Box: 2.1 Strategies and Strategic actions

Objective # 1: To reduce carbon emission by intensifying sustainable management of forest resources and minimizing the effects of drivers of deforestation and forest degradation across the ecological regions. (S # 1,2,3,4)

Outcome 1.1: Forest productivity increased and integrity of ecological system maintained through sustainable forest management and conservation practices.

Outcome 1.2: Policy and measures to develop forestry, to address drivers of deforestation and forest degradation conducive to ecological regions in place, and carbon stock increased.

Strategies:

S1: Enhance carbon stocks, increase supply of forest products, and reduce carbon emission through sustainable management of forests, land rehabilitation, shrubland management, and by addressing DD in all management regimes.

Major Strategic actions:

1.1 Identify and delineate forest for different management modalities and promote appropriate community-based management models

1.2 Intensify sustainable management of forest (SMF) to enhance the function of forest ecosystem and increase carbon sequestration in all community based management models.

1.3 Update and improve management plans (district forest management plans, and Protected Areas management plans, and operational plans of CBFM) with provisions of carbon stock measurements, carbon monitoring methods, fire management, grazing control, invasive species control.

1.4 Enhance community participation and support for the control and management of forest fire, grazing and encroachment.

1.5 Recognize customary forest and pasture management practices by including good practices into forest and pasture management plans

1.6 Strengthen fire control capabilities at district and local level with fire management plans, fire-fighting capacity building, fire monitoring, fire fighting equipment and insurance mechanisms.

1.7 Rehabilitate degraded land and shrublands through appropriate land rehabilitation and shrubland management measures.

1.8 Increase the supply of harvested wood products for building materials and furniture to substitute high-energy intensive metal products and reduce emission.

S2: Promote adaptive ecosystem-based approaches and integrated watershed management to conserve biodiversity and enhance the integrity of ecological systems across the landscapes.

Major Strategic actions:

2.1 Promote the landscape conservation and climate resilient approaches for ecosystems and biodiversity management.

2.2 Improve the management of Protected Areas by promoting Integrated Conservations, participatory

models and ecotourism

2.3 Assess the status of invasive alien species in PAs and community-based forests and identify and implement appropriate remedial and preventive measures.

2.4 Promote biodiversity conservation in managed ecosystems for sustaining livelihoods [including through local land use planning; and complementary implementation of CBD and UNFCCC (REDD+ co-benefits)]

2.5 Develop and promote Payment for Environmental Services (PES) for reduced emissions, watershed management, biodiversity conservation and for sustainable agriculture interventions.

S3: Promote private and public land forestry with appropriate financial incentives, simplified regulatory provisions and technical support mechanisms to create new forests.

Major Strategic actions:

3.1 Promote private forestry by simplifying administrative and procedural process, and with tax incentives.

3.2 Support and facilitate the nursery and plantation of indigenous and fast growing tree species with seed, seedling, research technologies and information (on growth and yield).

3.3 Establish financial schemes accessible to private tree growers and forestry entrepreneurs, particularly to those creating jobs and other benefits to women, poor and marginalized groups.

3.4 Promote appropriate agro-forestry/forestry in marginal, abandoned and drought prone lands

3.5 Promote forestry on community and abandoned land including flood plains, river banks within and outside forest areas with plantation, natural regeneration and other appropriate interventions with people's participation particularly, poor and marginalized households (Tarai)

S4: Improve land uses across the physiographic regions (Tarai, Siwalik, Mid-Hills and Mountains)

Major Strategic actions:

4.1 Establish spatially explicit information systems on land use potential, allocations and potential conflicts/complementarity with REDD+ strategies.

4.2 Develop and implement economic and market-based incentives packages to promote optimal land use across the physiographic regions.

4.3 Carry out forest zoning in each district through a participatory processes and implement phased transfer into different management modalities.

4.4 Develop community-based forestry approaches in High Mountain areas and Churia areas (apart from existing community-based forestry) considering the specific context of High Mountain and Churia areas.

4.5 Carryout Climate Change Vulnerability Assessment of forests in each district and mainstream it into District Forest Management Plan, Watershed Management Plan, National Park or Wild Life reserve Management plan, and Forest operation plans of community based forestry;

4.6 Promote increased use of GIS and remote-sensing/spatial planning applications and expand or update hazard mapping of delineated zones, based on climate change.

4.7 Control haphazard mining and excavation (of soil, stone, pebbles, bolders, sand) through effective planning, implementation and enforcement.

4.8 Improve public awareness and education concerning climate change risks, uncertainties vulnerability and benefits of landuse planning.

Objective # 2: To ensure fair and equitable distribution of carbon, non-carbon and environmental benefits of forests among right holders. (S # 5)

<u>Outcome 2.1:Policy and institutional arrangement securing tenure and carbon rights and fair benefit sharing in place.</u>

<u>Outcome 2.2:Forest dependent poor and marginalized groups benefited from increased access to forests and decision-making.</u>

Strategies:

S5: Clarify forest tenure, ensure carbon rights and fair benefit sharing among various right holders

Major Strategic actions:

5.1 Safeguard tenure security of forest user groups to access, manage, sustainably harvest, use and sell forest goods and services in all community-based forest management regimes

5.2 Define, clarify and accommodate carbon rights in relation to land and forests within existing policies and legal instruments.

5.3 Increase and ensure access to forests, decision-making and benefits to women, *Dalit*, Indigenous People, vulnerable groups, forest dependent people, distant users, and other marginalized people.

5.4 Establish clear and legally defined mechanism for the sharing of carbon, non-carbon benefits and payment of environmental services among right holders.

5.5 Actions suggested by TS

Objective # 3: To increase livelihood assets, food security and diversify employment opportunities of forest dependent people, particularly poor and marginalized (S # 6,7,8)

<u>Outcome 3.1: Income and employment of forest dependent poor and marginalized communities improved through enterprise development.</u>

<u>Outcome 3.2: Small and marginal farmers friendly climate smart technologies mainstreamed into forest and farmland management practices and agricultural productivity increased.</u>

<u>Outcome 3.3: Forest-dependent poor and marginalized people friendly alternative energy and wood technology developed and promoted.</u>

Strategies:

S6: Promote forestry and non- forestry enterprise development and enhance livelihood options and employment opportunities for forest dependent poor and marginalized communities.

Major Strategic actions:

6.1 Develop policies and capacity to encourage private investment in efficient and alternative timber technologies (e.g. bamboo housing, timber drying, timber treatment, timber processing).

6.2 Invest in sustainable forest-based enterprises to create more employment opportunities in the forestry

sector (for both timber and NTFPs, including ecotourism) producing finished forest products for domestic and export markets.

6.3 Develop mechanisms to engage the private sector in forestry in the entire value chain of forest products from planting to end-product development.

6.4 Scale up investment in non-forestry sector employment programs and off-farm income generation activities targeting rural and urban (poor) areas to reduce forest dependency and demand for forest products

6.5 Promote vocational education and skill-based training opportunities for enterprise development and forest operations (harvesting, logging, saw-milling, carpentry etc) for forest dependent poor and marginalized communities.

6.6 Improve access to alternative technologies (eg small sawmills carpentry, food processing, efficient stoves, kilns, briquettes, power looms, etc) by providing information, knowledge and loan services for forest dependent poor and marginalized communities.

6.7 Incentivize and support Forest User Groups in all community-based forest management regimes, also linking with local government resources (eg matching funds, and resource leverage) to create incomes, livelihood options and job opportunities for forest dependent poor and marginalized communities.

6.8 Design and implement off-farm income generation, and vocational training (bamboo crafting, animal husbandry, vegetable farming, carpentry etc) paired with micro-finance opportunities for forest-dependent poor and marginalized households of the communities.

S7: Increase agricultural productivity for small and marginal farmers by providing sustained supply of inputs for agriculture intensification and contribute to food security.

Major Strategic actions:

7.1 Intensify agricultural practices with identification of climate smart species and technology for agroforestry, organic farming, and use of alternative sources of fertilizer.

7.2 Promote development of policies supportive of small-scale sustainable agriculture (e.g. relating to agricultural tariffs, subsidies)

7.3 Support in the application of Sloping Agriculture Land Technologies (contours with fodder trees/grasses in bari lands)

7.4 Increase fodder and forage production in community based forestry and support to develop fodder and forage resource center.

7.5 Promote multi-purpose fodder management, stall feeding and scaling up of fodder reserve systems, especially silage and hay, for use during slack periods

7.6 Support to increase access to crop & livestock breeding and husbandry improvement programs

7.7 Conserve water sources and promote improved water harvesting and management technology.

S8: Increase access to affordable and efficient technology of alternative wood and energy.

Major Strategic actions:

8.1 Increase investment and promote fuel wood efficient and alternative energy technologies (including improved kilns and cooking stoves) to reduce fuelwood demand.

8.2 Promote sustainable, cost-effective (and increase availability and affordability of) renewable energy sources (e.g. Biogas, Access to electricity, Solar power) linking the energy end-use to enterprise development/income generation.

8.3 Develop mechanisms to increase access to alternative energy technologies for forest-dependent poor and marginalized people.

8.4 Promote cost effective wood technologies (eg particle board, pressed board, timber treatment, timber processing, bamboo housing etc) and increase access for forest-dependent poor and marginalized communities.

Objective # 4: To improve and harmonize policy and legal framework to harness carbon and co-benefits; strengthen institutional capability and improve governance of forest agencies. (S # 5,9,10,11,12)

Outcome 4.1: Sectoral policies and legal frameworks harmonized and collective efforts attained for climate change mitigation and adaptation.

Outcome 4.2: Service delivery system and governance improved through institutional reform and capacity enhancement of concerned stakeholders.

Outcome 4.3: Climate smart infrastructure planning, construction and maintenance tools and techniques with appropriate safeguard measures in place and direct/indirect impacts on forests minimized.

Strategies:

S9: Develop synergy among various sectors, sectoral policies and legal frameworks for a shared understanding and collective efforts for climate change mitigation and adaptation.

Major Strategic actions:

9.1 Identify and harmonize contradictory issues in cross-sectoral policies and legal frameworks (e.g., among Forest Act 1993, National Parks and Wildlife Conservation Act 1973, and other acts).

9.2 Improve policy coordination among Forest, Soil and water conservation, Land Reform, Agriculture, Local development, Energy, and Physical planning for effective integrated planning, monitoring and evaluations of development projects.

9.3 Strengthen multi-stakeholder and integrated planning approach at regional/landscape and national levels, in order to seek consensus-building, validation and clarify sector and extra-sectoral commitments.

9.4 Institutionalize mechanisms for promoting policy and planning linkages among the MFSC, National Planning Commission, and ministries responsible for finance, infrastructure, energy, land reform and agriculture.

9.5 Develop fiscal policies for investment to climate change mitigation including performance-based payment mechanisms.

S10: Strengthen institutional performance and service delivery system through institutional reform, capability enhancement, and good governance practices.

Major Strategic actions:

10.1   Re-structure institution and improve forest governance to enhance service delivery, accountability and transparency of all concerned agencies at all levels

10.2   Develop incentive and penalty system for both government and Forest User Groups to address illegal harvesting, and illegal trade with confidential system for whistle-blowers to report illegal practices.

10.3   Review and update judiciary and judicial processes and strengthen forest law enforcement to control illegal harvest, trade of forest products, encroachment and other forest offences.

10.4   Strengthen multi-stakeholder forums such as FSC at center and DFSCC at district level.

10.5   Adopt REDD+ international standards on participation, inclusion and Free, Prior, Informed Consent (FPIC).

10.6   Ensure adequate representation of women, poor, indigenous people and socially marginalized groups in key forestry decision-making bodies and processes

10.7   Recognize the traditional and customary practices of forest management and incorporate appropriately in community-based forest management with due consideration to their socio-cultural values, particularly in High Mountain areas.

10.8   Establish and strengthen grievance-addressing mechanisms that is gender-sensitive and respond to people's grievances and concerns

10.9   Develop and implement participatory M & E mechanisms and promote public hearing and public audits - especially at district and VDC level.

S11: Enhance technical, managerial and leadership capacity; groom and support champions of change and improve functional collaboration and cooperation among all stakeholders.

Major Strategic actions:

11.1   Improve mind-set, leadership and management competency, commitment and morale of forestry personnels.

11.2   Increase awareness, technical, leadership and managerial capacities of all stakeholders in all aspects of REDD +, particularly of women, *Dalit*, IPs including political leaders and parliamentarians.

11.3   Incorporate forest carbon and conservation elements in school curriculum

11.4   Develop functional collaboration and cooperation with security forces, media, and civil society to control illegal forest activities.

11.5   Control cross-border illegal trade of forest products through inter-country cooperation with Indian and Chinese (Tibetan) authorities

11.6   Sensitize various actors on issues of DD and forest sector governance

11.7   Promote and support partnership among government, community, and private sector to enhance the

performance of government and Local Forest User Groups.

S12: Promote forest and climate-friendly infrastructure planning, construction and maintenance - ensuring that location and applied technologies minimize both direct and indirect impacts on forest.

Major Strategic actions:

12.1   Ensure environmental, social and economic measures in infrastructure development and maintenance (Hydropower, transmission lines, highways, rural roads, irrigation canals, railways etc)

12.2   Implement climate smart infrastructure planning, implementation and monitoring ensuring social and environmental safeguards.

12.3   Avoid forest area for infrastructure development, and make compulsory provision of tree planting to substitute forest cleared if any.

12.4   Ensure effective implementation and compliances of IEE and EIA for all types of forest land use conversions including tourism ventures, settlements, road construction, hydropower and transmission lines, expansion of conservation areas.

Objective # 5: To establish and maintain a robust Forest Management Information System with strong monitoring, reporting and verification mechanisms (S # 13)

Outcome 5.1: A national credible measurement, monitoring, reporting and verification system established with well functional Forest Management Information and Knowledge Management System.

Strategies:

S13: Establish and maintain forest information, monitoring, reporting and verification mechanism with well-equipped Forest Management Information Systems.

Major Strategic actions:

13.1   Increase access to information on forest resources including decisions, plans, policies, programs and budgets, audit reports etc.

13.2   Enhance the national capability to conduct forest resource survey and inventory periodically and make data available for specific physiographic and administrative regions.

13.3   Develop the capacity for data collection, analysis, storage, management and dissemination for the national/local planning, and policy development.

13.4   Establish and make functional a forest management information system at different levels

13.5   Establish cost effective mechanisms for monitoring, reporting and verification of land use changes (and their impacts on commitments to achieving emissions reduction and enhancement at sub-regional/jurisdictional and national level)

13.6   Identify monitoring indicators and establish community-monitoring systems in all community based management regimes and include them in their operational/management plans.