

# ELEVENTH FIVE YEAR PLAN

## Volume II : Programme Profile



2013-2018

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



ELEVENTH FIVE YEAR PLAN 2013-2018

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



Volume II : Programme Profile

**SELF-RELIANCE**  
CSIs  
RATIONALIZATION  
GOVERNANCE  
INCLUSIVE  
DIVERSIFICATION  
GOOD HEALTH  
QUALITY EDUCATION  
PERFORMANCE MANAGEMENT  
FOOD SECURITY  
DISASTER MANAGEMENT  
EMPLOYMENT  
HERITAGE CO-ORDINATION  
CONSOLIDATION  
GENDER GREEN  
GROWTH-CENTERS  
WATER SECURITY  
SAFE SOCIETY  
SOCIAL COHESION  
POVERTY REDUCTION  
VALUE-ADDITION  
IDENTITY



**Eleventh Five Year Plan Document**

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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.*





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## Royal Government of Bhutan

PRIME MINISTER

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



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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



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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!

A stylized signature in black ink, likely belonging to Tshering Tobgay.

(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
FIs	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
MEF	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

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## 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.

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

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

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

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

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

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Department of Civil Registration and Census, MoHCA	Enhance Civil Registration and Census Services	27.02
Department of Immigration, MoHCA	Strengthen National Security and Enhance Immigration Services	90.00
Department of Local Governance, MoHCA	Strengthening of Local Governance	34.00
Royal Bhutan Police	Development of Fire and Rescue Services	94.00
	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
Royal Civil Service Commission	Strengthening Human Resource Systems in the Civil Service	207.00
	Human Resource Development of Civil 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
<b>Sector: Vulnerable Groups</b>		
National Commission for Women and Children	Protection and Promotion of Women and Children Rights	55.00
Gross National Happiness Commission	Targeted Poverty Interventions	225.00
National Land Commission	Land and Rehabilitation Services	500.00

# **RENEWABLE NATURAL RESOURCES**



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

<b>Justification:</b>	<p>Domestic production of cereals meets only 66% of the total requirement. Country is only 47% self-sufficient in rice, 47% in wheat, 40% is pulses and less than 10% in oils. However, the country has the potential to increase both production and productivity.</p> <p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. To bring focus on priority commodities to enhance production, commodity program approach will be continued with specific commodity area delineation.</li> <li>ii. Commercialization for potential crops such as rice, maize, wheat and oil seeds will be pursued through PPP/IFD.</li> <li>iii. To achieve the volume for commercialization, land intensification will be emphasized through assured irrigation water and mechanization services.</li> <li>iv. At strategic locations, storage facilities and processing plants will be instituted.</li> <li>v. Environmentally friendly and socially accepted electric fencing system (EFS) will be promoted, and SLM technologies will be promoted in steep slopes.</li> <li>vi. Research on varieties that are tolerant to biotic and abiotic stress to cope with climate change challenges will be pursued strongly.</li> </ul>

<b>Risk Assessment:</b>	i. Inadequate and timely allocation of fund 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.
<b>Beneficiary:</b>	i. At the national level, the successful implementation of the program will reduce dependence on import of cereal, pulses and oil and improve food security and sufficiency levels. 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 sustained	Enhance food and nutrition security	Cereal production (mt/annum) - (RNR Stat)
		Rice Production (mt/annum) - (RNR Stat)
Poverty+ reduced/ 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
Outcome001:Increase field crops production for enhancing cereal self sufficiency	Annual paddy production(MT/annum)	78730	98894
	Annual maize production(MT/annum)	79826	88365
	Annual other cereal production(MT/ annum)	24777	36478
	Annual oilseeds and legumes production(MT/annum)	5658	7000
	Cereal imports(%)	34	24

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<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output001: Enhanced rice production	Area under-assured irrigation(acres)	67676	77827
	Productivity(MT/acres)	1.3	2
	Area under farm mechanization (acres)	1271	5000
	Number of rice processing facilities established and functional for commercialization(Nos.)	1	6
Output002: Enhanced maize production	Area under maize cultivation(acre)	70312	71812
	Seed replacement ratio(%)	24	50
	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
Output004: Enhanced oilseed production	Area under oilseed production(acres)	1333	2000
	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**

<b>Programme Activities</b>	<b>Capital</b>
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

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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 capacity of the AMC	10.000
<b>Total:</b>	<b>430.000</b>

<b>Au Name:</b> MINISTRY OF AGRICULTURE AND FORESTS	<b>Department:</b> DEPARTMENT OF AGRICULTURE
<b>Program Name:</b> National Horticulture Commodity Development Program	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	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.
<b>Risk Assessment:</b>	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)  iv. Private engagement risk (Lack of cooperation and interest from private agencies/individuals, unwillingness to invest in RNR commodity programs – PPP models)  v. Market related risks: (demand and supply not matching, limited market access)

<b>Beneficiary:</b>	i. Farming communities; ii. Private entrepreneurs engaged in horticulture crop production and marketing.
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## Program and SKRA Linkages

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)
		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+ 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 : Increase horticultural crop production for enhancing nutrition and income	Annual vegetable production (MT)	44650	65200
	Annual citrus production(MT)	60993	67273
	Annual potato production (MT)	52116	78000
	Annual fruits and nuts production(MT)	35530	38856
	Annual MAPS production(MT)	5183	6000
	Annual mushroom production (MT)	89	119.3
	Annual import of vegetables (MT)	11619	5809

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<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:Increased vegetable production	Area under vegetable cultivation (acres)	33532	38532
	Average productivity (mt/ acre)	1.30	1.70
	Functional post-production infrastructures (Nos.)	307	522
Output 002:Promote citrus production	Average productivity (kg/ tree)	35	40
	Fruit bearing trees (Nos.)	3122356	3328431
	Functional post-production infrastructures (Nos.)	7	12
Output 003:Enhance potato production	Average productivity (mt/ acre)	3.34	5
	Functional post-production infrastructures (Nos.)	349	799
Output 004:Promote fruits and nuts production	Average Productivity (kg/ tree)	22	30
	Fruit bearing trees (Nos.)	3191053	4135609
	Functional post-production infrastructures (Nos)	32	82
Output 005:Promote MAPS production	Area under MAPS cultivation (acres)	7507	8633
	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
	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**

<b>Programme Activities</b>	<b>Capital</b>
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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Establishment of pack-houses, storage and processing infrastructures	3.000
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
<b>Total:</b>	<b>230.000</b>

<b>Au Name: MINISTRY OF AGRICULTURE AND FORESTS</b>	<b>Department: DEPARTMENT OF AGRICULTURE</b>
<b>Program Name: Agriculture Infrastructure Development</b>	<b>Phase: Approved</b>

<b>Justification:</b>	<p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>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.</li> <li>ii. DoA will also implement storage, pumping and water management research programs in collaboration with relevant agencies.</li> <li>iii. In collaboration with Horticulture Division, potential areas for irrigating commercial crops will be identified and appropriate irrigation technologies will be developed.</li> <li>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.</li> <li>v. The program will also initiate land development activities in selected Dzongkhags.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Risk of not getting the required minimum additional engineers especially at the RDCs.</li> <li>ii. Availability of adequate and timely fund.</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. The direct beneficiaries of irrigation program will be the farmers owning Chuzhing and those cultivating commercial crops such as potato, orchards, vegetables etc.</li> <li>ii. Land development will benefit dry land and orchard owners.</li> <li>iii. Farm roads will benefit rural communities, traders and facilitate civil servants and other development organizations in their field activities.</li> </ul>

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

Results Level (Outcome)	Indicators	Baselines	Base Year	Plan Targets
Outcome 001 : Improved and functional agriculture infrastructure in place	Paddy field area under functional irrigation systems (ha)	19200	2010	32000
	Horticulture (cash) crops area under irrigation (ha)	0	2012	300
	Percentage of households living more than one hour walking distance from a 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
Output 001:Increased paddy field area under improved irrigation systems	New irrigation systems constructed (Nos)	0	2012	10
	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 walking distance from a road head	Proportion of households living more than one hour walking distance from a road head (%)	31	2010	15
	New farm roads constructed (Nos)	0	2012	10
Output 004:Increased existing farm roads under pliable condition	Proportion of farm roads under pliable condition (%)	N/A	2010	100
	Functional farm roads database	Database in GIS format		Updated database
	Updated farm road maps by Dzongkhag available	farm roads maps		Updated farm roads maps
	Farm roads manual updated	Old manual		Updated 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
<b>Total</b>	<b>1600.000</b>

<b>Au Name:</b> MINISTRY OF AGRICULTURE AND FORESTS	<b>Department:</b> DEPARTMENT OF AGRICULTURE
<b>Program Name:</b> National Organic Development Programme (NOP).	<b>Phase:</b> Approved

<b>Justification:</b>	<p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Category 1 - Naturally organic - will be implemented in remote areas, areas 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.</li> <li>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</li> <li>iii. Category 3 - Any area suitable for production, any products identified as suitable for production for assured market with certification and for exports.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Having a National Organic Policy will determine the development of organic sector in the future.</li> <li>ii. Priority and vision of the government towards organic sector will have direct bearing on the implementation of the planned activities.</li> <li>iii. Availability and timely allocation of resources will directly affect the program objectives.</li> <li>iv. Coordination within and among the line agencies including private sector will affect market growth</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Organic RNR sector</li> <li>ii. Small farm holders and commercial organic farmers</li> <li>iii. Organic traders</li> <li>iv. General consumers</li> <li>v. Country- environmental conservation</li> </ul>

## Program and SKRA Linkages

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+ 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:Promote organic production for sustainable agriculture growth and rural income	Organic production (Livestock, Agriculture) (MT/annum)	65	980
	Income from organic production(Nu. in million)	0	1570
	Employment from organic sector(Nos)	4262	10000
Results Levels (Output)	Indicators	Baseline	Plan Targets
Output001:Increased organic agriculture production	Area under organic cultivation (acres)	2069	5560
	Average productivity of asparagus (kg/acres)	670	750
	Average productivity buckwheat (kg/acres)	300	400
Output002:Increased organic livestock production	Organic honey production(MT)	0	1
	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
<b>Total:</b>	<b>40.000</b>

<b>Au Name: MINISTRY OF AGRICULTURE AND FORESTS</b>	<b>Department: DEPARTMENT OF LIVESTOCK</b>
<b>Program Name: National Livestock Commodity Development Programme</b>	<b>Phase: Approved</b>

<b>Justification:</b>	<p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Institute and strengthen national commodity &amp; service Centers and implement commodity development plans.</li> <li>ii. Pursue pro-poor livestock development initiatives</li> <li>iii. Conduct value chain analysis of livestock commodities</li> <li>iv. Encourage investments in commercial livestock farming</li> <li>v. Explore possibilities of horizontal and vertical integration of mega farms to small producers</li> <li>vi. Institute improved services delivery system</li> <li>vii. Encourage and foster formation of groups/cooperatives</li> <li>viii. Standardize technology transfer process</li> <li>ix. Pursue Public-Private Partnership (PPP) including FDI for all commodities-</li> <li>x. Improve animal energy resources for draft power</li> </ul>

<b>Risk Assessment:</b>	i. Inadequate budget allocation can hamper the implementation of planned activities, 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
<b>Beneficiary:</b>	i. Rural and urban livestockfarmers of Bhutan. ii. Entrepreneurs engaged in livestock sector. iii. Consumers

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Food secure and sustained	Enhance food and nutrition security	Egg production (million Nos/ annum) - (RNR Stat)
		Milk production (mt/annum) - (RNR Stat)
Poverty + reduced/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)
	Accelerate RNR sector growth through commercial farming	Mean annual value of export (Nu. in million/annum) - (RNR Stat)
		Mean annual volume of export (mt/annum) - (RNR Stat)

**Table 1: Programme Results Level**

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

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<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome001:Enhanced self-sufficiency of livestock products	Fish production (mt/year)	65	750
	Chevon production (mt/year)	63	150
	Beef production(mt/year)	513	600
	Honey production(mt/year)	15	27
Outcome002:Reduced import of livestock products	Fresh milk(mt/year)	17626	2643
	Eggs(%)	100	100
	Chicken(mt/year)	711	213
	Pork (mt/year)	1842	847
	Wet fish(mt/year)	1325	583
	Chevon (mt/year)	20	10
	Beef(mt/year)	5719	5089
Output001:Enhanced livestock breed improvement	Fresh honey(mt/year)	3	1.5
	Milking cattle population (Nos.)	70533	80410
	Improved cattle breed(Nos.)	72154	88526
	Laying bird population(Nos.)	289596	350000
Output001:Enhanced livestock breed improvement	Broiler bird population(Nos.)	64400	666000
	Improved pig population (Nos.)	19711	30132
	Fingerling distribution for aquaculture(Nos.)	688078	2500000
	Goat population (Nos.)	43134	45290
	Bee colonies in improved hives (Nos.)	600	1045
Output002: Enhanced production efficiency and livestock service delivery	Community managed capture and recreational fisheries (Nos.)	2	20
	Average growth of fingerlingsin6months (kgs)	0.35	0.65
	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 (ltrs/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
Output003: Promoted green livestock farming practices to adapt/mitigate climate change	Households adopting bio-gas (Nos)	130	2500
	Organic livestock products for niche markets developed(Nos)	0	5
	Eco-friendly terrestrial crop residue feed for backyard fish 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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Enhance professionalism and technical capacity for poultry sector development	3.800
Enhance professionalism and technical capacity for piggery sector development	2.500
Enhance professionalism and technical capacity for fishery sector development	6.000
Enhance professionalism and technical capacity for wild fishery sector development	7.000
Enhance professionalism and technical capacity for animal health	105.000
Enhance professionalism and technical capacity for feed and fodder development	78.000
Enhance professionalism and technical capacity for livestock research development	45.000
Strengthen regional livestock support services	175.000
Strengthen national level livestock support services	51.000
Support commercial milk production	6.000
Promote green farming technology (Dairy, Poultry, Piggery, Fishery)	32.000
<b>Total:</b>	<b>1035.000</b>

<b>Au Name:</b> MINISTRY OF AGRICULTURE AND FORESTS	<b>Department:</b> DEPARTMENT OF LIVESTOCK
<b>Program Name:</b> Targeted Highland Development Programme	<b>Phase:</b> Approved

<b>Justification:</b>	<p>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.</p> <p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Institute a nodal agency to address the livestock priority needs of nomadic communities;</li> <li>ii. Promote efficient management of rangelands and watersheds;</li> <li>iii. Promote and support organic livestock production;</li> <li>iv. Promote use of alternative energy sources.</li> <li>v. Promote eco-tourism and niche product development.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Limited accessibility to provide coordinated supports.</li> <li>ii. Migration &amp; alternative income sources</li> <li>iii. Acceptability of planned programs</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Highland communities</li> </ul>

## Program and SKRA Linkages

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**

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

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>55.000</b>

<b>Au Name: MINISTRY OF AGRICULTURE AND FORESTS</b>	<b>Department: DEPARTMENT OF AGRICULTURE MARKETING AND COOPERATIVES</b>
<b>Program Name: Agriculture Marketing &amp; Cooperative Development Program</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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 than 60% of population depend directly on farming, agriculture marketing can play a huge role in the growth and development of farming systems in Bhutan. Nonetheless, in spite 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Department-wise commodity focal persons will be further strengthened in line with the Departments' priorities to cater to the Cooperatives and Marketing needs effectively.</li> <li>ii. Focus on the implementation of the commodity wise programs through the regulation and promotion of farmers groups and cooperatives.</li> <li>iii. The focus, going forward, will be on developing and facilitating linkages and networking between the major markets and the producers/dealers/cooperatives.</li> <li>iv. Conduct strategic market research and studies to the production plan for the potential commercial products.</li> <li>v. Contact farming will continue to receive attention in the 11th FYP and will be strengthened and up-scaled to other commodities and clients.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Market Size: small population and scattered households makes marketing challenging as demand is small coupled with limited scope of economy of scale in production, collection or distribution.</li> <li>ii. Competition with Indian produce/products</li> <li>iii. Ownership of new marketing interventions by farmers and traders</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Farmers</li> <li>ii. Traders/vendors/middlemen/entrepreneurs</li> <li>iii. Farmer groups and cooperatives</li> </ul>

## Program and SKRA Linkages

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)
		Mean annual volume of export (mt/annum) - (RNR Stat)
		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 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
Outcome001: Enhanced employment and income opportunities from sale of RNR products	Employment generated through farmers groups/Coops/OSFS. (Nos)	580	1370
	Income generated through Farmers Group and Cooperative enterprises (Nu. million)	96	200
	Employment generated through commercial farming such as contact farming, PPP and FDI (Nos)	2723	4397
	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 development of Farmers Groups and Cooperatives	Registered Cooperatives	25	50
	Registered Farmers Groups	225	
	Functional cooperative shop (Nos)	1	
Output002: Increased establishment of functional OSFS	Functional OSFS (Nos)	25	65

Output003:Increased commercial farming enterprises	MoUs signed and implemented (Nos)	6	16
	Functional institutional linkages on commercial Farming (Nos)	2	
	Commercial farming enterprises supported (Nos)	16	
	Functional Community owned Company(Nos)	2	
Output004:Promoted contact farming	Households engaged in contact farming (Nos).	1163	2000
	Area under contact farming(acres)	5000	
Output005: Market Infrastructure developed	Functional marketing infrastructure (Nos)	56	166
Output006:Increased domestic and export market Major domestic markets explored(Nos)	Major export market sexplored (Nos)	2	5
	Major domestic markets explored (Nos)	60	
Output007: Improved market information	Improvedmarketinformation in place (Nos)	10	20
	Increased modes of market information dissemination (Nos)	2	4
Output008:Conduct market research and studies	Market studies conducted (Nos)	1	5
Output009:RNR marketing policy in place	RNR marketing strategy formulated (Nos)	0	1
	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,2009andCooperative Rules and regulations2010	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

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Supply of primary processing and packaging equipment	10.000
Development and construction of OSFS	9.000
Supply of basic in puts/equipment for OSFS	1.500
Commission support to OSFS	2.000
Establishment of cooperative shops	0.000
EoI concepts building and Signing of MoU on prioritized commodities such as rice,-fruits, MAP basedon priorities and markets available	1.500
Support to contact farming, PPP, FDI and commercial farming enterprises based on priorities of commodities	6.000
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	30.000
Construction of RNR sales counter for agri/livestock/forestry products	5.000
Construction of cluster and collection depots for agri /livestock/forestry products	6.000
Roadside vendors shed constructed for agri/livestock/forestry products	3.000
Construction and up-gradation of urban market shed and auction yard	35.000
Renovation of existing market sheds	5.000
Promotion of major RNR products and trial marketing	4.000
Minimum support price for selected priority commodities to enhance self-sufficiency	12.000
Market-driven RNR production promotion by linking FGs/Coops, middle men to institutions, mega projects, schools, armed forces, hotels, urban markets.	3.000
Exploration of export markets for Rice, Buckwheat, pulses, vegetables, fruits, dairy, poultry and NWFPs.	2.000
Improved marketing chain/capacity building of FGs/Coops/ entrepreneurs on marketing	2.000
Strengthen market information database and dissemination	3.000
Conduct value chain analysis and market intelligence studies for major agricultural commodities	5.000
Conduct diagnostic studies on major marketing problems in domestic and export markets	2.000
Development of policy and strategy documents	2.000
Construction of cold and ambient stores and processing facilities	6.000
<b>Total:</b>	<b>180.000</b>

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<b>Au Name: MINISTRY OF AGRICULTURE AND FORESTS</b>	<b>Department: COUNCIL FOR RENEWABLE NATURAL RESOURCE RESEARCH OF BHUTAN</b>
<b>Program Name: RNR Research &amp; Extension Services Program</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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 mandate 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 meeting 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.
<b>Strategy:</b>	i. Building up appropriate research agenda through consultation considering the One Gewog Three Products (OGTP), area/crop potential and marketability.  ii. Conduct regular evaluation and impact studies and use these studies to recommend strategies & 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
<b>Risk Assessment:</b>	i. Financial resources constraint  ii. Limited research capability.  iii. Adoption of technology by the farmers/entrepreneurs
<b>Beneficiary:</b>	i. Farmers in terms of access to upto-date and innovative technologies  ii. Scientific community  iii. Agribusiness houses

## Program and SKRA Linkages

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 RNR products (Nu. in millions/ annum) - (RNR Stat)

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<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : RNR research and extension service delivery strengthened	Proportion of farming HH adopting RNR technologies (%)	30	80
	RNR technology available for use by the farmers (Nos)	76	236
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:Research agenda setting coordinated	Consultative meetings conducted (Nos)	10	26
	Research plans in place (Nos)	6	12
Output 002:Policy / strategic research coordinated & conducted	Policy/strategic research conducted (Nos)	1	11
	Emerging research [CC initiatives] conducted (Nos)	1	11
	Council meetings conducted (Nos)	5	15
Output 003:Research information managed & disseminated	Functional research databases (Nos)	0	2
	RNR journals published (Nos)	5	10
Output 004:Research collaborations & linkages established	MoUs signed (Nos)	8	14
	Memberships acquired (Nos)	3	8
Output 005:Research system monitored and evaluated	M&E / feedback reports published (Nos)	3	13
	Technologies screened [incl: climate smart technologies] (Nos)	22	40
	Adoption & impact studies conducted [incl: climate smart technologies] (Nos.)	1	11
Output 006:RNR research & extension policies, programs & strategies streamlined	Extension policies reviewed & strategy developed (Nos)	0	3
	Baseline surveys conducted (Nos)	0	1
	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
<b>Total:</b>	<b>20.000</b>

<b>Au Name:</b> MINISTRY OF AGRICULTURE AND FORESTS	<b>Department:</b> COUNCIL FOR RENEWABLE NATURAL RESOURCE RESEARCH OF BHUTAN
<b>Program Name:</b> School Agriculture Program	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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 the 11th FYP.</li> <li>iii. The program will also continue to upscale the farm to school approach in the 11th 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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. SAP schools,</li> <li>ii. Educated youths engaged in farming.</li> <li>iii. Farmers</li> </ul>

## Program and SKRA Linkages

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 sale of RNR products (Nu. in millions/annum) - (RNR Stat)

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
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
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output001:School Agriculture Program Strengthened	School under SAP (Nos.)	200	300
	FAT trained(Nos)	150	300
	Educated school youth trained to take up agriculture(Nos)	0	100
	Awareness campaigns organized(Nos)	0	5

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>20.000</b>

<b>Au Name:</b> MINISTRY OF AGRICULTURE AND FORESTS	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Biodiversity Conservation Program	<b>Phase:</b> Approved

<b>Justification:</b>	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
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Implement ex-situ conservation activities in collaboration with other agencies.</li> <li>ii. Coordinate in situ conservation of domestic biodiversity in collaboration with farmers, local communities and other stakeholders.</li> <li>iii. Implement sustainable use program from bio-prospecting and other related perspectives in collaboration with other relevant agencies.</li> <li>iv. Strengthen biodiversity information and access to it in collaboration with relevant stakeholders.</li> <li>v. Up-grade the center to Directorate to strengthen institutional capacity for effective delivery of the mandates.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Inadequate human resource and technical expertise.</li> <li>ii. Inadequate support from collaborators.</li> <li>iii. Lack of policy support/policy change</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Farmers.</li> <li>ii. Private sector and business establishment.</li> <li>iii. Conservationists.</li> </ul>

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001:Conservation and sustainable utilization of biodiversity enhanced	Diversity of biological resources conserved ex-situ(Nos)	439	855
	Status of agro-biodiversity maintained on-farm(Nos)	13	16
	Natural products marketed (Nos)	2	6
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output001:Increased and diversified ex-situ conservation of biodiversity	Accessions of PGRFA germ-plasm at the crop gene bank including field Gene Bank(Nos)	1358	2500
	Functional backup facility for ex-situ collection of plant genetic resources for food and agriculture(Nos.)	0	1
	Functional invitro and cryo bank facilities for plant genetic resources(Nos)	0	1
	Doses of animal germ-plasm (semen)at the animal gene bank (Nos)	3500	8000
	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

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Output003:Enhanced capacity of the local communities to adapt to changing climate	Resilient local crop varieties promoted in selected sites (Nos)	N/A	2
	Functional community seed banks(Nos)	3	6
	Farmers trained on local genetic resources(Nos)	1500	3000
Output004:Enabling legal and policy environment for biodiversity conservation and sustainable use program developed	Policies addressing agro-biodiversity and access and benefit-sharing in place(Nos)	Draft2	2
	National implementation mechanism for agro- biodiversity and access and benefit sharing in place(Nos)	0	2
	Amended Biodiversity Act 2003 (Nos)	1	1
	Biodiversity Rules and Regulations in place(Nos)	0	1
	Revised National Biodiversity Strategy and Action Plan in place(Nos)	1	1
Output005:Increased access to quality biodiversity information	Information on the risk status of targeted biological resource group available(Nos)	0	4
	Herbarium specimens(Nos)	10,000	15,000
	Invertebrate reference collection available(Nos)	0	1
	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

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

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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 of2003	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	0.500
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
<b>Total:</b>	<b>65.000</b>

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<b>Au Name: MINISTRY OF AGRICULTURE AND FORESTS</b>	<b>Department: BHUTAN AGRICULTURE &amp; FOOD REGULATORY AUTHORITY</b>
<b>Program Name: National Biosecurity and Food Safety Programme</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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> <li>v. Draft/review legislations/standards related to bio-security and food safety</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Unavailability of land for construction of quarantine station, biological pits and offices.</li> <li>ii. Shortage of skilled human resource.</li> <li>iii. Inadequate funds for containment operation of random incidences of pest and disease epidemics.</li> <li>iv. Stakeholder resistance to bio-security and food safety regulatory measures.</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Government institutions/agencies.</li> <li>ii. General public.</li> <li>iii. Importers, exporters, farmers.</li> <li>iv. Business operators.</li> </ul>

## Program and SKRA Linkages

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 RNR products (Nu. in millions/ annum) - (RNR Stat)

**Table 1: Programme Results Level**

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

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Output 002:Biosafety measures enhanced	Functional biosafety regulatory system in place (Nos)	0	1
	Biosafety Technical Working Group (BTWG) established and functional (Nos)	0	1
	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
Output 003:Functional food safety and quality assurance system in place	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
	Food safety standards developed for local food commodities based on codex principles (Nos)	0	10
	Categories of food handlers training manual developed (Nos)	1	5
	Linkages with export inspection and certification agencies of major trading partner countries to ensure safety of the food imports (Nos)	0	3
Output 004: National Food Testing Laboratory (NFTL) fully functional	Scope of accredited test parameters for NFTL (Nos)	15	30
	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**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>65.000</b>

<b>Au Name: MINISTRY OF AGRICULTURE AND FORESTS</b>	<b>Department: SECRETARIAT</b>
<b>Program Name: Rural Development Training Programme</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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 of 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <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>

## Program and SKRA Linkages

<b>NKRA</b>	<b>SKRA</b>	<b>SKRA KPI</b>
Poverty + reduced/ 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**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : Enhanced capacity of youths and farming communities on farm management	Proportion of trained rural youths competent to start farm business enterprises (%)	50	75
	Proportion of trained executives members applying business management skills (%)	50	75
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:Enhanced knowledge and skills on farm management	Youth and farmers trained on farm business Management (Nos)	473	3212
	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 on Business Planning, Farm Economics, Financial Mgt. and Market and Value Chain Analysis (Nos)	22	600
Output 006:Conducted training on school agriculture	Students and teachers attend agriculture training programme (Nos)	241	660
Output 007:Strengthened institutional capacity	Training need assessment conducted (Nos);	2	4
	Technology promoted as Technology Park (Nos)	6	10
	Post training evaluation/ surveys (Nos)	1	3

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>21.000</b>

<b>Au Name:</b> MINISTRY OF AGRICULTURE AND FORESTS	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Coordination and Support Services Program	<b>Phase:</b> Approved

<b>Justification:</b>	The secretariat consists mainly of policy planning division, administration and finance division, information and communication 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 the Departments under the Ministry, strengthening these divisions through institutional reforms and capacity enhancement on areas such as strategic planning, coordination 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 issues 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
<b>Strategy:</b>	<ul style="list-style-type: none"> <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> <li>iv. Development and implement HRD master plan, improve service delivery, streamline M&amp;E and ICT</li> <li>v. Review and monitor budget and expenditure</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Lack of skilled human resources.</li> <li>ii. Funding delay would lead to delay in implementation of activities hence affecting the overall outcome of the Ministry.</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Departments and agencies under MoAF;</li> <li>ii. Farmers,</li> <li>iii. Students/educational research institutes.</li> </ul>

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

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

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Output 005:Investment target for the RNR Sector realized for 11th Plan	New investment plan/projects/ PPP approved (Nos)	NA	3
	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
Output 007:Human resource management and development services institutionalized and strengthened	HR master plan developed and implemented	0	1
	HR information system developed and operational	0	1
	Agencification conducted for the Ministry	0	1
	Weekly HR committee Meetings conducted (Nos)	NA	200
Output 008:Development of information education communication (IEC) materials	IEC Radio programs developed and aired (Nos)	25	65
	IEC TV programs developed and aired (Nos)	42	92
	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 dissemination of RNR ICT services	ICT services made available (Nos)	21	31
	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

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



# **ROADS & BRIDGES**



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

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Landslide and flash flood.</li> <li>ii. Cooperation from the communities.</li> </ul>
<b>Beneficiary:</b>	All Bhutanese

## Program and SKRA Linkages

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)
	Construction and up gradation of Primary National Highways incorporating EFRC	KM of Primary National Highways constructed in EFRC manner (DoR)

Carbon Neutral/Green Climate resilient development	Construction and up gradation of Primary National Highways incorporating EFRC	KM of Primary National Highways up-graded in EFRC manner (DoR)
Improved public service delivery	Enhanced efficiency and Effectiveness of in Public service delivery	Average performance rating (Govt. Performance Management System - GPMS)
	Enhanced efficiency and Effectiveness of in Public service delivery	TAT for public services reduced
Corruption reduced	Enhanced efficiency and Effectiveness of in Public 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 up-gradation of Southern East-West Highway completed	Southern east-west highway constructed (Nos.)	338.97	695.15
	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
<b>Total</b>	<b>7295.915</b>

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

<b>Justification:</b>	Being landlocked, Bhutan is heavily dependent on the existing network of national 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. DoR will continue its role of design, supervision, quality control and 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. This strategy will be continued in the 11FYP.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Landslides and flash floods</li> <li>ii. Availability of adequate fund on time;</li> <li>iii. Adequate manpower.</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Travellers;</li> <li>ii. Transport companies</li> <li>iii. Farmers</li> </ul>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Carbon Neutral/ Green Climate resilient 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 Highways up-graded in EFRC 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 delivery	Enhanced efficiency and Effectiveness of in Public service delivery	Average performance rating (Govt. Performance Management System - GPMS)
	Enhanced efficiency and Effectiveness of in Public service delivery	TAT for public services reduced
Corruption reduced	Enhanced efficiency and Effectiveness of in Public service 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 Highway upgraded to all weather access road	Northern East-West highway upgraded to PNH (Km) Road network open to traffic at all times (Km)	158.39 NA	238.39 546

**Table 3: Program Plan Outlay Summary**

Program Activities	Capital
Up-gradation of Kheri-Yadhi highway	343.299
Up-gradation of Wangdue-Chuserbo highway	131.333
Up-gradation of Semtokha-Wangdue highway	889.806
Conduct feasibility study and initiation of road tunneling from Yusipang to Nahi on NEWH	0.000
<b>Total</b>	<b>1364.438</b>

<b>Au Name:</b> MINISTRY OF WORKS AND HUMAN SETTLEMENT	<b>Department:</b> DEPARTMENT OF ROADS
<b>Program Name:</b> Construction and upgradation/Improvement of roads connecting Hydro Power Projects	<b>Phase:</b> Draft

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. DoR will continue its role to design, supervise, control quality and coordinate with the actual construction works contracted out 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 10FYP. This strategy will be continued in the 11FYP.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Landslides and flood</li> <li>ii. Availability of fund on time</li> <li>iii. Availability of adequate human resources.</li> </ul>
<b>Beneficiary:</b>	The commuters of the concerned road and the Project. In the long run it will benefit the whole nation.

## Program and SKRA Linkages

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 Effectiveness of in Public service delivery	Anti-corruption Strategy implemented

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

**Table 1: Program Results Level**

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

**Table 3: Program Plan Outlay Summary**

<b>Program Activities</b>	<b>Capital</b>
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
<b>Total</b>	<b>1443.003</b>

<b>Au Name:</b> MINISTRY OF WORKS AND HUMAN SETTLEMENT	<b>Department:</b> DEPARTMENT OF ROADS
<b>Program Name:</b> Construction and up gradation of Dzongkhag roads	<b>Phase:</b> Draft
<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Landslide and flood</li> <li>ii. Availability of adequate manpower</li> </ul>
<b>Beneficiary:</b>	All Bhutanese

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Improved public service delivery	Enhanced efficiency and Effectiveness of in Public service delivery	Average performance rating (Govt. Performance Management System - GPMS)
	Enhanced efficiency and Effectiveness of in Public service delivery	TAT for public services reduced
Corruption reduced	Enhanced efficiency and Effectiveness of in Public service 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	Capital
Construction of Tsebar-Mikuri-Durungri road	454.954
Improvement of Takela-Tangmachu road	30.000
Construction of bridge over Pachu (Airport bypass road)	71.529
<b>Total</b>	<b>556.503</b>

Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT	Department: DEPARTMENT OF ROADS
Program Name: Construction/Up gradation of North-South Highways	Phase: Draft
<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Landslides and floods;</li> <li>ii. Availability of adequate fund on time.</li> <li>iii. Availability of adequate human resources.</li> </ul>
<b>Beneficiary:</b>	All Bhutanese.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Sustained Economic Growth	Construction and up gradation of Primary National Highways incorporating EFRC	KM of Primary National Highways constructed in EFRC manner (DoR)
	Construction and up gradation of Primary National Highways incorporating EFRC	KM of Primary National Highways up-graded in EFRC 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 delivery	Enhanced efficiency and Effectiveness of in Public service delivery	Average performance rating (Govt. Performance Management System - GPMS)
	Enhanced efficiency and Effectiveness of in Public service delivery	TAT for public services reduced
Corruption reduced	Enhanced efficiency and Effectiveness of in Public 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	Average travel time in trucking hours along North South Highways (Hrs)	11.5	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	Capital
Construction of Dagapela-Dalbari highway	1200.000
Construction of Gomphu-Panbang Highway	693.598
Construction of Gyalthang-Ngawlam highway	476.363
Re-alignment of Damchu-Chukha road	569.500
Up-gradation of Samdrup Jongkhar-Trashigang Highway	0.000
Up-gradation/improvement of Paro-Drukgyel road	0.000
Restoration works on Gathana-Damji Road	25.000
<b>Total</b>	<b>2964.461</b>

<b>Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT</b>	<b>Department: DEPARTMENT OF ROADS</b>
<b>Program Name: Road Asset Management</b>	<b>Phase: Draft</b>

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. DoR will continue its role of design, supervision, quality control and coordination with the actual construction works contracted out to private sector.</li> <li>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.</li> <li>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.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Landslide and floods</li> <li>ii. Availability of adequate manpower resources.</li> <li>iii. Availability of adequate and timely fund.</li> </ul>
<b>Beneficiary:</b>	All Bhutanese

## Program and SKRA Linkages

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 traffic all times (immediate clearance of blocks) (DoR)
Carbon neutral/Green & climate resilient development	Construction and up gradation of Primary National Highways incorporating EFRC	Permanent solutions to stabilize problematic landslide areas (DoR)
Improved public service delivery	Enhanced efficiency and Effectiveness of in Public service delivery	Average performance rating (Govt. Performance Management System - GPMS)
	Enhanced efficiency and Effectiveness of in Public service delivery	TAT for public services reduced
Corruption reduced	Enhanced efficiency and Effectiveness of in Public service delivery	Anticorruption Strategy implemented

**Table 1: Program Results Level**

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

<b>Program Activities</b>	<b>Capital</b>
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
<b>Total</b>	<b>2372.000</b>

# **HUMAN SETTLEMENT AND HOUSING**



<b>Au Name:</b> MINISTRY OF WORKS AND HUMAN SETTLEMENT	<b>Department:</b> DEPARTMENT OF HUMAN SETTLEMENT
<b>Program Name:</b> Enhancing human settlements in Bhutan	<b>Phase:</b> Draft

<b>Justification:</b>	<p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <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> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Cooperation from the stakeholders;</li> <li>ii. Lack of competent professionals;</li> <li>iii. Adequate and time availability of fund.</li> </ul>
<b>Beneficiary:</b>	Whole settlement of the country.

## Program and SKRA Linkages

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)

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Corruption reduced	Enhance effectiveness and efficiency in delivery of public services	Anticorruption Strategy implemented
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	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-efficient/disaster resilient housing construction technology adopted	No. of eco-efficient/ disaster resilient buildings constructed (NHDC)
	Innovative, affordable and eco-efficient/disaster resilient housing construction technology adopted	No. of houses constructed using innovative and affordable construction technology (NHDC)
Carbon Neutral/Green Climate resilient development	Innovative, affordable and eco-efficient/disaster resilient housing construction technology adopted	No. of housing complexes with waste management practices instituted (NHDC)
	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**

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

**Table 3: Program Plan Outlay Summary**

<b>Program Activities</b>	<b>Capital</b>
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
<b>Total</b>	<b>245.000</b>

# CONSTRUCTION



<b>Au Name:</b> MINISTRY OF WORKS AND HUMAN SETTLEMENT	<b>Department:</b> CONSTRUCTION DEVELOPMENT BOARD
<b>Program Name:</b> Promotion and Strengthening of Construction Sector	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Strengthen regulations; accelerate the implementation of e-services to enhance the capacity of the construction industry.</li> <li>ii. Promote, stimulate and undertake research in the construction sector to adopt new technologies.</li> <li>iii. Restructure Construction Development Board into Construction Development Authority.</li> <li>iv. Encourage contractors to adopt the best construction practices and mechanization in the construction industry.</li> <li>v. Provide industry support through policy reforms.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Availability of adequate and technically qualified manpower.</li> <li>ii. Cooperation from the contractors.</li> </ul>
<b>Beneficiary:</b>	Construction industry as a whole.

## Program and SKRA Linkages

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

Sustained Economic Growth	Eco-friendly/disaster resilient, innovative and good quality construction promoted	No. of construction mechanization technology introduced (CDB)
	Contribution to GDP and employment opportunities created	Contribution of construction to GDP (%) (BLSS)
Improved public service delivery	Effective and efficient public service delivery	Anti-corruption Strategy implemented
	Effective and efficient public service delivery	Average performance rating (Govt. Performance Management System - GPMS)
	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
Outcome 001 : Efficient and quality based construction industry enhanced	Construction mechanization technology introduced (Nos.)	NA	50
	Defaulting contractors with adverse record (%)	2.05	1
	Works completed with average performance score > 50% (%)	NA	60
	Projects running into time overruns (%)	NA	40
Results Levels (Output)	Indicators	Baseline	Plan Targets
Output 001:Efficient and reliable construction development services	Specialized Bhutanese professionals in construction industry (Nos.)	NA	10
	Bhutanese contractors qualifying for HPP (Nos.)	1	3
	Works awarded using e-tool/e-services in the construction 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/orientation on procurement norms and rules that govern construction sectors enhanced	Awareness on norms and rules that governs construction industry (Nos.)	NA	
	Induction courses for new aspiring contractors joining construction Business conducted (No. of batches)	15	

**Table 2: Program Plan Outlay Summary**

Program Activities	Capital
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
<b>Total:</b>	<b>40.000</b>

Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT	Department: DEPARTMENT OF ENGINEERING SERVICES
Program Name: Engineering adaptation for disaster risk reduction	Phase: Draft
<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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> <li>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.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	All the Bhutanese population

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Carbon Neutral/ Green Climate resilient 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/disaster resilient technologies (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-friendly construction technology (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
<b>Total</b>	<b>785.000</b>

<b>Au Name:</b> MINISTRY OF WORKS AND HUMAN SETTLEMENT	<b>Department:</b> DEPARTMENT OF ENGINEERING SERVICES
<b>Program Name:</b> Technical support for construction and maintenance of trail suspension bridges	<b>Phase:</b> Draft
<b>Justification:</b>	<p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Local Governments may accord low priority to the program.</li> <li>ii. Insufficient fund</li> </ul>
<b>Beneficiary:</b>	The rural communities of the country.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Sustained Economic Growth	Bridges constructed and replaced to improve access	No. of bazams constructed (DES, MoWHS)
	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 Effectiveness of in Public service delivery	Average performance rating (Govt. Performance Management System - GPMS)

Improved public service delivery	Enhanced efficiency and Effectiveness of in Public service delivery	TAT for public services reduced
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**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
	Technical backstopping provided for the construction of trail bridges (Nos.)	384	458
	Bazams constructed (Nos.)	16	26
	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
<b>Total</b>	<b>71.000</b>

<b>Au Name: MINISTRY OF WORKS AND HUMAN SETTLEMENT</b>	<b>Department: DEPARTMENT OF ENGINEERING SERVICES</b>
<b>Program Name: Technical support and management for infrastructure development and engineering services</b>	<b>Phase: Draft</b>
<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. 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>ii. Decentralize project implementation to the respective Municipalities/LGs with technical backstopping and assistance provided by Department.</li> <li>iii. Promote and encourage private investors or PPP whenever commercially viable to implement urban development activities.</li> <li>iv. 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> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Urban population</li> <li>ii. Private sector</li> <li>iii. Farmers</li> </ul>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Improved Disaster resilience and management mainstreamed	Bhutanese architect and aesthetics in construction incorporated while adopting modern construction technology	No. of standards made for standardized building components (DES)
	Eco-friendly/disaster resilient, innovative and good quality construction promoted	% coverage of eco-efficient/disaster resilient technologies (DES)
	Eco-friendly/disaster resilient, innovative and good quality construction promoted	% coverage of eco-efficient/disaster resilient technologies (DES)
Improved public service delivery	Effective and efficient public service delivery	Anti-corruption Strategy implemented
	Effective and efficient public service delivery	Average performance rating (Govt. Performance Management System - GPMS)
	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)
Carbon Neutral/Green Climate resilient development	Strategic and smart human settlements developed with high livability index for balanced regional development	No. of regional hubs developed (DHS)
	Strategic and smart human settlements developed with high livability index for balanced regional development	% of solid waste reduced, 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**

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

<b>Program Activities</b>	<b>Capital</b>
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
<b>Total</b>	<b>3858.751</b>

<b>Au Name:</b> MINISTRY OF WORKS AND HUMAN SETTLEMENT	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Policy planning and institutional strengthening	<b>Phase:</b> Draft
<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Cooperation from the Departments</li> <li>ii. Availability of adequate and timely fund</li> </ul>
<b>Beneficiary:</b>	Technical Departments under the Ministry.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Democracy and Governance strengthened	Participation in democratic governance deepened and strengthened	Agencies implementing gender sensitive policies/strategies (NCWC)
	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 National Anticorruption Strategy (ACC)

Improved public service delivery	Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance	TAT for public services
	Strengthened Accountability Transparency, Efficiency and 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
Output 001:Efficient and effective planning and coordination system	Policy and planning coordination meetings conducted (Nos.)	NA	20
	Quarterly progress report meetings conducted (Nos.)	NA	20
	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 strengthening revenue administration, expenditure management systems and participatory city development plans prepared	Manuals prepared (Nos.)	NA	2
	Thromde staff trained (Nos.)	NA	100

**Table 3: Program Plan Outlay Summary**

<b>Program Activities</b>	<b>Capital</b>
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
<b>Total</b>	<b>112.925</b>

# **GEOLOGY AND MINES**



<b>Au Name:</b> MINISTRY OF ECONOMIC AFFAIRS	<b>Department:</b> DEPARTMENT OF GEOLOGY AND MINES
<b>Program Name:</b> Geological Mapping, Mineral Exploration and Sustainable Mineral Development	<b>Phase:</b> Approved

<b>Justification:</b>	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 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Prioritize the target areas for mineral investigation and construction materials study during the annual activity plan formulation.</li> <li>ii. Implementation of geological investigation of heavy minerals will be accorded priority.</li> <li>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.</li> <li>iv. Scientific mining will be ensured through improvement of the regulatory framework and its implementation.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Inadequate human resources and technical capacity.</li> <li>ii. Inadequate financial resources</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Private miners</li> <li>ii. Public at large</li> </ul>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Improved public service delivery	Enhance effectiveness and efficiency in delivery of public service	TAT for public services reduced
Corruption reduced		Average performance rating (Govt. Performance Management System - GPMS) Anticorruption Strategy implemented
Sustainable utilization and management of natural resource	Environmentally and socially responsible mineral development promoted	Number of laws amended/revised to promote scientific method, sustainable and environmental friendly mining
		Number of mines re-vegetated or created recreational areas or other human uses after closing
Sustained Economic Growth	GDP Contribution and employment increased	GDP contribution (plan period)
		No. of Bhutanese employed by gender
Sustainable utilization and management of natural resource	Intergenerational equity ensured	Contribution to Community Development Fund
		Policy promoting value addition of minerals leading to few and quality mines

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : Geological mapping, mineral exploration and mineral development in sustainable and environment friendly manner carried out	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
	Laws amended/revised to promote scientific method, sustainable and environmental friendly mining (Nos)	0	2
	Contribution to community development by mining sector (Million Nu.)	0	54
	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
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Base Year</b>
Output 001:Access to Geological information, mines and mineral data enhanced and generated	Geological reports on gypsum deposits (Nos)	1	3
	Geological reports on Ferrosilicon grade quartize (Nos)	9	11
	Reports on talc deposits (Nos)	1	2
	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

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Output 001:Access to Geological information, mines and mineral data enhanced and generated	Registry and mineral database updated (Nos)	1	1
	Geological reports on cement/chemical grade limestone or marble (Nos)	12	14
	Geological reports on industrial grade dolomite deposits (Nos)	4	6
Output 002:Geo-scientific and mining institutional capacity strengthened	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
	Geospatial technology 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**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>48.907</b>

<b>Au Name: MINISTRY OF ECONOMIC AFFAIRS</b>	<b>Department: DEPARTMENT OF GEOLOGY AND MINES</b>
<b>Program Name: Geo-scientific studies and risk assessment of geo-hazards</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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 geo-scientific 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. 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> <li>ii. Conduct geophysical investigation of potential groundwater reserves in two pilot areas.</li> <li>iii. Conduct validation of potentially dangerous lakes in the northern frontiers of Bhutan Himalayas.</li> <li>iv. Implement the landslide mitigation of critical areas under the UNDP-NAPA project.</li> <li>v. Conduct Hazard assessment of the old dzongs, monasteries and new urban centers.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Availability of adequate human resources</li> <li>ii. Availability of finance resources</li> <li>iii. Institutional capacity</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Planners and policy makers</li> <li>ii. Engineering, geosciences &amp; risk management institutions</li> <li>iii. Scholars, researchers and media</li> <li>iv. Public at large</li> </ul>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Improved public service delivery	Enhance effectiveness and efficiency in delivery of public service	Anticorruption Strategy implemented Average performance rating (Govt. Performance Management System - GPMS) TAT for public services reduced
Improved Disaster resilience and management mainstreamed	Environmental impacts from snow and glacier melt reduced.	Climate Change induced GLOF risk mitigated
	Risk associated with GLOF and Geo hazards reduced	Landslide inventory mapped 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
Outcome001:Risk associated with Geo-hazards prevented and reduced	National Earthquake monitoring network installed (Nos)	0	30
	Probabilistic macro-seismic hazard map of the country (Nos)	0	1
	Micro seismic zonation (Nos)	0	1
	Geotechnical/foundation/sub-surface investigation/studies done 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 and earthquake intensity stations installed and operational	Short period stations (Nos)	0	5
	Intensity stations (Nos)	0	20
	Broadband station (Nos)	0	5

Output002:Access to Geophysical, geotechnical and geo hazard information enhanced	Investigation on Potential groundwater resources (Nos)	0	1
	Geodetic measurement (Nos)	1	2
	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 (Thimphu- Wangdue) (Nos)	0	1

**Table 2: Programme Plan Outlay Summary**

Programme Activities	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
<b>Total:</b>	<b>372.375</b>

# **TOURISM**



<b>Au Name:</b> TOURISM COUNCIL OF BHUTAN	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Strengthening of RITH	<b>Phase:</b> Approved

<b>Justification:</b>	<p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <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 for better trainings.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Availability of students interested to undergo diploma in Tourism Management and Hotel Management.</li> <li>ii. Availability of fund</li> <li>iii. Availability of well trained faculty</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Tourism and Hospitality Industry</li> <li>ii. Bhutanese Youth</li> </ul>

## Program and SKRA Linkages

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 Hospitality professionals trained at international standards	Tour guides trained (Nos)	0	140
	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**

<b>Programme Activities</b>	<b>Capital</b>
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 advertising 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
<b>Total:</b>	<b>25.500</b>

<b>Au Name: TOURISM COUNCIL OF BHUTAN</b>	<b>Department: SECRETARIAT</b>
<b>Program Name: Sustainable Tourism Development</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Occurrence of global or regional economic and financial crisis.</li> <li>ii. Competition from the regional markets</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Travel Companies</li> <li>ii. Hoteliers.</li> <li>iii. Tour Guides</li> <li>iv. Farmers</li> </ul>

## Program and SKRA Linkages

<b>NKRA</b>	<b>SKRA</b>	<b>SKRA KPI</b>
Indigenous wisdom, arts and crafts promoted for rural livelihood	Bhutanese culture and tradition promoted among visitors	% of tourist on cultural tours Growth in sale of handicraft products
Sustained Economic Growth	Contribution to GDP, Revenue and Employment increased	Contribution to GDP (US\$ m)
Employment		No. of Bhutanese employed
Sustained Economic Growth		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 management of natural resource	Environment conservation promoted and well being of rural communities improved through eco-tourism	% of tourists on eco-tourism Rural communities benefitting from eco-tourism (project areas)
Improved public service delivery	Improved service delivery	Tourist satisfied with visit
Sustained Economic Growth	New products developed	No. of new products (wellness, cultural, sports, eco-tourism MICS & Nature based tourism)

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : Bhutan promoted as a high-end destination by ensuring improved service delivery, contribution to GDP and employment, and increased yield	Tourist satisfaction (%) Revenue generation mil. US \$) Employment generation (Nos.) Annual tourist arrivals (Nos) % of tourist visiting East, south and central circuits Yield per tourist/night (US \$)	85 62.2 M 9238 65756 21.86 344	>90 250 M >28000 >150,000 >50 350
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:Tourism Products diversified	Products developed (Nos)	4	8
Output 002:Institutional plan developed	Tourism database (Nos) Average performance rating Industry stakeholder cooperation	1 NA 1	2 > 90% Maintained and Strengthened
Output 003:Sustainability standards developed and implemented with effective monitoring mechanisms	Sustainability standards reviewed (Nos) Implementation of green growth proposal (Nos)	1 0	1 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) Public infrastructure created (Nos)	21 2	31 5
Output 006:Tourists accommodations classified as per the classification system	Existing 2 and 1 star accommodations upgraded to 3 star and above (Nos) Trainings conducted for assessors (Nos) Star rating certificate issued (nos)	40 NA NA	88 10 >100

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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 Tourism infrastructures developed	New trekking routes operationalized (Nos)	31	33
	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, specialized courses and foreign language courses conducted (Nos)	4	20
	Hospitality training conducted (Nos)	4	20
Output 010:Build Brand Bhutan through effective 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 Development Plan (Nos)	2	3

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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

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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
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
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
Marketing and Promotion	90.000
Development, Facilitation, Monitoring and Evaluation of Dzongkhag Tourism Development Plans (DTDP)	12.100
Develop and implement destination management plans, transit/circuit management plans and site management plans for relevant sites	4.130
Facilitate development of product amenities for key products	2.000
Implementation of Green Growth Proposal	5.200
Construction of Hotel and Tourism management training Institute (Spill over)	79.294
Maintain Royal Institute of Tourism and Hospitality	7.259
Develop tourism synergies with environmental agendas	0.000
Develop tourism initiatives with cultural agendas	0.000
IT online application extended to include hotels	0.000
Establish protocols and processes for monitoring over all tour quality services	0.000
<b>Total:</b>	<b>345.613</b>



**HYDROMET**



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

<b>Justification:</b>	<p>There is increasing demand to provide the reliable and useable data/information on weather, climate and water related services to satisfy the increasing multi-facet requirement of end users. In particular hydrological information provides a scientific basis&amp; basic inputs for any socio-economic planning and development sectors like hydropower, industry, agriculture, construction, tourism, transportation etc.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <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>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Improved public service delivery	Delivery of weather, climate, GLoF, water and related environmental information and service enhanced.	No. of pamphlets, outlooks, guidance related to extreme hydromet events
	Delivery of weather, climate, GLoF, water and related environmental information and 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, GLoF, water and related environmental information and 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 Monitoring stations

**Table 1: Programme Results Level**

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

Output 006: Hydrological data book and research papers published	Data book published (Nos)		1
	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
<b>Total:</b>	<b>311.140</b>

<b>Au Name:</b> MINISTRY OF ECONOMIC AFFAIRS	<b>Department:</b> DEPARTMENT OF HYDRO-MET SERVICES
<b>Program Name:</b> Strengthening Meteorological Network Coverage and Enhancing Weather and Climate Information Services	<b>Phase:</b> Approved

<b>Justification:</b>	Correct information on weather and climatic conditions is required for socio-economic 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. 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Timely maintenance of stations to improve data collection.</li> <li>ii. Advocacy programs to increase public/stakeholders/end users interests on hydro-met products and services</li> <li>iii. Promote collaboration with relevant international/national research institutions/organizations for technical HR capacity developments.</li> <li>iv. Promote ICT-enabled data collection, transmissions and information disseminations to end users.</li> <li>v. Translate the technical and scientific information into formats readily understood by general public through appropriate media and train media persons for proper broadcasting &amp; advocate on hydro-met services.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Lengthy land acquisition process.</li> <li>ii. Inadequate professionals with required technical knowledge.</li> <li>iii. Lack of support &amp; cooperation from stakeholders and other agencies.</li> <li>iv. Limited Fund and access to latest ICT technologies &amp; experts for undertaking research/modeling works.</li> <li>v. Limited access to internet/mobile facilities.</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <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>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Improved public service delivery	Delivery of weather, climate, GLoF, water and related environmental information and service enhanced.	No. of pamphlets, outlooks, guidance related to extreme hydromet events
	Delivery of weather, climate, GLoF, water and related environmental information and 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 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**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
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, government and other users	Research, modeling, climate prediction products for climate change, disaster risks reduction &socio-economic benefits (Nos)	1	2
	Climate & weather and other meteorological studies (Nos)	0	4
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output001:National Hydro-Meteorological Services Policy framed & adopted	Hydromet policy in place (Nos)	0	1
Output002:Meteorological Observing Monitoring Network and Infrastructure expanded	Meteorological stations modernized and operational (Nos)	9	60
	Functional regional Offices(Nos)	0	2
	Functional field offices (Nos)	3	5
	Upper air observation initiated (Nos)	0	1
Output003:Weather, climate information & prediction products are improved	Models installed and used (Nos)	1	2
	Operational access to NWP products including effective use & interpretations (Nos)	0	2
	Route and aviation advisories (Nos)	0	2
	Seasonal prediction for socio-economic sector (Nos)	0	2
Output004:Improved availability & access to reliable, high quality hydro-meteorological data	Central Data base system with GIS (Nos)	0	1
	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 published	Climate, weather & water related research papers (Nos)	0	3
	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
<b>Total:</b>	<b>428.600</b>

# **ENERGY**



<b>Au Name:</b> MINISTRY OF ECONOMIC AFFAIRS	<b>Department:</b> DEPARTMENT OF HYDRO POWER AND POWER SYSTEM
<b>Program Name:</b> Institutional Reforms and Capacity Building	<b>Phase:</b> Approved

<b>Justification:</b>	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 hydro power 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.
<b>Strategy:</b>	i. Carry out institutional capacity assessments to identify gaps and deficiencies. ii. Conduct organization development exercise to sharpen its focus.
<b>Risk Assessment:</b>	i. Insufficient fund
<b>Beneficiary:</b>	i. Department of power and power system ii. Energy Sector

## Program and SKRA Linkages

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**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
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 specialized in the field of hydro power and Power systems (Nos)	471	591
	Vacancies for employment (%)	0	100
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:Hydropower Projects under PPPs/IPPs mode identified	PPP/IPP Projects allocated (Nos)	1	4
Output 002:Unbundling transmission and distribution utility assessed/ Operationalization of 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**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>29.400</b>

<b>Au Name: MINISTRY OF ECONOMIC AFFAIRS</b>	<b>Department: DEPARTMENT OF HYDRO POWER AND POWER SYSTEM</b>
<b>Program Name: Accelerated Hydropower Development &amp; Transmission Network Strengthening</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Commission pre-feasibility studies and reconnaissance studies.</li> <li>ii. To reduce dependence on bilateral modes of hydropower development, Independant Power Producers(IPP) and Public Private Partnership(PPP) models will be explored</li> <li>iii. Establish Power Training Institute to address manpower deployment in Hydropower projects.</li> <li>iv. Conduct system strengthening works and take up construction of new transmission lines and associated substations.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Insufficient and timely availability of fund;</li> <li>ii. Inadequate skilled manpower.</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Power/Energy sector</li> </ul>

## Program and SKRA Linkages

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, Build, Operate and 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 Enhanced	Installed Capacity (MW)	1480	4546
	Transmission System network enhanced (km)	1296	1474
	Reduction in net import of electricity (million Nu)	49.50	0
Outcome002:Contribution to GDP, Revenue and Employment increased	Contribution to GDP (million Nu)	51,000	103,000
	Bhutanese employed (Nos)	5853	14593
	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 Project Implementation	DPR prepared for Project Implementation (Nos)	8	12
Output004>New Transmission Lines Constructed	Length of new lines constructed(Km)	0	178
Output005:PFR of HPPs for DPR Preparation	PFR of HPPs for DPR Preparation(Nos)	5	13

Output006:Reconnaissance Study Report for PFR of HPPs prepared	Reconnaissance study report for PFR of HPPs (Nos)	14	21
Output007:New and old sub-station constructed and upgraded	New sub stations constructed (Nos)	0	1
	Sub Stations upgraded (Nos)	0	1
Output008:Social and Environmental integrated in HPP 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, Dagachu-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 & Dagachu)	0.000
<b>Total:</b>	<b>1310.500</b>

<b>Au Name:</b> MINISTRY OF ECONOMIC AFFAIRS	<b>Department:</b> DEPARTMENT OF RENEWABLE ENERGY
<b>Program Name:</b> Promotion and Development of Renewable/Alternate Energy Technologies	<b>Phase:</b> Approved
<b>Justification:</b>	<p>Energy 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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Develop Renewable Energy Master Plan, conduct pre-feasibility and feasibility studies to attract the investors in the renewable energy Sector.</li> <li>ii. Shape energy demand by promoting the use of efficient technologies, processes, products, standards and labels at all levels of supply and demand chain.</li> <li>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.</li> <li>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.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Inherent high cost of energy generation from the renewable energy sources like solar, wind, and biomass technologies.</li> <li>ii. Scattered nature of settlements and daunting challenge both in terms of economic and technological aspects for renewable energy</li> <li>iii. Availability of functional laboratory for research activities and testing &amp; certification of energy efficient products.</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Rural population,</li> <li>ii. Renewable energy based companies</li> </ul>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Sustained Economic Growth	Energy security enhanced	Installed capacity of Biomass Installed small HPP capacity Installed solar power capacity Installed wind power capacity
Improved public service delivery	Enhance effectiveness and efficiency in delivery of public service	Anticorruption Strategy implemented 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-fuel as source of cooking/heating

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome1:Energy security enhanced through diversification and promotion of renewable energy technologies	Electricity generation from Renewable Energy Technologies (kW)	8,152	21,522
	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
<b>Results Levels(Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output001:Alternate/renewable energy diversified/promoted	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
	Solar water heating system in place (Nos)	10	110
	RE Policy, rules and regulation (Nos)	0	1
	Renewable Energy Development Fund management and operational frame work in place (Nos)	0	1
	Solar power plant (Nos)	0	1
	Energy efficiency policy and its rules& Regulation (Nos)	0	2
Output002: Renewable Energy resource assessment carried out	RE Master Plan (Nos)	0	1
	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 enhanced on O&M of Renewable Energy Technologies (Nos)	46	166
	HHs electrified through solar (Nos)	2666	2966
Output004: Applied Research and Development on RE Technologies initiated.	Functional laboratory in place (Nos)	0	1
	Research activities initiated and its reports/journal produced (Nos)	0	5
	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 management using Compact Fluorescent Lamp(CFL ) 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

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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
<b>Total:</b>	<b>1526.500</b>

# TRADE



<b>Au Name:</b> MINISTRY OF ECONOMIC AFFAIRS	<b>Department:</b> DEPARTMENT OF TRADE
<b>Program Name:</b> Export Promotion and Market Access	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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 &amp; differential treatment in terms of market access and technical assistance.</li> <li>iii. Brand Bhutan will be operationalized to accelerate export and will accord priority to the development of dry ports.</li> <li>iv. Sharpen its engagement in trade fairs, organize trade missions, undertake market study for selected products and have an export showroom to exhibit the export products.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. The possible change in Government policy on bilateral relations with trading partners and trade policy may hamper the implementation of the bilateral trade.</li> <li>ii. Regional trade agreements depend on the consensus of the member states. As such, political situation and change in foreign trade policies of the member states may stall or affect the progress.</li> <li>iii. The land acquisition process entails various stakeholders and agencies which may impede the work process.</li> <li>iv. Lack of budget may hamper the progress.</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Local Government and BCCI</li> <li>ii. Business entrepreneurs</li> <li>iii. General consumer</li> </ul>

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

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

<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
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**

<b>Programme Activities</b>	<b>Capital</b>
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)	5.000
Participate /Host Regional Trade Agreement(s) meeting/negotiations under SAFTA/SA-TIS & 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 India and Bangladesh	0.000
Initiate and conclude Bilateral Trade Agreements with Nepal and Thailand	0.000
Appoint Trade attaches in Royal Bhutanese Embassies in New Delhi and Bangkok	0.000
<b>Total:</b>	<b>433.140</b>

<b>Au Name:</b> MINISTRY OF ECONOMIC AFFAIRS	<b>Department:</b> DEPARTMENT OF TRADE
<b>Program Name:</b> Strengthening Trade Policy and Regulatory Framework	<b>Phase:</b> Approved
<b>Justification:</b>	<p>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.</p> <p>This program is therefore designed to improve the institutional performance of the trade sector to effectively respond to the impending challenges.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Business entrepreneurs</li> <li>ii. Companies and corporations</li> <li>iii. General consumer,</li> </ul>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Sustained Economic 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 trading sector with conducive environment created	Annual trade contribution to GDP (in million.)	4641.79	6842.35
	Legal framework in place (Nos)	1	3
	Bhutanese employed in trade sector (Nos)	12505	17000
Results Levels (Output)	Indicators	Baseline	Plan Targets
Output 001:Legal and institutional framework developed	Consumer Protection Act (CPA) (Nos)	0	1
	Competition Law/Policy and Trade Development Act in place (Nos)	0	2
Output 002:Market Modernization	Awareness programs on consumer products (Nos)	8	All dzongkhags and major towns
	Skill of women entrepreneur (Nos)	0	30%
Output 003:Ease of doing business improved	Trading firms (Nos)	20373	30560
	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
Output 004:Improved fuel quality and supply of POL products within the country	POL retail outlets coverage (%)	70	90
	POL lab (upgradation) (Nos)	Clinical	Standard
	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
<b>Total:</b>	<b>298.000</b>

<b>Au Name: MINISTRY OF ECONOMIC AFFAIRS</b>	<b>Department: SECRETARIAT</b>
<b>Program Name: Development and Strengthening of Intellectual Property.</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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.  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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <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>

## Program and SKRA Linkages

<b>NKRA</b>	<b>SKRA</b>	<b>SKRA KPI</b>
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**

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

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>24.200</b>

<b>Au Name: MINISTRY OF ECONOMIC AFFAIRS</b>	<b>Department: SECRETARIAT</b>
<b>Program Name: Institutional strengthening of the Secretariat/RTIOs</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Availability of adequate fund on time</li> <li>ii. Human resource constraints</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Business communities</li> <li>ii. Small and Cottage enterprises</li> <li>iii. Potential entrepreneurs</li> </ul>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
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	National Anti-corruption 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
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**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 coordination system	New Officers Trained on RBM concept and PLaMS	4	6
	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
<b>Total:</b>	<b>3.700</b>



# INDUSTRY



<b>Au Name:</b> MINISTRY OF ECONOMIC AFFAIRS <b>Program Name:</b> Promotion of sustainable and environment friendly industrial development	<b>Department:</b> DEPARTMENT OF INDUSTRY <b>Phase:</b> Approved
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<b>Justification:</b> <p>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.</p> <p>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</p>
<b>Strategy:</b> <ul style="list-style-type: none"> <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 Jigmeling 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>
<b>Risk Assessment:</b> <ul style="list-style-type: none"> <li>i. Availability of land</li> <li>ii. Availability of fund for development of ancillary infrastructures</li> <li>iii. Potential investors</li> </ul>
<b>Beneficiary:</b> <ul style="list-style-type: none"> <li>i. Potential investors</li> <li>ii. Industries</li> <li>iii. Citizen at large</li> </ul>

## Program and SKRA Linkages

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 diversification enhance	Industrial Estates/SEZ developed
		No. of large and medium industries

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

**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
	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 Economic Zones developed (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 list of industries	All delegated list of industries

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
Development of Jigmeling Industrial Park/Special economic zone	800.000
Development of Motanga Industrial Park/Special economic zone	100.000
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	5.000
<b>Total:</b>	<b>1796.000</b>

<b>Au Name:</b> MINISTRY OF ECONOMIC AFFAIRS	<b>Department:</b> DEPARTMENT OF INDUSTRY
<b>Program Name:</b> Strengthening policy environment and institutional capacity	<b>Phase:</b> Approved

<b>Justification:</b>	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 the delivery of its service.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	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
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Potential investors</li> <li>ii. Business Community</li> </ul>

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
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
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:IIDD re-structured as an Authority	Functional Authority in place (Nos)	0	1
Output 002:CRD re-institutionalized	Effective agency in place (Nos)	0	1
Output 003:Investment law enacted/ Companies Act amended	Amendment of Companies Act 2000 (Nos)	0	1
	Investment law in place (Nos)	0	1
Output 004:Companies Act / Enterprise Law effectively implemented	Compliance of Act/law	0	All industries
Output 005:Assessments/studies carried out	Study on Import substitution (Nos)	0	1
	Study on industrial linkage & productivity (Nos)	0	1
	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**

<b>Programme Activities</b>	<b>Capital</b>
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	4.000
Study on industrial linkages and cluster	4.000
Study on import substitution	4.000
Study on enhancement of productivity in existing industries	4.000
Up-gradation/improvement of Industry information system	3.500
<b>Total:</b>	<b>37.500</b>

<b>Au Name: MINISTRY OF ECONOMIC AFFAIRS</b>	<b>Department: DEPARTMENT OF COTTAGE &amp; SMALL INDUSTRIES</b>
<b>Program Name: Development of Cottage &amp; Small Industry in Bhutan</b>	<b>Phase: Approved</b>

<b>Justification:</b>	<p>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&amp;D and innovation culture among enterprises.</p> <p>This program will work towards improving the performance of the private sector development through galvanizing cottage and small industries for industrial and employment generation.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Strengthen the Policy Environment and Institutional Framework.</li> <li>ii. Strengthen the Legislative Framework and Enterprise Environment.</li> <li>iii. Facilitate Access to Finance and Incentive;</li> <li>iv. Enhance Competitiveness and Innovation;</li> <li>v. Enhance employment and develop a culture of entrepreneurship</li> <li>vi. Improve market access</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Availability of adequate resources;</li> <li>ii. Availability of the land for infrastructures</li> <li>iii. Cooperation from the stakeholders</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Cottage &amp; Small Scale enterprises</li> <li>ii. Rural artisans</li> <li>iii. Entrepreneurs</li> </ul>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
CSMI and Cultural industries promoted	CSMI and Cultural industries promoted	No. of Business incubation facilities No. of operational CSIs
Sustained Economic Growth	Contribution of GDP and employment increased	Contribution to GDP Annually (in Nu. Mil.)
Employment		No. of Bhutanese employed over plan period
Corruption reduced		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

**Table 1: Programme Results Level**

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

Output 003: Enhanced capacity of institutions (DCSI, NGO or private) supporting CSIs	Officials trained in strategic CSI development methodologies (nos)	0	20
	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
<b>Total:</b>	<b>57.600</b>



# **TRANSPORT AND COMMUNICATION**



<b>Au Name:</b> MINISTRY OF INFORMATION & COMMUNICATIONS	<b>Department:</b> DEPARTMENT OF CIVIL AVIATION
<b>Program Name:</b> Expansion & Strengthening of Air Transport	<b>Phase:</b> Draft

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	Bhutanese and International Air travelers

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Sustained Economic Growth	Eco-friendly, safe, reliable and affordable surface/ air transport increased.	Increase in ton of air cargo carriage (in million tons)
	Eco-friendly, safe, reliable and affordable surface/ air transport increased.	Lack of effective implementation (LEI) percentage to be reduced to ICAO acceptable level
	Eco-friendly, safe, reliable and affordable surface/ air transport increased.	No. of passengers handled by Paro International Airport 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
Outcome 001 : Safe, Efficient and Reliable Air Transport (International and Domestic) Enhanced	No. of frequency of scheduled aircraft movement into or out of Paro.	3069	6000
	No. of airlines operating on Domestic routes	2	2
	No. of passengers using the Domestic Sector Annually	1044	10,000
	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 Airport Expanded	New international routes introduced	9	13
	Cargo access facility	NA	1
	Aircraft parking area increased	5	8

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Output 002: Domestic Airport Infrastructures Expanded	No. of STOL airstrips certified and operating	NA	5
	Establishment of com./nav. infrastructures in Gelephu domestic airports (in set)	NA	1
	No. of passenger car parking lot in each airports	NA	3
Output 003: Enhanced Safe Air Transport Operation	No. of security equipment in placed & operational in Paro & domestic airports.	4	10
	No. of runway safety machine	NA	4
	Up-gradation of com./nav. equipment in Paro & two domestic 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 Enhanced	Lack of Effective Implementation (LEI) % to be reduced to minimum ICAO acceptable level	63.5	50
	Separation of regulatory and execution function	NA	1
Output 005: Effective and Efficient Public Service 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

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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

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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
<b>Total:</b>	<b>1734.000</b>

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<b>Au Name: MINISTRY OF INFORMATION &amp; COMMUNICATIONS</b>	<b>Department: DEPARTMENT OF CIVIL AVIATION</b>
<b>Program Name: Expansion &amp; Strengthening of Air Transport</b>	<b>Phase: Draft</b>

<b>Justification:</b>	<p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>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.</li> <li>ii. Reduce road fatalities through strengthened enforcement, road safety advocacy and trainings.</li> <li>iii. Provide access to transport for differently-abled citizens</li> <li>iv. Promote use of eco-efficient vehicles, explore alternative transport such as rope ways, water ways and railways where feasible</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Inadequate financial resources which will hamper the implementation of plans</li> <li>ii. Inadequate human resources which may lead to partial or incomplete implementation of plans.</li> <li>iii. Transportation being a cross cutting issue, lack of support from other key stakeholders may jeopardize the achievements of outcomes</li> </ul>
<b>Beneficiary:</b>	All road users and those availing public and private public transportation within the country.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Democracy and Governance strengthened	Enhance effectiveness and efficiency in delivery of public service	TAT for public services reduced
Strengthened Bhutanese Identity, social cohesion and 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 management of natural resource	Surface/air transport emission and congestion reduced.	Public transport ridership
	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 strengthened	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**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : Access to adequate, sustainable and inclusive public transport increased.	% of motorable roads provided with public transport services	70	100
	% of public transport services provided with facilities for differently-abled persons	NA	20
	% of buses plying as per schedule	85	95
	Percentage of urban Public Transport Services (buses) with separate seats/sections for differently-abled and senior citizens.	NA	30
	Annual % reduction in road crashes	9 (2010-2011)	20 (Annually)
	Reduction of annual road fatalities per 10,000 vehicles	14	<10
Outcome 002 : Vehicular emission controlled and traffic congestion reduced	Number of urban areas with public transport services	2	5
	% of eco-friendly vehicles registered	<1	1
	Number of road user charging systems introduced	NA	2
	Number alternative modes of transport introduced (ropeway, waterway, electric public transport).	NA	3
Outcome 003 : Road Safety enhanced	Reduction in number of road crashes	1374	687
	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

<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:Rural accessibility enhanced	% of geogs with public transport	70	90
Output 002:Inter-dzongkhag/ regional bus services enhanced	Number of buses operating on inter- Dzongkhag/regional routes	209	250
Output 003:Facilities for senior citizens and those with special needs incorporated	Number of wheel chair ramps constructed	NA	5
	Number of urban Public Transport Services (buses) with separate seats/sections for differently-abled and senior citizens	NA	50
Output 004: Road Safety Enhanced	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
	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/introduced	Number of feasibility studies on alternative modes of transport carried out by type	NA	2
	Number of alternative modes introduced	NA	1
Output 006:Traffic Congestion Reduced	Number of urban centres with public transport introduced	2	5
	Number of buses operating in urban centers	36	50
	Peak hour frequency of city bus services increased (in min.)	15	10
	Number of dedicated and safe designated bus sheds built	3	5

Output 007: Transport emission controlled	Number of eco-friendly buses introduced	NA	11
	No. of emission testing centers established	6	10
	Number of towns with pedestrian plaza	NA	2
	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
Output 008: Public service delivery improved	Review Road Safety and Transport Act	NA	1
	Review and revise road safety and transport regulations	NA	1
	Carry out transport sector re-organization and restructuring 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

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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
<b>Total:</b>	<b>276.600</b>



# **INFORMATION & COMMUNICATION TECHNOLOGY & MEDIA**



<b>Au Name:</b> MINISTRY OF INFORMATION & COMMUNICATIONS	<b>Department:</b> DEPARTMENT OF INFORMATION TECHNOLOGY & TELECOM
<b>Program Name:</b> ICT for good governance and socio economic development	<b>Phase:</b> Draft

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Improve reliability and security of IT services and systems through additional international Telecom gateway, establishment of National Data Centre, BtCIRT and completion of broadband network.</li> <li>ii. Ensure inter-operability of Government IT systems through implementation of e-gif.</li> <li>iii. Expand ICT services to all gewogs through expansion and strengthening CCs</li> <li>iv. Operationalize the Bhutan Tech Park by facilitating the establishment of business incubators and government data centre.</li> <li>v. Strengthening the policy and regulatory framework through implementation of the Telecome and Broadband policy and e-gov policy.</li> <li>vi. Manage e-waste</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Unskilled professionals in the area of cyber security, e-waste management etc.</li> <li>ii. Limited financial resources</li> <li>iii. Policy gaps</li> </ul>
<b>Beneficiary:</b>	Service sectors and general public

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Sustained Economic Growth	Contribution to GDP and number of job created	No. of Bhutanese employed (IT/ITES) by gender
Democracy and Governance strengthened	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

	Effective and efficient public service delivery	Anticorruption Strategy implemented
	Effective and efficient public service delivery	Average performance rating (Govt. Performance Management System - GPMS)
	Effective and efficient public service delivery	e/m-payment gateway introduced
Sustained Economic Growth	Access to reliable and affordable ICT and media services improved	Broadband monthly subscription charge (Home) (Nu.)
	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 Identity, social cohesion and 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 to GDP and number of jobs	% contribution to GDP	NA	0.01
	No. of Bhutanese employed in IT/ITES Industries	964	3000
Outcome 002 : Effective and efficient public service delivery	% Reduction of TAT for delivery of public services	NA	70
	% increase in average performance rating	NA	>90
	Number of e-services delivered	49	>100
	Number of m-services delivered	3	10
	Multi-Service Delivery Gateway (MSDG) introduced	NA	1
Outcome 004 : Access to reliable and affordable ICT and media services improved	% of Villages with reliable mobile network	85	100
	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

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Outcome 006 : Culture and Traditions kept alive through ICT and Media	No. of exhibitions, debates, quiz on culture/traditions covered/ facilitated by ICT/media	NA	5
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:Internet/Telcom infrastructure strengthened	No. of international telecom gateways established	2	3
Output 002:Bhutan Tech Village established	No. of business incubates successfully incubated	3	10
	No. of Bhutanese employed	964	3000
Output 003:Policy support enhanced	% Implementation of Telecom and Broadband Policy	NA	80
	% Implementation of eGov master plan	NA	90
	eGov policy developed	NA	1
Output 004:ICT literacy enhanced	% increase in ICT literacy as a percentage of literate population	10	60
	No. of National/Regional Level ICT promotion programmes/activities conducted	3	5
Output 005:Information Infrastructure established	No. of government agencies accessing common data hubs	NA	10
	BtCIRT established	NA	1
	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 and Human resources reorganised	% of ICT Management System for ICT professionals operationalized	5	100
	Development, O&M of systems outsourced	NA	1
Output 008:ICT infrastructure enhanced	No. of gewog offices connected to TWAN	NA	205
	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 operationalized	No. of CCs constructed, equipped and connected	121	205
	No. of CC vendors appointed	121	205
Output 011:E-Waste management plan operationalized	No. of eWaste dealer registered	NA	1
	SOPs, manuals, guidelines, notifications, ToR drafted and implemented	NA	1
	No. of agreements signed	NA	1
Output 012:Public Service Delivery system (PSD) and access enhanced	PSD policy development and e-money regulation review completed	NA	1
	Number of most commonly e-m services developed and delivered	10	20

**Table 2: Programme Plan Outlay Summary**

Programme Activities	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

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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
<b>Total:</b>	<b>1391.367</b>

<b>Au Name:</b> MINISTRY OF INFORMATION & COMMUNICATIONS	<b>Department:</b> DEPARTMENT OF INFORMATION TECHNOLOGY & TELECOM
<b>Program Name:</b> Promotion and Development of Media	<b>Phase:</b> Draft

<b>Justification:</b>	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.
<b>Strategy:</b>	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
<b>Risk Assessment:</b>	i. Lack of professional/technical expertise  ii. Insufficient Resources  iii. Terms not attractive or clear for PPP  iv. Resistance of agency to introduction of new policies and regulations
<b>Beneficiary:</b>	i. General Public  ii. Media Agencies.  iii. Government Agencies

## Program and SKRA Linkages

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 Identity, social cohesion and 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	Number of e-services delivered
	Effective and efficient public service delivery	TAT for public services

**Table 1: Programme Results Level**

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

Output 002:Print and Broadcast Media personnel professionalized	No. of trained media personnel professionalized	NA	25
	No. of workshops, seminars and conference on media	NA	10
	No. of trained media focal person in all government agencies	35	50
	No. of Bhutanese employed in print and broadcast media	NA	50
	No. of partnership established in print and broadcast	NA	25
Output 003:Nationwide Information and Media Literacy Programme implemented	No. of schools with media literacy integrated into curriculum	25	All the schools
	No. of teacher trained in media literacy	1500	3000
	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

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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/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
<b>Total:</b>	<b>142.160</b>

<b>Au Name:</b> BHUTAN BROADCASTING SERVICE	<b>Department:</b> NA
<b>Program Name:</b> Strengthen quality and content of BBSC TV and Radio	<b>Phase:</b> Draft

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Not being able to carry out required land acquisition in time which will affect construction of studio.</li> <li>ii. Unable to acquire befitting programs to meet the audience satisfaction.</li> <li>iii. Resource gap to meet the international and domestic standard and quality.</li> <li>iv. Inadequate number of staff being provided which will affect implementation of plans.</li> </ul>
<b>Beneficiary:</b>	BBS audience and viewers.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Strengthened Bhutanese Identity, social cohesion and 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
Output 001:Coverage & quality of BBSC TV and Radio enhanced	Geographical coverage and reliability of BBSC programs (%)	NA	100

**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
<b>Total:-</b>	<b>340.000</b>



# EDUCATION



<b>Au Name:</b> MINISTRY OF EDUCATION	<b>Department:</b> DEPARTMENT OF SCHOOL EDUCATION
<b>Program Name:</b> Access and Sustainability of School Education	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Rationalize small, unsustainable schools where enrolment is low and is likely to decline further.</li> <li>ii. Consolidate schools with boarding, bussing services allowing for a critical mass of students that warrants better investments and facilitates provision of resource.</li> <li>iii. Strengthen Special Education Services for improving access to schools and ECCD programmes for better preparedness for new entrants to primary schools.</li> <li>iv. Facilitate the establishment of private schools and international schools to develop a more sustainable education system and promote Bhutan as an educational hub.</li> <li>v. Improve disaster preparedness and response in schools</li> <li>vi. Improve preparedness for donor phasing out by developing an Action Plan for replacing WFP's school feeding.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. The continuing teacher shortage in remote schools may affect the proper functioning of schools.</li> <li>ii. If adequate budget is not provided, it will affect the implementation of the capital intensive school consolidation plans.</li> <li>iii. If reliable data on out-of-school children is not available, it will affect evidence-based planning and decision-making</li> <li>iv. Overall human resource shortages both teaching and management should affect the implementation of the plan</li> </ul>
<b>Beneficiary:</b>	Students, teachers, parents, of school going children, NFE learners and the wider community.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Poverty + reduced/MDG+ achieved	MDGs+ Achieved	Adjusted Primary Net Enrollment Ratio
		Basic Net Enrolment Ratio(13-16yrs)
		Net Primary enrolment (6-12 yrs)
	Health and wellbeing of school children improved	Attendance rate
		Clean toilet initiatives in all schools
		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 in ECCD and school education enhanced	Adjusted Primary Net Enrolment Ratio (%) m/f	98	100
	Net Primary Enrolment ratio (%)m/f	96	98
	Basic Net Enrolment Ratio (13-16yrs old) -m/f	94	96
	ECCD Enrolment rate (%) m/f	5	10
	No. of children with special needs enrolled in schools	297	500
Outcome 002 : Health and wellbeing of school children improved	Attendance rate (%)	90	90
	Schools with sporting calendar/ sporting event (%)	NA	100
	Clean toilet initiatives in all schools (%)	NA	100
Results Levels (Output)	Indicators	Baseline	Plan Targets
Output 001:Sustainability and access to education infrastructures enhanced	No of public ECRs	109	218
	No of public PS	344	273
	No of public LSS	92	65
	No of public MSS	57	78
	No. of public HSS	34	44
	School education expenditure as of GDP (%)	6.9	6.9

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

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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	
<b>Total:</b>	<b>380.600</b>

<b>Au Name:</b> MINISTRY OF EDUCATION	<b>Department:</b> DEPARTMENT OF SCHOOL EDUCATION
<b>Program Name:</b> Relevance and Quality of School Education	<b>Phase:</b> Approved

<b>Justification:</b>	<p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	Students, teachers, parents of school going children and the wider community.

### Program and SKRA Linkages

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

Poverty + reduced/MDG+ 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
Outcome 001 : Relevance and quality of education improved	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
	Learning outcome scores (average/% taken across Math, English, Science and Dzongkha) for class III	Eng: 60 Math:61.5 Dzongkha:63.5 EVS:65	All subjects> 65
	Learning outcome scores (average taken across Math, English, Science and Dzongkha) for class VI	Eng: 48.3 Math: 46.1 Dzongkha: 60 Science: 43.7	Other subjects: 60 Dzongkha: 70
	Learning outcome scores (average/% taken across Math, English, Science and Dzongkha) for class X	Eng: 54.11 Math: 51.93 Dzongkha: 67.03 Science: 50.26	Other subjects: 60 Dzongkha: 70
	% of students scoring above 60% in Dzongkha	23	50
	% of schools achieving at least 60% in Academic learning scorecard(ALS)	60	80
	% of schools achieving at least 70% in Enabling Practices Scorecard(EPS)	87	95

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Output 001:Bhutanese learning system focused on GNH values and principles accelerated	% of schools above 70 on GNH Index	94	100
Output 002:Mechanism and capacity for Performance Management System strengthened	Principals/DEOs trained on PMS	All Existing DEOs and Principals	All new DEOs and Principals
Output 003:ICT in education enhanced	Subject areas using ICT-based teaching and learning materials	NA	6
	ICT Master plan in Education	NA	1
	Computer to student ratio by level	PS: 1:72 Secondary: 1:45	PS: 1:30 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**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>444.40</b>

<b>Au Name: MINISTRY OF EDUCATION</b>	<b>Department: DEPARTMENT OF CURRICULUM RESEARCH &amp; DEVELOPMENT</b>
<b>Program Name: Curriculum Research and Development</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Strengthen the existing curriculum for all subjects making it relevant and meaningful. This will be implemented through close co-ordination and consultation with all relevant stakeholders and based on scientific review.</li> <li>ii. Invest in building capacities of curriculum officers and ensure their expertise is recognized by RCSC in their management of specialists and professionals. This is to ensure that their expertise continues to benefit the department.</li> <li>iii. Strengthen the management system for introducing and monitoring the new curricula.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Continued shortage of both Curriculum Officers and other staff in the Department, pose a risk of not being able to implement activities effectively.</li> <li>ii. Lack of training in curriculum design and publishing for the staff is a major problem and as such our work needs to be outsourced on many occasions. Outsourcing is also not very effective.</li> </ul>
<b>Beneficiary:</b>	School teachers, students and the community and nation at large

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Poverty + reduced/MDG+ achieved	Students performance outcome improved	Learning outcome scores
		Completion Rates (Secondary)
		Completion Rates (Primary)
		Survival Rates ( to class VI )
		Survival Rates ( to class X )

**Table 1: Programme Results Level**

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

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>200.00</b>

<b>Au Name:</b> MINISTRY OF EDUCATION	<b>Department:</b> DEPARTMENT OF ADULT & HIGHER EDUCATION
<b>Program Name:</b> Higher Education Services	<b>Phase:</b> Approved

<b>Justification:</b>	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 reputable tertiary education institutes will also address this issue.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Strengthen the regulatory framework and quality assurance systems to facilitate establishment of quality tertiary education institutions (TEIs).</li> <li>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.</li> <li>iii. Strengthen services such as information and advisory services to students, as well as facilitating linkages for TEIs such as accreditations etc.</li> <li>iv. Encourage participation of girls in tertiary education through policy and other interventions.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Lack of adequate resources to implement the programme especially the scholarship activities which are largely dependent on development partners.</li> <li>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</li> </ul>
<b>Beneficiary:</b>	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.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Poverty + reduced/ MDG+ achieved	MDGs+ Achieved	GER at tertiary level (19-21yrs) both within and outside Bhutan
Sustained Economic 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
Outcome 002 : Opportunities for higher education enhanced including lateral entry into tertiary education	GER at tertiary level (%)	33	40
	% of tertiary students studying in Bhutan (%)	70	80
	Ratio of females to males in tertiary education (%)	71	90
	Extent to which National HR gap narrowed in critical sectors (% of scholarship slots matching HR requirement.)	40	60
	% of TTI graduates availing tertiary education	NA	3%
Results Level (Outcome)	Indicators	Baselines	Plan Targets
Output 001:A system for accreditation of TEIs and recognition of qualifications in place	% of TEIs accredited	NA	90
	% of qualification recognized	70	75

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Output 002:Sustainability and access to tertiary education improved	No. of colleges/tertiary institutions approved	13	17
	Rules and Regulations for the Establishment of University in place.	NA	1
	Tertiary education expenditure as a % of GDP	1.91	1.9
	% of self-financed students in tertiary education (in- country and ex-country)	12	30
Output 003:Scholarships implemented as per national HR requirements	Number of scholarships implemented as per the plan (Ex country and RTC)	600	1600
	Number of bilateral/institutional scholarship slots received	35	200
Output 004: Efficiency and effectiveness of scholarship service delivery and support services improved	TAT of commonly availed services 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, creditors and QAAD officials	8.32
<b>Total:</b>	<b>981.49</b>

<b>Au Name: MINISTRY OF EDUCATION</b>	<b>Department: DEPARTMENT OF ADULT &amp; HIGHER EDUCATION</b>
<b>Program Name: Adult Literacy and Lifelong Learning</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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 augmenting 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Enhance NFE curriculum by including a functional English curriculum and other life skills, and developing an equivalency framework.</li> <li>ii. Improve the quality of NFE instructors by building their capacities</li> <li>iii. Revitalize Community Learning Centres with provision of basic equipment and other resources.</li> <li>iv. 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.</li> <li>v. Facilitate provision of Continuing Education Programme to support enhancement of academic qualifications.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Most activities under the non-formal education programme are supported by development partners. With development partners phasing out support from Bhutan, sustainability would be an issue and a risk.</li> <li>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.</li> <li>iii. Similarly there is also the risk of being unable to retain trained CE tutors on which the efficacy of the CE depends.</li> </ul>
<b>Beneficiary:</b>	The illiterate population, in-service personnel, out of school youths, neo-literates and the wider community.

## Program and SKRA Linkages

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 learners completing Class XII	1600	2400
	Drop rate (%)	20	<10
	Completion rate (%)	80	90
Outcome 002 : Adult literacy improved	Adult literacy rate 15 years + (UNESCO Definition) (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
Output 002:NFE programme expanded and strengthened	No of new NFE centers established	958	1350
	Equivalency framework in place	NA	1
	No of functional Community 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
<b>Total:</b>	<b>23.100</b>

<b>Au Name:</b> MINISTRY OF EDUCATION	<b>Department:</b> DEPARTMENT OF YOUTH & SPORTS
<b>Program Name:</b> Youth Development	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	Youth and their parents as well as the community at large.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Poverty + reduced/MDG+ achieved	Health and wellbeing of school children improved	Attendance rate
		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
Outcome 001 : Youth empowered with appropriate knowledge, skills, attitudes and values	% of youth participating in community service and voluntary activities-	NA	30
	% 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 guidance and counseling programme strengthened in schools	%of parents who find parenting education useful	NA	70
	% of secondary schools with functional Guidance and Counseling Programme	20	80
Output 002:National Scouting programme strengthened	% of schools with trained scout masters	70	100
	No. of National Scout Training Center in place	NA	2
	No. of students taking up scouting	20600	25000

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Output 002:National Scouting programme strengthened	Dzongkhag Level Scouting program (%)	NA	100
	National Scout Award system in place (%)	NA	100
	Community based scouting established (No.)	3	10
	Scout band strengthened (No.)	1	2
	No. of National and Regional Scout Jamboree and Camps conducted	9	16
Output 003:Youth have access to youth friendly facilities, services and programmes	% of youth availing youth friendly facilities and services	10	50
	No. of functional youth centers	8	13
	National Youth Action Plan implemented	Developed	Implemented
Output 004:Culture and values education programme expanded and strengthened	No. of Youth Participating in exchange programmes (regional and international)	476	800
	% of students who can perform at least one traditional dance/songs	NA	70
	No. of MSS and HSS availing choeshey programme	52	All MSS and 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 Program Standardized across the schools	National Strategy Framework for School Sports and Physical Activities developed (No.)	NA	2
	No. of technical books and guidelines developed	1	6
Output 007: Mass participation of children and youth in sports and physical 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 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 Education and Advocacy 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 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

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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	
<b>Total:</b>	<b>329.81</b>

<b>Au Name:</b> MINISTRY OF EDUCATION	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Teacher Support Services	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	Teachers, students, parents of school going children and the society at large.

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

Results Level (Outcome)	Indicators	Baselines	Plan Targets
Outcome 001 : Relevance and quality of education improved	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
	Learning outcome scores in % (average taken across Math, English, Science and Dzongkha) for class III	Eng: 60 Math:61.5 Dzongkha:65 Science:65	All subjects:65
	Learning outcome scores in % (average taken across Math, English, Science and Dzongkha) for class VI	Class VI: Eng: 48.3 Math: 46.1 Dzongkha: 60 Science: 43.7	Other subjects: 60 Dzongkha: 70
	Learning outcome scores in % (average taken across Math, English, Science and Dzongkha) for class X	Class X: Eng: 54.11 Math: 51.93 Dzongkha:67.03 Science: 50.26	Other subjects: 60 Dzongkha: 70
	% of students scoring above 60% in Dzongkha	23	50
	% of teacher satisfied with teaching profession	68.3	85

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

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>359.40</b>

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

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Construct Secretariat building to ease space crunch, promote efficient service delivery and co-ordination amongst the various departments, divisions of the Ministry.</li> <li>ii. Finalize and implement the National Education Policy.</li> <li>iii. Strengthen and streamline HR Development and management systems for the large numbers of personnel under the Ministry.</li> <li>iv. Use IT to strengthen education management information and inventory systems for greater efficiency and cost effectiveness.</li> <li>v. Strengthen monitoring and implementation of plans, policies and programmes</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Risk of land for construction of Secretariat building being insufficient due to the current land issue with Dzongkha Development Commission.</li> <li>ii. Inadequate manpower and technical capacity in the Ministry, which will affect implementation of plans.</li> <li>iii. Timely adequate financial resources not being provided which will jeopardize the implementation of plans.</li> </ul>
<b>Beneficiary:</b>	The Departments and Divisions within the Ministry, teachers, students, parents, school administrations, Local Governments and the wider community.

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

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

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>198.20</b>

<b>Au Name:</b> ROYAL UNIVERSITY OF BHUTAN	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Enhancing Access to Tertiary Education (in RUB)	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	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.
<b>Beneficiary:</b>	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.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Poverty + reduced/MDG+ 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 delivery	Enhanced efficiency and effectiveness in public service delivery	Anti-corruption strategy implemented
		Average performance rating > 90%
		TAT of common availed services reduced by at least 70%

**Table 1: Programme Results Level**

Results Level (Outcome)	Indicators	Baselines	Base Year	Plan Targets
Outcome 001 : Access to tertiary education (RUB)	Gross Enrolment Ratio	10 %	2013	15 %
	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 and facilities developed to support quality of education and expansion	Total area of academic spaces (sq. m)	21588	2013	24787
	Total area of residential spaces (sq. m)	72383	2013	40270
	Total area for other miscellaneous spaces (sq. m)	19800	2013	20605
Output 002:Adequate number of staff recruited	No. of teaching staff on campus	600	2013	1000
	No. of non-teaching staff (including GSC and ESP)	300+	2013	700

**Table 3: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital Outlay</b>
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
<b>Total</b>	<b>778.510</b>

<b>Au Name:</b> ROYAL UNIVERSITY OF BHUTAN	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Enhancing Quality and Relevance of Tertiary Education	<b>Phase:</b> Approved

<b>Justification:</b>	<p>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.</p> <p>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.</p> <p>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.</p>
<b>Strategy:</b>	<p>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.</p> <p>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.</p> <p>A GNH values &amp; holistic education modules and critical pedagogy &amp; 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.</p>

<b>Risk Assessment:</b>	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.
<b>Beneficiary:</b>	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.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Improved Disaster resilience and management mainstreamed	Environmental education enhanced in schools	% of schools/institutes practicing green initiatives
Poverty + reduced/MDG+ 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 and effectiveness in public service delivery	Average performance rating > 90%
		Anti-corruption strategy implemented
		TAT of common availed services reduced by at least 70%
	Teacher performance outcome improved	% of teacher satisfied with teaching profession
Poverty + reduced/MDG+ 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**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 002 : Quality and relevance of tertiary education (learners' experience) enhanced	% of graduates employed within 6 months after graduation	88	90
	No. of students recruited on-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
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
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 qualification and 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

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Output 004:Infrastructure and facilities upgraded/improved to support quality education	No. of online journals subscribed	ProQuest made available in 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 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 of Finance, Plan, student admission, and library.	Online system developed for all major services including HR and 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 CST and GCBS	Compulsory course in all colleges
	No. of development activities consistent with green practices	40	69

**Table 3: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital Outlay</b>
Review and improve existing learning and teaching practices	12.000
Strengthen Quality Assurance System	2.400
Develop and offer 40 new programmes	1.500
Develop and offer all student services as per the guideline	3.400
Human Resource Development (includes PhDs, Masters and short-term trainings)	200.000
Improve library resources and services	14.700
Develop ICT to facilitate teaching and learning	20.000
Upgrade labs and other related facilities as per the changing needs of the programmes	11.080
Develop good governance tools and carry out review exercises	1.400
Develop IT based management systems	5.000
Develop GNH value and holistic education modules and offer it as a foundation of all programmes in the University.	10.000
<b>Total:</b>	<b>281.480</b>

<b>Au Name:</b> ROYAL UNIVERSITY OF BHUTAN	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Promoting Research, Innovation and Enterprise	<b>Phase:</b> Approved
<b>Justification:</b> <p>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.</p> <p>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.</p> <p>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 policies and other decision making processes. RUB will also offer research based masters and PhD programs to help build research capacities in the country.</p>	
<b>Strategy:</b> <p>To promote research, innovation and development, RUB will adopt some of the following key strategies:</p> <ul style="list-style-type: none"> <li>- Consolidate structures and institutions to meaningfully engage the university with the economy, government and the larger society.</li> <li>- 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.</li> <li>- Build research capacity by enhancing number of faculty with PhDs to 25% by the end of 11<sup>th</sup> plan.</li> <li>- 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.</li> <li>- Diversify sources of income such as endowment, gifts, donations, short-courses, research, consultancy services and rents to ensure financial sustainability of the university.</li> <li>- Integrate research achievement in the performance evaluation.</li> </ul>	
<b>Risk Assessment:</b> <p>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.</p>	
<b>Beneficiary:</b> <p>The promotion of research and innovation will benefit students, faculties, industries, government and society at large.</p>	

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Sustained Economic Growth	Education sustainability ensured	% of self-financed students in tertiary education
		Tertiary education expenditure as % of GDP
Improved public service delivery	Enhanced efficiency and effectiveness in public service delivery	Anti-corruption strategy implemented
		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/ MDG+ achieved	MDGs+ Achieved.	GER at tertiary level (19-21 years)-both within and outside Bhutan
	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
Outcome 002 : Long term sustainability of the RUB ensured	Proportion of self-financed students admitted each year	30%	30%
	Proportion of government supported students each year.	70%	70%
	Proportion of annual income generated from sources other than tuition fees	NA	10 %
	Proportion of international students enrolled from the overall total enrollment (up to 3% of total intake)	0.0001 (3 students)	3 %

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<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001: Research and innovations developed and promoted, and adequate number of staff recruited	Proportion of staff involved in research	15.9	34.8
	Proportion of students involved in research	12	17.6
	No. of papers published in RUB/national level publications	85	197
	No. of papers published in international level publications	27	56
	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
Output 002: RUB image promoted both nationally and internationally	Formation of alumni association and number of members	2005	5580
	No. of joint programmes offered	4	11
	No. of international students enrolled	54	162
	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
Output 003: Income streams diversified to augment government support for RUB to ensure long-term sustainability	Amount of funds raised through sources other than tuition fees from regular students (Nu. Million)	26.652	82.275
	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**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>26.460</b>

<b>Au Name:</b> ROYAL EDUCATION COUNCIL	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Strengthen and Promote Innovation, Creativity and Enterprise in Education	<b>Phase:</b> Approved

<b>Justification:</b>	<p>Education plays a crucial role in building a productive work force, reducing 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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>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.</li> <li>ii. Research and pilot innovative educational approaches and related programs in educational institutions, including schools and colleges.</li> <li>iii. Develop effective mechanism to implement, monitor, and support its programs.</li> <li>iv. Share responsibilities in supporting relevant agencies especially their pilot agencies with technical backstopping and guidance.</li> <li>v. Monitor and initiate timely evaluation of its activities through quarterly and annual reports to the REC Council and GNHC.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. REC as a research think-tank must rely on its key stakeholders, such as the Ministry of Education, Royal</li> <li>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</li> <li>iii. Limited human resource capacity within REC may hamper in realization of its vision, mission and mandates.</li> </ul>
<b>Beneficiary:</b>	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

## Program and SKRA Linkages

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
Outcome 001 : Evidence based decision making in improving quality of education strengthened	% 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
	% of recommendation on curricular, pedagogical and assessment approaches adopted/implemented by BCSEA & MoE	25	60
	% 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 : Strengthened institutional capacity and sustainability	% Increase in external support (Monetary and in kind/technical)	USD 20,000	USD 1 Million

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<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Output 001: Successfully cascaded practices of SEED schools to a representative sample of schools in 4 regions	No. of successfully adopted SEED schools	6	21
	No. of teacher trained on 21st century teaching pedagogy	300	700
	No. of curriculum framework recommended to relevant agencies and implemented	NA	8
	No. of diversified curriculum at HSS recommended and adopted for class 11 & 12	NA	24
	% of student performance of SEED schools improved	50	70
	No. of policy document/text books published	15	20
Output 002: Successfully established teacher education institute	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
	Recruited/Developed adequate no. of faculty and staff (%)	13	40
	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 Education Council Endowment Fund created	Fund raising strategy developed and implemented	Under development	Implemented
	Amount of USD in million in 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
Operationalize 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
<b>Total:</b>	<b>292.00</b>

<b>Au Name: ROYAL INSTITUTE OF MANAGEMENT</b> <b>Program Name: Management Program in Support of Good Governance</b>	<b>Department: SECRETARIAT</b> <b>Phase: Approved</b>
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<b>Justification:</b> <p>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 public 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.</p> <p>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.</p>
<b>Strategy:</b> <p>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.</p> <p>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.</p> <p>Research and development will be promoted to enhance quality of teaching and sustainability of the RIM.</p>
<b>Risk Assessment:</b> <p>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.</p>
<b>Beneficiary:</b> <p>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.</p>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Sustained Economic Growth	Education sustainability ensured	Tertiary education expenditure as of GDP
Improved public service delivery	Enhanced efficiency and effectiveness in public service delivery	Anti-corruption strategy implemented
		Average performance rating
		TAT of commonly availed services
Employment	Full employment achieved (97.5%)	Youth unemployment
		% of job seeking graduates employed within 6 months of graduation
Poverty + reduced/ 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. of 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
Output 001:Strengthened infrastructure facilities and learning resources	Up-gradation of existing facilities	40%	70%
	Construction of bridge over Olarongchhu.	1	2
	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

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Output 002: Enhanced quality and diversified management development and professional programs	No. of masters program	2	4
	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%
	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
Output 003: Strengthened human resource capacity.	No. of faculty/staff with specialization and professional training	15	80
	Average performance rating of the RIM	NA	>90%
	No. of faculty members with PhD	3 (ongoing)	16
	No. of faculty with masters degree	18	23
Output 004: Promoted self-sustenance of RIM	No. of annual publication of research works	3	10
	No. of consultancies and advisory services	5	15
	Creation of endowment fund	Nu.12 million	Nu. 50 million

**Table 3: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital Outlay</b>
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
<b>Total</b>	<b>273.000</b>

# HEALTH



<b>Au Name:</b> MINISTRY OF HEALTH	<b>Department:</b> DEPARTMENT OF MEDICAL SERVICES
<b>Program Name:</b> Medical Services	<b>Phase:</b> Approved

<b>Justification:</b>	<p>The overarching goal of the ‘Medical Services’ is to deliver quality medical services and increase access to all citizens of the country. In terms of health indicators, Bhutan has made great improvements in most parameters related to the achievement of MDGs.</p> <p>Today, Bhutan is at a juncture of epidemiological transition marked by an increase in the burden of non-communicable and lifestyle diseases such as hypertension, diabetes while it still has the task of tackling communicable diseases like TB, malaria. In addition there has also been major demographic shifts bringing with it emerging issues of adolescent health and aging health issues. We have also witnessed several manmade and natural disasters in the recent years which has claimed lives and damaged properties.</p> <p>Health services has to be made accessible for the unreached population, which includes nomadic, migratory and peri-urban communities. In terms of service delivery, the general perception is that it needs to be improved and made more efficient. Furthermore, there is increasing pressure for efficient delivery of services and higher service standards.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Standardization of health services across all health institutions.</li> <li>ii. Improve access to healthcare services by reaching the unreached population through mobile camps, ORCs, construction of sub-post and other innovative approaches</li> <li>iii. Explore feasibility of granting autonomy to JDWNRH and Regional Referral Hospitals</li> <li>iv. Enhance preparedness and response to emergencies and disasters in the Health Facilities and provide access to emergency services by creating EMS Division, improving HHC, establishing trauma centers, EMoNC, essential surgical services, and High Altitude Medicine Program</li> <li>v. Improve access and delivery of services by establishing CT scan &amp; endoscopy facilities in the two regional hospitals and by using ICT enabled health care solutions such as telemedicine</li> <li>vi. Strengthen nursing care services by creating Nursing Division</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Non- availability of financial resources will jeopardize the implementation of the plans.</li> <li>ii. Lack of HR capacity will affect timely implementation of the plans.</li> <li>iii. There is the possibility that inter-sectoral collaboration/community partnership may not be forthcoming</li> </ul>
<b>Beneficiary:</b>	General Public

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

Results Level (Outcome)	Indicators	Baselines	Base Year	Plan Targets
Outcome 001 : Improved quality of health services and increased access	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
	Patient satisfaction rate (%)	85	2012	>95
	Number of district hospitals assessed for disaster resilient component	NA	2012	20
	No of dzongkhags proportionately utilizing HHC	16	2012	20
	Percentage of hospital acquired infection (HAI)	27.7	2012	<20
Results Levels (Output)	Indicators	Baseline	Base Year	Plan Targets

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

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

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

**Table 3: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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

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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

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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 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 Tele-referral 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

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Procurement of various laboratory equipment, chemicals, reagents, consumables, etc	30.000
Development and standardization of standard operating procedures, reporting forms and charts	0.500
Draft, review and finalize training curriculum /manual for different stakeholders	0.500
Conduct structured training to medical doctors, nurses, ACOs, technicians on forensic principles and techniques including management of gender-based violence in healthcare settings	1.800
Attachment training for 30 nurses on specialized areas in JDWNRH for 2-3 weeks	0.000
Infection control and waste management s training for 300 clinical nurses for 5 days	0.000
Pedagogical skills training for 20 nurses for 3 weeks	0.560
Update and print nursing administration manuals and service standard guidelines	0.000
Conduct orientation for 55 nurses involved on expectation of their performance, supervision and staff appraisal, nursing rules and regulation for 3 days	0.000
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	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)	0.000
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 Central Regional Referral Hospital (Spillover)	620.000
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
Construction of Vector Borne Disease Control Program Office, Gelephu	40.000

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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
<b>Total:</b>	<b>2543.608</b>

<b>Au Name:</b> MINISTRY OF HEALTH	<b>Department:</b> DEPARTMENT OF MEDICAL SERVICES
<b>Program Name:</b> Traditional Medical Services	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Demand for traditional medicine services may not be met if GMP is not constructed.</li> <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>
<b>Beneficiary:</b>	Patients, general public and business firms engaged with wellness centers.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Poverty + reduced/MDG+ achieved	Curative and Rehabilitative Healthcare Services Provided	Average Nationwide OPD waiting time from 9 AM to 11 AM
Indigenous wisdom, arts and crafts promoted for rural livelihood		Independent Patient satisfaction rate
	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 medicine and promoted as a centre of excellence	No. of district hospitals providing TM services	22	2012	30
	Department of Traditional Medicine Services established (number)	0	2012	1
	No. of services standardized	5	2012	10
Outcome 002 : Niche market for traditional medicine services promoted	Increased output production of traditional medicines (in tons & %)	10 (55)	2012	30 (80)
	Revenue from sales of traditional medicines and Commercial products increased (Nu in million)	13.2	2012	20
Results Levels (Output)	Indicators	Baseline	Base Year	Plan Targets
Output 001:HR Capacity and management in traditional medicine strengthened	No. of Menpas qualification upgraded		2012	22
	Department of Traditional 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

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Output 003:Sustainability of traditional medicine ensured	No. of Drying centers upgraded and new centers established	2	2012	4
Output 004:Quality Assurance and R&D capacity strengthened	Development and publication of Monographs	2	2012	4
	Development and publication of Pharmacopeia	0	2012	1
	No. of institutional linkages established	0	2012	2
Output 005:Production of Traditional Medicine scaled up and sustained	GMP complaint facility constructed (No)	0	2012	1
	Management Information System (MIS/SAP) 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
Output 006: Promote excellence in sowa rigpa wellness service	No. of guidelines and SOPs published for effective monitoring	0	2012	3
	No. of health promoting, Spa and wellness products developed	12	2012	22
	No. of Partnerships established with hotels and resorts	0	2012	5

**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

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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 trials 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
<b>Total:</b>	<b>40.350</b>

<b>Au Name:</b> MINISTRY OF HEALTH	<b>Department:</b> DEPARTMENT OF MEDICAL SERVICES
<b>Program Name:</b> Medicines, Technologies and Logistics	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Strengthening procurement system for essential drugs to ensure timely and adequate supplies. This includes developing an ICT based indenting and store management system.</li> <li>ii. Strengthening monitoring and evaluation on utilization of medicines and technologies to address the issues of irrational and inappropriate use of medicines and technologies.</li> <li>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.</li> <li>iv. Strengthening the system for maintenance for specialized medical equipment to allow for their efficient and effective functioning.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. If adequate and skilled personnel are not available, it will affect the selection and maintenance of specialized medical equipment.</li> <li>ii. Dependency on suppliers and vendors and 100% advance payment which delays in availability of spare parts, hence delays repair and service of equipments.</li> </ul>
<b>Beneficiary:</b>	Patients, Medical practitioners, general public

### Program and SKRA Linkages

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

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Base Year</b>	<b>Plan Targets</b>
Outcome 001 : Availability of adequate, reliable and cost effective medical supplies and functionality ensured	Proportion of health facilities with 95% of essential medicines available at any point of time (%).	NA	2012	100
	Proportion of equipment uptime at all point of time (%)	80	2012	90
	% of health centers reporting rational drug use monitoring	40	2012	100
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Base Year</b>	<b>Plan Targets</b>
Output 001:Capacity on health technology assessment and monitoring strengthened	Proportion evidence based health technology Assessed (%)	0	2012	100
	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**

<b>Programme Activities</b>	<b>Capital</b>
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

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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, endoscopy, 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
<b>Total:</b>	<b>739.540</b>

Au Name: MINISTRY OF HEALTH	Department: SECRETARIAT
Program Name: Institutional Strengthening & Monitoring	Phase: Approved

<b>Justification:</b>	<p>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.</p> <p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Strengthen HR management and coordination to increase skills and number of health professionals.</li> <li>ii. Strengthen health planning and monitoring through using results based planning approach and developing a robust Health Information System.</li> <li>iii. Strengthen the legal and regulatory framework for Health sector through enactment of Health Act.</li> <li>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.</li> <li>v. Developing capacity and systems for health research to allow for better preparedness and targeting of vulnerable groups, areas and periods.</li> <li>vi. Expanding ICT-enabled health care services such as telemedicine, video consultations etc.</li> <li>vii. Institute Continuous Quality Improvement (CQI) in health facilities.</li> <li>viii. Strengthening of the BMHC and BHTF Secretariats to improve regulatory and financing functions.</li> </ul>

<b>Risks</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	Patients, Medical Personnel and General Public

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

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

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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 professionals registered 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 : 11 FYP of MoH implemented according to its strategic focus and good capital budget delivery	Delivery of Ministry's outcome (%)	90	2012	>95
	11FYP Capital budget delivery of MoH (%)	NA	2012	100
Results Levels (Output)	Indicators	Baseline	Base Year	Plan Targets
Output 001:Health human resource capacity developed	Proportion of training component of HR master plan (%)	NA	2012	100
	Number of health professionals upgraded	164	2011	342
Output 002:Appropriate number and type of health professionals recruited and equitably deployed	Number of staffs recruited and deployed as per the Health Human Resource Master Plan	3950	2011	4354
	Proportion of health facilities staffed in line with service standards (%)	NA	2011	90
	Proportion of health workers meeting the CME Credit requirements (%)	NA	2011	100
Output 003:Health professionals equipped with required Dzongkha skills and knowledge	No of Dzongkha trainings/ seminars conducted	-	2012	3

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 governance, systems and capacity strengthened	Number of coordinated research conducted by Departments/Divisions/ Units under Ministry	10	2011	50
	No of REBH approved research protocols/proposal published in national and international journals	00	2012	05
Output 006: Robust and dynamic health information system instituted	Proportion of health facilities with defined health data- sets and indicators (%)	NA	2012	90
	Proportion of health facilities with improved data quality standards and control mechanism (%)	10	2011	90
Output 007: Delivery of health care services expanded through ICT and ICT enabled	Proportion of health facilities equipped with ICT-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

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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

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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 (JDWRNH)	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
<b>Total:</b>	<b>54.190</b>

<b>Au Name: MINISTRY OF HEALTH</b>	<b>Department: DEPARTMENT OF PUBLIC HEALTH</b>
<b>Program Name: Public Health Services</b>	<b>Phase: Draft</b>

<b>Justification:</b>	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 re-emerging 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>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.</li> <li>ii. Develop and implement an integrated national strategy for sanitation and hygiene.</li> <li>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.</li> <li>iv. Develop and strengthen National Initiative for improving nutrition and micro-nutrient deficiencies.</li> <li>v. Advocate for Health in all Policies for ensuring mainstreaming of health concerns in the planning and implementation of all sectors' programmes.</li> <li>vi. Integrate management of Neonatal and Childhood illness with MCH, CDD, ARI and nutrition programmes to improve health of mother and child.</li> <li>vii. Scale up and intensify implementation, management and monitoring of key programmes of HIV and TB</li> <li>viii. Implement Health Strategies for vulnerable groups of youth, differently abled and elderly persons.</li> <li>ix. Integrate prevention and advocacy of NCDs with PHC???</li> <li>x. Strengthen outreach of health services through urban and village health workers and maintenance of current vaccines and expansion of new vaccines.</li> </ul>

<b>Risk Assessment:</b>	<p>Possible Risks are:</p> <ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	Vulnerable groups, patients, mothers, children and community.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Poverty + reduced/ MDG+ achieved	Preventative, Promotive and Rehabilitative Health-care services	IMR per 1000 live births Malaria incidence per 10,000 population 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
Outcome 001 : Morbidity & mortality due to communicable diseases reduced	Under 5 Mortality Rate	60.1	2010	30
	Infant Mortality rate per 1000 live birth	47	2010	<20
	Immunization coverage (%)	94.4	2011	>95
	HIV Prevalence (%)	0.04	2011	maintained
	Malaria incidence per 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

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	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
Outcome 002 : Morbidity and Mortality due to Non-communicable diseases controlled	Maternal Mortality Rate per 100,000 live birth	255	2000	<100
	Height for Age/Stunting (%)	33.5	2010	<30
	Institutional Delivery Rate (%)	56	2010	>70
	Incidence of Diabetes per 10,000 population	47	2011	<50
	Elimination of Iodine Deficiency Disorder	Eliminated	2002	Sustained
	Hypertension Incidence per 10,000 population	343		<400
Results Levels (Output)	Indicators	Baseline	Base Year	Plan Targets
Output 001:Reduced caseload of tropical and zoonotic diseases and elimination of malaria achieved	Center for Tropical and Zoonotic Disease established	0	2012	1
	Number of research papers published in international and national Journal by the CTZD	0	2012	5
	Number of epidemiological mapping for tropical and zoonotic diseases conducted	NA	2012	4
	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

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	Surveillance system for zoonotic diseases established and integrated	NA	2012	Integrated
	Number of health center with kala Azaar diagnostic facility	3	2011	11
	Number of health center with Dengue diagnostic facility	2	2011	10
Output 002:Improved case detection, treatment and Care of STIs and HIV	HIV Cases detected	270	2012	450
	Incidence of STIs per 10,000 population	12	2012	<10
	Prevalence of HIV /STIs among MARPS population (%)	4.4	2012	~1
	% 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
	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
	Leprosy Cure Rate (%)	100	2012	100
Output 004:Improved TB case detection and management	Case notification rate (all forms) / 100,000 population / year	161	2012	<145
	Treatment success rate among new smear positive cases (%)	91	2012	>90

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

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

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	% Women aged 20–60 screened by pap smear for at least once for detecting cervical cancer	25	2011	70
Output 015:Increased community participation	% of VHW retained	NA	2012	>70
	Number of Urban Health Workers Trained	NA	2012	50
Output 016:Improved Occupational Health and Safety	Incidence of work related injuries	27929	2011	<35000
Output 017: Reduced disability and injuries	Proportion of disabled people rehabilitated (%)	30	2011	70
	Reduce deaths and injuries due to road traffic crashes per 100,000 population (%)	15	2011	8
Output 018: Healthy lifestyle achieved through health promotion	% reduction in the number of tobacco users among youth and adult	22	2008	10
	% reduction in the number of alcohol users among youth and adult	11.1	2008	5
	Health promotion policy developed	NA	2012	1
	Proportion of communication activities developed and conducted (%)	NA	2012	90
Output 019:Strengthened capacity and services public health laboratory	Laboratory data available on diseases of Public Health importance	4	2011	6
	Laboratory data on outbreaks investigation in place	20 outbreaks confirmed from 40 outbreaks reported	2011	All outbreaks confirmed 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 Health Regulation strengthened	IHR core capacities in place (%)	50	2012	100
Output 021:Early Child Care Development 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

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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

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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

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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

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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
<b>Total:</b>	<b>461.420</b>

<b>Au Name:</b> UNIVERSITY OF MEDICAL SCIENCE OF BHUTAN	<b>Department:</b> NA
<b>Program Name:</b> University of Medical Sciences of Bhutan (UMSB)	<b>Phase:</b> Draft

<b>Justification:</b>	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 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. To have UMSB fully operational in the 11th FYP, the JDWRH, 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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	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 Climate resilient development	Eco-efficient, disaster resilient and differently-abled health infrastructure ensured	All new health infrastructure/facilities eco-efficient/disaster resilient
Poverty + reduced/MDG+ achieved	Curative and Rehabilitative Healthcare Services Provided	Average Nationwide OPD waiting time from 9 AM to 11 AM
		Independent Patient satisfaction rate
	Curative and Rehabilitative Healthcare Services Provided	Nurse to bed ratio
Improved public service delivery	Enhance efficiency and effectiveness of public service delivery	Average Turn Around Time for commonly
Carbon Neutral/Green Climate resilient development	Medical waste management improved	Hospital Acquired infections

**Table 1: Programme Results Level**

Results Level (Outcome)	Indicators	Baselines	Base Year	Plan Targets
Outcome 001: University of Medical Science established and functional.	No of faculties established.	2	2012	3
	No of faculties accredited / affiliated.	0	2012	3
	No of Medical Journals established	0	2012	1
	Proportion of eco-efficient/disaster resilient buildings constructed (%)	0	2012	100
Outcome 002: Qualitative health care 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

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Outcome 002: Qualitative health care services provided.	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
	No. of incidence of cervical cancer reduced per 100,000.	20	2012	15
	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
Output 002: Quality Medical Education provided.	No. of Curriculum, guidelines and standards framed.	0	2012	3
	Satisfaction of the students with the quality of teaching.	Medium	2012	High
	No. of Medical councils recognizing the Medical degree.	2	2012	3
	No. of new programmes introduced	0	2012	5
	No. of programmes using VLE system	0	2012	3

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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: Eco-efficient and disaster resilient infrastructure and facilities developed.	Proportion of infrastructure developed	0	2012	5
	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: Accreditation and 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 department services strengthened.	No. of cardiac ICU established and strengthened.	0	2012	3
	No. of CAPD established.	0	2012	2
	No. of medical oncology unit established.	5	2012	7
Output 010: Pediatric & Neonatal Services strengthened.	No. of pediatric ICU strengthened.	0	2012	6
	No. of NICU strengthened.	1	2012	2
	No. of pediatric cardiology services established.	0	2012	1
	No. of high risk infant follow-up strengthened.	0	2012	500
	No. of childhood disability center established.	0	2012	1
	No of MICU improved.	1	2012	2

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Output 011: Dermatological and venereological services improved.	No. of dermatological and venereological services improved.	1	2012	2
Output 012: Psychiatric services improved and strengthened.	No. of ECT facility established.	0	2012	1
	No. of EEG facility established.	0	2012	1
	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
Output 014: Obstetrics and Gynecological services strengthened.	Proportion of gynecological services and infertility management improved.	0	2012	2
	No. of minimal access surgical services in gynaecology established.	0	2012	1
	No. of routine operation days increased.	3 days/ week	2012	5 days/ 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
Output 017:Community Health Services Strengthened	No. of non- infected babies born to HIV infected mothers in JDWNRH detected.	NA	2012	0
	% 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 ARSH services in JDWNRH AFHS unit	NA	2012	70
Output 018: Pharmacy services strengthened	No. of patients serviced by the pharmacy department	314,864	2012	783,483

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Output 019: Clinical Laboratory Services strengthened.	No. of Department of Clinical laboratory separated	1	2012	4
	No. of newer essential laboratory tests introduced.	7	2012	10
	No. of TB culture facilities established JDWRNH.	0	2012	1
	% of Laboratory policy, standards, guidelines and SOPs developed and distributed.	0	2012	100
	No. of internal and external laboratory quality systems in all RHs established and strengthened.	0	2012	1
Output 020:ICU services strengthened	No. of Pediatric ICU established.	0	2012	6
	No. of surgical ICU established.	0	2012	4
	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 strengthened	No. of ENT sub-specialty services introduced.	0	2012	2
	No. of audiological services strengthened.	1	2012	2
Output 022: Nursing services strengthened.	No. of nurse: patient ratio improved.	1:15	2012	1:6
	No. of Specialized nursing services introduced.	10	2012	20
Output 023: Radio-diagnostic and imaging services strengthened	No of interventional radio-imaging services introduced	4	2012	8
Output 024: Medico-Legal Services 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 Medicine service strengthened.	No. of research center introduced.	0	2012	1
	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

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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

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Recreation centre (audio visual centers plus indoor game facilities)	0.000
Introduction of bookshop and cafeteria	0.000
Administrative services and counseling services	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
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.	0.000
Invitation of visiting faculty from institutions from abroad for exchange programmes.	0.000
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.	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
Publication of scientific research conducted.	0.000

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Introduction of institute research award of the year	0.000
Integration of research achievement in annual performance evaluation	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
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)	5.000
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 ECT machine	5.000

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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 Threater 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
Compound Lighting system (RIHS)	0.259
Compound 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
<b>Total:</b>	<b>823.695</b>

# **EMPLOYMENT AND HUMAN RESOURCE DEVELOPMENT**



<b>Au Name:</b> MINISTRY OF LABOUR & HUMAN RESOURCES	<b>Department:</b> DEPARTMENT OF EMPLOYMENT
<b>Program Name:</b> Promotion of full and productive employment	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>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</li> <li>ii. Encouraging self-employment for youth through entrepreneurship development program</li> <li>iii. 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</li> <li>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.</li> <li>v. Developing innovative strategies for creating awareness on career and employment opportunities in collaboration with other relevant stakeholders for students, school leavers and parents.</li> <li>vi. 7. Implementing employment facilitation and promotion in close consultation and collaboration with stakeholders on PPP model.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>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.</li> <li>ii. The availability of jobs depends on a stable and sound economic growth to boost employment and investment opportunities.</li> <li>iii. Availability of budget and manpower to implement the plans effectively.</li> <li>iv. 4. Willingness of the youth to take up employment and training opportunities.</li> </ul>
<b>Beneficiary:</b>	Job Seekers and the public at large.

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

Results Level (Outcome)	Indicators	Baselines	Plan Targets
Outcome 001 : Maintain full employment	Unemployment rate(%)	2.1	2.5
	Youth unemployment rate(%)	7.3	2.5
	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 preferred career option	No. of youth trained in entrepreneurship (BEC, CEC and AEC)	621	3000
	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 Strategy developed	0	1

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

Output 005:School to Work Transition Programme enhanced	No. of graduates undergone UGIP	NA	3000
	No. of youth undergone Apprenticeship Programme	437	2000
	No. of youth undergone Pre-Employment Engagement Programme	3000	3000
	No. of students undergone National 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	15.000
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	0.000
Tracer study of jobseekers	0.000
Conduct National Graduates Orientation	0.500
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
<b>Total:</b>	<b>183.750</b>

<b>Au Name: MINISTRY OF LABOUR &amp; HUMAN RESOURCES</b>	<b>Department: DEPARTMENT OF LABOUR</b>
<b>Programme Name: Promotion of decent working conditions and work environment</b>	<b>Phase: Approved</b>

<b>Justification:</b>	<p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Enforcement of Labour and Employment Act and its regulations through awareness and advocacy, development of guidelines and procedures and periodic labour inspection services.</li> <li>ii. 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.</li> <li>iii. Introducing insurance scheme for workers who have been disabled and insurance for workers in between jobs (redundancy).</li> <li>iv. Augmenting the administration of foreign workers by improving the foreign workers recruitment procedures and introducing foreign workers fee system.</li> <li>v. Strengthening the capacity of regional employment and labour offices to effectively deliver the services related to labour administration.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Labour market is dependent on the economic direction of the country which in turn decides overall need of workers in the country???</li> <li>ii. Manpower and budget constraint in implementing the programme could be a potential risk.</li> <li>iii. There could be also lack of cooperation from employers and employees in implementing and improving the policies and regulations.</li> </ul>
<b>Beneficiary:</b>	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 employment in private sector	% of employment in Pvt. sector	22.7	30
	Ratio of foreign workers to local worker	1:6	1:8
Results Level (Output)	Indicators	Baselines	Plan Targets
Output 001:Improved working condition	No. of workplaces inspected	2827	5000
	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 culture at workplace	% of workplace accidents	1.4	1
	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
Output 004:Social protection for private sector employees enhanced	Social Protection Policy developed	NA	1
	% of enterprises with social protection scheme	NA	45
	% of workers with disability insurance	NA	30
	% 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**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>155.900</b>

<b>Au Name:</b> MINISTRY OF LABOUR & HUMAN RESOURCES	<b>Department:</b> DEPARTMENT OF OCCUPATIONAL STANDARDS
<b>Program Name:</b> Improving the quality of skilled workers	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Lack of active participation of stakeholders will impact the overall implementation of BVQF and QAS</li> <li>ii. Lack of budgetary and human resources especially in the TVET institutes will affect the quality of the work</li> </ul>
<b>Beneficiary:</b>	Students of technical education and Potential Employers

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Poverty + reduced/ MDG+ achieved	Quality and Relevance of TVET improved	Competency based TVET curricula developed based on NOSS
		performance of the instructors
		Ratio to local worker to foreign worker
		TVET graduates employed in four months
Employment	Working environment in private sector improved	Improved working conditions
		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 and relevance of TVET graduates and skilled workers improved	% of TTI/IZC graduates certified through BVQF	15	100
	No. of skilled workers certified through RPL	136	1500
	% of employers satisfied with the competence of TTI/IZC graduates	NA	75
Results Levels (Output)	Indicators	Baseline	Plan Targets
Output 001:TVET qualifications awarded through Bhutan Vocational Qualification Framework (BVQF)	No of National Competency Standards (NCS) developed	41 (in 10th FYP)	81
	No of existing NCS reviewed and revised	0	20
	No of Assessment Resources developed and revised in priority occupations	5	30
	No of Assessments Centers established	0	8
	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:Quality of TVET improved through implementation of Quality Assurance System (QAS)	% of Courses in TTIs and IZCs accredited	25	100
	% 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
Assessment 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
<b>Total:</b>	<b>65.000</b>

<b>Au Name:</b> MINISTRY OF LABOUR & HUMAN RESOURCES	<b>Department:</b> DEPARTMENT OF HUMAN RESOURCES
<b>Program Name:</b> National HRD programme	<b>Phase:</b> Approved
<b>Justification:</b>	<p>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.</p> <p>Although the private and corporate sector is considered an engine of socio-economic 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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Strengthen the management of HRD portfolio for improved planning, coordinating, implementing and monitoring of the National HRD Policy and master plan.</li> <li>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.</li> <li>iii. Publishing national HRD advisory series on periodic basis to guide and streamline overall HR planning, investment and development for the short and medium term.</li> <li>iv. Continue to diversify and strengthen the TVET training programs to provide relevant vocational and technical skills and knowledge to youth entering the job market.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Inadequate human resources being provided to the Department to implement the National HRD Policy. This will greatly affect the efficacy of its plans.</li> <li>ii. Inadequate financial resources being provided for timely and effective implementation.</li> <li>iii. Lack of support from HRD implementing agencies, especially the private sector to invest in HR for their staff.</li> <li>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.</li> <li>v. Similarly, there is also the risk that potential trainees may not be willing to participate in the trainings.</li> </ul>
<b>Beneficiary:</b>	Potential job seekers, employers and the Employees

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Full Employment	Full employment achieved (97.5%)	Youth unemployment
		% of job seeking graduates employed within 6 months of graduation
		Chronic/long term unemployment
		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 : Strengthened efficient and effective National Human Resources development and management	Full employment rate (%)	97.9	97.5
	Labour force participation rate (%)	62	65
	Ratio of foreign worker to national labour force	1:6	1:8
	Decrease in Foreign Workers	54,000	45000
Outcome 002 : TVET programmes diversified and strengthened	Youth unemployment rate (%)	7.3	2.5
	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 policies across all HRD agencies	% of Key HR agencies coordinating with MoLHR for HRD planning	15	80
	% of Tertiary graduates employed in 6 months	NA	TBD
	% of TVET graduates employed in 4 months	60	90

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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 capacity of the workforce engaged in the critical sectors	No. of in-service trained in short term	842	1300
	No. of in-service trained in long term	84	200
Output 004: TVET Programs diversified	No. of female friendly courses	6	11
	% of female enrollment in formal training	39.7	50
	No of new courses introduced annually	0	6
Output 005:Support services for TVET strengthened	% of certified trainers in TTIs & IZCs,	80	100
	% of certified trainers in Private training Institutes	>10	60
	No. of new curricula developed 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	A
	% of employers satisfied with TVET graduates performance at work	NA	100

**Table 3: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
Train all newly recruited instructors in the TTIS& IZCs	20.000

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Conduct training of skilled supervisors from industries	4.000
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	2.000
Conduct tracer studies - 2	2.000
Institute recognition and awards for best performing institutes/Principal/Student/ Trainer	0.000
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 and Training cum Production/ Consultancy services	3.000
Reform and restructure institute management/organization	0.000
Facilitate establishment of institutional linkages with reputed TVET institutes in the region for TTIs/IZCs	0.000
Establish QMS in the TTIs/IZCs	1.000
Comply with accreditation criteria for training courses	0.000
Develop human resource capacity of the institutes	0.000

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



# CULTURE



<b>Au Name:</b> DRATSANG LHENTSHOG	<b>Department:</b> NA
<b>Program Name:</b> Strengthening of Dratshang	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Inadequate financial resources will jeopardize the implementation of plan activities.</li> <li>ii. Inadequate HR both managerial and technical may affect implementation of the programme.</li> </ul>
<b>Beneficiary:</b>	Monks, nuns, lay persons and general public

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

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

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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 Goendneys 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
<b>Total:</b>	<b>379.000</b>

<b>Au Name: MINISTRY OF HOME &amp; CULTURAL AFFAIRS</b>	<b>Department: DEPARTMENT OF CULTURE</b>
<b>Program Name: Preservation and Promotion of Culture.</b>	<b>Phase: Approved</b>

<b>Justification:</b>	<p>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.</p> <p>The mounting pressure from the forces of globalization has put considerable strain on conservation and promotion efforts.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	All sections of the society, artisans, linguistic, tourism sector, religious institutions/ organizations and minor communities will benefit from this programme.

## Program and SKRA Linkages

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

Strengthened Bhutanese Identity, social cohesion and harmony	Intangible cultural heritage preserved and promoted	No. of tshechus /cultural events developed/promoted
	Tangible cultural heritage preserved and promoted	No. of new heritage structures built
		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
	Strategy on promotion of culture developed and implemented	NA	1
Outcome 002 : Tangible cultural heritage preserved and promoted.	No. of structural heritage maintained.	5	9
	No of new heritage structures built	2	5
	No. of archeological sites identified.	4	9
Results Levels (Output)	Indicators	Baseline	Plan Targets
Output 001:Oral traditions, history, arts and objects, living expressions, and architectural knowledge conserved, inventoried and documented.	No. of different performing arts and expressions researched and documented.	NA	50 Boedra, 40 Zhungdra, 30 Zhay, 10 Zhems, 200 Lozeys and Tsangmos, 5 mask dances and 7 tshechus.
	No. of publication on heritage sites	5	10
	No. of elements of intangible cultural heritage inventoried.	NA	5 dzongkhags
	No. of cultural properties conserved and documented.	135	190

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

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

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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
<b>Total:</b>	<b>1983.300</b>

<b>Au Name:</b> MINISTRY OF ECONOMIC AFFAIRS	<b>Department:</b> DEPARTMENT OF COTTAGE & SMALL INDUSTRIES
<b>Program Name:</b> Promotion and Development of the Craft Industry	<b>Phase:</b> Approved

<b>Justification:</b>	<p>A vibrant &amp; economically sustaining crafts industry is essential for enhancing employment, rural income &amp; economic growth. While there exists promising potential for development of craft industries in Bhutan, the sector could not efficiently harness the potential due to several constraints 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.</p> <p>In cognizant to above constraints, the Agency for Promotion of Indigenous Craft (APIC) was created 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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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 manpower</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Both urban and rural artisans,</li> <li>ii. Craft vendors</li> <li>iii. Unemployed youth</li> </ul>

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : Indigenous Arts & Crafts promoted	Bhutanese employed (Nos)	1200	2500
	Rural house hold engaged in indigenous crafts (Nos)	202	2000
	Functional registered crafts industries (Nos)	80	200
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 01:Infrastructures for Craft industries/ clusters established	Raw material banks (Nos)	1	3
	Functional craft clusters (Nos)	2	5
	Vibrant craft bazaars (Nos)	1	2
Output 002:Enhanced capacity of the craft workers( artisans & vendors)	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
	Youths trained on cane & bamboo weaving skills (Nos)	0	100
	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
	Officials trained on promotion & management of craft sectors (Nos)	0	25
	Documentations and catalogs (Nos)	2	5
Output 004:Research & development of arts and crafts strengthened	Memorandum of understanding (Nos)	3	7
	Baseline study on craft sector (Nos)	0	1

Output 005: Awareness on the arts & crafts enhanced	Promotional materials (brochures, banners, advertisements, posters etc) (Nos)	50	200
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**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	5.500
<b>Total:</b>	<b>104.500</b>



# **ENVIRONMENT**



<b>Au Name: MINISTRY OF AGRICULTURE AND FORESTS</b> <b>Program Name: Sustainable Management of Forest Landscapes and Conservation of Biodiversity</b>	<b>Department: DEPARTMENT OF FOREST</b> <b>Phase: Approved</b>
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<b>Justification:</b>	<p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. 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.</li> <li>ii. Designated core zones of the protected areas will be strictly protected for biodiversity conservation purposes.</li> <li>iii. Innovative interventions based on scientific research will be designed to secure the integrity of the parks and the biological corridors.</li> <li>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.</li> <li>v. Additionally, the program will, aside from promoting sustainable use of forest resources including NWFPs, design effective interventions to mitigate human wildlife conflict.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Ownership of natural resources by the local communities.</li> <li>ii. Adverse impact of climate change on the natural systems.</li> <li>iii. Inadequate technical capacity and resources.</li> <li>iv. Over emphasis on economic development over conservation.</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. Farmers</li> <li>ii. Communities living in and around Pas</li> <li>iii. International communities</li> </ul>

## Program and SKRA Linkages

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 eco-tourism developed
Carbon Neutral/ Green Climate resilient development	Negative impact on environment minimized from development activities	Population status of umbrella species (tiger) (DoFPS)
Sustainable utilization and management of natural resource	Opportunities for livelihood strengthened	Human wildlife conflict incidences (no. of cases in a year)
		Proportion of farming HH citing wildlife as major constraints to farming (GNH survey)
Poverty + reduced/MDG+ 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 Tourists increased through Nature Recreation and Community Based Ecotourism (%)	13	30

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<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
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
Output 002:Conservation of endangered and endemic species enhanced	Faunal population status updated (Nos)	1	59
	National Tiger population revalidated region-wise (Nos)	0	3
	Endemic floral population status updated (Nos)	105	Updated
	Predator -prey dynamics for species established (Nos)	0	7
Output 003:Human Wildlife Conflict (HWC) mitigation measures enhanced	HWC hotspots mapped for 9 parks and 10 TFDs (Nos.)	NA	19
	Functional gewog HWC management committees (Nos)	11	126
	Pilot innovative biological measures initiatives (Nos.)	0	5
Output 004:Natural heritage, nature recreation, heritage forests and greening zones increased	World Natural Heritage Sites established (Nos)	0	4
	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 to international and regional conventions maintained	Transboundary conservation initiatives (Nos.)	0	2
Output 007:Community based ecotourism promoted	Community based ecotourism sites in GRFs (Nos)	5	19
	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

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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
<b>Total:</b>	<b>237.000</b>

<b>Au Name: MINISTRY OF AGRICULTURE AND FORESTS</b>	<b>Department: DEPARTMENT OF FOREST</b>
<b>Program Name: Sustainable Management of State Forests</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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 timber 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Inadequate skilled human resources</li> <li>ii. Timely adequate funding</li> <li>iii. Impact of Climate Change</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <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>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Sustainable utilization and management of natural resource	Sustainable production and efficient utilization of timber enhanced	Percent recovery rate of wood from upgraded technology (RNR Stats. 2012)
		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 eco-tourism 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 assessment conducted	Carbon assessment report produced (Nos)	0	1
	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
Output 004:Community participation in forest management and conservation increased	CFs established and functional (Nos)	485	750
	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
<b>Total:</b>	<b>135.000</b>

<b>Au Name:</b> MINISTRY OF AGRICULTURE AND FORESTS <b>Program Name:</b> Integrated Watershed Management to ensure Sustainable Environmental Services	<b>Department:</b> DEPARTMENT OF FOREST <b>Phase:</b> Approved
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<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <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>

## Program and SKRA Linkages

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
Outcome 001 : Water security and ecosystem services ensured through effective IWRM practices in selected watersheds	Landscapes under Integrated Water Resource Management Plan (Nos.)	2	10
	Forest fire incidences per year (Nos.)	80	40
	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 climate change adaptation in watersheds	Experimental or observatory plots in different ecological zones established (Nos.)	0	10
	National REDD+ strategy developed	0	1
	REDD+ scheme piloted	0	1
Output 002:Management plans for watersheds within major river basins developed and implemented	Watershed assessed (Nos)	71	111
	Management plans for degraded watersheds developed ( Mangdechhu, Kurichu, Punatsangchhu and Wangchhu) (Nos)	2	8
Output 003:Conservation and management of wetlands enhanced	Wetland inventory conducted (Nos)	0	1
	Ramsar site declared (Nos)	2	4
	Wetland complex (Nos)	5	6

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

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>518.000</b>

<b>Au Name:</b> MINISTRY OF HOME & CULTURAL AFFAIRS	<b>Department:</b> DEPARTMENT OF DISASTER MANAGEMENT
<b>Program Name:</b> Enhanced Disaster Preparedness, Response and Relief Capacity.	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	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.
<b>Beneficiary:</b>	Public of 205 Gewogs under 20 Dzongkhags

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Improved disaster resilience and management mainstreamed	Disaster resilience, preparedness and 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 Growth	Eco-friendly/disaster resilient, innovative and good quality construction promoted	% coverage of eco-efficient/disaster resilient technologies (DES)
Carbon Neutral/Green Climate resilient development	Eco-friendly/disaster resilient, innovative and good quality construction promoted	% coverage of eco-efficient/disaster resilient technologies (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 Disaster Management and Contingency Plan.	0	20
	Functional National Disaster Management Authority	0	1
	No. of Dzongkhag Disaster Management Committee	0	20
Outcome 002: Strengthened capacity of disaster response and recovery coordination.	No. of trained response team formed.	1(NaSART)	20 dzongkhags
	No. of policy documents formulated	NDRMF and 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

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

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>84.000</b>

<b>Au Name: NATIONAL ENVIRONMENT COMMISSION</b>	<b>Department: SECRETARIAT</b>
<b>Program Name: Conservation and Sustainable Environmental Management</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. 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.</li> <li>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.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. 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.</li> <li>ii. 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.</li> </ul>

<b>Beneficiary:</b>	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.
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## Program and SKRA Linkages

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/ Green climate resilient development	Negative impact on environment minimized from development activities	Ambient air quality Green house gas emission controlled
Improved public service delivery	Enhanced efficiency and effectiveness of public service delivery	Average Performance rating TAT of commonly availed services reduced Anti-corruption strategy implemented

**Table 1: Programme Results Level**

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

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<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
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 Standards (WQS)	National standard 2010	Revised to include new parameters-total hardness, ammonia, oil and grease.
	No. of water monitoring sampling stations	69	103
	National drinking water quality standards developed	WHO	National Standards developed and implemented
Output 002:National policies, plans and capacity strengthened to achieve carbon neutral and climate resilient development	Nationally appropriate mitigations actions (NAMAs) Developed	0	3 NAMAs (road transport, housing and solid waste) and 2 low emission development strategy
	National Adaptation Plans (NAP) developed	0	1
	2nd National Adaptation Programme of Action (NAPA) project implemented	1st NAPA project completed	2nd NAPA implemented
	National Strategy for Climate Resilient and Carbon Neutral Development developed	National Environment Strategy	National strategy for climate resilient and carbon neutral development developed and implemented
	ECP mainstreamed in polices, plans and projects at the central and local level	11FYP	ECP mainstreaming in polices, plans and projects at the central and local level sustained

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

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

**Table 3: Programme Plan Outlay Summary**

Programme Activities	Capital Outlay
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

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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
<b>Total:</b>	<b>395.000</b>



# SPORTS



<b>Au Name:</b> BHUTAN OLYMPIC COMMITTEE	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Excellence through sports for all.	<b>Phase:</b> Draft

<b>Justification:</b>	<p>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.</p> <p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Establish a robust sport governance system to efficiently deliver organized sports to all.</li> <li>ii. Identify and pursue mechanisms to secure the financial sustainability of development programs and accountability within sports bodies</li> <li>iii. Develop human resource capacity in sports bodies for delivery of services and results</li> <li>iv. Provide opportunities and access to sports facilities by optimizing management and utilization of existing and new sports infrastructure</li> <li>v. Promote a vibrant sporting culture and overall sports development through advocacy and engaging all forms of media and communications</li> <li>vi. Engage all national and international partners and stakeholders through a clear strategic partnership framework.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	The target population is the public at large, with a special emphasis on the youth.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Democracy and Governance strengthened	A democratic and robust sport governance system that will efficiently deliver organized sport to established sports to all Bhutanese	Average performance rating of BoC
	A democratic and robust sport governance system that will efficiently deliver organized sport to established sports to all Bhutanese	No. of BoC and NSFs constitutions 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 Identity, social cohesion and 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 and endurance sports programs developed	No. of endurance and adventure sports programs developed and implemented
Indigenous wisdom, arts and crafts promoted for rural livelihood	Indigenous Games and sports promoted	No. of traditional games/ tournaments organized 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+ achieved	School sports strengthened in schools to enable sports for all by 2018	% of students participating in sports activities

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
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) Shooting: 2(F) 3(M) Boxing: 36(M) Taekwondo: 4(F) 6(M) Football: 63(M)	Archery: 12 Shooting: 15 Boxing:50 Taekwondo:25 Football:126
	No. of Elite Bhutanese athletes by 2018 (by gender 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/ tournaments organize	8	40
	No. of endurance and Adventure sports programs 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
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:A comprehensive sports in education policy developed.	Policy enacted.	0	1
	No. of school implementing the Policy	0	20

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Output 002:Urban community based sports enabled.	No. of sports associations established.	0	20
	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 athletes identified and developed.	No. of sports prioritized to participate in international events.	2	5
	Revise the rules and regulations for awarding scholarships to the selected athletes developed.	0	1
	% increase in accessibility to the best training facilities for elite athletes	15	50
	No. of National Anti-doping rules and regulations implemented.	0	1
Output 004: New sports infrastructure developed in the strategic nucleated locations.	Policy on sustainable management for the sports infrastructure adopted.	0	1
	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 preserved and promoted.	No. of indigenous games and sports museum constructed.	0	1
	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

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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-Laya- Lunana-Thanza-Warethang-Dhur Tshachu- Tshochenchen-Dzongthang village-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
<b>Total:</b>	<b>394.600</b>



# GOVERNANCE



<b>Au Name:</b> MINISTRY OF FINANCE	<b>Department:</b> DEPARTMENT OF REVENUE & CUSTOMS
<b>Program Name:</b> Revenue & Customs Services	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	The Royal Government of Bhutan and its citizens.

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Base Year</b>	<b>Plan Targets</b>
Outcome 001: Efficient and Effective mobilization of public resources.	Domestic revenue in percent of GDP (%)	22	2012	24-26
	Tax revenue in percent of GDP (%)	12	2012	15
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Base Year</b>	<b>Plan Targets</b>
Output 001:Modernized revenue and customs administration	Revenue Administration and Management Information System 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 Kyoto Convention	0	2012	1
	Timely update of Customs Harmonized coding system	1	2012	1
Output 002:Streamlined Revenue Administration and Policies	Agreement signed and ratified	0	2012	2
	Laws and regulation introduced	0	2012	5
Output 003:Strengthened Department of Revenue and Customs	Number of DRC staff trained	650	2012	2825
	Number of offices constructed ( Regional)	0	2012	4
	Office set ( DRC) and restructured	0	2012	5
Output 004:Simplified Tax Procedures implemented	Online tax filing for effective service introduced	0	2012	5

**Table 3: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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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Establish Revenue Intelligence and Research Division	0.500
Reform Customs and Excise Division in line with implementation of the RKC	10.000
Provide individualized interface for the tax payers (for PIT, CIT, BIT, CD, ST)	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
Dissemination of information to public	0.000
Remodel Ground floor of RRCO, Phuntsholing	0.500
Black top and construct drainage at main gate, pling	2.000
Procure plants and equipment	1.500
Purchase IP camera and 24 GB switches	0.150
Improve weigh bridges at the RRCO, Phuntsholing	0.000
<b>Total:</b>	<b>583.150</b>

<b>Au Name:</b> MINISTRY OF FINANCE	<b>Department:</b> DEPARTMENT OF PUBLIC ACCOUNTS
<b>Program Name:</b> Public Accounts Services	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	All Ministries/ACC/RAA/RI M/All budget Agencies

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Base Year</b>	<b>Plan Targets</b>
Outcome 001 Prudent Utilization and Management of Public 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 Standards for Government owned companies & listed companies implemented	0	2012	33
	Maintain non-hydro debt to GDP ratio within 30% (%)	34.5	2012	30
	Maintain Debt Service to Exports ratio within international threshold (%)	18.1	2012	25
<b>Results Level (Output)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Base Year</b>	<b>Plan Targets</b>
Output 001: Strengthened Government Accounting System	FAM under FRR 2001 revised	0	2012	1
	PEMS and relevant online systems such as RAMIS, NPPF, EFTCS etc. integrated.	0	2012	3
Output 002:Strengthened Fiscal Transfer & Monitoring System	Fiscal transfer and monitoring guidelines revised	0	2012	2
Output 003:Strengthened Treasury Management System	Cash flow forecasting system developed	0	2012	1
Output 004:Comprehensive AFS produced	Timely reporting of Annual Financial Statement (AFS)	5	2012	5
Output 005:Bhutanese Accounting Standards (BAS) made compliant 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**

<b>Programme Activities</b>	<b>Capital</b>
Revise FAM under FRR	0.000
Feasibility study to implement high-end system (Review existing PEMS together with MYRB)	1.100
Interface government accounting system (PEMS) with RAMIS, NPPF, EFTCS etc.	1.000
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	0.000
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.	2.000
Debt Management Division upgrade to a Department to consolidate all debt management functions (front, middle and back office functions)	0.000
Formulate debt management strategy & prepare periodic debt reports	0.000
Upgrade CS-DRMS and training	1.000
Mobilize funds (grants and loans) from multilateral financial institutions	0.000
<b>Total:</b>	<b>13.800</b>

Au Name: MINISTRY OF FINANCE	Department: DEPARTMENT OF NATIONAL BUDGET
Program Name: National Budget Services	Phase: Approved
<b>Justification:</b>	<p>The Department of National Budget has the responsibility of preparing the multi-year rolling budgets (MYRB) in accordance to the budget manual. The MYRB system which started as a pilot in the 9<sup>th</sup> 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.</p> <p>As required by the Public Finance Act 2007 and amendment thereof, a multi-year 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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>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.</li> <li>ii. Implement multi- year rolling budget from the start of 11 FYP as required by the Public Finance Act 2007 and amendment thereof.</li> <li>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.</li> <li>iv. Gender Responsive Budgeting to advance gender equality and women's empowerment.</li> <li>v. Green budgeting for conservation of environment and the sustainable use of the natural resources.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Inadequate resources can affect the implementation of activities to develop systems.</li> <li>ii. Gender responsive and green budgeting are new concepts and limited expertise being may challenge the implementation of these activities</li> </ul>
<b>Beneficiary:</b>	All Central Government and Local Governments agencies including Thromdes and State owned Enterprises.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Sustained Economic Growth	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: 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 processes	Submission of Budget proposals on time (%)	85	2012	100
	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 budgeting in annual budget report	0	2012	5
Output 004: Public environment and budget/expenditure report incorporated in MYRB/PEMS	Environment report incorporated	2	2012	3

**Table 3: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>28.100</b>

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

<b>Justification:</b>	<p>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.</p> <p>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 &amp; 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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Develop and implement proper planning and e-procurement system</li> <li>ii. Develop and implement government property management system like e-inventory</li> <li>iii. Promote traditional Arts and crafts through diversification of products for use by government agencies.</li> <li>iv. Strengthen PAVA and compensation systems</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	All Central and Local government agencies, Corporate and private sector.

## Program and SKRA Linkages

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 resources.	Domestic revenue in percent of GDP Tax revenue in percent of GDP

**Table 1: Programme Results Level**

Results Level (Outcome)	Indicators	Baselines	Base Year	Plan Targets
Outcome 001 : Prudent Utilization and Management 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 budgetary agencies
	Training and awareness on e-procurement (No)	0	2012	all budgetary agencies
Output 002:Procurement planning mechanism developed and implemented	No. of procurement plan instituted in the agencies	0	2012	All budgetary agencies
Output 003:Revised Procurement Rules & Regulations and SBDs	No. of revision of Procurement rules and 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

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Capacity development of Repair and Maintenance Division	2.000
Capacity building of Fine Art and Craft Division ( FACD)	1.200
Diversification of products	1.000
<b>Total:</b>	<b>79.000</b>

<b>Au Name:</b> MINISTRY OF FINANCE	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Secretariat Services	<b>Phase:</b> Approved

<b>Justification:</b>	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 co-ordination 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Strengthen Macroeconomic coordination management through the up-grading 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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	All Government agencies and the economy sector as a whole.

## Program and SKRA Linkages

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 resources.	Domestic revenue in percent of GDP Tax revenue in percent of GDP
Improved public service delivery	Enhanced efficiency and effectiveness of public service delivery	Average Performance rating > 90%
Democracy and Governance strengthened	Strengthened Accountability 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	Base Year	Plan Targets
Outcome 001 : Macroeconomic coordination and management enhanced	Average fiscal deficit contained in percent of GDP (%)	5	2013	3
Outcome 002 : Enhanced Fiscal Responsibility & Transparency	No of Internal Control 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 MoF implemented as per its strategic focus & good 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-economic variables incorporated in MTFF framework.	MTFF upgraded to Medium Term Macro-economic Framework (MTMF)	7	2013	9
Output 002:Dynamic MEF developed	Move to web based MTMF system	0	2013	1

Output 003:Ensure internal-external balance	International reserve to cover 12 months of 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 Established	0	2013	1
Output 006: Effective management of SOEs	Public Enterprise Information System (PEIS) 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

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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	0.000
Assess service delivery standards & recommend measures for improvement	0.000
Rationalize subsidies to SOEs	0.000
Develop Information System on SOEs	3.000
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	1800.000
<b>Total:</b>	<b>1974.500</b>

<b>Au Name:</b> MINISTRY OF HOME & CULTURAL AFFAIRS	<b>Department:</b> DEPARTMENT OF CIVIL REGISTRATION & CENSUS
<b>Program Name:</b> Enhance civil registration and census services.	<b>Phase:</b> Approved

<b>Justification:</b>	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 11 <sup>th</sup> 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	All sections of the society.

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : Effective and efficient Civil Registration and Census Services	% of civil registration and census application/requests processed within the same day. % TAT of individual service reduced.	80% 75%	90% 90%
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:Bhutan Civil Registration System (BCRS) Database made fully web-based application (Online system)	No. of DCRC services provided effectively and efficiently through online system % of 3rd Generation (3G) Citizenship Identity Card issued to eligible Bhutanese citizen who had applied. % of Special Residence Permit (SRP) cards issued to eligible persons who had applied.	15 services 71% 83%	17 services fully operational 100 100
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) % of cases reviewed and updated in the BCRS database.	NA 32%	1 100

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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	0.800
<b>Total:</b>	<b>27.020</b>

<b>Au Name:</b> MINISTRY OF HOME & CULTURAL AFFAIRS	<b>Department:</b> DEPARTMENT OF IMMIGRATION
<b>Program Name:</b> Strengthen National Security and enhance Immigration Services	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	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.
<b>Beneficiary:</b>	International visitors, immigrant workers, businesses, public and corporate sector, and public at large.

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
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
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
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 enabled system in immigration offices and check points	No. of online system upgraded and installed	2	3
	No. of automated up-country check-post system installed	NA	1

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
Construction of Immigration office building in Thimphu	17.000
Awareness and sensitization programmes.	1.000
Procurement and installation of system (biometric, barcode reader, visa sticker system etc).	12.000
Construction of regional immigration office in Phuentsholing	60.000
<b>Total:</b>	<b>90.000</b>

<b>Au Name:</b> MINISTRY OF HOME & CULTURAL AFFAIRS	<b>Department:</b> DEPARTMENT OF LOCAL GOVERNANCE
<b>Program Name:</b> Strengthening of Local Governance	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary</b>	Local Governments and public at large

## Program and SKRA Linkages

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**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : Decentralization and democratic governance at the local level deepened and strengthened.	% of chiwog where structured zomdu has been institutionalised ( as per the LG Rules & Regulations 2012)	NA	100
	Ratio of elected female LG functionaries	1:13	1.5: 13
	No. of Chiwog with functional/ active community groups (WUG, RUG)	NA	atleast one functional group in each chiwog
	% of households participating in zomdus	NA	80
Outcome 002 : Efficient and effective public services delivered at local level.	No. of functional CCs in the gewogs.	100	205
	Improvement of people's perception on LG performance	79	85
	TAT of public services delivery at gewog level.	7 days	1 day
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001: Community participation and ownership strengthened.	No. of functional committees for specific services formed in chiwog.	0	atleast one in each 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/ 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 dzongkhags, 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 place.	No. of people availing the service through CCs.	0	1
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**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
<b>Total:</b>	<b>34.000</b>

<b>Au Name: MINISTRY OF HOME &amp; CULTURAL AFFAIRS</b>	<b>Department: ROYAL BHUTAN POLICE</b>
<b>Program Name: Development of Fire and Rescue Services</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	Inadequate fund and lack of manpower might impact the successful implementation of the proposed activities.
<b>Beneficiary:</b>	All the citizens

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Safe Society	Security and safety of society enhanced	% of people who felt safe(GNH survey, 2010)
		No. of nationwide crime reported annually (RBP)
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
Outcome 001 : Enhanced safe and secure society	No. of fire incidents reported annually	47	>15
	No. of households saved from fire accidents/effective fire fighting	40 houses in three years	save 80% of reported cases
Outcome 002 : Efficient and effective fire service delivered	No. of households saved from fire accidents attended/effective fire fighting	40 houses saved out of 110 reported (36%)	90%
	Response time reduced	N/A	10 minutes
Results Level (Output)	Indicators	Baselines	Plan Targets
Output 001:1.1 Adequate infrastructures developed	No. of structures constructed	222	247
	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/strengthened	1	1

**Table 2: Programme Plan Outlay Summary**

Programme Activities	Capital
Construction and maintenance of fire stations and structures	85.941
Purchase of fire tenders and pool vehicles	2.000
Purchase of office equipments and furniture	4.000
Capacity development	2.000
<b>Total:</b>	<b>93.941</b>

<b>Au Name: MINISTRY OF HOME &amp; CULTURAL AFFAIRS</b>	<b>Department: ROYAL BHUTAN POLICE</b>
<b>Program Name: Development and Reformation of Prison Services</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. The Prison Service Department proposes to construct a rehabilitation center at Dolongang with capacity of 500 prisoners to decongest current jails.</li> <li>ii. Adequate accommodation and other facilities for the police personnel will be provided to encourage deliver prompt services.</li> <li>iii. 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>iv. Provision of adequate security systems in prisons to strengthen security at prisons.</li> </ul>
<b>Risk Assessment:</b>	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.
<b>Beneficiary:</b>	Prisoners, their families and public at large

## Program and SKRA Linkages

<b>NKRA</b>	<b>SKRA</b>	<b>SKRA KPI</b>
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**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
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%
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
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 Strengthened security and safety of the inmates	No. of prison break out reduced	N/A	less than 5/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**

<b>Programme Activities</b>	<b>Capital</b>
Vocational trainings, spiritual/counseling and NFE programs	2.000
Construction of safety walls and other security features	2.000
Procurement and installation of security systems and gadgets	2.000
Construction and maintenance of prison and quarters for prison personnel	262.764
Capacity development	1.000
Procurement of office furniture and pool vehicles	4.000
<b>Total:</b>	<b>273.764</b>

<b>Au Name:</b> MINISTRY OF HOME & CULTURAL AFFAIRS	<b>Department:</b> ROYAL BHUTAN POLICE
<b>Program Name:</b> Maintenance of Law and Order	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	All the citizens

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

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

<b>Programme Activities</b>	<b>Capital</b>
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	759.915
Procurement and maintenance of vehicles	50.000
Long term and short term capacity development program for RBP personnel	55.000
Institute one window service system	15.500
Strengthening of crime and operation measures	19.811
Vital installation security	5.000
<b>Total:</b>	<b>1039.797</b>

<b>Au Name:</b> ELECTION COMMISSION OF BHUTAN <b>Program Name:</b> Strengthening Electoral System and Processes for Vibrant Electoral Democracy	<b>Department:</b> SECRETARIAT <b>Phase:</b> Approved
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<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Inadequate resources to implement plans in a timely manner</li> <li>ii. Inadequate Human resources</li> <li>iii. Political uncertainties could affect the election schedule</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>i. General Public and Voters</li> <li>ii. Media Agencies</li> </ul>

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Democracy and Governance strengthened	Participation in democratic governance deepened and strengthened	% of female candidates in the elections sustained (ECB)
	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 Impact Survey)

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

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	Number of ICT systems implemented in electoral process and procedures	3	5
Output 002:ECB strengthened as an independent institution of democratic governance	ECB HQ constructed	NA	1 HQ Office
	% of election officials (ECB and Dzongkhags Election Offices) trained and equipped with knowledge and skills	60	95
Output 003:Effective civic and voter education delivered	% of voters covered by civic and voter education and information dissemination programmes	75	80 & above
	% 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
Output 004: Participation in the electoral process ensured	% of Bhutanese women covered by civic and voter education programmes	75	80 & above
	Attendance % of candidates and political parties contesting elections	100	100
	% of women staff recruited in ECB and trained	30	40
Output 005:Cost effective elections conducted	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
	% of electoral procedures improved (e.g. in terms of processing voters in Polling Stations)	N/A	50
	% of eligible voters registered and enrolled in the Electoral Roll	80	100
	% of well-motivated election personnel	N/A	80 & above

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Output 006: National language and identity promoted	% of voters covered by civic and voters education and information programmes conducted in Dzongkha	100	100
	% of civic and voter education and information materials developed and published in Dzongkha	100	100
	Chiwog Demkhongs names standardized in Dzongkha and used (coverage in %)	70	100
	% of employees groomed in 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 Elections (Bye-Elections, 2016 LGE and 2018 PE)	Bye-Elections conducted to Local Governments and Parliament whenever 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**

<b>Programme Activities</b>	<b>Capital</b>
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 Observers, 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

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

<b>Au Name:</b> ROYAL AUDIT AUTHORITY	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Strengthening Institutional Capacity and Audit Service Delivery	<b>Phase:</b> Draft

<b>Justification:</b>	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 socio-economic 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Strengthen the institution by carryout a restructuring process concerning the creation of additional Divisions and investing in HRD for auditors in key priority areas.</li> <li>ii. Enhance co-ordination with key stakeholders such as ACC, OAG through development of co-ordination protocols.</li> <li>iii. Streamline audit procedures and adopting best practices in auditing, plough back feedback from peer reviews and client satisfaction surveys to improve the system.</li> <li>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.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. If adequate human and financial resources are not provided, it will hamper the successful implementation of the plan</li> <li>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.</li> </ul>
<b>Beneficiary:</b>	The public at large

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Corruption reduced	Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance	Civil Service performance /GPMS rating
	Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance	TAT for public services
Democracy and Governance strengthened	Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance	Civil Service performance /GPMS rating
	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 : RAA's credibility enhanced as the SAI of Bhutan	No.of International Clients acquired	0	1
	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 systems strengthened in all audited agencies	Adherence to Parliament directives issued based on audit reports(%)	NA	100
	Recommendations on systems review implemented(%)	NA	80
Outcome 003 : Efficient & effective public service delivery	TAT reduced (%)	0	70
Results Levels (Output)	Indicators	Baseline	Plan Targets
Output 001: Auditing systems strengthened	No. of manuals developed	3	25
	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 Management System (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 Dzongkhags	20 Dzongkhags, Political Parties, Corporate and Private 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	

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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	
<b>Total:</b>	<b>215.636</b>

<b>Au Name:</b> ROYAL CIVIL SERVICE COMMISSION	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Strengthening HRD and HR system in the Civil Service	<b>Phase:</b> Draft

<b>Justification:</b>	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)
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	All civil servants

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

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

**Table 3: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
Strengthen the Civil Service recruitment, transfer and promotion systems including BCSE	10.000
Review and strengthen Performance Management System	4.000
Institutionalize HR Audit and other M&E measures	8.000
Initiate OD exercise	3.000
Review and revise BCSR including Dzongkha version	5.000
Implement CSAB,2010 and BCSR	2.000

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Conduct annual HR Conference	2.000
Form MoUs and Institutional Linkages	1.000
Enhance CSIS	8.000
Make comprehensive recommendation on Civil Service remuneration, benefits and allowances to Pay Commission	0.000
Introduce and implement Civil Service Award System	3.000
Promote workplace health and safety management system	1.000
Construct RCSC Secretariat building	100.000
Conduct perception survey on the Civil Service	1.000
Institutionalize Management Development Programmes (MDP)	58.000
Conduct Tracer study (utilization of acquired knowledge) survey	1.000
<b>Total:</b>	<b>207.000</b>

<b>Au Name: ANTI-CORRUPTION COMMISSION</b> <b>Program Name: Minimize corruption through Education, Prevention and Investigation and strengthen ACC as a strong and credible institution</b>	<b>Department: SECRETARIAT</b> <b>Phase: Approved</b>
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<b>Justification:</b>	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 to be 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 Anti-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.
<b>Strategy:</b>	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 build 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.
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Lack of ownership and cooperation by other stakeholders;</li> <li>ii. Lack of political will;</li> <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>
<b>Beneficiary:</b>	General Public (Citizens of Bhutan)

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : Awakened citizenry with enhanced check and balance mechanism to prevent corruption in the system	Corruption reported freely by citizens (%)	1.Known compliants-15 2. Anonymous compliants-55	1. 25 2. 40
	National Integrity score	7.44	8
	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
Outcome 003 : Institutional capacity of ACC strengthened	Rate of Conviction (%)	90	95
	Rate of Prosecution (%)	95	95
	Cases investigated (Nos)	100	150
	Average number of days to complete investigation	100	60
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001: Awareness and advocacy programs developed and implemented	Interactive sessions with schools, institutions/agencies and Gewogs (Nos)	Schools-26, Institutions /agencies-49 & Gewogs-70	Schools-30, Institutions /agencies-50 & Gewogs-205
	Programs broadcasted through print, radio and TV (Nos)	7	10
	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

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Output 002:Anti-Corruption measures streamlined or mainstreamed	System studies conducted to improve/strengthen the systems, procedures and practices (Nos)	2	17
	Complaints (Nos)	i. Public service delivery-161 ii. Natural resource management-55	i. Public service delivery-100 ii. Natural resource 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-corruption amended and formulated (Nos)	6	7
Output 005:Conducive working atmosphere established	Institutional Development Plan (Implementation) (Nos)	0	1
Output 006:Institutional networking/ collaboration with national and international agencies strengthened	Networks built with international agencies (Nos)	9	20
	Delegations received/fielded from/to other anti-corruption agencies in the region/abroad to share/learn knowledge and experience (Nos)	10	20

**Table 2: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>93.500</b>

<b>Au Name: OFFICE OF THE ATTORNEY GENERAL</b>	<b>Department: SECRETARIAT</b>
<b>Program Name: Strengthening of the Public Prosecution System</b>	<b>Phase: Approved</b>

<b>Justification:</b>	<p>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.</p> <p>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.</p> <p>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.</p>
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. 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.</li> <li>ii. Pursue ICTization of prosecution case management system to make it more efficient and effective.</li> <li>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.</li> <li>iv. Continue and intensify efforts in educating the public on youth and family related laws.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Budget constraints may impede the smooth implementation of activities.</li> <li>ii. Lack of personnel in terms of numbers as well as technical expertise will affect the quality and efficiency of OAG's work.</li> <li>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.</li> <li>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.</li> </ul>
<b>Beneficiary:</b>	<ul style="list-style-type: none"> <li>✓ Prosecutors</li> <li>✓ Lawyers</li> <li>✓ Central and Local Government Administrations</li> <li>✓ General public</li> </ul>

## Program and SKRA Linkages

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

**Table 1: Programme Results Level**

Results Level (Outcome)	Indicators	Baselines	Base Year	Plan Targets
Outcome 001 : Efficiency, transparency and accountability through Prosecution System	Percentage of cases prosecuted as per the set standard of prosecution handbook.	556	2012	656
	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: Prosecution services 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

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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 Laws.	No of programmes conducted in disseminating the Legal awareness on youth related crimes.	0	2012	10
	No of programmes conducted in disseminating the Legal awareness on family related Laws.	0	2012	3
Output 004: National Language promoted.	No of Dzongkha Legal documents and Legislation made available online	61	2012	300
Output 005: OAG as an institution strengthened.	No of regional offices constructed and established.	0	2012	1
	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

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

<b>Au Name:</b> NATIONAL STATISTICS BUREAU	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Strengthening Statistics for Development	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. Continue to conduct nationwide surveys and disseminate the statistical information widely to allow for evidence based decision making.</li> <li>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.</li> <li>iii. Strengthen the human resource capacities of statistical staff to continue to conduct research and improve overall soundness of data generation and analysis.</li> <li>iv. Institute a National Data Bank system through improved cross-sectoral coordination amongst all agencies that carryout surveys and generate statistical data. This will also facilitate easy access to official statistics.</li> <li>v. Develop environmental statistics and accounting system in line with RGoB's policy of sustainable development.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>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.</li> <li>ii. The shortage of experts and specialists in statistics especially in new and emerging themes.</li> <li>iii. Dependence on several publications on secondary data which if not developed using credible statistical methods may results in the publications being unreliable.</li> <li>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.</li> </ul>
<b>Beneficiary:</b>	Local and Central government organizations, non-governmental organizations, international agencies, civil society agencies, private and corporate organizations, etc.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Democracy and Governance strengthened	Enhanced efficiency and effectiveness in public service delivery	Average Performance rating > 90%
	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 : Enhanced evidence based decision making	No. of official statistics published/produced	15	25
	No. of official data sets produced	5	6
	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
Output 001:PHCB and other surveys and census conducted	No. of quarterly publications (1 CPI & 1 Quarterly socio-economic )	2	4
	No. of annual publications (NAS, ADS & SYB)	3	3
	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 (statistics act) for statistical 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 anonymization, meta data-documentation and online request system	1.000
<b>Total:</b>	<b>92.244</b>

<b>Au Name: JUDICIARY</b>	<b>Department: SECRETARIAT</b>
<b>Program Name: Effective and Efficient Judicial Services Management</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	The public at large, and Government and Corporate agencies.

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Improved public service delivery	Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance	Litigants satisfaction with judicial services (Judiciary survey)
	Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance	TAT for public services
	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 National Anticorruption 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
Output 001:Judicial services and management system enhanced	Cases heard using E-litigation (%)	0	25
	Courts using video conferencing (Nos.)	0	22
	Cases heard for the disadvantaged and vulnerable people using video conferencing (Nos.)	0	50
	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 capacity strengthened	SAARC regional conferences held (Nos.)	2	3
	Institutional linkages established (Nos.)	28	160
Output 003:Disaster resilient and environment friendly court buildings constructed	Dzongkhag courts constructed (Nos.)	11	14
	Dungkhag courts constructed (Nos.)	10	12
	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
<b>Total</b>	<b>623.800</b>

<b>Au Name: ROYAL INSTITUTE OF LAW</b> <b>Program Name: Institutional development and capacity building of Royal Institute of Law</b>	<b>Department: NA</b> <b>Phase: Approved</b>
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<b>Justification:</b>	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
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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>
<b>Beneficiary:</b>	Judiciary sector and public at large.

## Program and SKRA Linkages

<b>NKRA</b>	<b>SKRA</b>	<b>SKRA KPI</b>
Improved public service delivery	Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance	Litigants satisfaction with judicial services (Judiciary survey)
	Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance	TAT for public services
Democracy and Governance 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 National Anticorruption Strategy (ACC)
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**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 legal education imparted	Students enrolled (Nos.)	NA	50
	Curriculum developed (Nos.)	NA	25
	Faculties recruited (Nos.)	NA	10
Output 002:Advanced legal studies and research promoted	Training provided (Nos.)	NA	2
	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	40.000
<b>Total</b>	<b>547.500</b>

<b>Au Name:</b> BHUTAN NATIONAL LEGAL INSTITUTE, ROYAL LAW SCHOOL AND LIBRARY	<b>Department:</b> NA
<b>Program Name:</b> Institutional strengthening	<b>Phase:</b> Approved

<b>Justification:</b>	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 in-service 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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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 deliver 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>
<b>Beneficiary:</b>	Bhutanese as a whole.

## Program and SKRA Linkages

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

Democracy and Governance 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 National Anticorruption Strategy (ACC)

**Table 1: Program Results Level**

Results Level (Outcome)	Indicators	Baselines	Plan Targets
Outcome 001 : People have easy access to systematic ADR (Mediation) services at local level	% of Local Leaders and officials from relevant stakeholders trained on ADR (Mediation) system	N/A	70
	% 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 and officials from relevant stakeholders conducted	No. of legal dissemination and awareness programs conducted	N/A	35
	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/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 capacity strengthened	No. of judicial personnel trained	NA	250
	No. of institutional linkages established	NA	7
	No. of curriculum developed	NA	1
Output 005:Bhutan law library strengthened	No. of books procured	NA	30
	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
<b>Total</b>	<b>42.000</b>



# VULNERABLE GROUPS



<b>Au Name:</b> NATIONAL COMMISSION FOR WOMEN & CHILDREN	<b>Department:</b> SECRETARIAT
<b>Program Name:</b> Protection and Promotion of the Rights of Women and Children	<b>Phase:</b> Approved

<b>Justification:</b>	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.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. 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.</li> <li>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.</li> <li>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.</li> <li>iv. Establish support services to enhance participation and protection of women and children.</li> <li>v. Continue advocacy through media and other platforms on the protection and promotion of children and women.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. Shortage of manpower both in terms of numbers and technical capacities of staff to implement the plans.</li> <li>ii. Low level of understanding/ acceptance of gender and child protection issues will impede the smooth implementation of the plans.</li> <li>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.</li> </ul>
<b>Beneficiary:</b>	Women and Children and general public

## Program and SKRA Linkages

NKRA	SKRA	SKRA KPI
Gender friendly environment for Women's participation	Prevention and elimination of Gender based violence	% of domestic violence due to alcoholism No. of divorce rates by region and income levels No. of divorce cases reduced
Needs of Vulnerable Groups addressed	Child's Right to Protection Enhanced	% of children engaged in harmful child labour % 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 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**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : Strengthened enabling environment for women and children participation in all spheres	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	
	No of legislations promoting women's participation (gender equality law/quota legislation/ Legislation for special temporary measures	NA	2012
	% 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
Outcome 002 : Increased safety and security for women and children	Reduction in acceptance of domestic violence (%)	68	
	Prevalence of domestic violence against women and girls (%)	29%	
	Proportion and type of women and child related cases resolved (%)	NA	
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001: Legislation, policies, Rules and Standard of procedures reviewed, disseminated, formulated and 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

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	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
Output 003:Coordination mechanism for gender equality and child protection developed and functional	Central data base in place	NA	1
	No. of Child Welfare Committee	NA	1
	Proportion of Gender Focal Points submitting bi annual/annual reports to NCWC (%)	NA	100
Output 004: Knowledge of NCWC and key stakeholders enhanced on women empowerment and child protection	Media communication strategy in place	NA	1
	Capacity development strategy developed and implemented	NA	1
	Number of sectors that adopt Capacity Development Strategy on child protection	NA	6
	No of advocacy on gender equality and child protection amongst policy and decision makers	15	35

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<b>Programme Activities</b>	<b>Capital</b>
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	2.00
Support the establishment of family/child courts and benches	5.00
<b>Total:</b>	<b>55.00</b>

<b>Au Name:</b> GROSS NATIONAL HAPPINESS COMMISSION <b>Program Name:</b> Rural Economic Advancement Programme (Phase II)	<b>Department:</b> SECRETARIAT <b>Phase:</b> Approved
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<b>Justification:</b>	The Royal Government of Bhutan accorded highest priority in addressing poverty during the 10 Five Year Plan (2008-2013) and continues to do so in its 11th Plan. RGoB also made several international commitments to address the poverty issues such as Decade of Poverty Alleviation (2005-2015), SAARC Development Goals and Millennium Development Goals. Towards this end, targeted poverty initiatives such as Rural Economic Advancement Programme (REAP) and land rehabilitation programme were carried out. While the broad-based development programmes continue to alleviate poverty, the REAP shall seek to target the extreme poverty that may not be adequately addressed through broad-based development programmes. Given the significant contribution of the REAP I to national objectives of poverty reduction, the GNH Commission has decided to upscale the targeted programme in 11th FYP covering the poorest villages across 20 Dzongkhags.
<b>Strategy:</b>	<ul style="list-style-type: none"> <li>i. REAP II shall carry out its interventions at the village level and the poorest villages shall be selected using objective criteria, namely, multi-dimensional poverty index (MPI). To promote participation and address poverty and deprivations in the six dimensions, communities shall prepare respective village development plans (VDP). Furthermore income generating activities shall cover the entire value chain to ensure effective interventions</li> <li>ii. Special activities targeted at the poorest households in the village shall be implemented as they have difficulties capitalizing on the more general interventions.</li> <li>iii. Promote Government and Non- Government participation and partnerships to allow for synergy and complementary in work.</li> <li>iv. Conduct timely monitoring and evaluation, and provide feedback to continuously refine and sharpen the interventions.</li> </ul>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <li>i. The successful implementation of the REAP depends on the support and co-operation of Dzongkhag and Gewog Administrations who will be the implementing partner. If support is not forthcoming, it will affect the timely and effective implementation of plans.</li> <li>ii. If adequate financial resources are not made available, it will jeopardize the implementation of REAP activities.</li> </ul>
<b>Beneficiary:</b>	116 Villages across 20 Dzongkhags

## Program and SKRA Linkages

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/ 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**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
Outcome 001 : Increased Income	HHs income greater than Nu. 46000 per year (%)	13	90
Outcome 002 : Improved 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 Living Standards	HHs with access to Electricity (%)	22	100
	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
<b>Results Levels (Output)</b>	<b>Indicators</b>	<b>Baseline</b>	<b>Plan Targets</b>
Output 001:Self-Help Groups formed	Number of self-help groups	0	100
Output 002:Commercial farming enhanced	Number of self-help groups engaged in commercial farming	0	50
Output 003:Basic amenities developed	HHs with CGI Sheets for roofing (%)	63	90
	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 developed	HHs with income generating skills (%)	0	50
Output 005:Community machineries ( Rice Huller/ Maize Grinder) installed	Number of machineries installed	0	100

**Table 3: Programme Plan Outlay Summary**

<b>Programme Activities</b>	<b>Capital</b>
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
<b>Total:</b>	<b>215.000</b>

<b>Au Name: NATIONAL LAND COMMISSION</b>	<b>Department: SECRETARIAT</b>
<b>Program Name: National Land Services</b>	<b>Phase: Approved</b>

<b>Justification:</b>	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
<b>Strategy:</b>	<ul style="list-style-type: none"> <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>
<b>Risk Assessment:</b>	<ul style="list-style-type: none"> <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 multi cadastre information</li> </ul>
<b>Beneficiary:</b>	The Commission, the Secretariat, Royal Government, business and general public at large.

## Program and SKRA Linkages

<b>NKRA</b>	<b>SKRA</b>	<b>SKRA KPI</b>
Democracy and Governance strengthened	Strengthened Accountability Transparency, Efficiency and Effectiveness in Governance	TAT for public services

**Table 1: Programme Results Level**

<b>Results Level (Outcome)</b>	<b>Indicators</b>	<b>Baselines</b>	<b>Plan Targets</b>
<b>Outcome 001:</b> Promote sustainable and effective management and utilization of land based resources	Area of Government reserved forest land leased out for sustainable use (Acres)	12578.43	20078
	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
<b>Outcome 002:</b> Improve efficiency in the provision of land administration and geo-information services	Average Turn Around Time (TAT) for the most commonly availed land services (days)	90 days	15 days
	Average performance rating of NLCS (%)	70%	>90%
	Percent of land substitution cases processed and approved annually (%)	70%	80%

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

<b>Output 005:</b> Spatial and cadastral geo-database updated and made functional	NSDI developed and functional by 2016	0	Functional NSDI
	Dzongkhags with functional E-sakor (Nos)	1	20
	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
<b>Output 006:</b> 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

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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
<b>TOTAL:</b>	<b>500</b>

