<br>central and local<br>level sustained           |

| Output<br>003:Obligations  | No. of reports submitted to the UNFCCC and CBD Secretariat                                       | 1NC,2000,<br>2NC, 2011<br>and National<br>Biodiversity<br>Strategy and<br>Action Plan<br>(NBSAP) | 3NC by 2016, 1st<br>biennial updated<br>report by 2014   |
|--|--|--|--|
| under Multilateral Environment                                       | 35% reduction of HCFC use in Bhutan by 2018  | 5.6 mt   | 3.6 mt   |
| Agreements fulfilled   | Full participation in the MEA's(COPS)  | 5 COPS<br>(UNFCCC), 2COPS<br>and 3 MOPs (<br>Ozone), 2 COPS<br>(CBD)                             | 5 COPS (UNFCCC),<br>2COPS and 3 MOPs<br>( Ozone), 2 COPS<br>(CBD)                                      |
|  | Time limit set for projects requiring major EIA.   | Negotiable   | 180 days   |
|  | Time limit set for projects requiring minor EIA.   | negotiable   | 90 days  |
| Output 004:Public<br>service delivery<br>enhanced                    | Time to obtain<br>environmental clearance<br>reduced by<br>50% for projects not<br>requiring EIA | 90 days  | 45 days  |
|  | Time taken to obtain import permit reduced by 70%  | 15 days  | 5 days   |
|  | EA Act and regulation implemented and enforced   | EA Act 2000,<br>RECP 2002  | Implementation and<br>enforcement of EA<br>Act and regulation<br>sustained                             |
| Output 005:Legal<br>framework and<br>law enforcement<br>strengthened | No. of environmental laws developed and revised  | NEPA 2007  | Revise EA Act 2000, Regulation for environmental clearance of projects 2002, develop Water Regulation. |
|  | Sensitization on environmental laws conducted in all dzongkhags                                  | EA Act 2000,<br>RECP 2002,<br>Water Act  | Advocacy and awareness on EA Act, Water Act, Waste Act, etc. and its related regulations.              |

| Output  | No. of air quality monitoring stations  | 6  | 10  |
|---|---|--|---|
| 006:Strengthened<br>environmental<br>monitoring,<br>information | Ambient Air Quality<br>Standards 2010 revised   | AQS on par with<br>Indian CPCB<br>standards  | AQS revised as appropriate as per national circumstances.   |
| management and communication                                    | Parameters for air quality monitoring   | PM 10  | PM 2.5, SOx, NOx,<br>CO<br>and O3   |
|   | Vehicle Emission Standards<br>(VES) 2008  | VES customized<br>to national<br>situation to allow<br>20% failure                                 | VES revised to regional standard  |
|   | No. of environmental awareness conducted/<br>Global<br>Environmental events<br>observed | 4 World Earth Day, 4 Earth Hour day, 4 World Water Day, 4 World Environment Day, 4 World Ozone Day | 4 World Earth Day,<br>4 Earth Hour day, 4<br>World Water Day, 4<br>World Environment<br>Day, 4 World Ozone<br>Day |
|   | Compliance monitoring strengthened  | 15.88% non<br>-compliance<br>84.12%<br>compliance  | Reduce % of non compliance  |
|   | Bhutan Environment Outlook and State of Environment Report for Dzongkhags published     | BEO, DEO for<br>Zhemgang and<br>Wangdiphodrang   | DEO biennially and<br>1<br>BEO  |

Table 3: Programme Plan Outlay Summary

| Programme Activities   | <b>Capital Outlay</b> |
|--|-----------------------|
| Conduct water resources inventory in all 20 Dzongkhags   | 8.665                 |
| Institutionalize the river basin management plan at each basin wide scale                                | 2.000                 |
| Water user associations (WUAs) formalized (both drinking and irrigation)                                 | 1.000                 |
| Preparation of Integrated Water Resource Management plan   | 10.000                |
| Finalization, publication, awareness creation and enforcement of the provisions of the water regulation. | 5.000                 |
| Designate one river system free from development interference  | 2.000                 |

| Capacity building and preparation of NAMAs and other associated obligations under UNFCCC as a result of Cancun Agreements of 2010 through LECB project | 35.830 |
|--|--------|
| Preparation of 3rd National Communication report to UNFCCC   | 30.000 |
| Preparation of 1st biennial update report to UNFCCC  | 10.910 |
| Atmospheric (ATM) observatory stations   | 8.000  |
| Revision of NBSAPs and development of 5 <sup>th</sup> National Report to CBD   | 12.001 |
| Strengthening of enforcement and retrofitting activities   | 20.290 |
| Strengthening capacity/enhancing awareness/application of ECP tools  | 20.000 |
| Capacity building and preparation of long term climate adaptation plans through "National Adaptation Plans (NAP) under UNFCCC process.                 | 21.820 |
| Coordination of 2nd NAPA project (major activities to be implemented by line agencies as per NAPA project profiles)                                    | 22.020 |
| Increase number of monitoring stations, monitor water quality, revise ambient water and effluent standards   | 1.000  |
| Revise National Environment Strategy   | 2.000  |
| Procurement of equipment, reagents & consumables item for water analysis   | 0.700  |
| Water resource mapping and availability projections in atleast 4 Dzongkhags  | 5.500  |
| Obligation towards MEAs (COPs)   | 5.000  |
| Amendment of EA Act 2000 and regulations 2002, publication, awareness creation etc.  | 3.000  |
| Impact assessment of industries, mines and hydro-power   | 2.000  |
| Expansion of CCTV installation in all industrial estates   | 2.500  |
| Assessment of capacity and national infrastructure in terms of chemicals management in the country   | 1.500  |
| Revision of Waste Prevention and Management 2012, guidelines and standards, advocacy, and awareness  | 4.000  |
| Conduct carrying capacity assessment (CCA) for mines and industries  | 20.000 |
| Conduct minimum environmental flow   | 20.000 |
| Assessment of green building materials to qualify for environmental incentives   | 0.200  |
| Develop online Environment Clearance Systems   | 20.000 |
| Establish Regional Environment Office  | 20.000 |
| Annual compliance monitoring conference with mines and industries and prepare report   | 1.500  |
| Conduct strategic environment assessment for hydro-power and transmission line   | 20.000 |
| Revision of ambient air quality and vehicle emission standards.  | 1.000  |
| Prepare Bhutan environment outlook and Dzongkhag environment outlook.  | 15.000 |
| Commemorate Global Environment Events  | 5.000  |
|  |        |

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| Develop framework for environment information management and integration of GIS  | 2.000   |
|--|---------|
| Initiate monitoring PM 2.5, SOX, NOX, O3 and CO, increase coverage of AQM stations and carry out daily monitoring of AQ. | 8.000   |
| Human resource development program   | 21.000  |
| Capacity building for water technicians and other relevant stakeholders  | 1.000   |
| Development of national strategy for integrated waste management   | 2.364   |
| Review and revise list of activities not requiring environmental clearance   | 0.000   |
| Introduce application fees for environmental clearance projects  | 0.000   |
| Capacity building and development of sustainability criteria for DNA approval process                                    | 0.000   |
| Preparation of nations report/secretarial support services   | 0.200   |
| Coordinate formulation of national drinking water quality standard   | 1.000   |
| Prosecution/litigations  | 0.000   |
| Assessment of projects for environmental clearance   | 0.000   |
| Total:   | 395.000 |

# **SPORTS**

Au Name: BHUTAN OLYMPIC COMMITTEE Department: SECRETARIAT

Program Name: Excellence through sports for all. Phase: Draft

| Justification:      | Sports and games directly or indirectly impact the lives of all citizens, irrespective of age or gender, and have significant potential to contribute positively to the national economy, culture, good governance, international relations, community spirit, overall health of the population and juvenile delinquency, among others. The current situation of a high proportion of youth population, increasing rural-to-urban migration, increasing urbanization and associated lifestyle-related health problems, are challenges of the development process. If not mitigated, such problems can have serious repercussion on society's health, value systems, living environment and the economy.  In light of the overwhelming evidence of the benefits of sports and given the present systemic weaknesses, there is a compelling need for a focused and coherent sports development plan that will strategically intervene. |
|---------------------|--|
| Strategy:           | <ol> <li>Establish a robust sport governance system to efficiently deliver organized sports to all.</li> <li>Identify and pursue mechanisms to secure the financial sustainability of development programs and accountability within sports bodies</li> <li>Develop human resource capacity in sports bodies for delivery of services and results</li> <li>Provide opportunities and access to sports facilities by optimizing management and utilization of existing and new sports infrastructure</li> <li>Promote a vibrant sporting culture and overall sports development through advocacy and engaging all forms of media and communications</li> <li>Engage all national and international partners and stakeholders through a clear strategic partnership framework.</li> </ol>  |
| Risk<br>Assessment: | <ul> <li>i. Unavailability of land for constructing sports infrastructure</li> <li>ii. Lack of sufficient financial resources may affect the efficacy of the plan.</li> <li>iii. Human Resource capacity within the Bhutan Olympic Committee and stakeholders is limited and without additional HR, the implementation of the plan will be affected.</li> <li>iv. To achieve Sports for all depends on the support of multiple stakeholders. Without their co-operation, the successful implementation of plan is at risk.</li> </ul>  |
| Beneficiary:        | The target population is the public at large, with a special emphasis on the youth.  |

| NKRA   | SKRA  | SKRA KPI  |
|--|---|---|
| Democracy and Governance strengthened                              | A democratic and robust sport<br>governance system that will<br>efficiently deliver organized sport to<br>established sports to all Bhutanese | Average performance rating of BoC   |
|  | A democratic and robust sport<br>governance system that will<br>efficiently deliver organized sport to<br>established sports to all Bhutanese | No. of BoC and NSFs constituttions revised and adopted                            |
| Indigenous wisdom, arts and crafts promoted for rural livelihood   | Access to sport facilities facilitated and established in strategic nucleated locations.  | % of urban population with access to sports facility                              |
| Strengthened Bhutanese<br>Identity, social cohesion and<br>harmony | Community Sports established where there is critical mass to enable sports for all.   | % of population participating in different sports                                 |
| Sustainable utilisation and management of natural resource         | High Altitude Training Center<br>and endurance sports programs<br>developed   | No. of endurance<br>and adventure sports<br>programs developed and<br>implemented |
| Indigenous wisdom, arts and crafts promoted for rural livelihood   | Indigenous Games and sports promoted  | No. of traditional games/<br>tournaments organized<br>annually                    |
|  | Promotion and recognition of talents in various sports to enable sports for all.  | Bhutanese athletes participating in international competitions and events         |
|  | Promotion and recognition of talents in various sports to enable sports for all.  | Elite Bhutanese athletes  |
| Poverty + reduced/MDG+<br>achieved                                 | School sports strengthened in schools to enable sports for all by 2018  | % of students participating in sports activities                                  |

**Table 1: Programme Results Level** 

| Results Level<br>(Outcome)                          | Indicators  | Baselines   | Plan<br>Targets  |
|---|---|---|--|
| Outcome 001 : Sports for all promoted.              | % of students participating in various sports activities.                       | NA  | near 100   |
|   | % of population participating in different sports                               | Archery: 3(F) 1 (M)<br>Shooting: 2(F) 3(M)<br>Boxing: 36(M)<br>Taekwondo: 4(F)<br>6(M)<br>Football: 63(M) | Archery: 12<br>Shooting: 15<br>Boxing:50<br>Taekwondo:25<br>Football:126 |
|   | No. of Elite Bhutanese<br>athletes by 2018 (by gender<br>and sports)            | 35  | 50   |
|   | % of Bhutanese athletes participating in international competitions and events. | 0   | 50   |
|   | % of urban population with access to sports facility                            | 54.25   | 70   |
|   | No. of traditional games/<br>tournaments organize                               | 8   | 40   |
|   | No. of endurance and<br>Adventure sports programs<br>developed and implemented  | 1   | 3  |
|   | Average financial expenditure performance rating of BoC(%)                      | 89.22   | >90  |
|   | No. of MoUs signed with National and International partners.                    | 5   | 10   |
|   | No of BOC and NSFs constitutions revised and adopted.                           | 16  | 16   |
| Results Levels (Output)                             | Indicators  | Baseline  | Plan Targets   |
| Output 001:A  | Policy enacted.   | 0   | 1  |
| comprehensive sports in education policy developed. | No. of school implementing the Policy   | 0   | 20   |

| Output 002:Urban community based   | No. of sports associations established.  | 0  | 20  |
|--|--|----|-----|
| sports enabled.  | No. of sports Clubs established  | 0  | 85  |
|  | No. of BOC National and Regional Games organized.  | 0  | 2   |
|  | No. of coaching camps conducted.   | 24 | 130 |
| Output 003: Elite sports and talented                                      | No. of sports prioritized to participate in international events.                              | 2  | 5   |
| athletes identified and developed.   | Revise the rules and regulations for awarding scholarships to the selected athletes developed. | 0  | 1   |
|  | % increase in accessibility to<br>the best training facilities for<br>elite athletes           | 15 | 50  |
|  | No. of National Anti-doping rules and regulations implemented.                                 | 0  | 1   |
| Output 004: New sports infrastructure                                      | Policy on sustainable management for the sports infrastructure adopted.                        | 0  | 1   |
| developed in the strategic nucleated locations.                            | No. of Multi- sports halls constructed.  | 3  | 8   |
|  | no. of new sports infrastructures constructed in the capital.                                  | 0  | 8   |
| Output 005: Renovation and maintenance for existing sports infrastructure. | No. of existing sports infrastructure renovated.   | 0  | 4   |

| Output 006: Indigenous games and sports                        | No. of indigenous games and sports museum constructed.                         | 0  | 1  |
|--|--|----|----|
| preserved and promoted.  | No. of national and regional tournament conducted.                             | 8  | 40 |
|  | % promoted and introduced in indigenous games and sports at the school levels. | 25 | 30 |
|  | No. of documentaries and magazines on indigenous sports published.             | 0  | 10 |
| Output 007: Endurance and adventure sports programs developed. | No. of endurance and adventure sports programs implemented.                    | 1  | 3  |
| Output 008: Effective sports governance established.           | No. of BOC and NSF's constitutions revised and adopted.                        | 16 | 16 |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Consult, draft, endorse and implement a comprehensive sports in education policy.   | 1.000   |
| Develop a focused sports and physical education curriculum.   | 2.000   |
| Consolidate existing school sports programs through technical supports.   | 0.000   |
| Initiate in and after school sports and recreation programs through partnership between schools and federations.              | 0.000   |
| Conduct capacity building for the coaches and School Sports Instructors in the schools.                                       | 5.000   |
| Partner with an existing one High School for the National Sports Academy  | 2.000   |
| Develop guidelines for the formation of association including protocols and procedures for affiliation to Federation and BOC. | 0.500   |
| Appointment of office bearers in 20 sports associations and establishment of their offices.                                   | 1.000   |
| Provide seed money for sports associations based on the number of clubs affiliated.   | 0.000   |
| Develop guideline for the formation of sports clubs.  | 0.500   |
| Conduct 1st BOC Regional Games for all sports.  | 0.000   |
| Conduct 1st BOC National Games for all sports.  | 0.000   |
| Enable regular NSFs competitions at local, regional and national level for all sports and maintain calendar of events.        | 0.000   |
| Conduct multi-disciplinary sports and celebrate the Olympic day.  | 0.000   |
|   | 0.000   |

| Facilitate local sports development by ensuring quality coaching in all sports.   | 0.000  |
|---|--------|
| Prioritization of sports disciplines and facilitate participation in regional and international competitions.   | 0.000  |
| Preparation and participation in mandatory IOC and OCA Games.   | 0.000  |
| Develop and implement sports password scheme in collaboration with MoE and other relevant stakeholders.   | 1.000  |
| Develop and implement an athlete information system (AIS).  | 0.200  |
| Identify collaborative training programmes with other NOCs, IFs and other bilateral and international partners.   | 0.000  |
| Formalize and implement the National Anti- doping rules and regulations for the selected in-country activities.   | 5.000  |
| Draft and implement a common policy for optimizing the sustainable use and development of sports infrastructure in consultation with stakeholders.  | 0.000  |
| Identification and acquisition of land in nucleated urban areas for the development of 27 Multi-sports Halls, 5 Regional sports Complexes and 1 National Sports Academy and develop blueprints. | 10.000 |
| Construction of 5 Multi-sports Halls in Phuentsholing, Punakha, Bumthang, Paro and Samdrup Jongkhar.  | 90.000 |
| Restructuring works at the swimming pool complex.   | 45.000 |
| construction of international standard shooting range(10m, 25m and 50m range)   | 40.000 |
| Construction of new table tennis hall.  | 20.000 |
| Development of new archery range at Khankulo near Jamyang resort.   | 2.000  |
| Construction National Tennis Center.  | 6.000  |
| Construction of 5 futsal pitches and maintenance of football ground.  | 5.000  |
| Maintenance and additional facilities at the synthetic track.   | 5.000  |
| maintenance work at the Changlimithang National Stadium.  | 25.000 |
| Renovation and maintenance of the current boxing hall and badminton hall.   | 1.200  |
| Renovation and construction of the current tennis office to BOC club house.   | 10.000 |
| Identification, acquisition of land and construction of the museum at Changlimithang, Thimphu.  | 16.000 |
| Conduct various indigenous games and sports at local, regional and national level.  | 0.000  |
| Conduct school level tournament for indigenous games and sports.  | 0.000  |
| Support research and filming of documentaries on indigenous games and sports.   | 2.000  |
| Organize Tour of the Dragon cycling race (268 kms) from Bumthang to Thimphu.  | 5.000  |
| Conduct King's challenges (315.5 kms) - 9 days adventure race from Punakha-Gasa-<br>Laya- Lunana-Thanza-Warethang-Dhur Tshachu- Tshochenchen-Dzongthang village-<br>Trongsa                     | 2.000  |
| Organize Bhutan International Marathon covering 42.2 kms in Punakha.  | 2.000  |
|   |        |

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| Identify 5 trails, conduct feasibility studies and building of biking trails in the western and central regions.   | 5.000   |
|--|---------|
| Develop mechanism to ensure sustainable use and management of biking trails, venue and events in partnership with local communities and private sectors. |         |
| Sign MoUs with regional and international agencies for the development, promotion, marketing and sponsorship of endurance and adventure sports.          |         |
| Develop procedure for drafting and formalization of the constitution of BOC and the NSFs.  | 0.200   |
| Finalization of the BOC mandates to oversee the sports development in the country.   |         |
| Develop annual planning and reporting calendar.  |         |
| Conduct consultation workshops on Strategic Road Map of sports in southern and western Dzongkhags.   | 2.000   |
| Develop a framework for international partnerships and their engagement.   | 3.000   |
| Construction of international standard artificial tuff football ground with lighting in Phuntsholing, Gelephu, Mongar and Samdrupjongkhar                | 80.000  |
| Total:   | 394.600 |

# GOVERNANCE

| Au Name: MINISTRY OF FINANCE             | Department: DEPARTMENT OF REVENUE & CUSTOMS |
|--|---|
| Program Name: Revenue & Customs Services | Phase: Approved                             |

| Justification:      | The Department of Revenue and Customs is primarily responsible for mobilizing internal resources through taxes, royalties and non-tax revenues to cover the expenditures of the RGoB to implement its socio-economic plans and programmes. An optimum tax system is one which stimulates equity and fairness, efficiency, neutrality, simplicity, certainty, flexibility and fiscal adequacy. Evidence suggests that other non-hydro revenue sources are losing ground, reflecting the narrow tax base and generous incentives and exemptions. The modernization of tax and custom administration will help to increase tax collections while simultaneously reducing the cost of collection. One of the key initiatives will be simplifying and rationalizing the tax procedures and developing a web based revenue administration system to maintain, generate and analyze information efficiently for decision making purposes. |
|---------------------|--|
| Strategy:           | <ul> <li>i. Initiate specific fiscal reforms in the 11th plan in customs administration and compliance. Also rationalize and simplify the tax administration to increase collection and enhance compliance.</li> <li>ii. Develop a web-based system called Revenue Administration and Management Information System (RAMIS) to allow for greater efficiency in maintaining, analyzing and generating information.</li> <li>iii. Facilitate trade activities through supporting Department of Trade in its pursuit of favorable bilateral agreements and appointing necessary trade agents in the entry points.</li> <li>iv. Strengthen institutional and manpower capacity.</li> </ul>   |
| Risk<br>Assessment: | <ul> <li>i. Parliamentary approval needs to be sought for any fiscal policy change.</li> <li>ii. Other external factors influence the collection of taxes from the business enterprises such as the global economic conditions and policies especially monetary policy influences trade, thereby affecting tax collections.</li> <li>iii. Inadequate funds and human resources will affect implementation of plans in a timely manner.</li> </ul>  |
| Beneficiary:        | The Royal Government of Bhutan and its citizens.   |

| NKRA                      | SKRA  | SKRA KPI                           |
|---------------------------|---|------------------------------------|
| Sustained Economic Growth | Efficient and Effective mobilization of public resources. | Domestic revenue in percent of GDP |
|                           | zation of public resources.                               | Tax revenue in percent of GDP      |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                           | Indicators                             | Baselines | Base Year | Plan Targets |
|---|--|-----------|-----------|--------------|
| Outcome 001: Efficient and Effective mobilization | Domestic revenue in percent of GDP (%) | 22        | 2012      | 24-26        |
| of public resources.                              | Tax revenue in percent of GDP (%)      | 12        | 2012      | 15           |

| Results Levels (Output)                                  | Indicators  | Baseline | Base Year | Plan Targets |
|--|---|----------|-----------|--------------|
| Output 001:Modernized revenue and customs administration | Revenue Administration<br>and Management<br>Information System<br>implemented | 0        | 2012      | 22-30        |
|  | Trade through regional cooperation facilitated                                | 80       | 2012      | 85-90        |
|  | Feasibility Study Report on implementation of VAT/GST done                    | 0        | 2012      | 1            |
|  | Membership to Revised<br>Kyoto Convention                                     | 0        | 2012      | 1            |
|  | Timely update of Customs<br>Harmonized coding system                          | 1        | 2012      | 1            |
| Output 002:Streamlined Revenue Administration            | Agreement signed and ratified   | 0        | 2012      | 2            |
| and Policies   | Laws and regulation introduced  | 0        | 2012      | 5            |
| Output 003:Strengthened Department of Revenue            | Number of DRC staff trained   | 650      | 2012      | 2825         |
| and Customs  | Number of offices constructed ( Regional)                                     | 0        | 2012      | 4            |
|  | Office set ( DRC) and restructured  | 0        | 2012      | 5            |
| Output 004:Simplified<br>Tax Procedures<br>implemented   | Online tax filing for effective service introduced                            | 0        | 2012      | 5            |

Table 3: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Piloting & Implement RAMIS with Customs Management System Component (CMSC) in Head Office, RRCOs & Checkpost   | 20.000  |
| Hosting of RAMIS in Data Centre  | 0.000   |
| Integration of RAMIS with relevant stakeholders  | 0.000   |
| National Revenue Report compiled and published   | 0.000   |
| Publish Bhutan Trade Statistics on quarterly basis   | 0.000   |
| PI Reports compiled and published  | 0.000   |
| Enhance participation in bi-lateral and multilateral agreements pertaining to trade facilitation.  | 0.000   |
| Enhance intra-regional trade in the SASEC region   | 0.000   |
| Initiate agreement on exemption of service tax in India for services delivered in Bhutan.  | 0.000   |
| Improve network connectivity, procurements of IT hardwares, X-rays, Scanners, Fork Lifts and other NIIE  | 425.000 |
| Carry out feasibility study of VAT/GST to modernize consumption tax in line with International best practice   | 0.000   |
| Implement Post Clearance Audit (PCA), Institute risk-management, Advance ruling and enhance specialization in valuation & classification (SASEC TF Program, ADB)     | 0.000   |
| Submit draft laws and amendments required for Bhutan Customs compliance with the RKC to Parliament for approval and enactment (SASEC TF Program, ADB) & publication. | 0.000   |
| Simplification and harmonization of Customs clearance process and regulations in line with the implementation of the RKC provisions (SASEC TF Program, ADB)          | 10.000  |
| Ratification of the Revised Kyoto Convention (SASEC TF Program, ADB)   | 0.000   |
| Update and publish Bhutan Trade Classification as per WCO HS.  | 0.000   |
| Draft and propose revenue law  | 0.000   |
| Revise revenue accounting, direct tax and indirect tax manual under FRR 2001   | 0.000   |
| Propose new tax measures   | 0.000   |
| Propose amendments and enactment of tax laws   | 0.000   |
| Review fiscal incentives 2010  | 0.000   |
| Broaden tax base and rationalize indirect tax  | 0.000   |
| Publish Risk Management, Post Clearance Audit and Advance Ruling Guidelines (SASEC TF Program, ADB)  | 0.000   |
| Initiate DTAA negotiation with other countries   | 0.000   |
| Training and attachment of DRC officials as per HR Master Plan (new trainings as per SASEC TF Program)   | 3.500   |
| Construction of Regional Revenue and Customs Office at Gelephu (spillover)   | 110.000 |

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| Total:  | 583.150 |
|---|---------|
| Improve weigh bridges at the RRCO, Phuntsholing   | 0.000   |
| Purchase IP camera and 24 GB switches   | 0.150   |
| Procure plants and equipment  | 1.500   |
| Black top and construct drainage at main gate, pling  | 2.000   |
| Remodel Ground floor of RRCO, Phuntsholing  | 0.500   |
| Dissemination of information to public  | 0.000   |
| Carry out capacity building program for the stakeholders, traders and private sectors as per the implementation of the SASEC TF Program and RKC | 0.000   |
| Provide individualized interface for the tax payers (for PIT, CIT, BIT, CD, ST)   | 0.000   |
| Reform Customs and Excise Division in line with implementation of the RKC   | 10.000  |
| Establish Revenue Intelligence and Research Division  | 0.500   |

| Au Name: MINISTRY OF FINANCE           | Department: DEPARTMENT OF PUBLIC ACCOUNTS |
|--|---|
| Program Name: Public Accounts Services | Phase: Approved                           |

| Justification:      | The Department of Public Accounts is responsible for ensuring proper accounting of government financial resources and the management of treasury and debt. Prudent utilization and management of public funds requires strengthening of current financial management systems. In particular, the revision of fiscal transfer and monitoring guidelines as well as the implementation of treasury management guidelines are required. Furthermore, the Public expenditure management system has to be integrated with the MYRB, NPPF and RAMIS In its role of mobilizing and managing of government debt, the division of debt management will be strengthened to consolidate all debt management functions. In particular the in-house capacity to conduct analytical tasks including cost and risk analysis of debt and DSA will be strengthened. |
|---------------------|--|
| Strategy:           | <ul> <li>i. Appropriate fund redistribution mechanism needs to be put in place. Strengthen Multiyear Rolling Budget (MYRB).Treasury Single Account, Government Accounting System and green accounting shall be carried out.</li> <li>ii. Debt contracting responsibility for hydro project currently executed by MoEA to be consolidated with Debt Management Division of MoF. The DMD to be elevated to a Department.</li> </ul>  |
| Risk<br>Assessment: | <ul> <li>i. Challenges in unsupervised transactions, un- reconciled accounts and fund utilization capacities due to weak monitoring and evaluation capacities.</li> <li>ii. Heavy reliance on tax measures to mobilize resources as it is getting harder for Bhutan to avail of loans on account of her moving up the development index.</li> </ul>  |
| Beneficiary:        | All Ministries/ACC/RAA/RI M/All budget Agencies  |

| NKRA                         | SKRA  | SKRA KPI   |  |
|------------------------------|---|--|--|
|                              | Efficient and Effective mobilization of public resources. | Domestic revenue in percent of GDP                 |  |
|                              |   | Tax revenue in percent of GDP                      |  |
| Sustained Economic<br>Growth | Macroeconomic coordination and management enhanced        | Average fiscal deficit contained in percent of GDP |  |
|                              | Efficient and Effective mobilization of public resources. | Domestic revenue in percent of GDP                 |  |
|                              |   | Tax revenue in percent of GDP                      |  |
|                              | Macroeconomic coordination and management enhanced        | Average fiscal deficit contained in percent of GDP |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines | Base Year | Plan Targets |
|---|--|-----------|-----------|--------------|
| Outcome 001 Prudent<br>Utilization and<br>Management of Public<br>Resources       | No. of revised FAM implemented   | 0         | 2012      | 1            |
| Outcome 002: Efficient and Effective mobilization of public resources             | Turnaround time reduced in number of days  | 7         | 2012      | 1            |
|   | Treasury management guidelines implemented (No)  | 0         | 2012      | 1            |
|   | No of Accounting & Auditing<br>Standards for Government<br>owned companies & listed<br>companies implemented | 0         | 2012      | 33           |
|   | Maintain non-hydro debt to GDP ratio within 30% (%)  | 34.5      | 2012      | 30           |
|   | Maintain Debt Service<br>to Exports ratio within<br>international threshold (%)                              | 18.1      | 2012      | 25           |
| Results Level (Output)  | Indicators   | Baselines | Base Year | Plan Targets |
| Output 001: Strengthened  | FAM under FRR 2001 revised   | 0         | 2012      | 1            |
| Government Accounting<br>System   | PEMS and relevant online systems such as RAMIS, NPPF, EFTCS etc. integrated.                                 | 0         | 2012      | 3            |
| Output 002:Strengthened<br>Fiscal Transfer &<br>Monitoring System                 | Fiscal transfer and monitoring guidelines revised  | 0         | 2012      | 2            |
| Output 003:Strengthened<br>Treasury Management<br>System                          | Cash flow forecasting system developed   | 0         | 2012      | 1            |
| Output<br>004:Comprehensive AFS<br>produced                                       | Timely reporting of Annual Financial Statement (AFS)   | 5         | 2012      | 5            |
| Output 005:Bhutanese<br>Accounting Standards<br>(BAS) made compliant<br>with IFRS | BAS in government owned companies & listed companies implemented   | 0         | 2012      | 33           |
| Output 006:Improved Debt Management   | Debt management strategy developed   | 0         | 2012      | 1            |

Table 3: Programme Plan Outlay Summary

| Programme Activities  | Capital |  |
|---|---------|--|
| Revise FAM under FRR  | 0.000   |  |
| Feasibility study to implement high-end system (Review existing PEMS together with MYRB)  |         |  |
| Interface government accounting system (PEMS) with RAMIS, NPPF, EFTCS etc.  |         |  |
| Develop new reports in PEMS/PEMS enhancement and stakeholders training  | 1.000   |  |
| Participate in international & regional PFM forums  | 1.000   |  |
| Review and upgrade the existing release guidelines  | 0.300   |  |
| Develop expenditure monitoring and evaluation framework   | 0.500   |  |
| Develop Treasury Management Guidelines  | 0.300   |  |
| Develop/implement cash flow forecasting system  | 2.000   |  |
| Streamline the operation of government bank accounts and extra-budgetary accounts   |         |  |
| Develop separate module in PEMS for generation of AFS   | 1.000   |  |
| Produce AFS   | 0.000   |  |
| Establish Auditing & Accounting Standard Board as Autonomous Agency with prior approval from the Government                             | 1.300   |  |
| Facilitate establishment of Bhutan Institute of Chartered Accountant (BICA)   | 1.300   |  |
| Increase accounting and auditing professional base through linkages with international professional institutes.                         |         |  |
| Debt Management Division upgrade to a Department to consolidate all debt management functions (front, middle and back office functions) |         |  |
| Formulate debt management strategy & prepare periodic debt reports  | 0.000   |  |
| Upgrade CS-DRMS and training  |         |  |
| Mobilize funds (grants and loans) from multilateral financial institutions  |         |  |
| Total:  |         |  |

Au Name: MINISTRY OF FINANCE Department: DEPARTMENT OF NATIONAL BUDGET

Program Name: National Budget Services Phase: Approved

#### Justification: The Department of National Budget has the responsibility of preparing the multiyear rolling budgets (MYRB) in accordance to the budget manual. The MYRB system which started as a pilot in the 9th Plan makes budget projections for more than one financial year. Minor system modifications will be carried out to make MYRB system more versatile in the 11 FYP through constant revision of formula used in the preparation of recurrent budget and incorporation of additional reports formats. Furthermore, the integration of MYRB with Public Expenditure Management System (PEMS) and Plan Monitoring system (PlaMS) will provide all budgeting agencies with holistic view of their plans, annual budgets and expenditures. As required by the Public Finance Act 2007 and amendment thereof, a multiyear rolling budget i.e. two years' expenditure projections will have to be implemented in the 11 FYP. The National Budget Services will have to ensure efficient and effective allocation and utilization of public resources. This will be implemented through strengthened monitoring and co-ordination of the annual budgets in collaboration with Department of Public Accounts. Strategy: i. Establish proper linkage between plan and budget - integrating MYRB system with Plan monitoring System (PlaMS) of GNHC to allow for greater efficiencies in reporting and decision making. Implement multi- year rolling budget from the start of 11 FYP as required by the Public Finance Act 2007 and amendment thereof. iii. Provide resource position of the Government so that implementing agencies can plan and re-prioritize with greater certainty about future resource allocations and improve resource allocation to strategic priorities. iv. Gender Responsive Budgeting to advance gender equality and women's empowerment. Green budgeting for conservation of environment and the sustainable use of the natural resources. Risk

## Assessment:

- i. Inadequate resources can affect the implementation of activities to develop systems.
- ii. Gender responsive and green budgeting are new concepts and limited expertise being may challenge the implementation of these activities

#### Beneficiary:

All Central Government and Local Governments agencies including Thromdes and State owned Enterprises.

| NKRA               | SKRA   | SKRA KPI   |  |
|--------------------|--|--|--|
| Sustained Economic | Efficient and Effective mobilization               | Domestic revenue in percent of GDP                 |  |
| Growth             | of public resources.                               | Tax revenue in percent of GDP                      |  |
|                    | Macroeconomic coordination and management enhanced | Average fiscal deficit contained in percent of GDP |  |

Table 1: Programme Results Level

| Results Level (Outcome)  | Indicators  | Baselines | Base Year | Plan Targets |
|--|---|-----------|-----------|--------------|
| Outcome 001: Effective and efficient allocation of public resources.                                 | Percentage of capital budget utilization enhanced                 | 72        | 2012      | 85           |
|  | Percentage of total expenditure financed through domestic revenue | 50        | 2012      | 70           |
| Results Levels (Output)  | Indicators  | Baseline  | Base Year | Plan Targets |
| Output 001:Strengthened budget formulation   | Submission of Budget proposals on time (%)                        | 85        | 2012      | 100          |
| processes  | Budget manual revised   | 0         | 2012      | 1            |
| Output 002:Output monitoring initiated   | Monitoring of budget and physical output made quarterly           | 0         | 2012      | 20           |
| Output 003:Gender responsive budgeting instituted in annual budget                                   | Number of Gender<br>budgeting in annual budget<br>report          | 0         | 2012      | 5            |
| Output 004: Public<br>environment and budget/<br>expenditure report<br>incorporated in MYRB/<br>PEMS | Environment report incorporated                                   | 2         | 2012      | 3            |

Table 3: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Review and upgrade existing MYRB system  | 7.000   |
| Integration of MYRB, PEMS and PLaMS  | 3.000   |
| Streamline resource allocation mechanism for current expenditure   | 2.000   |
| Review and improve current budget formula  | 1.600   |
| Revise Budget Manual in line with the PFA 2007 & Amendment thereof   | 1.700   |
| Review and rationalize existing budget codes   | 1.700   |
| Allocate capital budget strictly as per the plan   | 1.000   |
| Initiate physical output & budget monitoring   | 1.000   |
| Prepare quarterly budget situation report  | 1.000   |
| Capacity building  | 1.500   |
| Promote gender responsive budgeting  | 5.000   |
| Initiate creation of green codes (e.g. waste management, climate change, etc.) through PEER in MYRB and PEMs | 1.600   |
| Introduce economic classification of budget  | 0.000   |
| Initiate development & Non-development capital budget  | 0.000   |
| Total:   | 28.100  |

Au Name: MINISTRY OF FINANCE
Department: DEPARTMENT OF NATIONAL PROPERTY
Program Name: National Property Services
Phase: Approved

| Justification:      | The Department of National Property (DNP) manages the extensive moveable and immoveable properties owned by RGoB. The DNP also spearheads and manages procurement system of the Government.  In order to enhance the efficiency and effectiveness, transparency and accountability and compliance in the government systems, Department of National Property will improve the planning and procurement system in the 11 <sup>th</sup> FYP. These initiatives will make the procurement system more competitive, transparent and efficient leading to competitive prices for goods & services. Furthermore to prevent pilferage, loss of assets and false claims on government properties and assets, the property and inventory management system of the Government will also be revamped and made into a web based e-inventory system.  The Department will also strengthen the PAVA and compensation systems to provide better valuations of both the public and private properties in the country. In line with policy of promotion and preservation of our age old traditions and culture, the DNP will promote various arts and crafts to cater to the needs of both the government and private sector. |
|---------------------|--|
| Strategy:           | i. Develop and implement proper planning and e-procurement system  ii. Develop and implement government property management system like e-inventory  iii. Promote traditional Arts and crafts through diversification of products for use by government agencies.  iv. Strengthen PAVA and compensation systems  |
| Risk<br>Assessment: | <ul> <li>i. Budget being unavailable at the right time could constrain the implementation of plans.</li> <li>ii. Expertise being unavailable to improve PAVA and compensation system could affect the plan.</li> <li>iii. Effective Property management of government properties depends on coordination and co-operation with many government agencies. If this is not forthcoming, it can affect effective implementation of the plan.</li> </ul>  |
| Beneficiary:        | All Central and Local government agencies, Corporate and private sector.   |

| NKRA                      | SKRA   | SKRA KPI   |
|---------------------------|--|--|
| Sustained Economic Growth | Macroeconomic coordination and management enhanced | Average fiscal deficit contained in percent of GDP |
|                           | Efficient and Effective mobilization of public     | Domestic revenue in percent of GDP                 |
|                           | resources.   | Tax revenue in percent of GDP                      |

## **Table 1: Programme Results Level**

| Results Level (Outcome)  | Indicators                                       | Baselines | Base Year | Plan Targets |
|--|--|-----------|-----------|--------------|
| Outcome 001 : Prudent<br>Utilization and Management<br>of Public Resources | e-procurement system implemented                 | 0         | 2012      | 1            |
|  | Number of inventory system developed             | 0         | 2012      | 1            |
|  | Compensation rates revised (No)                  | 2         | 2012      | 5            |
|  | Managed Government buildings infrastructure (No) | 250       | 2012      | 250          |
| Outcome 002 : Preservation and Promotion of Traditional Art and Crafts     | Art and Crafts diversified and promoted (No)     | 6         | 2012      | 6            |

| Results Levels (Output)   | Indicators   | Baseline | Base Year | Plan Targets                 |
|---|--|----------|-----------|------------------------------|
| Output 001:Efficient and Effective eGP system in place              | No. of agencies linked with e-procurement                  | 0        | 2012      | all<br>budgetary<br>agencies |
|   | Training and awareness on e-procurement (No)               | 0        | 2012      | all<br>budgetary<br>agencies |
| Output 002:Procurement planning mechanism developed and implemented | No. of procurement plan instituted in the agencies         | 0        | 2012      | All<br>budgetary<br>agencies |
| Output 003:Revised<br>Procurement Rules &<br>Regulations and SBDs   | No. of revision of<br>Procurement rules and<br>regulations | 2        | 2012      | 3                            |
| Output 004: Efficient management of government properties           | Inventory system developed                                 | 0        | 2012      | 1                            |

| Output 005: Centralize procurement of items identified by government  | Number of items identified  | 2 | 2012 | 3 |
|---|---|---|------|---|
| Output 006:Strengthened PAVA system                                   | Number of revision of rates as per Land Act                                 | 2 | 2012 | 5 |
|   | Valuation manual put in place   | 0 | 2012 | 1 |
| Output 007:Traditional arts & crafts and event management promoted    | Traditional arts and crafts and Chadi management strengthened and improved. | 6 | 2012 | 6 |
| Output 008: Environmental concerns integrated into procurement system | No. of clause inserted into PRR & SBDs regarding environmental concerns     | 0 | 2012 | 2 |

Table 3: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Study, research and implement e-procurement system in all budgetary agencies.  | 1.000   |
| Capacity building of e-procurement system                                      | 1.300   |
| Initiate annual procurement plan and develop procurement guidelines.           | 2.300   |
| Up gradation of PPP Division to a Department                                   | 1.000   |
| Revision Procurement Rules & Regulations and SBDs                              | 0.800   |
| Construction of multi-storied complex along Norzin Lam                         | 0.000   |
| Construct, renovate and maintain government properties                         | 38.000  |
| Procure server and develop web based inventory system                          | 2.700   |
| Timely disposal of obsolete government properties                              | 2.800   |
| Study, research and recommend changes in government property management        | 3.000   |
| Study, review and propose compensation rates                                   | 1.500   |
| Develop and implement non development fiscal measures for land                 | 1.000   |
| Develop valuation manual   | 1.500   |
| Capacity building for PAVA   | 2.000   |
| Develop personal information management system for Para-regular staff of DNP   | 0.700   |
| Mechanization of production.   | 1.500   |
| Provide Chadri services as and when required                                   | 3.500   |
| Promote environmental friendly concept in procurement                          | 1.700   |
| Develop and implement e-GP system  | 5.000   |
| Study, research and training on Public procurement policies and best practices | 3.500   |

| Capacity development of Repair and Maintenance Division  | 2.000  |
|--|--------|
| Capacity building of Fine Art and Craft Division ( FACD) |        |
| Diversification of products                              | 1.000  |
| Total:   | 79.000 |

| Au Name: MINISTRY OF FINANCE       | Department: SECRETARIAT |  |  |
|------------------------------------|-------------------------|--|--|
| Program Name: Secretariat Services | Phase: Approved         |  |  |

| Justification:      | The Secretariat of Ministry of Finance provides the support services such as administration, finance and human resource management for the departments under the Ministry. Other very specific responsibilities are the monitoring and coordination of the macro-economic situation, the management of internal audit for all government agencies, and Corporate Governance of Public Enterprises. The recent rupee shortage has clearly shown that the management of macroeconomic situation and forecasting needs to strengthened further. Additional sectoral information pertaining to trade, money and banking, tourism, State Owned Enterprises (SOE) needs to be added to the current framework (MTFF) to make macro-fiscal projections more robust.  To enhance fiscal and financial accountability and transparency, there is a need to strengthen Internal Audit services to improve performance and pre-empt corruption right from the initial stages. Further, Corporate Governance needs to be strengthened through improved monitoring. This will contribute to increased revenue generation for the government. |
|---------------------|--|
| Strategy:           | <ul> <li>i. Strengthen Macroeconomic coordination management through the up-gradation of MTTF to Macro-economic Framework (MEF), to provide reliable information and data for policy and decision makers. The MEF will be underpinned by an IT system to allow for greater efficiency and effectiveness.</li> <li>ii. Strengthen Fiscal and Financial accountability and transparency through reviewing and augmenting the structures and responsibilities of Internal Audit Units in Government.</li> <li>iii. Improved analysis and review of performance of State Owned Enterprises through development of an information and performance management system for SOEs.</li> </ul>  |
| Risk<br>Assessment: | <ul> <li>i. The development of various systems depends on co-ordination and cooperation by stakeholders. Lack of coordination and support by stakeholder agencies which will affect the implementation of plans.</li> <li>ii. Limited knowledge and skills to tackle macroeconomic, fiscal and corporate governance issues may affect effective implementation of plans.</li> </ul>  |
| Beneficiary:        | All Government agencies and the economy sector as a whole.   |

| NKRA                                     | SKRA   | SKRA KPI   |
|--|--|--|
| Sustained Economic<br>Growth             | Macroeconomic coordination and management enhanced   | Average fiscal deficit contained in percent of GDP |
|  | Efficient and Effective mobilization of public   | Domestic revenue in percent of GDP                 |
|  | resources.   | Tax revenue in percent of GDP                      |
| Improved public service delivery         | Enhanced efficiency and effectiveness of public service delivery                           | Average Performance rating > 90%                   |
| Democracy and<br>Governance strengthened | Strengthened Accountability<br>Transparency, Efficiency and<br>Effectiveness in Governance | Civil Service performance /GPMS rating             |
| Corruption reduced                       |  | TAT for public services                            |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines | Base Year | Plan Targets |
|---|--|-----------|-----------|--------------|
| Outcome 001 :<br>Macroeconomic<br>coordination and<br>management enhanced                                 | Average fiscal deficit contained in percent of GDP (%)                 | 5         | 2013      | 3            |
| Outcome 002 : Enhanced<br>Fiscal Responsibility &<br>Transparency   | No of Internal Control<br>Framework developed                          | 0         | 2012      | 1            |
| Outcome 003 : Corporate governance and performance enhanced   | Annual increase of earnings from SoEs (%)                              | 2         | 2012      | 3            |
| Outcome 004 : 11FYP of<br>MoF implemented as per<br>its strategic focus & good<br>capital budget delivery | Delivery of ministry's outcome (%)                                     | 85        | 2012      | 100          |
|   | Capital budget delivery of 11FYP of MoF (%)                            | 85        | 2012      | 100          |
| Results Levels (Output)   | Indicators   | Baseline  | Base Year | Plan Targets |
| Output 001:All the Macro-<br>economic variables<br>incorporated in MTFF<br>framework.                     | MTFF upgraded to<br>Medium Term Macro-<br>economic Framework<br>(MTMF) | 7         | 2013      | 9            |
| Output 002:Dynamic MEF developed  | Move to web based<br>MTMF system                                       | 0         | 2013      | 1            |

| Output 003:Ensure internal-<br>external balance | International reserve<br>to cover 12 months of<br>essential imports | 12 | 2013 | 12 |
|---|---|----|------|----|
| Output 004:Internal control framework developed | Internal control framework implemented                              | 0  | 2013 | 1  |
| Output 005: Internal audit agency strengthened. | Internal Audit Bureau<br>Established                                | 0  | 2013 | 1  |
| Output 006: Effective management of SOEs        | Public Enterprise<br>Information System (PEIS)<br>in place          | 0  | 2013 | 1  |
|   | Develop Framework for efficient performance management of SoEs      | 0  | 2013 | 1  |
| Output 007:Institutional competency enhanced    | Bi-annual achievement report published                              | 10 | 2013 | 10 |

Table 3: Programme Plan Outlay Summary

| Programme Activities   | Capital |
|--|---------|
| Incorporate Money & Banking data/info.                                   | 2.700   |
| Incorporate Import & Export data/Info.                                   | 1.500   |
| Develop separate Hydro & Non-Hydro MTMF                                  | 1.300   |
| Develop user-friendly IT MEF system.                                     | 7.000   |
| Introduce MEF user guidelines  | 1.000   |
| Strengthen capacity for macroeconomic coordination and management        | 2.000   |
| Publish MEF working paper/report   | 0.000   |
| Draft Fiscal responsibility Bill   | 0.000   |
| Debt Sustainability Analysis (DSA)                                       | 0.000   |
| Develop Fiscal Policy  | 0.000   |
| Develop Internal Control Framework                                       | 0.000   |
| Identification, assessment and management of risk                        | 0.000   |
| Stocktaking and consultative workshop with stakeholders                  | 0.000   |
| Capacity building of Internal Auditors                                   | 2.000   |
| Up gradation of CCA to a Department                                      | 0.000   |
| Up-gradation of Public Enterprise Division to a department               | 1.500   |
| Assess current corporate governance structure & recommend best practices | 0.000   |

| Develop framework for risk management to detection, monitoring & risk mitigation measures        | 0.000    |
|--|----------|
| Design and implement monitoring & evaluation tools and framework                                 | 0.000    |
| Develop framework for evaluating service delivery in light of their social mandates & objectives |          |
| Assess service delivery standards & recommend measures for improvement                           | 0.000    |
| Rationalize subsidies to SOEs  | 0.000    |
| Develop Information System on SOEs   |          |
| Construction of MoF's office building.   | 150.000  |
| Monitoring and evaluation of MoF plan activities   | 0.000    |
| Institute monthly progress report  | 0.000    |
| Capacity Building of MoF's secretariat   | 2.500    |
| Procure aircraft for Druk Air  |          |
| Total:   | 1974.500 |

Au Name: MINISTRY OF HOME & CULTURAL

AFFAIRS REGISTI

Program Name: Enhance civil registration and census services.

Department: DEPARTMENT OF CIVIL REGISTRATION & CENSUS

**Phase: Approved** 

| Justification:      | The Department of Civil Registration and Census (DCRC) core mandate is to deliver the civil registration and census services to the general public in line with the Citizenship Law of the land. During the 11th plan, in order to improve the services, it is proposed to put in place a reliable service delivery system through the establishment of online Bhutan Civil Registration System (BCRS). To support the online system, ICT network infrastructure and associated equipments will be upgraded at the headquarter, dzongkhags, dungkhags and thromdes. Automated Fingerprint Information System (AFIS) will also be incorporated in the online system to enable efficient verification and authentication of citizen information. |
|---------------------|--|
| Strategy:           | <ul> <li>i. In order to enhance effective and efficient delivery of civil registration and census services, DCRC will create a conducive working environment for the officials, service oriented facilities for the clientele</li> <li>ii. Upgrade the existing Automated Fingerprint Information System</li> <li>iii. Create step by step process for all services</li> </ul>   |
| Risk<br>Assessment: | <ul> <li>i. Shortage of manpower and limited technical expertise (manpower) to sustain the online BCRS services</li> <li>ii. Inadequate fund</li> <li>iii. Lack of effective inter-agency coordination and collaboration are some of the factors that could affect effective implementation of the programme</li> </ul>  |
| Beneficiary:        | All sections of the society.   |

| NKRA                     | SKRA   | SKRA KPI                       |
|--------------------------|--|--------------------------------|
| Democracy and Governance | Effective and efficient public   | Number of e-services delivered |
| strengthened             | service delivery   | TAT for public services        |
| Corruption reduced       | Strengthened Accountability<br>Transparency, Efficiency and<br>Effectiveness in Governance | TAT for public services        |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines   | Plan Targets                        |
|---|--|-------------|-------------------------------------|
| Outcome 001 : Effective and efficient Civil Registration and  | % of civil registration and census application/requests processed within the same day.                                 | 80%         | 90%                                 |
| Census Services   | % TAT of individual service reduced.   | 75%         | 90%                                 |
| Results Levels (Output)   | Indicators   | Baseline    | Plan Targets                        |
|   | No. of DCRC services provided effectively and efficiently through online system  | 15 services | 17 services<br>fully<br>operational |
| Output 001:Bhutan Civil Registration System (BCRS) Database made fully web- based application (Online system) | % of 3rd Generation (3G) Citizenship Identity Card issued to eligible Bhutanese citizen who had applied.               | 71%         | 100                                 |
|   | % of Special Residence Permit (SRP) cards issued to eligible persons who had applied.                                  | 83%         | 100                                 |
| Output 002:Strengthened Institutional Capacity  | New Office Building constructed  | 0           | 1                                   |
| Output 003:Strengthen the security and accuracy of online BCRS database                                       | Developed comprehensive and accurate identification of citizen through Automated Fingerprint Information System (AFIS) | NA          | 1                                   |
| Offiline BCKS database  | % of cases reviewed and updated in the BCRS database.  | 32%         | 100                                 |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Training of DCRC officials and Local Government on the online/web-based system.              | 2.000   |
| Advocacy campaign on birth and death registration as per standard operating procedures (SOP) | 0.200   |
| Construction of office building equipped with furniture and functional amenities.            | 17.000  |
| Procurement of AFIS (both software and hardware)   | 4.990   |
| Training of official and staff on AFIS   | 0.460   |
| Procurement of digital cameras, camera stand, back light/frame and accessories.              | 0.580   |
| Annual Census  | 0.530   |
| Research and Analysis of BCRS database   | 0.460   |
| Feasibility study on development of Bi-lingual BCRS database                                 |         |
| Total:   | 27.020  |

| Au Name: MINISTRY OF HOME & CULTURAL AFFAIRS                                | Department: DEPARTMENT OF IMMIGRATION |
|---|---------------------------------------|
| Program Name: Strengthen National Security and enhance Immigration Services | Phase: Approved                       |

| Justification:      | The Department of Immigration has the responsibility to safeguard national security, monitor and regulate flow of foreigners into the kingdom, and deliver prompt and professional immigration services to the public. Enhancing efficiency and competency of the officials in the field are critical to regulate and curb the influx of illegal immigrants and that of undesirable elements into the country to ensure security and safety of the nation. In view of this, it is proposed to strengthen the immigration services through establishment of automated check-post system, awareness creation, building capacity of the staff and close monitoring and supervisions. |
|---------------------|---|
| Strategy:           | <ul> <li>i. Towards fulfilling the mandate of safeguarding the national security, efficiency and effectiveness of immigration services will be strengthened through development of adequate infrastructure</li> <li>ii. Mobilize adequate manpower with required skills</li> <li>iii. Establish security enabled system and provide adequate provision of conveyance facilities</li> <li>iv. Awareness on the immigration policies, rules and regulations will be created through sensitization workshops and meetings to the stakeholders and general public.</li> </ul>   |
| Risk<br>Assessment: | If additional required manpower are not provided and automated system could not be developed, the quality of services will be compromised with the increasing number of expatriate workers entering the country due to the implementation of mega power projects and other FDI ventures.  |
| Beneficiary:        | International visitors, immigrant workers, businesses, public and corporate sector, and public at large.  |

| NKRA               | SKRA   | SKRA KPI                |
|--------------------|--|-------------------------|
| Corruption reduced | Strengthened accountability transparency, efficiency and effectiveness in governance | TAT for public services |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines      | Plan Targets             |
|--|--|----------------|--------------------------|
| Outcome 001: Strengthened national security and enhanced immigration service delivery. | Client perception on public service delivery.                            | NA             | 70% of clients satisfied |
|  | Time taken to process immigration services of route permit and extension | 2 hrs          | 30 minutes               |
|  | Time taken to process visa application and work permit                   | 5 working days | 3 working days           |
| Results Levels (Output)  | Indicators   | Baseline       | Plan Targets             |
| Output 001: Institutional capacity enhanced  | No. of infrastructure created.   | NA             | 1 (Office building)      |
|  | No. of employees inducted.   | 204            | 480                      |
| Output 002: Immigration inspection strengthened.                                       | Frequency of inspection.   | NA             | Round the clock          |
| Output 003: Increased awareness on immigration.  | No. of awareness and sensitization programmes conducted.                 | NA             | 10                       |
| Output 004: Installed security   | No. of online system upgraded and installed                              | 2              | 3                        |
| enabled system in immigration offices and check points                                 | No. of automated up-country check-post system installed                  | NA             | 1                        |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Construction of Immigration office building in Thimphu                                       |         |
| Awareness and sensitization programmes.  |         |
| Procurement and installation of system (biometric, barcode reader, visa sticker system etc). |         |
| Construction of regional immigration office in Phuentsholing                                 |         |
| Total:   |         |

Au Name: MINISTRY OF HOME & CULTURAL

**AFFAIRS** 

**Program Name: Strengthening of Local** 

Governance

Department: DEPARTMENT OF LOCAL

GOVERNANCE

**Phase: Approved** 

| Justification:      | Good governance plays a key role in the pursuit of Gross National Happiness. With the decentralization of power to the Local Governments (LGs), people's participation in the country's development planning and implementation has been given the highest priority. However, in order for LGs to perform efficiently and effectively, their institutional capacity has to be strengthened. As mandated and done in the 10 <sup>th</sup> plan, the DLG will continue to build capacity of the LG functionaries through series trainings, workshops, seminars and exposure visits both within and outside the country. Various studies are also proposed that will look into finding solutions to recurring problems in the LGs regarding policy and legislations. |
|---------------------|---|
| Strategy:           | <ul> <li>i. Strengthening the capacity of the LG functionaries is viewed as a foundation of efficiency and effective delivery of public services. In view of this, DLG will continue to build capacity of the LG functionaries in collaboration with other relevant stakeholders.</li> <li>ii. Emphasis will also be put in to improve information management system, participation of female in the LG functionaries, and improving the coordination mechanism with external stakeholders.</li> </ul>  |
| Risk<br>Assessment: | <ul> <li>i. Inadequate financial resources can affect the implementation of activities</li> <li>ii. If sufficient human resources are not provided, it will also affect the timely implementation of activities.</li> </ul>   |
| Beneficiary         | Local Governments and public at large   |

| NKRA                                  | SKRA   | SKRA KPI                |
|---------------------------------------|--|-------------------------|
| Corruption reduced                    | Strengthened accountability transparency, efficiency and effectiveness in governance | TAT for public services |
| Improved public service delivery      | Strengthened accountability transparency, efficiency and effectiveness in governance | TAT for public services |
| Democracy and governance strengthened | Strengthened accountability transparency, efficiency and effectiveness in governance | TAT for public services |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines | Plan Targets   |
|--|--|-----------|--|
|  | % of chiwog where<br>structured zomdu has been<br>institutionalised ( as per the LG<br>Rules & Regulations 2012) | NA        | 100  |
| Outcome 001 : Decentralization and democratic governance at                                      | Ratio of elected female LG functionaries   | 1:13      | 1.5: 13  |
| the local level deepened and strengthened.   | No. of Chiwog with functional/<br>active community groups<br>(WUG, RUG)  | NA        | atleast one<br>functional<br>group in<br>each chiwog |
|  | % of households participating in zomdus  | NA        | 80   |
|  | No. of functional CCs in the gewogs.   | 100       | 205  |
| Outcome 002 : Efficient and effective public services delivered at local level.                  | Improvement of people's perception on LG performance   | 79        | 85   |
| at local level.  | TAT of public services delivery at gewog level.  | 7 days    | 1 day  |
| Results Levels (Output)  | Indicators   | Baseline  | Plan Targets   |
| Output 001: Community participation and ownership strengthened.                                  | No. of functional committees for specific services formed in chiwog.   | 0         | atleast one<br>in each<br>chiwog                     |
| Output 002: Strategic policies and intervention measures on decentralization framework enhanced. | No. of policy documents framed/reviewed.   | 3         | 5  |
| Output 003: LG functionaries' capacities enhanced.   | No. of awareness programmes/<br>trainings conducted.   | 20        | 25   |
| Output 004: Functional and reliable information systems developed for Local Governance.          | Information system development in place.   | 0         | 1  |
| Output 005: Local Government performance evaluation and recognition system instituted.           | No. of LGs evaluated/assessed and recognized.  | 0         | 20<br>dzongkhags,<br>100 gewogs                      |
|  | Reward and recognition system in place.  | 0         | 1  |
| Output 006: Co-ordination and liaising between LGs and central agencies strengthened             | No. of coordination mechanisms put in place.   | 3         | 6  |

| Output 007: Functional CCs in | No. of people availing the | 0 | 1 |
|-------------------------------|----------------------------|---|---|
| place.                        | service through CCs.       | U | 1 |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Exploring other informal community participation method- feed forward, social network groups, focus discussion groups, committees, etc. | 0.900   |
| Carry out study and conduct awareness workshops to strengthen zomdu culture.  | 0.600   |
| Provide coordination services to the relevant partner sectors.  | 0.100   |
| Carry out studies on reconfiguration of Dzongkhags/Gewogs   | 0.100   |
| Study on implications of Gungtongs on Local Governance.   | 0.600   |
| Conduct induction for newly recruited/elected LG functionaries- GAOs, Gups, Mangmis, Tshogpas, Tshodrungs.                              | 0.700   |
| Develop strategic decentralization (administrative, political and fiscal) policy.   | 0.500   |
| Training/workshop for the Local Government functionaries.   | 19.000  |
| Support LGs in preparation and implementation of capacity development programme.  | 1.500   |
| Collaborate/partner with other relevant agencies on implementation of capacity development activities.                                  | 1.000   |
| Development and up-gradation of system.   | 1.500   |
| Develop LG performance assessment criteria.   | 0.100   |
| Carry out social audit and M&E for 105 selected gewogs.   | 1.000   |
| Biennial DT/GT Chairperson's conference.  | 2.300   |
| Biennial GAOs symposium.  | 2.000   |
| Annual dzongdags's conference.  | 1.000   |
| Compile and develop comprehensive Dzongkhag, Gewog profile  | 0.100   |
| Carryout M&E of functional CCs  | 1.000   |
| Total:  | 34.000  |

| Au Name: MINISTRY OF HOME & CULTURAL AFFAIRS          | Department: ROYAL BHUTAN POLICE |
|---|---------------------------------|
| Program Name: Development of Fire and Rescue Services | Phase: Approved                 |

| Justification:      | The Fire Service Department comprises 2 officers and 165 police personnel who cater fire fighting and emergency fire services across the nation. Besides that, they also provide rescue and recovery operations such as road traffic accident, drowning cases and river rescue operations. At present Fire Service Division has 56 fire engines against 165 trained fire personnel stretched over 20 Dzongkhags and 1 rescue vehicle fully equipped with rescue equipment stationed at Thimphu, The Fire Service Division also installed Fire hydrant system in six Dzongs and fire alarm system in three historical Dzongs namely Tashichho dzong, Trongsa Dzong and Punakha Dzong. The trend of fire accidents has been constant at 40 cases for the last three years, however, the service was not up to the mark due to lack of infrastructure and manpower in all the dzongkhags and major towns. Therefore, it is proposed to strengthen fire and rescue services with the establishment of an |
|---------------------|--|
|                     | independent fire service department under MoHCA.  The Fire Service Division also provided fire safety trainings to the institutes and public and till date a total of 7992 people have been trained. Such training will be continued in the 11 <sup>th</sup> plan to prevent and curb down the fire incidences in the country.   |
| Strategy:           | <ul> <li>i. Establishment of regional fire brigade with fire stations along with accommodation and other necessary fire equipment in all the dzongkhags.</li> <li>ii. The fire service division will also continue to train institutes and general public on fire safety and rescue services and create awareness among the general public using media such as BBS, Kuensel from time to time. Brochures and pamphlet will also be developed to distribute to the general public.</li> </ul>   |
| Risk<br>Assessment: | Inadequate fund and lack of manpower might impact the successful implementation of the proposed activities.  |
| Beneficiary:        | All the citizens   |

| NKRA               | SKRA   | SKRA KPI  |
|--------------------|--|---|
| Cafa Caciatu       | Security and safety of society enhanced  | % of people who felt safe(GNH survey, 2010)     |
| Safe Society       |  | No. of nationwide crime reported annually (RBP) |
| Corruption reduced | Strengthened Accountability<br>Transparency, Efficiency and<br>Effectiveness in Governance | TAT for public services                         |

| Improved public service delivery | Strengthened Accountability<br>Transparency, Efficiency and<br>Effectiveness in Governance | TAT for public services |
|----------------------------------|--|-------------------------|
| Democracy and                    | Strengthened Accountability  | TAT for public services |
| Governance                       | Transparency, Efficiency and   |                         |
| strengthened                     | Effectiveness in Governance  |                         |

Table 1: Programme Results Level

| Results Level (Outcome)                                      | Indicators  | Baselines  | Plan Targets                     |
|--|---|--|----------------------------------|
| Outcome 001 : Enhanced safe                                  | No. of fire incidents reported annually                                       | 47   | >15                              |
| and secure society   | No. of households saved from fire accidents/effective fire fighting           | 40 houses in three years                           | save 80%<br>of reported<br>cases |
| Outcome 002 : Efficient and effective fire service delivered | No. of households saved from fire accidents attended/ effective fire fighting | 40 houses<br>saved out of<br>110 reported<br>(36%) | 90%                              |
|  | Response time reduced   | N/A  | 10 minutes                       |
| Results Level (Output)                                       | Indicators  | Baselines  | Plan Targets                     |
| Output 001:1.1Adequate                                       | No. of structures constructed   | 222  | 247                              |
| infrastructures developed                                    | No. of fire fighting equipments and fire tenders purchased                    | 56   | 58                               |
| Output 002:2.1 Strengthened institutional capacity           | No. of fire tenders and vehicles purchased                                    | 56   | 58                               |
|  | Fire fighting protocol reviewed/<br>strengthened                              | 1  | 1                                |

### **Table 2: Programme Plan Outlay Summary**

| Programme Activities   |  |
|--|--|
| Construction and maintenance of fire stations and structures |  |
| Purchase of fire tenders and pool vehicles                   |  |
| Purchase of office equipments and furniture                  |  |
| Capacity development   |  |
| Total:   |  |

| Au Name: MINISTRY OF HOME & CULTURAL AFFAIRS | Department: ROYAL BHUTAN POLICE |
|--|---------------------------------|
| Program Name: Development and                | Phase: Approved                 |

| Justification:      | The Prison Service Department administers 8 prisons including Youth Development and Rehabilitation Center at Tshimasham. The existing prisons has capacity for 811 prisoners. However, it accommodates 1040 prisoners including 45 female due to increased in number of prisoners. This has led to overcrowding of the prisons which has acceded to many issues such as difficulty in maintaining discipline and security, poor health and hygiene, and increase in conflict and violence in the prison.  There is also a difficulty in rehabilitating the prisoners leading to increase in recidivism. Further, it is increasingly realized that the increase in number of prisoners also increases liabilities to the society.  The RBP is also constrained many factors such as shortage of manpower, accommodation for prison guards and poor security system and facilities. In view of this, it is proposed to strengthen prison facilities for improved security. |
|---------------------|--|
| Strategy:           | <ol> <li>The Prison Service Department proposes to construct a rehabilitation center at Dolongang with capacity of 500 prisoners to decongest current jails.</li> <li>Adequate accommodation and other facilities for the police personnel will be provided to encourage deliver prompt services.</li> <li>Efforts to re-integrate former convicts into the social mainstream will also be made by introducing rehabilitative programs such as vocational skill development, non-formal education system, counseling programs, etc. to productively engage the prisoners.</li> <li>Provision of adequate security systems in prisons to strengthen security at prisons.</li> </ol>   |
| Risk<br>Assessment: | Financial constraint and lack of technical capacities in the department might constraint the successful implementation of the constructions. Also the success of the major reform in the management of prisons will depends on the efficiency and effectiveness of the security system.  |
| Beneficiary:        | Prisoners, their families and public at large  |

| NKRA         | SKRA                                    | SKRA KPI                                       |  |
|--------------|---|--|--|
| Safe Society | Security and safety of society enhanced | No of nationwide crime reported annually (RBP) |  |
|              |   | % of people who feel safe (GNH survey, 2010)   |  |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines                                      | Plan Targets         |
|---|---|--|----------------------|
| Outcome 004 : Ensured value provider for efficient, safe and humane correctional services | % of recidivists in the prisons                               | 96 out of 1106 prisoners are recidivist(8. 7%) | Reduced to 5%        |
|   | No. of skills development programs (eg. Vocational) initiated | NA   | 11                   |
| Results Levels (Output)   | Indicators  | Baseline                                       | Plan Targets         |
| Output 001:1.1 Reformatory measures in place  | No. of reformatory programs conducted                         | 2  | 8                    |
|   | No. of counselors recruited                                   | NA   | 8                    |
| Output 002:1.2<br>Strengthened security and<br>safety of the inmates                      | No. of prison break out reduced                               | N/A  | less than 5/<br>year |
|   | No. of gender friendly prison constructed                     | N/A  | All prisons (8)      |
|   | No. of security systems installed                             | N/A  | To all prisons(8)    |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   |       |
|--|-------|
| Vocational trainings, spiritual/counseling and NFE programs              |       |
| Construction of safety walls and other security features                 | 2.000 |
| Procurement and installation of security systems and gadgets             |       |
| Construction and maintenance of prison and quarters for prison personnel |       |
| Capacity development   |       |
| Procurement of office furniture and pool vehicles                        |       |
| Total:   |       |

| Au Name: MINISTRY OF HOME & CULTURAL AFFAIRS | Department: ROYAL BHUTAN POLICE |
|--|---------------------------------|
| Program Name: Maintenance of Law and Order   | Phase: Approved                 |

| Justification:      | The Royal Bhutan Police is a law enforcement agency mandated to maintain law and order in the Kingdom and provide security to life and property with quality services to the public. Since its establishment in 1965, the RBP was able to maintain law and order in the country, however with the growing population and urbanization, the crime rate particularly among the youth is increasing almost every year. On the other hand, the RBP is not fully equipped to deal with such crimes with limited infrastructure, facilities and technologies. Therefore, RBP proposed to strengthen its services with better infrastructure facilities, technologies and human resources. This will contribute greatly to maintenance of law and order, reducing and preempting crime particularly among the youth in the country. |
|---------------------|--|
| Strategy:           | <ul> <li>i. Modernization of policing and crime detection using the appropriate technologies such as CCTV</li> <li>ii. Develop Automated Fingerprint Information System for improved crime detection and conviction</li> <li>iii. Building human resource capacity in new and emerging areas</li> <li>iv. Police outreach services strengthened to provide close monitoring and timely execution of the services</li> </ul>  |
| Risk<br>Assessment: | <ul> <li>i. Budget being unavailable at the right time could constrain the implementation of plans.</li> <li>ii. If adequate and skilled personnel are not available, it will affect the implementation of plans.</li> </ul>   |
| Beneficiary:        | All the citizens   |

| NKRA   | SKRA    | SKRA KPI  |
|--|---------|---|
| Security and safety of society Safe Society enhanced |         | % of people who felt safe (GNH survey, 2010)    |
| Safe Society   | emanced | No. of nationwide crime reported annually (RBP) |

**Table 1: Programme Results Level** 

| Results Level (Outcome)                                    | Indicators  | Baselines          | Plan Targets            |
|--|---|--------------------|-------------------------|
| Outcome 001 : Enhanced safe                                | Crime population ratio                              | 7 or 4678<br>cases | 5 or 1500               |
| and secure society   | People's perception on safety by end of plan period | N/A                | 80                      |
| Outcome 002 : Efficient and                                | Average performance rating                          | N/A                | 90                      |
| effective service delivery                                 | TAT of complaint response                           | N/A                | 10minutes               |
| Results Levels (Output)                                    | Indicators  | Baseline           | Plan Targets            |
| Output 001: Criminal activities reduced                    | Crime/ population ratio                             | 7 or 4678<br>cases | 5/1000 or<br>1500 cases |
| Output 002: Efficient intelligence network enhanced        | Functional intelligence network offices             | 4                  | 9                       |
| Output 003: Community                                      | No. of community police centers                     | 5                  | 10                      |
| Policing enhanced  | No. of advocacy and sensitization program           | 10                 | 30                      |
| Output 004: Strengthened                                   | No. of Infrastructures developed                    | 1677 units         | 1947                    |
| Police services  | No. of vehicles procured                            | 259                | 295                     |
| Output 005: One window service delivery mechanism in place | TAT of complaint response reduced                   | N/A                | >70%                    |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities   |         |  |
|--|---------|--|
| Reduction of traffic related offences                                    | 6.650   |  |
| Institute intelligence network offices                                   | 5.000   |  |
| VIP and vital installation security                                      | 112.421 |  |
| Police youth/community/public partnership/awareness and advocacy program | 10.500  |  |
| Construction and renovation of offices/quarters                          |         |  |
| Procurement and maintenance of vehicles                                  |         |  |
| Long term and short term capacity development program for RBP personnel  |         |  |
| Institute one window service system                                      |         |  |
| Strengthening of crime and operation measures                            |         |  |
| Vital installation security  |         |  |
| Total:   |         |  |

Au Name: ELECTION COMMISSION OF BHUTAN

Program Name: Strengthening Electoral System and Processes for Vibrant Electoral Democracy

**Department: SECRETARIAT** 

**Phase: Approved** 

| Justification:  Strategy: | Elections play a critical role in enhancing, promoting and fostering growth of electoral democracy and participation of citizens of Bhutan. Sustaining participation in the electoral process is becoming a challenge as evident in the falling voter participation rates. Therefore it is crucial that all citizens including youth are adequately informed and educated to actively engage in electoral and democratic process. In terms of gender representation, women need to be actively encouraged to participate as candidates to allow for better election outcomes.  The Parliamentary and Local Government elections of the past have resulted in tremendous learning. Strengthening of the electoral process needs to be undertaken to ensure improving cost effectiveness, efficiency and transparency in the conduct of elections. Also, it should facilitate the participation of all eligible voters with minimum errors and in a cost effective manner.  i. To improve the efficiency and effectiveness in the conduct of elections, ICT will be increasingly used as a tool to manage the election process, advocacy and dissemination of results.  ii. The Election Commission through construction of its Head Office will strengthen the institution through availability of adequate office space and thereby improve |
|---------------------------|---|
|                           | its service delivery. iii. Human Resource Capacities of its staff at the headquarters as well as in the districts will be developed to strengthen the capacities of the ECB.  |
| Risk<br>Assessment:       | i. Inadequate resources to implement plans in a timely manner ii. Inadequate Human resources iii. Political uncertainties could affect the election schedule  |
| Beneficiary:              | General Public and Voters     Media Agencies  |

| NKRA                        | SKRA   | SKRA KPI  |
|-----------------------------|--|---|
| Democracy and<br>Governance | Participation in democratic governance deepened and strengthened                     | % of female candidates in the elections sustained (ECB) |
| strengthened                | Participation in democratic governance deepened and strengthened                     | % Voters turnout in Elections(ECB)                      |
| Corruption reduced          | Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance | Access to media (Media<br>Impact Survey)                |

| Democracy and<br>Governance<br>strengthened                    | Participation in democratic governance deepened and strengthened | % of female candidates in the elections sustained (ECB) |
|--|--|---|
| Gender friendly<br>environment<br>for women's<br>participation | Participation in democratic governance deepened and strengthened | % Voters turnout in Elections(ECB)                      |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines                       | Plan Targets                               |  |
|---|---|---------------------------------|--|--|
|   | % Report Coverage of<br>National and International<br>Election Observers  | 100                             | 100  |  |
| Outcome 001: Free, Fair and Genuine Elections                               | Conduct of periodic free and fair elections (Parliamentary and Local Governments)   | 1 PE (2008) and<br>1 LGE (2011) | 2 PEs (2013 &<br>2018) and 1<br>LGE (2016) |  |
| Conducted   | % of timely registration of<br>voters and accurate updating<br>of the Electoral Roll  | 80                              | 100  |  |
|   | Media reports on elections - % of media agencies covering elections   | 90                              | 100  |  |
|   | Voter % turnouts in elections   | 80 (2008) and<br>56 (2011)      | 70 in 2016 LGE<br>& 90 in 2018 PE          |  |
| Outcome 002 : Participation in Electoral and Political Processes Sustained/ | Number of women candidates contesting in election   | 225                             | 330  |  |
| Improved  | % of voters undergone civic and voter education programmes  | 75                              | 80 & above                                 |  |
| Results Levels (Output)   | Indicators  | Baseline                        | Targets                                    |  |
|   | Number of reviews of elections conducted with electoral stakeholders (every after election)   | 2                               | 3  |  |
| Output 001:Electoral system, processes and procedures strengthened          | % of electoral processes and procedures reviewed and simplified   | 15                              | 50   |  |
| procedures strengthened   | % of required election officials<br>(poll related and during<br>elections) trained on electoral<br>process and procedures – for<br>every election | 100                             | 100  |  |

|   |   |          | 1             |
|---|---|----------|---------------|
|   | Number of ICT systems implemented in electoral process and procedures   | 3        | 5             |
| Output 002.FCB  | ECB HQ constructed  | NA       | 1 HQ Office   |
| Output 002:ECB<br>strengthened as an<br>independent institution of<br>democratic governance | % of election officials (ECB<br>and Dzongkhags Election<br>Offices) trained and equipped<br>with knowledge and skills | 60       | 95            |
| 0 1 1000 5%   | % of voters covered by civic and voter education and information dissemination programmes                             | 75       | 80 & above    |
| Output 003:Effective civic and voter education delivered                                    | % of youth and students covered by civic and voter education programmes   | 50       | 80 & above    |
|   | % Instances of baseless electoral allegations and complaints reduced  | N/A      | Reduced by 50 |
|   | % of Bhutanese women covered by civic and voter education programmes  | 75       | 80 & above    |
| Output 004: Participation in the electoral process ensured                                  | Attendance % of candidates and political parties contesting elections   | 100      | 100           |
|   | % of women staff recruited in ECB and trained   | 30       | 40            |
|   | Per capita expenditure on elections reduced   | US \$ 12 | US \$ 5-6     |
|   | Number of ICT initiatives implemented to ensure error-free and professional electoral process and procedures          | 3        | 5             |
| Output 005:Cost effective elections conducted   | % of elecotoral procedures improved (e.g. in terms of processing voters in Polling Stations)                          | N/A      | 50            |
|   | % of eligible voters registered<br>and enrolled in the Electoral<br>Roll  | 80       | 100           |
|   | % of well-motivated election personnel  | N/A      | 80 & above    |

|   | % of voters covered by civic and voters education and  | 100 | 100            |
|---|--|-----|----------------|
| Output 006: National language and identity promoted                         | information programmes conducted in Dzongkha   |     |                |
|   | % of civic and voter education<br>and information materials<br>developed and published in<br>Dzongkha                                | 100 | 100            |
|   | Chiwog Demkhongs names<br>standardized in Dzongkha and<br>used (coverage in %)   | 70  | 100            |
|   | % of employees groomed in<br>Driglam- Chosum   | 70  | 100            |
| Output 007: Election resources and materials sustainably used and managed   | % of election materials and resources re-used and recycled   | 30  | 50             |
|   | Number of measures (ICT-related) adopted in electoral processes and procedures to reduce wastage of election materials and resources | 3   | 5              |
|   | % of work places made environment friendly, clean and green  | 60  | 100            |
| Output 008:Conduct of<br>Elections (Bye-Elections,<br>2016 LGE and 2018 PE) | Bye-Elections conducted<br>to Local Governments<br>and Parliament whenever<br>vacancies occur  | 2   | Not Applicable |
|   | Local Government Elections conducted in 2016   | 1   | 1              |
|   | Parliamentary Elections conducted in 2018  | 1   | 1              |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Conduct Learning from Experience Programmes with electoral stakeholders after completion of Parliamentary Elections and Local Government Elections                              | 4.000   |
| Review and develop electoral rules & regulations, guidelines, handbooks and strategy documents and publication  | 3.000   |
| Review electoral processes and procedures for improvements  | 1.500   |
| Identify and conduct thorough trainings for election officials such as Returning Officers, Election Obervers, Presiding and Polling Officers, Election Security Personnel, etc. | 10.000  |
| Develop comprehensive Biometric Voter Registration and Identification System, including upgrading of Electoral Roll Management System   | 10.000  |
| Develop GIS-based Election Information and Management System  | 0.000   |
| Develop Election Officials (poll related) Database Management System  | 0.000   |
| Develop Election Result Management System   | 1.000   |
| Strengthen ICT infrastructure across ECB and Dzongkhag Election Offices, including developing Intranet portal facility  | 2.000   |
| Construct ECB HQ  | 128.000 |
| Undertake human resource development and build core competencies  | 0.000   |
| Undertake election-related study visits and exchanges and participation in seminars, conferences and workshops  | 5.000   |
| Undertake civic and voter education and information dissemination (through mass communication media and other conventional means)   | 10.000  |
| Engage youth and students in civic and voter education in schools, colleges, training institutes, etc.  | 5.000   |
| Develop and implement standard civic and voter education curriculum   | 5.000   |
| Conduct Building Resources in Democracy, Governance and Elections (BRIDGE) trainings and workshops for election officials and electoral stakeholders                            | 10.000  |
| Train and develop a pool of Resource Persons/Trainers   | 5.000   |
| Conduct electoral dispute resolution trainings for electoral stakeholders and local authorities   | 6.000   |
| Develop awareness and information materials on participation by women, youth and marginalized voters  | 1.000   |
| Train political parties, candidates and representatives on electoral roles and responsibilities   | 2.000   |
| Conduct trainings and workshops political parties and their workers in national and field offices to better coordinate organizational functions and activities                  | 2.000   |

| Total:  | 427.700 |
|---|---------|
| Conducting Parliamentary Elections in 2018  | 100.000 |
| Conducting Local Government Elections in 2016   | 100.000 |
| Conducting Bye-Elections (2013-2018)  | 11.000  |
| Undertake annual induction courses on traditional culture and ethics for election officials                                   | 0.700   |
| Sensitize use of Dzongkha standard names and spellings of Chiwog Demkhongs  | 1.000   |
| Develop civic and voter education curriculum in Dzongkha  | 1.500   |
| Develop civic and voter education and information materials in Dzongkha   | 1.500   |
| Identify and establish permanent Polling Stations   | 0.000   |
| Consultation with political parties, CSOs, general public and media for enhancing confidence in electoral processes and ECB   | 0.500   |
| Conduct workshops to promote the practices of internal democracy for transparency and accountability within political parties | 1.000   |

Au Name: ROYAL AUDIT AUTHORITY

**Department: SECRETARIAT** 

Program Name: Strengthening Institutional Capacity and Audit Service Delivery

**Phase: Draft** 

| Jus |  |  |
|-----|--|--|
|     |  |  |
|     |  |  |

In order to deliver its mandates as enshrined in the Constitution and the Audit Act of Bhutan 2006, it is imperative for the RAA to embrace sustained development of core skills and capabilities to carry out its task efficiently and effectively. RAA's core mandate is to produce credible audit reports which inform on the economy, efficiency and effectiveness in the use of public resources. This task of RAA is getting more challenging with greater complexity and expansion in the socioeconomic development activities.

In its efforts to gain national and international credibility as the SAI of Bhutan, it must continue to build its organizational capacity and systems. Streamlining its audit procedures by conforming it to QA guidelines and external assurances on the processes of auditing and reporting will be some major measures it will undertake to strengthen the institution and its credibility. Furthermore, investments in building and enhancing the HR and professional expertise in RAA will continue.

#### Strategy:

- Strengthen the institution by carryout a restructuring process concerning the creation of additional Divisions and investing in HRD for auditors in key priority areas.
- ii. Enhance co-ordination with key stakeholders such as ACC, OAG through development of co-ordination protocols.
- iii. Streamline audit procedures and adopting best practices in auditing, plough back feedback from peer reviews and client satisfaction surveys to improve the system.
- iv. Re-enforce the importance of audit reports for deterring corrupt practices, through advocacy targeting MPs, local government representatives, public and civil servants, and public at large.

#### Risk Assessment:

- If adequate human and financial resources are not provided, it will hamper the successful implementation of the plan
- ii. The plan is also dependent on support and co-operation from key stakeholders like ACC, OAG, National Parliament. Without their support, it will be challenging for RAA to achieve all its outcomes.

#### Beneficiary:

The public at large

| NKRA  | SKRA  | SKRA KPI                               |
|---|---|--|
| Corruption reduced                          | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | Civil Service performance /GPMS rating |
|   | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | TAT for public services                |
| Democracy and<br>Governance<br>strengthened | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | Civil Service performance /GPMS rating |
|   | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | TAT for public services                |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
|   | No.of International<br>Clients acquired                             | 0         | 1            |
| Outcome 001 : RAA's credibility enhanced as the SAI of Bhutan     | No of successful outcome of client satisfaction survey              | 0         | 1            |
|   | No of successful annual audits of the RAA                           | 723       | 3300         |
| Outcome 002 : Decision making accountability                      | Adherence to Parliament directives issued based on audit reports(%) | NA        | 100          |
| systems strengthened in all audited agencies                      | Recommendations<br>on systems review<br>implemented(%)              | NA        | 80           |
| Outcome 003 : Efficient<br>& effective public service<br>delivery | TAT reduced (%)   | 0         | 70           |
| Results Levels (Output)   | Indicators  | Baseline  | Plan Targets |
|   | No. of manuals developed  | 3         | 25           |
| Output 001: Auditing systems strengthened                         | No. of quality assurance systems reviewed                           | 0         | 1            |
|   | No of Peer Review conducted   | 1         | 2            |
|   | No. of ToT conducted  | 0         | 1            |

| Output 002: Planning, prioritization, monitoring and reporting strengthened | Audit Resource<br>Management System<br>(ARMS)implemented     | 0                | 1  |
|---|--|------------------|--|
| Output 003:Audit conducted in line with Annual Audit Plans                  | %of planned financial and performance & thematic audits done |                  | 80   |
| Output 004:Systems reviews conducted on need basis                          | No. of system reviews conducted                              | 0                | 4  |
| Output 005:Advocacy and awareness enhanced                                  | No. of awareness programmes conducted                        | 10<br>Dzongkhags | 20 Dzongkhags,<br>Political Parties,<br>Corporate and Private<br>sectors |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activities   | Capital |
|--|---------|
| Construction of professional development centre at Tsirang   | 150.000 |
| Development of Audit Manuals and handbooks   | 16.136  |
| Restructuring and Creation of new Divisions  |         |
| Conduct Quality Assurance Review of auditing and reporting process   | 0.500   |
| Participate in trans-regional audits   | 4.500   |
| Acquiring international clients  | 8.000   |
| Development of Financial Resources Accountability Index  | 5.000   |
| Conduct Peer Review of RAA by a member of ASOSAI   | 1.000   |
| Conduct client satisfaction survey   | 4.000   |
| Adopt online auditing system   |         |
| Promotion of Dzongkha and Basic Communication Skills   | 0.500   |
| Greening the RAA   |         |
| Furnishing of Professional Dev. Centre at Tsirang  | 15.000  |
|  | 0.000   |
| Conduct audits as per Annual Audit Schedule  |         |
| Strengthen Risk-based audit  | 2.000   |
| Review monitoring & evaluation system, internal controls, quality assurance systems and rules & regulations of selected agencies | 0.500   |
| Outsourcing of audit services to private firms   | 0.000   |
| Deliver training and sensitization workshop to private and public sectors on Bhutanese Accounting Standards                      | 2.000   |
| Conduct Performance and Thematic Audit   |         |
| Carry out effective follow-up of audit reports   |         |

| Integration of Risk-based audit and performance audit in financial audits           | 4.000   |
|---|---------|
| Develop protocols for coordination with Parliament, ACC, OAG and peer organisations |         |
| Conduct advocacy and awareness programmes with various stakeholders                 | 2.500   |
| Improve wellbeing of the employees  |         |
| Total:  | 215.636 |

Au Name: ROYAL CIVIL SERVICE COMMISSION Department: SECRETARIAT Program Name: Strengthening HRD and HR Phase: Draft

system in the Civil Service

| Justification:      | The RCSC has been in existence since its establishment in 1982. Today the civil service strength stands at 24,275. Undoubtedly, the civil service has played a pivotal role in the development and modernization of the nation as well as strengthening its security and sovereignty. For most of its existence, the challenge for RCSC has been to pursue the policy of small, compact and efficient Civil Service.  In the past, the brightest talent would choose the civil service and continue in the service until their retirement. However, this trend is gradually changing and retaining good and qualified staff is becoming a challenge. Also, optimizing and maximizing the investments made in HR to contribute to nation building and strengthening the civil service is critical. Furthermore, motivating and managing civil servants to perform better and productively for delivering professional and quality services is another challenge. (no strategy/activity for small and compact CS) |
|---------------------|---|
| Strategy:           | <ul> <li>i. Review and strengthen performance management system to make the civil service system efficient, effective and accountable. This involves enhancing the overall management of recruitment, transfer, promotion and discipline in the civil service. Also, the CSI System will be revamped and updated to ensure timely information for decision making.</li> <li>ii. Develop and implement a strategic HRD master plan for civil servants to augment the management of trainings as a critical investment in HR for improving skills, knowledge and attitudes. In addition, monitor the utilization of acquired knowledge to ensure optimization of HRD investments.</li> <li>iii. Motivate civil servants through institutionalization of a reward and recognition system.</li> </ul>   |
| Risk<br>Assessment: | <ul> <li>i. Budgetary constraints can affect the timely implementation of plans.</li> <li>ii. The implementation of HR development and management plans depends on the support and co-operation of all government agencies and therefore can pose a risk in the timely implementation of plans according to the scope envisaged in the programme.</li> </ul>  |
| Beneficiary:        | All civil servants  |

| NKRA                             | SKRA  | SKRA KPI                               |
|----------------------------------|---|--|
| Improved public service delivery | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | Civil Service performance /GPMS rating |
|                                  | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | TAT for public services                |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines                             | Plan Targets  |
|--|---|---------------------------------------|---|
| Outcome 001 : Efficient,<br>Effective and Motivated                                      | Average performance rating of government agencies (GPMS)                            | NA                                    | >90   |
| Civil<br>Servants  | Improved civil servants perception on the Civil Service                             | NA                                    | >60   |
|  | Government performance index (%)  | 56.4                                  | 90  |
| Outcome 002 :<br>Professional and quality<br>services delivered by the<br>civil servants | Need based strategic Civil<br>Service HRD Master Plan<br>developed and implemented. | HRD<br>Master<br>plan for<br>10th FYP | HRD Master Plan for<br>11th FYP developed<br>and implemented. |
|  | Tracer study (utilization of acquired knowledge(%)                                  | 0                                     | >80   |
|  | Average TAT (%)   | NA                                    | 70  |
| Results Levels (Output)  | Indicators  | Baseline                              | Plan Targets  |
| Output 001:HR<br>management system<br>strengthened                                       | HRCs perform HR actions in accordance with the BCSR (%)                             | 0                                     | >95   |
| Output 002:HR information management   | % of usage of CSIS for HR actions(<br>by HROs and individual users)                 | NA                                    | 25% annually  |
| system strengthened and operationalized  | % of decrease in the complaints regarding CSIS                                      | NA                                    | 25% annually  |
|  | Civil Service Award system institutionalized  | NA                                    | Civil Service awards conferred annually                       |
| Output 003:Leadership/<br>managerial skills<br>developed                                 | MDP trainings: No. of civil servants in Executive and professional category trained | 458                                   | All civil servants  |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activities  |  |
|---|--|
| Strengthen the Civil Service recruitment, transfer and promotion systems including BCSE |  |
| Review and strengthen Performance Management System                                     |  |
| Institutionalize HR Audit and other M&E measures  |  |
| Initiate OD exercise  |  |
| Review and revise BCSR including Dzongkha version                                       |  |
| Implement CSAB,2010 and BCSR  |  |

| Conduct annual HR Conference   |  |
|--|--|
| Form MoUs and Institutional Linkages   |  |
| Enhance CSIS   |  |
| Make comprehensive recommendation on Civil Service remuneration, benefits and allowances to Pay Commission |  |
| Introduce and implement Civil Service Award System   |  |
| Promote workplace health and safety management system  |  |
| Construct RCSC Secretariat building  |  |
| Conduct perception survey on the Civil Service   |  |
| Institutionalize Management Development Programmes (MDP)   |  |
| Conduct Tracer study (utilization of acquired knowledge) survey  |  |
| Total:   |  |

#### Au Name: ANTI-CORRUPTION COMMISSION

Program Name: Minimize corruption through Education, Prevention and Investigation and strengthen ACC as a strong and credible institution

**Department: SECRETARIAT** 

**Phase: Approved** 

| Justification:      | Corruption gravely undermines democratic institutions and the rule of law, retards sustainable economic development, distorts fair business practices and exacerbates poverty. It is also known be to key reasons explaining extreme poverty and underdevelopment prevalent in many countries. Corruption in Bhutan is relatively low and is mostly prevalent in the form of misuse of public resources, abuse of public authority to collusion and fronting in procurement contracts, bribery and tax evasion.  As a small country founded on the GNH philosophy, Bhutan cannot afford to have any form of corruption. In an effort to effectively manage and reduce corruption in Bhutan, the Anit-corruption Commission was established in 2005. The commission through the implementation of various initiatives has made significant progress in combating corruption over the past decade. Going forward, the commission will continue its effort in making Bhutan free of corruption. |  |
|---------------------|--|--|
| Strategy:           | Fighting corruption is a multi -sectoral responsibility and good governance is fundamental to curbing corruption. The ACC will take a lead role firstly by directly participating in prevention, education and investigation; and secondly, the ACC will make every effort to prevent good people from falling prey to unlimited opportunities by way of systemic lapses. Thirdly, the ACC will built partnership with public/private and non-governmental agencies, civil society and public at large to create a strong anti- corruption/culture characterized by intolerance towards corruption.  |  |
| Risk<br>Assessment: | i. Lack of ownership and cooperation by other stakeholders;     ii. Lack of political will;  |  |
|                     | <ul> <li>iii. Inadequate budget;</li> <li>iv. The Recruitment and retaining professionals;</li> <li>v. Social alienation and victimization of the Investigation Officers and risks to their families and relatives;</li> <li>vi. Lack of Human Resource Management autonomy</li> </ul>   |  |
| Beneficiary:        | General Public (Citizens of Bhutan)  |  |

| NKRA                        | SKRA   | SKRA KPI                                |
|-----------------------------|--|---|
| Democracy and<br>Governance | Strengthened Accountability                              | National Integrity Score (ACC)          |
| strengthened                | Transparency, Efficiency and Effectiveness in Governance | Civil Service performance / GPMS rating |
| Corruption reduced          |  | TAT for public services                 |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators   | Baselines  | Plan Targets  |
|--|--|--|---|
| Outcome 001 : Awakened citizenry with enhanced check   | Corruption reported freely by citizens (%)                                 | 1.Known<br>compliants-15<br>2. Anonymous<br>compliants-55  | 1. 25<br>2. 40  |
| and balance mechanism to   | National Integrity score   | 7.44   | 8   |
| prevent corruption in the system   | TI Corruption perception index   | 33/174   | <20   |
|  | People's attitude towards ACC (survey)                                     | NA   | TBD   |
| Outcome 002 : Acts of corruption minimized by effective investigation and strong legal framework | Cases investigated (Nos)   | 100  | 150   |
|  | Rate of Conviction (%)   | 90   | 95  |
| Outcome 002 - Institutional  | Rate of Prosecution (%)  | 95   | 95  |
| Outcome 003 : Institutional capacity of ACC strengthened   | Cases investigated (Nos)   | 100  | 150   |
| , ,  | Average number of days to complete investigation                           | 100  | 60  |
| Results Levels (Output)  | Indicators   | Baseline   | Plan Targets  |
|  | Interactive sessions with schools, institutions/ agencies and Gewogs (Nos) | Schools-26,<br>Institutions<br>/agencies-49 &<br>Gewogs-70 | Schools-30,<br>Institutions<br>/agencies-50 &<br>Gewogs-205 |
|  | Programs broadcasted through print, radio and TV (Nos)                     | 7  | 10  |
| Output 001:Awareness<br>and advocacy programs<br>developed and implemented                       | Interactions with CSO, and spiritual institutions (Nos)                    | 1  | 5   |
|  | Supplements in print media (Nos)   | 5  | 20  |
|  | Media houses partnering with ACC (Nos)                                     | 0  | 10  |
|  | IEC publications (calendar, posters, information brochures, etc) (Nos)     | 17   | 20  |

| Output 002:Anti-Corruption   | System studies conducted to improve/strengthen the systems, procedures and practices (Nos)   | 2   | 17  |
|--|--|---|---|
| measures streamlined or mainstreamed   | Complaints (Nos)   | i. Public service<br>delivery-161<br>ii. Natural<br>resource<br>management-55 | i. Public service<br>delivery-100<br>ii. Natural<br>resource<br>management-20 |
| Output 003:Corrupt practices investigated effectively and efficiently                                    | Functional intelligence unit (Nos)   | 0   | 1   |
| Output 004:Legal framework to curb and combat corruption strengthened                                    | Laws pertaining to anti-<br>corruption amended and<br>formulated (Nos)   | 6   | 7   |
| Output 005:Conducive working atmosphere established  | Institutional Development<br>Plan<br>(Implementation) (Nos)  | 0   | 1   |
| Output 000 lestitutional   | Networks built with international agencies (Nos)   | 9   | 20  |
| Output 006:Institutional networking/ collaboration with national and international agencies strengthened | Delegations received/<br>fielded from/to other<br>anti-corruption agencies<br>in the region/abroad to<br>share/learn knowledge<br>and experience (Nos) | 10  | 20  |

# Table 2: Programme Plan Outlay Summary

| Programme Activities  | Capital |
|---|---------|
| Conduct general Awareness and advocacy on corruption  | 7.000   |
| Observe and commemorate International Anti- corruption Day and National Anti-corruption Week  | 0.000   |
| Conduct systems studies, researches and surveys   | 11.500  |
| Establish intelligence unit (forensic), ICTize the complaints/cases management system and Revise and redesign operational management                                | 20.000  |
| Improve legislation in curbing corruption   | 5.000   |
| Implement/Review Institutional Development Plan (IDP)   | 15.000  |
| Maintain/establish linkages with anti-corruption agencies in the region/abroad (ICAC Hong Kong, IACA, Malaysian ACA,CPIB Singapore, CBI India, ADB/OECD and others) | 5.000   |
| Implement NACS & Mainstream anti- corruption through strategic partnership  | 30.000  |
| Conduct Investigations (Proactive, reactive, mop-up operations)   | 0.000   |
| Total:  | 93.500  |

Au Name: OFFICE OF THE ATTORNEY GENERAL

**Department: SECRETARIAT** 

Program Name: Strengthening of the Public Prosecution System

Phase: Approved

## Justification:

Upholding of Rule of Law is a basic tenet of democratic governance. The Office of the Attorney General contributes to this outcome through prosecution of criminal and corruption cases and ensuring the administration of justice without fear, favor and undue delays.

The objectives of the Office of the Attorney General in the 11th Five Year Plan is to provide a transparent, efficient, accountable prosecution system in the country. Such a system will immensely contribute in upholding the rule of law and making our society corruption free. The OAG also provides legal counsel and information to Government agencies.

To improve the delivery of its services, the OAG needs to invest in improving its case management system making it into a web based IT system. It also needs to strengthen the process of prosecution by developing and adhering to standard protocols. Furthermore, to standardize and allow for consistency in the drafting of laws, a drafting manual is essential. These efforts will contribute to enhance the prosecution works and provide faster and fairer justice to the general public.

### Strategy:

- Strengthen the system of prosecution through the development of a prosecution handbook for the prosecutors, which will regulate the code of conduct and ethics of the prosecutors.
- ii. Pursue ICTization of prosecution case management system to make it more efficient and effective.
- iii. Augment and standardize the legal drafting process through a developing drafting manual to be used as a national drafting standard of laws for all ministries and agencies.
- iv. Continue and intensify efforts in educating the public on youth and family related laws.

## Risk Assessment:

- i. Budget constraints may impede the smooth implementation of activities.
- ii. Lack of personnel in terms of numbers as well as technical expertise will affect the quality and efficiency of OAG's work.
- iii. Ministries and Agencies may not comply with the drafting guidelines or the prosecution handbook, which may result in the continuation of current challenges of inconsistencies and other issues.
- iv. Successful outcomes for OAG depends on the collaboration and co-operation with RBP, ACC and also the public at large. This may not be forthcoming and therefore is a definite risk for OAG.

# **Beneficiary:**

- ✓ Prosecutors
- ✓ Lawyers
- ✓ Central and Local Government Administrations
- ✓ General public

| NKRA                             | SKRA   | SKRA KPI   |
|----------------------------------|--|--|
| Improved public service delivery | Enhanced efficiency and effectiveness of public service delivery | Average Performance rating > 90%   |
| Corruption reduced               | Strengthened Accountability<br>Transparency, Efficiency and      | Public satisfaction on OAG's efforts in combating corruption cases (OAG) |
|                                  | Effectiveness in Governance                                      | TAT for public services  |

**Table 1: Programme Results Level** 

| Results Level<br>(Outcome)                                      | Indicators  | Baselines | Base Year | Plan Targets |
|---|---|-----------|-----------|--------------|
| Outcome 001 :<br>Efficiency, transparency<br>and accountability | Percentage of cases prosecuted as per the set standard of prosecution handbook. | 556       | 2012      | 656          |
| through Prosecution<br>System                                   | Public's satisfaction on OAG's effort in combating corruption cases             | Medium    | 2012      | High         |
|   | No of weeks to review cases   | 4         | 2012      | 1            |
| Results Levels (Output)   | Indicators  | Baseline  | Base Year | Plan Targets |
| Output 001:<br>Prosecution services<br>improved.                | No of working days to review the cases by RBP (simple/complicate)               | 10        | 2012      | 5            |
|   | No of working days to review the cases by ACC (simple/complicate)               | 20        | 2012      | 10           |
|   | Percentage of attendance in orientation program by newly recruited Lawyers.     | NA        | 2012      | 100          |
|   | No of Legal opinions rendered   | 125       | 2012      | 225          |
|   | No of trainings conducted in mediation process                                  | 3         | 2012      | 9            |
|   | Percentage of Laws drafted as per set standard drafting manual and process.     | 0         | 2012      | 100          |
|   | No of Legislation in place.   | 0         | 2012      | 1            |

| Output 002: Effective Information (IT) Management System established. | Time taken to retrieve the case status (minutes)   | 60  | 2012 | 15  |
|---|--|-----|------|-----|
|   | Time taken to obtain the Law Books and Legal references (minutes).                       | 3   | 2012 | 10  |
|   | No of court judgments available online   | 157 | 2012 | 500 |
| Output 003: Increased awareness on youth and family related           | No of programmes conducted in disseminating the Legal awareness on youth related crimes. | 0   | 2012 | 10  |
| Laws.   | No of programmes conducted in disseminating the Legal awareness on family related Laws.  | 0   | 2012 | 3   |
| Output 004: National<br>Language promoted.                            | No of Dzongkha Legal<br>documents and Legislation<br>made available online               | 61  | 2012 | 300 |
|   | No of regional offices constructed and established.                                      | 0   | 2012 | 1   |
| Output 005: OAG as an institution strengthened.                       | No of Legal Aid Offices in the country.  | 0   | 2012 | 1   |
|   | No of Lawyers registered for providing the Legal Aid                                     | 0   | 2012 | 10  |
|   | No of Attorney in the institution (Recruitment & Appointment)                            | 24  | 2012 | 50  |

Table 3: Programme Plan Outlay Summary

| Programme Activities  | Capital |
|---|---------|
| Develop a prosecution Handbook.   | 1.700   |
| Training of Prosecutors on prosecution handbook.                                    | 1.500   |
| Forming a Task Force to monitor the prosecution process and streamline the process. | 0.500   |
| Developing a programme for orientation and practice of fair trial system.           | 1.500   |
| Formulation and signing of MoU with ACC & RBP                                       | 0.100   |
| Joint professional development among the stakeholders.                              | 1.700   |
| Conducting meetings and workshops.  | 0.300   |

| Total:   | 43.900 |
|--|--------|
| Furnishing new Office building   | 3.000  |
| Establishment of Legal Aid Office  | 1.500  |
| Drafting of Law on the establishment of Legal Aid  | 1.000  |
| Training of Lawyers in Dzongkha Unicode, translation skills and Dzongkha Basics.                 | 1.800  |
| Scanning and translation of Legal documents into Dzongkha and publish online                     | 2.000  |
| Establishment of regional offices  | 2.000  |
|  | 0.000  |
| Short term trainings for Attorneys & other Staff   | 2.500  |
| Conducting training on Alternative Dispute Resolutions.  | 2.000  |
| Conducting a legal dissemination on family related laws.   | 2.000  |
| Conduct a legal dissemination on youth related crimes in schools                                 | 2.000  |
| Improving the website and increasing the no of legal documents that can be assessed online       | 1.500  |
| Developing a drafting and office IT workflow system.   | 1.800  |
| Enhancing the Library Management.  | 1.500  |
| Develop e-library and online legal document system   | 2.000  |
| Developing a programme for joint professional development for draftsmen.                         | 1.000  |
| Developing a programme for orientation on drafting manual and skills to newly recruited lawyers. | 1.500  |
| Training of draftsmen on the drafting Manual and skills.   | 0.500  |
| Developing and implementing the Drafting Manual and Guidelines                                   | 1.000  |
| Training the staff in using Case management System   | 1.000  |
| Developing a IT based online case management System  | 5.000  |

## **Au Name: NATIONAL STATISTICS BUREAU**

**Program Name: Strengthening Statistics for Development** 

**Department: SECRETARIAT** 

Phase: Approved

### Justification:

Statistics plays a pivotal role in development planning. They are required for evidence-based decision-making by providing quantitative and objective means for assessing development progress. It also allows planners and policy makers to evaluate the implementation of policies and reforms and supports economic management process and delivery of development services.

There is a huge demand for quality statistics and data more so with the introduction of Results Based Management in the Five Year Plans. The NSB shall strengthen statistics for evidence-based development through quality surveys, timely production of national reports, systematic data collection and documentation. NSB shall also develop a National Statistics Act to standardize policy and procedures pertaining to the planning, implementation and management of statistics. This will promote adherence to statistical standards and approaches leading to more reliable/credible data generation.

## Strategy:

- i. Continue to conduct nationwide surveys and disseminate the statistical information widely to allow for evidence based decision making.
- ii. Strengthen legal and regulatory framework through drafting of statistical legislation and policies, thereby enhancing statistical coordination and standards and leading ultimately to more reliable data generation.
- Strengthen the human resource capacities of statistical staff to continue to conduct research and improve overall soundness of data generation and analysis.
- iv. Institute a National Data Bank system through improved cross-sectoral coordination amongst all agencies that carryout out surveys and generate statistical data. This will also facilitate easy access to official statistics.
- Develop environmental statistics and accounting system in line with RGoB's policy of sustainable development.

## Risk Assessment:

- i. The surveys and censuses are often funded by development partners. This raises the risk of future sustainability once assistance from development partners is not forthcoming.
- ii. The shortage of experts and specialists in statistics especially in new and emerging themes.
- iii. Dependence on several publications on secondary data which if not developed using credible statistical methods may results in the publications being unreliable.
- iv. Data collection and generation depends on good co-ordination and co-operation amongst its producers. There is a risk that co-operation with other producers may not always be forthcoming.

### **Beneficiary:**

Local and Central government organizations, non-governmental organizations, international agencies, civil society agencies, private and corporate organizations, etc.

| NKRA                                  | SKRA   | SKRA KPI                         |
|---------------------------------------|--|----------------------------------|
| Demography and Covernance             | Enhanced efficiency and effectiveness in public service delivery                             | Average Performance rating > 90% |
| Democracy and Governance strengthened | Strengthened Accountability<br>Transparency, Efficiency and Effec-<br>tiveness in Governance | TAT for public services          |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines | Plan Targets |
|---|--|-----------|--------------|
|   | No. of official statistics published/<br>produced  | 15        | 25           |
| 0.1 004 5 1   | No. of official data sets produced   | 5         | 6            |
| Outcome 001 : Enhanced evidence based decision making                       | No. of information dissemination programs/activities (quizzes/ conferences/seminars/workshops/ surveys/census & research findings) | 30        | 40           |
|   | No. of on-line publications  | 10        | 25           |
| Results Level (Output)  | Indicators   | Baselines | Plan Targets |
|   | No. of quarterly publications (1 CPI & 1 Quarterly socio-economic )  | 2         | 4            |
| Output 001:PHCB and other surveys and census conducted                      | No. of annual publications (NAS, ADS & SYB)  | 3         | 3            |
| conducted   | No. of census and surveys conducted  | 3         | 6            |
| Output 002:Socio-economic and thematic research conducted                   | No. of research publications on social capital   | 2         | 4            |
| Output 003: Environmental statistics and environmental accounting developed | No. of environmental statistics included in the statistical year book  | NA        | 1            |
|   | No. of environmental protection expenditure included in the national accounts report   | NA        | 1            |
|   | No. of national accounts officials trained on environmental accounting   | NA        | 5            |

| Output 004:Legal framework<br>(statistics act) for statistical<br>system developed | No. of statistics act developed                                   | NA  | 1     |
|--|---|-----|-------|
|  | No. of micro-data clients served                                  | 20  | 50    |
|  | No. of people participating in statistical dissemination programs | 500 | 10000 |
|  | No. of hits/downloads   | 0   | 20000 |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Data collection, analysis and publication of consumer price index                                       | 0.000   |
| Data collection, analysis and publication of producer price index                                       | 0.000   |
| Data collection, analysis and publication of construction material index                                | 0.000   |
| Data collection, analysis and publication of national accounts statistics                               | 0.000   |
| Data collection, analysis and publication of annual dzongkhag statistics                                | 0.000   |
| Data collection, analysis and publication of statistical year book and Bhutan at a Glance               | 0.000   |
| Conduct of research on socio-economic issues  | 0.000   |
| Conduct of population housing census of Bhutan (PHCB)   | 50.000  |
| Conduct of economic census  | 10.000  |
| Population and development indicator-Bhutan data sheet  | 0.000   |
| Conduct of Bhutan living standard survey (BLSS)   | 0.009   |
| Publication of population projection report and conduct of programs on population projection methods    | 0.000   |
| Publication of poverty analysis report  | 0.000   |
| Publication of thematic analysis report of PHCB   | 0.000   |
| Publication of socio economic monograph series  | 0.000   |
| Publication of social capital report  | 0.000   |
| Collect core data for environmental statistics (E-Stat) data-base and increase the number of indicators | 0.000   |
| Development of IT framework and database for e-stat   | 2.935   |
| Development of roadmap for environmental accounting (EA)  | 0.000   |
| Development of environmental accounts   | 13.300  |
| Stakeholder consultations and TA support for statistics act   | 0.000   |
| Conduct of statistical dissemination programs   | 15.000  |
| Development of data annonimization, meta data-documentation and online request system                   | 1.000   |
| Total:  | 92.244  |

Au Name: JUDICIARY Department: SECRETARIAT

Program Name: Effective and Efficient Judicial Services

Management

Phase: Approved

| Justification:     | In the study done by the Institute of Management Studies in collaboration with the Bhutan National Legal Institute on "Access to Justice in Bhutan" revealed that the human resource development challenge topped the list with 44.1%. The bulk of the needs expressed was in professional development of the court staff at 85.2%. Therefore, capacity development was found imperative for judiciary. In terms of service delivery, the current case management systems are managed manually, thereby making it inefficient, prone to errors and lacking transparency and accountability. This greatly needs to be revamped and made into a system using IT as a tool.  Currently, many courts in the country are functioning from inside the Dzong where they are sharing the space with District/Dungkhag administration. Many do not have adequate space and facilities which affects service delivery. Also having separate court houses symbolically promotes the independence of the Judiciary and confidence of people. |
|--------------------|--|
| Strategy:          | <ul> <li>i. To professionalize the Judiciary, investments in human resources both at professional and management level will be made. Besides long-term and short term training opportunities, the judiciary shall try to build capacities through other platforms like peer exchange programs, on the job trainings, mentoring, institutional linkages etc.</li> <li>ii. Simultaneously, work will be undertaken to ICTize Judicial services. This is in line with the Judiciary's objective to reduce its TAT time for service delivery and make it transparent and effective. This will be developed through extensive consultations with all key stakeholders.</li> <li>iii. Project management teams will be formed with proper authority and responsibility to implement the construction projects. The committee will be well equipped to plan and manage construction project activities.</li> </ul>  |
| Risk<br>Assessment | <ul> <li>i. If sufficient financial resources are not received, it will hamper the delivery of its plans.</li> <li>ii. IT initiatives depend on the access and stability of the OPGW network.</li> </ul>   |
| Beneficiary:       | The public at large, and Government and Corporate agencies.  |

| NKRA                             | SKRA  | SKRA KPI   |
|----------------------------------|---|--|
|                                  | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | Litigants satisfaction<br>with judicial services<br>(Judiciary survey) |
| Improved public service delivery | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | TAT for public services  |
|                                  | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | Civil Service performance /GPMS rating                                 |
| Corruption reduced               | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | Implementation<br>of National<br>Anticorruption<br>Strategy (ACC)      |

**Table 1: Program Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
| Outcome 001 : Improved service delivery and satisfaction with the judicial services | Litigant's satisfaction with judicial services (%)                                      | 81.1      | 90           |
| Outcome 002 : Access to justice enhanced  | Populations having access to the courts within reasonable proximity (%)                 | 82        | 90           |
| Results Levels (Output)   | Indicators  | Baseline  | Plan Targets |
|   | Cases heard using E-litigation (%)  | 0         | 25           |
|   | Courts using video conferencing (Nos.)  | 0         | 22           |
| Output 001:Judicial services and  | Cases heard for the disadvantaged and vulnerable people using video conferencing (Nos.) | 0         | 50           |
| management system enhanced  | Courts having access to IP-VPN (Nos.)   | 0         | 37           |
|   | Courts having access to e-library systems (Nos.)  | 0         | 37           |
|   | Courts having IP Telephony (Nos.)   | 0         | 37           |

| Output 002:Institutional and   | SAARC regional conferences held (Nos.)                   | 2  | 3   |
|--|--|----|-----|
| capacity strengthened  | Institutional linkages established (Nos.)                | 28 | 160 |
|  | Dzongkhag courts constructed (Nos.)                      | 11 | 14  |
| Output 003:Disaster resilient  | Dungkhag courts constructed (Nos.)                       | 10 | 12  |
| and environment friendly court buildings constructed   | Construction of supreme court construction completed (%) | 85 | 100 |
|  | High courts construction completed (%)                   | NA | 100 |
| Output 004:Disaster resilient and environmentally friendly residences for judicial personnel | Residences for judicial staff constructed (Nos.)         | NA | 2   |

**Table 3: Program Plan Outlay Summary** 

| Program Activities                                 | Capital |
|--|---------|
| ICTization of the judicial services and management | 50.000  |
| SAARC Regional Conferences                         | 100.000 |
| Construction of Dzongkhag courts                   | 132.8   |
| Construction of Dungkhag courts                    | 44.000  |
| Construction of supreme court                      | 70.000  |
| Construction of High Court                         | 200.000 |
| Construction of residences for judicial personnels | 27.000  |
| Total  | 623.800 |

# Au Name: ROYAL INSTITUTE OF LAW

Program Name: Institutional development and capacity building of Royal Institute of Law

Department: NA
Phase: Approved

| Justification:      | With the significant social, cultural, and economic changes taking place, there is a need to strengthen the judicial system to provide the necessary judicial functions and uphold rule of law which is critical for the development of any country.  Recognizing this need, the establishment of a legal institute and research centre was initiated in 2009 to develop and enhance the capacities of legal professionals and expertise. Currently, there is no tertiary education institute that provides legal education. Except for the diploma course in National Law offered by Royal Institute of Management, students have to pursue their legal studies at university level, outside the country. The Royal Institute of Law aims to be an autonomous tertiary level law institute providing undergraduate degree in law. It will also provide for research on development of the legal system in th |
|---------------------|---|
| Strategy:           | <ul> <li>i. A Strategic Plan/Detailed Project Report will be developed as the first major activity.</li> <li>ii. Based on the DPR faculty recruitment and development, curriculum and teaching materials development and construction of infrastructure for the Law School shall be implemented in tandem and in a phased manner starting from 2013.</li> <li>iii. The Royal Institute of Law will engage both national and international faculties for the law school to form a balanced team of faculty.</li> </ul>   |
| Risk<br>Assessment: | <ul> <li>i. There is a probable risk of not finding capable faculties for the law school once it is established.</li> <li>ii. Ensuring availability of funds to meet expenses of the RIL is a potential risk.</li> </ul>  |
| Beneficiary:        | Judiciary sector and public at large.   |

| NKRA  | SKRA   | SKRA KPI   |
|---|--|--|
| Improved public service                     | Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance | Litigants satisfaction with judicial services (Judiciary survey) |
| delivery                                    | Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance | TAT for public services  |
| Democracy and<br>Governance<br>strengthened | Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance | Civil Service performance<br>/GPMS rating                        |

|                    | Strengthened Accountability                | Implementation of       |
|--------------------|--|-------------------------|
| Corruption reduced | Transparency, Efficiency and Effectiveness | National Anticorruption |
|                    | in Governance                              | Strategy (ACC)          |

**Table 1: Program Results Level** 

| Results Level (Outcome)                                | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
| Outcome 001 : Legal system in the country strengthened | General public aware of their legal rights and responsibilities (%) | 81.7      | 90           |
| Results Levels (Output)                                | Indicators  | Baseline  | Plan Targets |
| Output 001:Comprehensive                               | Students enrolled (Nos.)  | NA        | 50           |
| legal education imparted                               | Curriculum developed (Nos.)   | NA        | 25           |
|  | Faculties recruited (Nos.)  | NA        | 10           |
| Output 002:Advanced legal                              | Training provided (Nos.)  | NA        | 2            |
| studies and research pro-<br>moted                     | Institutional linkages established (Nos.)                           | NA        | 3            |
|  | Research papers published (Nos.)                                    | NA        | 5            |
|  | Law Library established (Nos.)                                      | NA        | 1            |

**Table 3: Program Plan Outlay Summary** 

| Program Activities                                   | Capital |
|--|---------|
| Construction and development infrastructures         | 500.000 |
| Development of curriculum                            | 2.500   |
| Development of institutional linkages                | 0.000   |
| Short and long-term training                         | 5.000   |
| Publication of research papers, journal and magazine | 0.000   |
| Stipend for students                                 | 0.000   |
| Faculty development                                  |         |
| Total  | 547.500 |

Au Name: BHUTAN NATIONAL LEGAL INSTITUTE, ROYAL LAW SCHOOL AND LIBRARY

Program Name: Institutional strengthening Phase: Approved

| Justification:      | BNLI is an independent entity established as per the Judicial Service Act 2007. It is mandated to provide continuing legal education to enhance capacity of inservice judicial personnels and others involved in the administration of justice. Alternative Dispute Resolution (ADR) is considered as most effective mode of settling disputes amicably and maintaining harmony in the society. However,  |
|---------------------|---|
|                     | the recent statistics indicates that only few people use this mode of dispute resolution. This is evident from the fact that even petty civil cases are being filed before the courts which requires lot of time and money. It is therefore become very important to revitalize ADR system in our society.  With the new form of governance, the right to information and awareness on  |
|                     | individual rights and responsibilities has become crucial. Only an informed citizen and transparency of information will lead to successful democratic governance.  |
| Strategy:           | <ul> <li>i. Strengthen advocacy and awareness through legal dissemination programmes.</li> <li>ii. Strengthen and institutionalize Alternate Dispute Resolution</li> <li>iii. Build formal institutional linkage with similar institutes abroad while currently working in close coordination with relevant stakeholders within the country to ensure proper and timely completion of its planned activities.</li> <li>iv. Strengthen Child Justice System</li> </ul>   |
| Risk<br>Assessment: | <ul> <li>i. Bhutan National Legal Institute is currently facing acute shortage of competent professionals to execute its programs. However, to overcome this shortfall, the institute is coordinating with the Judiciary to engage judges to delivers trainings and conduct other programs. The institute is also in the process of grooming its own young professionals in the field of providing continuing legal education and other programs for its targeted beneficiaries.</li> <li>ii. Lack of budget may also delay the implementation as scheduled.</li> </ul> |
| Beneficiary:        | Bhutanese as a whole.   |

| NKRA             | SKRA  | SKRA KPI   |
|------------------|---|--|
| Improved public  | Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance    | Litigants satisfaction<br>with judicial services<br>(Judiciary survey) |
| service delivery | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | TAT for public services  |

| Democracy and<br>Governance<br>strengthened | Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance | Civil Service performance /GPMS rating                         |
|---|--|--|
| Corruption reduced                          | Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance | Implementation of<br>National Anticorruption<br>Strategy (ACC) |

**Table 1: Program Results Level** 

| Results Level (Outcome)   | Indicators  | Baselines | Plan Targets |
|---|---|-----------|--------------|
| Outcome 001 : People have<br>easy access to systematic ADR<br>(Mediation) services at local | % of Local Leaders and officials<br>from relevant stakeholders trained<br>on ADR (Mediation) system | N/A       | 70           |
| level   | % of general public availing ADR (Mediation) facilities established in their locality               | N/A       | 35           |
|   | % of civil disputes resolved by mediators at local level  | NA        | 60           |
| Outcome 002 : Easy access to legal information to general public                            | % of general public (including youth and children) aware of their legal rights and responsibilities | 81.7      | 85           |
| Outcome 003 : Enhanced child justice system in the country                                  | No. of legal professionals specialized in child justice system                                      | NA        | 35           |
|   | % of juvenile and child related cases heard by child court/bench                                    | NA        | 35           |
| Outcome 004 : Effective and efficient administration of justice ensured                     | Litigant's satisfaction with judicial services (%)  | 81.7      | 85           |
| Results Levels (Output)   | Indicators  | Baseline  | Plan Targets |
| Output 001:ADR (Mediation) training for local leaders                                       | No. of legal dissemination and awareness programs conducted   | N/A       | 35           |
| and officials from relevant<br>stakeholders conducted                                       | No. of ADR (Mediation) centers established in the courts and gewogs                                 | N/A       | 10           |
| Output 002:Legal dissemination and awareness program conducted                              | No. of dissemination and awareness program conducted  | NA        | 30           |

| Output 003:Child courts/<br>bench established | No. of child/family courts/bench established in the country      | NA | 2   |
|---|--|----|-----|
|   | No. of legal professionals developed to administer child justice | NA | 20  |
| Output 004:Institutional                      | No. of judicial personnel trained                                | NA | 250 |
| capacity strengthened                         | No. of institutional linkages established                        | NA | 7   |
|   | No. of curriculum developed                                      | NA | 1   |
| Output 005:Bhutan law library                 | No. of books procured  | NA | 30  |
| strengthened                                  | No. of e-resources procured                                      | NA | 20  |

**Table 3: Program Plan Outlay Summary** 

| Program Activities   | Capital |
|--|---------|
| Develop and publish ADR related documents.   | 1.000   |
| Conduct ADR (Mediation) training for the local leaders and other relevant stakeholders | 12.000  |
| Establish ADR (Mediation) office in all courts and gewogs                              | 20.000  |
| Introduce legal education in schools and academic institutions                         | 3.500   |
| Conduct nation-wide legal dissemination programs                                       | 0.000   |
| Enhance procedures for child/family courts/bench                                       | 1.000   |
| Develop human resources for administration of child justice                            | 1.000   |
| Establishment of child court/bench   | 1.500   |
| Development of curriculum  | 1.000   |
| Development of institutional linkages  | 0.000   |
| Publication of research papers, journals and magazines                                 | 0.000   |
| Archiving  | 1.000   |
| Total  | 42.000  |

# **VULNERABLE GROUPS**

Au Name: NATIONAL COMMISSION FOR WOMEN &

**CHILDREN** 

Program Name: Protection and Promotion of the Rights of Women and Children

**Department: SECRETARIAT** 

**Phase: Approved** 

## Justification:

The National Council for Women and Children is the agency tasked with the protection and promotion of the rights of women and children. Currently being at the initial stages of establishing a comprehensive gender mainstreaming and child protection systems, it is imperative to ensure continuance of programmes for a systematic promotion and protection of women and children's rights.

As part of Government's commitment to addressing the needs of women and children, increased emphasis needs to be placed on gender mainstreaming and child protection in the 11th FYP. This is also strongly aligned to the National Key Result of Good Governance "Creating a gender friendly environment for women's participation and leadership". Similarly, another key priority will be to ensure that children's right to protection is enhanced as a primary strategy towards addressing their vulnerability.

Generation of sex disaggregated data can only lead to better planning and budgeting, thus strengthening the evidences of results. Furthermore, in the process of generating disaggregated data, it will give an explicit picture of the ground realities thus determining state interventions which will be responsive.

### Strategy:

- Strengthen inter-agency co-ordination by instituting a monitoring and co-ordination system. In support of this develop a central database for managing and analyzing information better.
- ii. Enhance Gender mainstreaming through developing a gender indicator handbook to guide all agencies in Gender Mainstreaming, advocacy and incorporation of women empowerment in mainstream education curricula.
- iii. Augment the legal framework to enhance participation and protection of women and children through review of existing and new legislation from a gender/ child perspective. Furthermore, continue to implement Acts- Child Care and Protection, Child Adoption, Domestic Violence Prevention.
- iv. Establish support services to enhance participation and protection of women and children.
- v. Continue advocacy through media and other platforms on the protection and promotion of children and women.

# Risk Assessment:

- Shortage of manpower both in terms of numbers and technical capacities of staff to implement the plans.
- ii. Low level of understanding/ acceptance of gender and child protection issues will impede the smooth implementation of the plans.
- iii. Inadequate financial resources will affect the implementation of plans. Many of the programmes of NCWC are donor dependent and with many of our development partners phasing out, the continuation of these plans in the future is questionable.

## **Beneficiary:**

Women and Children and general public

| NKRA                                     | SKRA  | SKRA KPI  |
|--|---|---|
| Gender friendly                          |   | % of domestic violence due to alcoholism  |
| environment for<br>Women's participation | Prevention and elimination of Gender based violence | No. of divorce rates by region and income levels  |
|  |   | No. of divorce cases reduced  |
|  |   | % of children engaged in harmful child labour   |
|  | Child's Right to Protection<br>Enhanced             | % of children with the capacity to claim their right to protection                          |
|  |   | % of girls who are married before 18 years of age   |
|  |   | % of hhs with the required child care and house help services                               |
| Needs of Vulnerable<br>Groups addressed  |   | Child Care and Protection Act (CCPA) Operational Plan implemented                           |
|  |   | No of day-care centres/crèches  |
|  |   | No. of institutional mechanisms and support services in place                               |
|  |   | No. of programmes developed to promote children's right to protection (by gender by sector) |
|  |   | No. of vulnerable children/orphans reduced (by gender)                                      |

**Table 1: Programme Results Level** 

| Results Level (Outcome)  | Indicators  | Baselines | Plan Targets |
|--|---|-----------|--------------|
|  | No. of agencies (Govt., NGOs and private) with gender/child sensitive policies  | 3         | 2012         |
|  | No. of agencies with gender mainstreaming strategies (NPAG/Gender Action Plan)  | 2         |              |
| Outcome 001 : Strengthened enabling environment for women and children   | No of legislations promoting women's participation (gender equality law/quota legislation/ Legislation for special temporary measures | NA        | 2012         |
| participation in all spheres   | % of children with the capacity to claim their right to protection  | NA        | 2012         |
|  | Proportion of people who take up messages and adopt gender/child sensitive attitudes (%)  | NA        |              |
|  | Proportion of trained personnel who integrate knowledge and skills gained and implement plans (%)                                     | NA        | 2012         |
|  | Reduction in acceptance of domestic violence (%)  | 68        |              |
| Outcome 002 : Increased safety and security for women and children   | Prevalence of domestic violence against women and girls (%)   | 29%       |              |
|  | Proportion and type of women and child related cases resolved (%)   | NA        |              |
| Results Levels (Output)  | Indicators  | Baseline  | Plan Targets |
| Output 001: Legislation,<br>policies, Rules and Standard<br>of procedures reviewed,<br>disseminated, formulated and<br>implemented | No. of policies responsive to gender needs  | 3         | 7            |
|  | No of legislations reviewed and formulated from gender and child responsive perspective   | 6         | 12           |
|  | No. of implementing rules and regulations for women empowerment and child protection (for the acts)                                   | NA        | 3            |

|  | No. of standard operating procedures (trafficking, case management/referral)                                     | NA | 2   |
|--|--|----|-----|
|  | No. of periodic reports to international and regional treaty bodies prepared, submitted and disseminated - CRC   | 2  | 5   |
|  | No. of periodic reports to international and regional treaty bodies prepared, submitted and disseminated - CEDAW | 3  | 5   |
| Output 002:Increased involvement of women and children in policy making, strategy development and governance | % participation of women and children in policy making and strategy development                                  | NA | 30  |
|  | Central data base in place   | NA | 1   |
| Output 003:Coordination mechanism for gender equality  | No. of Child Welfare Committee   | NA | 1   |
| and child protection developed and functional  | Proportion of Gender Focal Points submitting bi annual/annual reports to NCWC (%)                                | NA | 100 |
|  | Media communication strategy in place  | NA | 1   |
| Output 004: Knowledge of NCWC and key stakeholders enhanced on women empowerment and child protection        | Capacity development strategy developed and implemented  | NA | 1   |
|  | Number of sectors that adopt<br>Capacity Development Strategy on<br>child protection                             | NA | 6   |
|  | No of advocacy on gender equality and child protection amongst policy and decision makers                        | 15 | 35  |

| Programme Activities   | Capital |
|--|---------|
| Review gaps in existing legislations and policies, and develop and disseminate Standard Operating Procedures/guidelines  | 5.00    |
| Development of central database (Information Management System) for documentation and monitoring of violence against women and children  | 5.50    |
| Implementation of Rules and Regulations of Child Care and Protection Act, 2011, Child Adoption Act, 2012, Domestic Violence Prevention Act, 2013   | 5.50    |
| Development of: capacity development strategy for NCWC and partner agencies; media strategy to address gender stereotyping and child protection; Case management systems, Establishment of fully functional organization within the government to address needs of vulnerable groups | 12.00   |
| Advocacy campaigns to promote gender equality and child protection at local and national level; observe International and National Days and with MPAB and Media  | 5.00    |
| Submission of International, Regional and National reports for women empowerment and child protection and dissemination and implementation of concluding observations  | 4.00    |
| Engender the curriculum of educational and development programs  | 6.00    |
| Conduct studies on Divorce in Bhutan, Violence against Children, Women's participation in Civil Service and assess needs for support mechanisms for working parents; Review available data on women's profile in the private & corporate sector                                      | 5.00    |
| Development of National and Dzongkhag level coordination and reporting mechanism for Gender Focal Points and Child Protection and establishment of networking forums for aspiring women leaders and entrepreneurs  |         |
| Support the establishment of family/child courts and benches   | 5.00    |
| Total:   | 55.00   |

Au Name: GROSS NATIONAL HAPPINESS COMMISSION Department: SECRETARIAT

Program Name: Rural Economic Advancement Phase: Approved

Programme (Phase II)

| Justification: The Royal Government of Bhutan accorded highest priority in addressing poduring the 10 Five Year Plan (2008-2013) and continues to do so in its 11th Plan. RGoB also made several interna commitments to address the poverty issues such as Decade of Poverty Allev (2005-2015), SAARC Development Goals and Millennium Development Towards this end, targeted poverty initiatives such as Rural Economic Advance Programme (REAP) and land rehabilitation programme were carried out. While the broad-based development programmes continue to alleviate po  | tional<br>lation<br>Goals.<br>ment   |
|--|--|
| the REAP shall seek to target the extreme poverty that may not be adequed addressed through broad-based development programmes. Given the signic contribution of the REAP I to national objectives of poverty reduction, the Commission has decided to upscale the targeted programme in 11th FYP couthe poorest villages across 20 Dzongkhags.  | ficant<br>GNH  |
| i. REAP II shall carry out its interventions at the village level and the poorest vishall be selected using objective criteria, namely, multi-dimensional poindex (MPI). To promote participation and address poverty and deprivation the six dimensions, communities shall prepare respective village developed plans (VDP). Furthermore income generating activities shall cover the value chain to ensure effective interventions  ii. Special activities targeted at the poorest households in the village be implemented as they have difficulties capitalizing on the more go interventions.  iii. Promote Government and Non- Government participation and partnet to allow for synergy and complementary in work. iv. Conduct timely monity and evaluation, and provide feedback to continuously refine and sharped interventions. | overty<br>ons in<br>ment<br>entire<br>shall<br>eneral<br>erships<br>coring |
| Risk Assessment:  i. The successful implementation of the REAP depends on the support are operation of Dzongkhag and Gewog Administrations who will be the implementation. If support is not forthcoming, it will affect the timely and efficient implementation of plans.  ii. If adequate financial resources are not made available, it will jeopardize implementation of REAP activities.  | enting<br>ective   |
| Beneficiary: 116 Villages across 20 Dzongkhags   |  |

| NKRA   | SKRA   | SKRA KPI  |
|--|--|---|
| Sustainable utilisation and management of natural resource | Opportunities for livelihood strengthened                      | Annual Income generated from sale of NWFP per HH                  |
| Food secure and sustained                                  | Enhance food and nutrition security                            | Egg production (million Nos/annum) - (RNR Stat)                   |
|  | Enhance food and nutrition security                            | Milk production (mt/annum) - (RNR Stat)                           |
|  | Enhance food and nutrition security                            | Vegetable production (mt/annum) – (RNR Stat)                      |
| Poverty + reduced/<br>MDG+ achieved                        | Preventative, Promotive and Rehabilitative Healthcare services | IMR per 1000 live births  |
|  | Preventative, Promotive and Rehabilitative Healthcare services | MMR per 100,000 live births                                       |
|  | Preventative, Promotive and Rehabilitative Healthcare services | Percentage of rural pop with access to improved sanitation        |
|  | Preventative, Promotive and Rehabilitative Healthcare services | Percentage of rural pop with access to safe drinking water supply |
|  | Preventative, Promotive and Rehabilitative Healthcare services | U5 MR pr 1000 live birth  |
|  | Health and wellbeing of school children improved               | Attendance rate   |
|  | MDGs+ Achieved.  | Basic Net Enrolment Ratio(13-16yrs)                               |
|  | MDGs+ Achieved.  | Net Primary enrolment (6-12 yrs)                                  |
|  | Preventative, Promotive and Rehabilitative Healthcare services | Percentage of rural pop with access to improved sanitation        |
|  | Preventative, Promotive and Rehabilitative Healthcare services | Percentage of rural pop with access to safe drinking water supply |

**Table 1: Programme Results Level** 

| Results Level (Outcome) Indicators  |  | Baselines | Plan Targets |
|---|--|-----------|--------------|
| Outcome 001 : Increased Income  | HHs income greater than Nu. 46000 per year (%)                             | 13        | 90           |
| Outcome 002 : Improved<br>Health and Sanitation                                   | HHs in which there have been no death of children under five (%)           | 75        | 90           |
|   | HHs in which there has not been a death of a mother due to child birth (%) | 99        | 99           |
| Outcome 003 : Increased   | HHs with access to Electricity (%)   | 22        | 100          |
| Living Standards  | HHs with access to piped water (%)   | 82        | 90           |
|   | HHs with access to sanitation (%)  | 90        | 95           |
|   | HHs with CGI sheets for roofing (%)  | 60        | 70           |
|   | HHs with wooden plank flooring (%)   | 73        | 90           |
| Results Levels (Output)   | Indicators   | Baseline  | Plan Targets |
| Output 001:Self-Help<br>Groups formed   | Number of self-help groups   | 0         | 100          |
| Output 002:Commercial farming enhanced  |  |           | 50           |
| Output 003:Basic  | HHs with CGI Sheets for roofing (%)  | 63        | 90           |
| amenities developed   | HHs with access to piped drinking water (%)                                | 82        | 95           |
|   | HHs with access to sanitation (%)  | 90        | 95           |
|   | HHs with access to Electricity (%)   | 22        | 100          |
| Output 004:Skills HHs with income generating skills (%) developed                 |  | 0         | 50           |
| Output 005:Community<br>machineries ( Rice Huller/<br>Maize Grinder)<br>installed | Number of machineries installed  | 0         | 100          |

**Table 3: Programme Plan Outlay Summary** 

| Programme Activites                     | Capital |
|---|---------|
| Form Self-Help Groups                   | 20.000  |
| Enhance commercial farming              | 60.000  |
| Develop Basic Amenities                 | 50.000  |
| Develop skills                          | 25.000  |
| Install Community Machineries           | 35.000  |
| Coordination, Monitoring and Evaluation | 25.000  |
| Total:                                  | 215.000 |

| Au Name: NATIONAL LAND COMMISSION    | Department: SECRETARIAT |
|--------------------------------------|-------------------------|
| Program Name: National Land Services | Phase: Approved         |

| Justification:      | Land is not simply an economic issue but an issue affecting the very livelihoods and welfare of the people to a large extent. As an agrarian country, land plays an important role in uplifting the livelihood and poverty of the majority of Bhutanese population. Therefore equal access to and ownership of land will provide strong foundation for inclusive growth and development. Poverty alleviation or economic dynamism - both ends of the spectrum of government priorities are affected by land issues. It will therefore be imperative for Bhutan to strengthen land information management and improve land related services. Similarly, we cannot hope to create a dynamic financial sector or attract foreign investment, if land transaction and allotment procedures are not transparent, reliable and efficient. As such, it is important to streamline and strengthen land administration and management system of Bhutan |
|---------------------|---|
| Strategy:           | <ul> <li>i. Improve and strengthen land registration and transaction services</li> <li>ii. Improve multipurpose cadastre information</li> <li>iii. Develop and establish geo-spatial infrastructure</li> <li>iv. Carry out high precision surveys on geodetic and geodynamic applications</li> <li>v. Improve and strengthen cadastral database</li> </ul>  |
| Risk<br>Assessment: | <ul> <li>i. Lack of adequately trained/skilled manpower</li> <li>ii. Shortage of competent and reliable employees in the Dzongkhags and Drungkhags</li> <li>iii. Lack of active participation from stakeholders in realizing the benefit of multicadastre information</li> </ul>  |
| Beneficiary:        | The Commission, the Secretariat, Royal Government, business and general public at large.  |

| NKRA | SKRA  | SKRA KPI                |
|------|---|-------------------------|
|      | Strengthened Accountability Transparency,<br>Efficiency and Effectiveness in Governance | TAT for public services |

**Table 1: Programme Results Level** 

| Results Level (Outcome)   | Indicators   | Baselines | Plan Targets |
|---|--|-----------|--------------|
|   | Area of Government reserved forest land leased out for sustainable use (Acres)                           | 12578.43  | 20078        |
| Outcome 001: Promote sustainable and effective management and utilization of land based resources | Proportion of land formalization application for religious and cultural sites processed and approved (%) | 6182      | 85%          |
|   | Isolated/ forested registered plots surveyed and demarcated on the ground (Nos)                          | 0         | 90,000       |
| Outcome 002: Improve effi-  | Average Turn Around Time (TAT) for the most commonly availed land services (days)                        | 90 days   | 15 days      |
| ciency in the provision of land administration and geo-information services                       | Average performance rating of NLCS (%)   | 70%       | >90%         |
|   | Percent of land substitution cases processed and approved annually (%)                                   | 70%       | 80%          |

| Results Levels (Output)  | Indicators   | Baseline | Plan Targets         |
|--|--|----------|----------------------|
| Output 001:Land holdings   | Land holdings verified and registered (Nos)                      | 97037    | 121000               |
| verified and registered  | Alienable and disposable land identified in all Dzongkhags (Nos) | 0        | 20                   |
|  | Land dispute cases processed (Nos)                               | 17       | 1000                 |
| Output 002:Land transactions and other land related cases/ issues heard and resolved | Dispute settlement Committee meetings organized (Nos)            | 5        | 150                  |
|  | National land commission meetings organized (Nos)                | 32       | 35                   |
| Output 003:Sanctity and  | International boundary pillar maintained (Nos)                   | 268      | 300                  |
| permanence of international  | Strip maps updated (Nos)   | 0        | 15                   |
| boundaries maintained  | Archiving of international boundary documents completed          | 0        | Archiving completed  |
| Output 004: Landless/<br>economically disadvantaged<br>resettled and poverty reduced | Area of land allocated for resettlement (acres)                  | 3506     | As per<br>directives |

|   | NSDI developed and functional by 2016                           | 0  | Functional<br>NSDI |
|---|---|----|--------------------|
|   | Dzongkhags with functional<br>E-sakor (Nos)                     | 1  | 20                 |
| <b>Output 005:</b> Spatial and cadastral geo-database updated and made functional | First order GPS stations established (Nos)                      | 58 | 15                 |
|   | Permanent Reference Stations (PRS) established (Nos)            | 6  | 9                  |
|   | Land use cover maps prepared (Nos)                              | 0  | Whole country      |
| Output 006:Strengthened administration and management of NLCS                     | HR committee meetings organized                                 | 3  | 30                 |
|   | Quarterly budget review and monitoring conducted annually (Nos) | 0  | 4                  |

**Table 2: Programme Plan Outlay Summary** 

| Programme Activities  | Capital |
|---|---------|
| Conduct rural land registration and transactions                      | 11.685  |
| Prepare chhazhag thrams & lagthrams after transaction                 | 1.500   |
| Acquire fallow private registered land in rural areas and its payment | 10.00   |
| Conduct urban land registration and transactions                      | 5.75    |
| Prepare chhazhag thrams and lagthrams after land transactions         | 1.00    |
| Resolve excess and deficit land issues                                | 1.00    |
| Verify & update thrams  | 1.00    |
| Archive thromdey Thrams   | 1.5     |
| Acquire fallow private registered land in urban areas and its payment | 5.00    |
| Survey forested registered land, absentee & disputed cases            | 10.00   |
| Conduct survey of thromdey land                                       | 5.00    |
| Carry out digital archiving and management of land documents          | 3.00    |
| Render regular surveying services                                     | 2.00    |
| Procure surveying software & upgrades                                 | 2.00    |
| Render legal services   | 3.75    |
| Verify & investigate land disputes throughout country                 | 0.00    |
| Coordinate and organize commission meetings                           | 0.00    |
| Conduct mapping of International boundary                             | 0.00    |
| Maintain/verify international boundary pillars                        | 5.00    |

| Update strip maps  | 10.00 |
|--|-------|
| Conduct GPS coordination of international boundary pillars   | 4.00  |
| Archive international boundary documents   | 3.00  |
| Implement rehabilitation services  | 340.5 |
| Organize sensitization/workshops/ meetings   | 0.00  |
| Procure server of higher capacity  | 3.00  |
| Conduct digital archiving, management and printing of 20 Dzongkhags NCRP cadastral maps  | 5.00  |
| Develop additional modules to e-Sakor system and continue upgradation of e- Sakor system   | 5.00  |
| Implement user interface/ system development   | 3.00  |
| Produce lagthram base maps   | 1.00  |
| Produce thematic/topographic (spatial) maps both soft and hard copy  | 1.00  |
| Procure Heidelberg printing machine with two colours and printing area of 645 mm   | 6.00  |
| Procure of richi machine for printing full colour maps in A 4  | 1.00  |
| Develop Bhutan National Spatial Infrastructure (NSDI) with data model, meta data, base data for geo-portal & information dissemination | 11.00 |
| Enhance cross sectoral geo-information capacities/Coordination & marketing   | 0.00  |
| Construction & recce of high precision leveling in Punakha, Gasa & Dagana & carrying precision leveling                                | 0.500 |
| Develop and implement GPS network densification  | 2.00  |
| Procure permanent reference station, installation and construction   | 7.59  |
| Survey mark maintenance, construction & re-leveling  | 1.00  |
| Carry out gravity observation  | 0.00  |
| Carry out magnetic observation   | 1.00  |
| Provide control points and topographical base mapping on 1:25,000 scale  | 15.00 |
| Collect geographical names for gazetter of Bhutan  | 0.00  |
| Set up GNSS service & PRS networking followed by training in gravity & magnetic survey   | 1.00  |
| Provide general administration and direction services (Secretariat)  | 9.225 |
| Maintain office building, office estate, equipment, vehicles, computers and furniture  | 0.00  |
| Monitor & evaluate planned activities  | 0.00  |
| TOTAL:   | 500   |