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Forestry Sector Strategy for Nepal

July 2014

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ABBREVIATIONS AND ACRONYMS

BZMG	Buffer Zone Management Group
CF	Community Forest
CFUG	Community Forest Users Group
DFO	District Forest Officer
DFRS	Department of Forest Research and Survey
DFSP	District Forest Sector Plan
DNPWC	Department of National Parks and Wildlife Conservation
DoF	Department of Forests
DSCWM	Department of Soil Conservation and Watershed Management
EIA	Environmental Impact Assessment
EPA	Environment Protection Act
FLEG-T	Forest Law Enforcement, Governance and Trade
FPDB	Forest Products Development Board
FSCC	Forestry Sector Coordination Committee
FSS	Forestry Sector Strategy
GDP	Gross Domestic Product
GESI	Gender, Equity and Social Inclusion
GIS	Geographical Information System
GoN	Government of Nepal
HPPCL	Herbs Production and Processing Company Limited
HR	Human Resources
HRD	Human Resources Development
IT	Information Technology
LAPA	Local Adaptation Plan of Action
M&E	Monitoring and Evaluation
MAP	Medicinal and Aromatic Plant
MFSC	Ministry of Forests and Soil Conservation
MIS	Management Information System
MPFS	Master Plan for the Forestry Sector
NAPA	National Adaptation Plan Of Action
NFC	Nepal Fuelwood Corporation
NGO	Non-Governmental Organisation
NRS	Nepali Rupees
NTFP	Non-Timber Forest Product
PA	Protected Area
PES	Payment for Ecosystem Services
PRSP	Poverty Reduction Strategy Paper
REDD+	Reducing Emissions from Deforestation and Degradation
SWC	Soil and Watershed Conservation
TCN	Timber Corporation of Nepal
VAT	Value Added Tax
VDC	Village Development Committee

ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY

GLOSSARY

Intensively managed forest	Forest that is being managed productively according to the provisions of an agreed management plan and is yielding forest products and/or forest services
Community-based forest management	A group of forest management modalities that involve local people in planning, implementation and benefit sharing (including community forest management, pro-poor leasehold forest management, collaborative forest management, buffer zone management, public land management and urban forestry)
Community forest	Forest managed by Community Forest User Groups as defined by the Forest Act (1993) and Forest Regulations (1995)
Forest services	These include services for biodiversity conservation, soil and water conservation; aesthetic and recreational use, cultural use, climate amelioration and other environmental services
Degraded forest	Defined as forest with < 40% canopy cover
Forestry	Broadly defined to include livelihoods, social aspects, environmental services, forestry policies and institutions, and economic considerations. In addition to traditional aspects of forest management, production, health and protection, forestry considers the broad landscape of trees outside forests, including urban forestry and agro-forestry. Forestry includes the management of wildlife and protected areas. Forestry considers the impacts of other sectors on the forest, as well as the impact of the forest on other sectors.
Forest	An ecosystem characterised by a more or less dense and extensive tree cover. It often consists of stands varying in characteristics such as species composition, structure, age class, and associated processes, and commonly including meadows, stream, fish and wildlife. Forests include special kinds, such as industrial forests, private forests, plantations, protection forests and urban forests.
Forest management modality	The ownership, institutional and legal arrangements which determine how a particular forest is governed. In Nepal there are 4 possible modalities (i) community-based forest management (which is further categorised into six types - see definition above); (ii) private forest management (iii) government forest management and (iv) religious forest management

PART 1 INTRODUCTION

1.1 BACKGROUND AND CONTEXT

The Master Plan for the Forestry Sector (MPFS) that guided Nepal's forestry development for almost 25 years, ended in 2011. The Government of Nepal has recognised the importance of having a new Forestry Sector Strategy (FSS) to provide strategic direction and guidance over the next decade.

Nepal has undergone major political, social and economic change since the MPFS was prepared in 1988. These changes, accompanied by global changes, have influenced the way forestry is practiced in Nepal. The Forest Act (1993) and Forest Regulations (1995) enlarged the scope of community forest governance and made forest tenure reforms whilst amendments to the Wildlife and National Park Act (1973) changed the paradigm of conservation by creating opportunities for local communities to be involved in the management of conservation areas and buffer zones. The political changes of 1990 and the subsequent liberalisation of the economy increased the involvement of civil society, non-government organisations and the private sector in the forestry sector as implementers of operations, as service providers and for supporting forest-based enterprises. These changes have not yet been matched by new regulatory and fiscal policies in the sector thus contributing to an overburdened state forest administration and limited stimulus for economic and enterprise development.

Forest ecosystems and watersheds provide multiple goods and services for people's livelihoods and welfare. They provide fuel-wood as an energy source, timber and poles for building construction and furnishing materials, NTFPs/MAPs as essential ingredients for health and income, fodder for livestock and water for drinking, irrigation and hydropower. Forests are also sources and sinks for carbon emissions and they regulate the hydrological balance conserving water and reducing soil erosion. They are also sources of peace, cultural upliftment and recreation and are major destinations for eco-tourism. Nepal's forests and watersheds also support the ecological functions and services needed for the promotion of other sectors and harbour rich and diverse flora and fauna unique in the world.

The FSS has been developed based on (i) a review of the achievements of MPFS, (ii) extensive consultation with all the relevant forestry and related stakeholders at different levels and at different geographical areas, (iii) visualisation of the future of forestry in the days to come, and (iv) theory of change.

1.2 SITUATION ANALYSIS

There have been positive gains that have resulting from MPFS implementation and the associated and legislative reforms over the past 2 decades. The recent review of the MPFS identified some of the most significant changes:

- Forest tenure and governance reform have led to the gradual restoration of forests and controlled deforestation in the degraded landscapes of the Middle hills
- Protected areas have expanded from 7% of Nepal's geographic area to about 23%
- MAPs now constitute about 8% of all Nepal's exports
- Plywood manufacture has expanded significantly.
- Bottom up planning has helped to design programmes and activities based on the aspirations of local people.
- Climate change has been recognised as a critical issue for Nepal and measures to mitigate and adapt to climate changes are being initiated
- Populations of some of the most charismatic species (tiger, rhino, wild buffalo) are slowly increasing and rhino poaching appears to be under control

Notwithstanding these positive changes there are still several problems with Nepal's forestry sector that MPFS has failed to address:

- Deforestation and watershed degradation especially in the Tarai and Chure are still continuing.
- Supplies of forest products from productive forest management are less than their potential and do not yet meet the country's requirements.
- Despite having 39% forest cover Nepal still imports timber and fuel-wood
- Despite its potential, contribution of the forest sector to income generation, employment and economic development is small and has not increased significantly.
- Ad-hoc decision-making and lack of a favourable operational environment have been a disincentive to intensive forest management and forest product supply.
- The private sector is hesitant to engage and invest in forest operations and value addition because of frequently changing rules and unpredictable supplies of raw material.
- Climate change is already happening in Nepal but the role of forest ecosystems and watersheds in mitigation and adaptation is not yet well developed. Forests need to be climate-proofed to enhance their climate resilience.
- Illegality is prevalent in the timber trade and there is a significant illegal trade in wildlife and wildlife parts
- Gender and social inclusion in forestry sector governance and decision-making is limited.

1.3 REVIEW OF THE MASTER PLAN FOR THE FOREST SECTOR

Past performance of the forestry sector during the duration of MPFS was comprehensively reviewed¹ during 2013-14.

Amongst the 6 primary development programmes, the Community and Private Forestry Programme had significant impact and largely achieved its aims. It contributed to halting forest loss and degradation (especially in the Middle Hills) and enhanced the livelihoods of large numbers of rural people. But community forestry had limited impact on rural employment and the local economy and community forests are generally under-utilised. Erosion of the legal autonomy of forestry groups by a series of administrative orders and other decisions hindered better forest utilisation and growth of forest-based enterprises. By contrast the National and Leasehold Forestry Programme made only limited progress. Leasehold forestry evolved into Pro-Poor Leasehold Forestry which was a successful approach (albeit on a relatively small scale) but other components including lease of national forest for commercial management by private operators and implementation of sustainable forest management by state agencies did not take place. As a result many remaining areas of unmanaged national forest suffer from degradation and deforestation. Collaborative Forest Management that was developed as a potential approach to tackle this is not yet fully effective and Nepal's wood production is still unsystematic without insufficient investment by the private sector. At the same time there is a thriving trade in illicit timber and there are ongoing threats to unmanaged national forests from infrastructure development and urban expansion as well as open access for grazing and encroachment.

The Programme for Wood-based Industries achieved very little. A huge gap still exists between demand and supply for wood and market-led economic liberalisation policies for timber and other wood products were not effectively pursued. Consequently the assured supply of forest products needed to sustain and enhance Nepal's forest-based industry does not yet exist although increasing supplies of raw materials are now coming from sustainably managed community and private forests. Issues include over-regulation and frequent policy changes as well as interference by other agencies e.g. police, local government etc. and promotion of timber imports at the expense of domestic growth. These affect the allocation of forests and harvest, sale and transport of forest products which in turn creates disincentives to legitimate private investment and sustains the illegal forest product trade. The Medicinal & Aromatic Plants & Other Minor Forest Products Programme had only limited success

¹ Master Plan for the Forestry Sector, Nepal: 1988-2011. Review of Implementation & Achievements with Lessons & Options for the Future. March 2014.

although there is now much greater awareness, interest and grass-roots experience of enterprises based on these products and many rural communities and households are involved in some way. But the sub-sector is characterised by unsupportive and restrictive regulations, taxes and procedures coupled with inadequate phyto-sanitary and testing facilities to support international trade that adversely affect the establishment and management of such enterprises. NTFPs/MAPs-based enterprises remain small and fragile with only limited private investment and with few products reaching international markets. Beneficiaries tend to be middle-men and traders rather than rural households.

There was moderate success with the Soil Conservation and Watershed Management Programme which resulted in some important impacts in specific localities. However, physical achievements of this programme were relatively insignificant compared with the actual requirements for soil and watershed conservation across the country – especially as these are now being exacerbated by climate change, rural road construction and haphazard collection of building materials from river courses. Policies on watershed conservation are lacking and there is weak coordination between MFSC and other agencies such as local government, civil society and community groups and other ministries. The Conservation of Ecosystems & Genetic Resources Programme was relatively successful and there is now a network of protected areas (PAs) contributing to conservation of ecosystems and biodiversity covering 23% of the country's land area. Populations of several charismatic species such as tiger, rhino and wild buffalo have increased although many other species (especially birds) are in decline. Conservation policies moved away from 'people exclusionary' and 'species focused' towards 'people-centred' approaches and buffer zone management groups have enabled local people to benefit from PAs. In popular national parks visitor numbers and revenues increased significantly. Ongoing issues include a shortage of specialised staff within DNPWC and a contested legal framework for PAs (including processes of PA declaration, governance, power sharing, equity and benefit-sharing) whilst increased visitor numbers combined with infrastructure development have had adverse effects at certain locations and human wildlife conflicts have increased. Illegal trade and wildlife poaching has not been effectively controlled despite the engagement of the Nepal Army.

Of the six supportive programmes of MPFS the Forest Policy & Legal Reform Programme proved to be highly critical to the success of others. Without such reforms in various programme areas it was not possible to implement affected programmes successfully. The Forest Sector Policy (1989) that was included in the MPFS and the Forest Act (1993) and associated Forestry Regulations (1995) are considered as having been among the most influential, innovative and far-sighted elements of the MPFS. The policy directions determined by MPFS and the subsequent legal reforms made a significant contribution to shaping the direction of Nepal's forestry sector and the institutions operating within it. Important challenges in the policy and enabling environment that remain include:

- Need for deregulation to support more effective harvesting, utilisation and transport of forest products (both wood and non-wood) and to reduce unnecessary transaction costs.
- Need for transparency and consistency in the application of royalties and taxes to ensure that legitimate sources of government revenue are maintained whilst not stifling the activities that are being promoted.
- Weak coordination and synergy of policies across different sectors and within the forestry sector itself.
- Unclear policies affecting forest land use and forest management modalities and frequent *ad hoc* regulation and politically motivated decision-making.
- Inconsistency in roles and responsibilities *vis* the Forest Act (1993) and the Local Government Act (1999).
- Limited stakeholder engagement in policy processes at different levels.
- Inconsistencies between policies and legislation (including various orders, circulars and regulations).
- Excessive application of regulations under the Environment Protection Act (EPA) being applied to activities in the forestry sector (especially small-scale harvesting and enterprises).
- Poor policy and regulatory dissemination.

1.4 FOREST SECTOR STRATEGY DEVELOPMENT

a. Consultation

Extensive and intensive consultations were held during the process of FSS development to solicit the views and ensure the contributions of stakeholders on the future directions to be undertaken by the forestry sector. Consultations were held at different levels and at different geographic locations to capture the diversity of opinions and voices of different groups. The process of consultations and discussions is shown in Annex 7 and the names of individuals and organisations consulted are given in Annex 8.

b. Visualising the future

There are distinct patterns of change occurring in Nepal's forestry sector and in the external driving factors that were considered while formulating the FSS. These were discussed during the consultation process on the understanding that the FSS primarily needs to meet the needs of the future and fit with the visualised future scenario rather than respond to the immediate present. Some of the most important future driving forces that are anticipated over the coming years were identified as being:

- State restructuring-federalism and decentralisation
- A demographic shift towards the Tarai and urban areas (internal migration) coupled with a gradual loss of economically active people from rural areas
- An increasing role for forestry in climate change and other ecosystem services
- Changes in Nepal's economic structure - moving towards a cash/market economy and emerging economic frontiers
- Expansion of physical infrastructure (roads, communications technology, urbanisation, hydropower, etc.)
- Changes in energy sources and use patterns with less dependency on fuel-wood
- Political focus on the promotion of economic prosperity
- Diversification of forest management modalities - moving away from control and command
- Shift in products away from unprocessed timber to composites and reconstituted wood
- Forest fragmentation and more simplified ecosystems
- Increasing consumer demand for green products and for certification and legal verification systems
- Evolving forestry governance architecture with new forms of partnership emerging.

1.5 THEORY OF CHANGE

As part of the FSS development process a theory of change was derived. The theory of change describes the logical steps and their linkages that will lead to the planned outcomes of the FSS. It is a working hypothesis that can be tested over time in response to monitoring of future shifts in the context and the achievement of the desired milestones. Mapping the theory of change in this way helps to identify the types of actions that need to be taken to achieve vision (Figure 1).

1.6 STRUCTURE OF THE FOREST SECTOR STRATEGY

This strategy has been developed with a logical structure starting with Part 1, this introduction. Part 2 describes the direction the forestry sector is expected to take over the next decade and includes a description of its 8 strategic pillars – these being the foundations on which the strategy is based. Part 2 continues with a description of the forestry sector vision, its strategic goals and the expected outcomes of implementing this strategy including milestones that can be regularly monitored and reviewed to measure progress. Part 3 describes what will be done to achieve this vision by outlining the broad actions and approaches across seven key thematic areas. Part 4 describes the mechanisms, systems, institutions and structures that will be used to deliver this vision and finally, Part 5 contains annexes that provide more detailed information to support the strategy.

Figure 1 Theory Of Change Underpinning Nepal's Forestry Sector Strategy



PART 2 A VISION FOR NEPAL'S FORESTRY SECTOR

2.1 EIGHT STRATEGIC PILLARS

The vision for Nepal's forestry sector is underpinned by the eight strategic pillars (below) that provide the foundation for the strategy. Past experience has shown that these pillars must be integral to all the key thematic areas making up the Forestry Sector Strategy:

- i. Sustainably managed resources and ecosystem services
- ii. Conducive policy process and operational environment
- iii. Responsive and transparent organisations and partnerships
- iv. Improved governance and effective service delivery
- v. Security of community tenure
- vi. Private sector engagement and economic development
- vii. Gender equality, social inclusion and poverty reduction
- viii. Climate change mitigation and resilience

Part 34 of shows how these eight pillars have been used to help define the main approaches that will be used to implement the actions required in all of the seven key thematic areas of the strategy.

2.2 VISION

Potentials of forest ecosystems, biodiversity and watersheds fully optimised for peoples' prosperity

2.3 GOAL

Forest ecosystems and watersheds sustainably managed and climate resilient through a decentralised, competitive and well-governed forestry sector providing inclusive and equitable incomes, employment and development opportunities

2.4 OUTCOMES

In order to achieve this goal, the Forestry Sector Strategy will deliver five major outcomes:

1. Forest productivity and sustainable supplies of products and services enhanced
2. Biodiversity, watersheds and ecosystem services improved
3. Livelihoods and forestry sector contribution to national economic development improved
4. Forestry sector organisations and institutions devolved, competitive, accountable and inclusive
5. Climate resilient society and forest ecosystems

Outcome 1: Forest productivity and sustainable supplies of products and services enhanced
To achieve this outcome we will: <ul style="list-style-type: none">• Increase the forest area being productively and sustainably managed• Promote wise and efficient use of forest products• Expand forest, tree and NTFP/MAP cultivation both inside and outside forest areas• Promote community based forestry and ensure community tenure rights and capacity in forest management, conservation and utilisation• Ensure transparent, predictable and stable supplies of forest products and services• Improve the harvesting technology for forest products and promote 'green' products• Develop tools and techniques to reduce the incidence and damage incurred by fire, pests and diseases• Strengthen forest planning through improved research and forestry information

Outcome 2: Biodiversity, watersheds and ecosystem services improved

To achieve this outcome we will:

- Use integrated landscape approaches and conservation corridors to manage, restore, conserve and improve ecosystems and habitats and genetic resources
- Promote the scientific, socio-economic, recreational and cultural values of biodiversity
- Adopt people-centred approaches for management of plant and animal diversity and for conservation of genetic resources and ecosystems.
- Control wildlife poaching and illegal trade in wild animals and plants and reduce human-wildlife conflict.
- Conserve biodiversity hot-spots and environmentally fragile ecosystems and landscapes such as in the *Chure* and elsewhere.
- Promote safety, food security and the aesthetic value of landscapes by enhancing and restoring land productivity and water quality.
- Promote integrated watershed management by strengthening up-stream and down-stream linkages
- Promote research and studies on ecology, habitats and genetic resources

Outcome 3: Livelihoods and forestry sector contribution to national economic development improved

To achieve this outcome we will:

- Diversify and optimise the utilisation of forest products and services
- Encourage and promote competitiveness in supply and value-addition of forest products and services
- Promote community based and private forest enterprises for livelihoods improvement and wealth creation especially for poorer people
- Promote forest-based job creation and incomes in all areas of the sector
- Give increased roles to the private sector to encourage investment in cultivating forestry crops (including trees and NTFP/MAPs); in forestry operations (including service delivery); forest-based enterprises and eco-tourism

Outcome 4: Forestry sector organisations and institutions devolved, competitive, accountable and inclusive

To achieve this outcome we will:

- Reform and create a more enabling policy and operational environment
- Make state forestry sector institutions competitive, decentralised, people-centric and downwardly accountable
- Enhance the transparency, accountability and rule of law of all community-based forestry operations and management regimes
- Define the role and functions of state forestry institutions and transfer some of the functions to other entities as appropriate
- Increase the participation, competency and leadership of women, indigenous and other poor and socially excluded groups and individuals in forestry sector institutions of all kinds
- Strengthen the governance and capability of forestry organisations at all levels
- Enhance partnerships, collaboration and coordination between sectoral agencies, academic institutions, civil society, the private sector and communities
- Improve the public availability of good quality forestry information at all levels
- Establish a separate national entity for financing forestry sector development

Outcome 5: Climate resilient society and forest ecosystems

To achieve this outcome we will:

- Support the adaptive capacity of local communities and forest ecosystems
- Promote community-based resilience and mitigation measures
- Establish forest carbon trade mechanisms by linking forests, biodiversity and watershed conservation and management with markets
- Develop and strengthen mechanisms for payment for ecosystem services
- Support low carbon development by promoting sustainable timber and renewable energy

2.5 MILESTONES

Milestone will be used to monitor progress in achieving the outcome of the FSS and will be regularly monitored. A mid-term review of the FSS (after 5 years) will be used to identify areas of weakness and make necessary corrections in the approaches.

Where we are in 2015	Where we will be by 2025
Forest Management	
<ul style="list-style-type: none"> • Forest (forest & shrub-land) covers 39.6% of Nepal's land area² 	<ul style="list-style-type: none"> • Forest (forest & shrub-land) covers at least 40% of Nepal's land area
<ul style="list-style-type: none"> • Approximately 50% of Nepal's forest is covered by forest management plans³ 	<ul style="list-style-type: none"> • All forest areas of Nepal covered by forest management plans (of various types) that are up to date, being implemented and publically available.
<ul style="list-style-type: none"> • Forest under community-based management comprises 39.7% of Nepal's forest area 	<ul style="list-style-type: none"> • Forest under community-based management comprises at least 60% of Nepal's forest area.
<ul style="list-style-type: none"> • Community forest covers 1.7m ha (29% of Nepal's forest area) 	<ul style="list-style-type: none"> • Community forest covers 2.33m ha (40% of Nepal's forest area)
<ul style="list-style-type: none"> • Collaborative forest covers 0.93% of Nepal's forest area 	<ul style="list-style-type: none"> • Collaborative forest covers 4.0% of Nepal's forest area
<ul style="list-style-type: none"> • Leasehold forest covers 0.73% of Nepal's forest area 	<ul style="list-style-type: none"> • Leasehold forest covers 1.5% of Nepal's forest area
<ul style="list-style-type: none"> • Private forest covers an area of 54,900 ha 	<ul style="list-style-type: none"> • Private forest covers 200,000 ha
<ul style="list-style-type: none"> • Approximately 0.4% (200,000 ha) of Nepal's forests being intensively managed 	<ul style="list-style-type: none"> • About 50% of Tarai and Inner Tarai forests and at least 25% of middle-hills and mountain forests being intensively managed.
Ecosystems and Biodiversity	
<ul style="list-style-type: none"> • Protected areas comprise 23.1% of Nepal's land area 	<ul style="list-style-type: none"> • No increase in protected areas. All existing areas conserved, managed and/or maintained as wildlife connectivity corridors between national and international protected areas
<ul style="list-style-type: none"> • Populations of tiger, rhino and wild buffalo 	<ul style="list-style-type: none"> • Populations of tiger, rhino, wild buffalo increased

² Updated figures on Nepal's forest area and growing stock will be provided by the National Forest Resource Assessment programme and will be available shortly

³ Approximate figure assumes there are forest management plans in place for all areas under community-based forest management (40% of total forest) plus for all protected areas (estimated as a further 10%) giving a total of 50%. Many of these plans are outdated and many are not being effectively implemented. Few are publically available.

are 198, 534 and 259 respectively	by at least 50% over 2015 figures
<ul style="list-style-type: none"> No commercial farming of common wild animal species 	<ul style="list-style-type: none"> At least five common wild animal species being commercially farmed
<ul style="list-style-type: none"> One central zoo in Kathmandu. 	<ul style="list-style-type: none"> Central zoo relocated and 4 additional zoos established at regional level
<ul style="list-style-type: none"> Zero poaching of rhino in 2013 	<ul style="list-style-type: none"> Zero poaching of rhino maintained every year
<ul style="list-style-type: none"> 11 botanical gardens established 	<ul style="list-style-type: none"> 15 botanical gardens established with better coverage in middle hills and high mountains and with community involvement
Climate Change	
<ul style="list-style-type: none"> Nepal's forest carbon stock currently not known 	<ul style="list-style-type: none"> Nepal's forest carbon stock increased by at least 10% over 2015 figure
<ul style="list-style-type: none"> Mean annual deforestation rate in the Tarai forests is 0.44% 	<ul style="list-style-type: none"> Mean annual deforestation rate in the Tarai is 0.05% and zero elsewhere.
Enterprise and Economic Development	
<ul style="list-style-type: none"> Forestry sector contribution to GDP is less than 5% 	<ul style="list-style-type: none"> Forestry sector contribution to GDP at least 7.5%
<ul style="list-style-type: none"> Forestry sector generates approximately 200,000 full-time equivalent jobs annually 	<ul style="list-style-type: none"> Forestry sector generates at least 1.2m full-time equivalent jobs annually
<ul style="list-style-type: none"> Annual import of timber is about 8,500 m³ 	<ul style="list-style-type: none"> Annual timber imports reduced by 50% with the requirement being made up from sustainably sourced domestic timber.
<ul style="list-style-type: none"> Annual export value of NTFPs/MAPs is about NRs 6 billion 	<ul style="list-style-type: none"> Annual export value of NTFPs/MAPs is at least NRs 18 billion
<ul style="list-style-type: none"> Mean value of annual income accruing from forest resources for a sample of forest dependent households is unknown⁴ 	<ul style="list-style-type: none"> Mean value of annual income accruing from forest resources for a sample of forest dependent households is about NRs 7,000
<ul style="list-style-type: none"> About 1.2 m³ of timber commercially supplied to the domestic market annually 	<ul style="list-style-type: none"> 12 m³ of timber commercially supplied to the domestic market annually
Watersheds	
<ul style="list-style-type: none"> Watershed condition of 50 districts classed as: 13 very poor; 6 poor; 7 marginal; and 25 fairly good (FAO, 2009) 	<ul style="list-style-type: none"> Watershed condition of at least 20% of districts upgraded to a higher condition category
Capacities, Institutions and Partnerships	
<ul style="list-style-type: none"> Low representation of women, <i>dalits</i>, ethnic and indigenous people in leadership positions on key decision-making forums in community-based forestry. 	<ul style="list-style-type: none"> Representation of women, <i>dalits</i>, ethnic and indigenous people in leadership positions on key decision-making forums in community-based forestry is proportionate to their population

⁴ Based on a baseline survey of forest dependent rural households (members of community-based forest management groups) taken across all ecological regions and representing a spectrum of socio-economic conditions

<ul style="list-style-type: none"> Forestry sector plans, decisions, budgets and other relevant information are inaccessible to the public 	<ul style="list-style-type: none"> Forestry sector plans, decisions, budgets and other relevant information made publicly available through web sites and other means
<ul style="list-style-type: none"> Public confidence in forest agencies is low⁵ 	<ul style="list-style-type: none"> Public confidence in forest agencies is greatly improved.
<ul style="list-style-type: none"> Transparency index for the forestry sector⁶ 49% indicators unfulfilled; 37% partially fulfilled and 14% completely fulfilled 	<ul style="list-style-type: none"> Transparency index for the forestry sector shows 50% of indicators completely fulfilled
<ul style="list-style-type: none"> Forestry Council does not exist 	<ul style="list-style-type: none"> Forestry Council established and fully functional.
<ul style="list-style-type: none"> Multi-stakeholder Forestry Sector Coordination Committee is non-functional 	<ul style="list-style-type: none"> Multi-stakeholder Forestry Sector Coordination Committee is fully functional and effective
<ul style="list-style-type: none"> National Forest Entity to finance forestry sector development does not yet exist. 	<ul style="list-style-type: none"> National Forest Entity established and made fully functional to finance forestry sector development
<ul style="list-style-type: none"> Forest sector laws, policies and plans conflict (within and outside the sector) and are formulated without appropriate review or consultation 	<ul style="list-style-type: none"> Forest sector laws, policies and plans harmonised (within and outside the forest sector) and prepared through evidence-based and consultative decision-making processes
Forestry Information Systems	
<ul style="list-style-type: none"> Mean annual increment averages 6 m³/ha in the Tarai and 3 m³/ha in hills and mountains 	<ul style="list-style-type: none"> Mean annual increment averages 8 m³/ha in the Tarai and 5 m³/ha in hills and mountains.
<ul style="list-style-type: none"> Growing stock of Nepal's forests not known 	<ul style="list-style-type: none"> Growing stock of Tarai, middle hills and mountain forests that is classed as degraded in 2015 increased by 10%
<ul style="list-style-type: none"> Database/Information and Management System (MIS) is weak and not integrated with M&E functions of the Ministry of Forests 	<ul style="list-style-type: none"> A comprehensive MIS is established and is fully integrated with M&E needs at different levels in the Ministry of Forests

⁵ As ascertained through an independently conducted baseline survey

⁶ Transparency in Nepal's Forest Sector: A baseline assessment of legal indicators, provisions and practices (2011)

PART 3 ACHIEVING THE VISION - 7 KEY THEMATIC AREAS

To achieve the vision of the FSS, and outcomes, actions will be taken in seven key thematic areas:

1. Managing Nepal's forests
2. Managing ecosystems and conserving biodiversity
3. Responding to climate change
4. Managing watersheds
5. Promoting enterprise and economic development
6. Enhancing capacities, institutions and partnerships
7. Managing and using forestry sector information

Each key thematic area is described in the following section showing its purpose and explaining why it forms part of the strategy. An indicative list of actions that will be taken over the next 10 years under each theme follows (including any identified priorities and key institutional responsibilities). These are the specific actions that will be promoted and supported under the FSS.

KEY THEMATIC AREA 1: MANAGING FORESTS

Thematic Purpose

Sustainably manage and improve the productivity of Nepal's forest to enhance its contribution to local livelihoods and national socio-economic development.

Why Is It Required?

Nepal's forest (including shrub-land) covers 39.6% of the country's land area. The percentage of forest under different forest management modalities in 2014 is shown below.

Management regime	Forest Management Modality	Percentage of Nepal's state forest
Community-based forest management	Community forest	29.3
	Collaboratively managed forest	0.9
	Leasehold forest	0.7
	Protected forest	2.3
	Religious forest	0.01
	Conservation areas & buffer zones	7.0
Biodiversity conservation	Protected Areas, National Parks and Reserves	10.0
Government managed forests	Government management (residual area)	49.9
Total		100.00

Nepal lost 0.57 million ha of forest between 1964 and 1991 with this rate of loss continuing today particularly in the Tarai and inner Tarai, where the annual deforestation rate is approximately 0.44%. In addition to deforestation, forest degradation (loss of growing stock) is also increasing. As a result, overall forest productivity is declining. The primary rationale for this key thematic area is to reduce forest loss and restore and enhance its productivity.

Forests, trees and forested ecosystems have potential to supply multiple products, services and benefits. However forest resources in Nepal are becoming depleted and are often under-utilised. For example, the potential sustainable supply of timber and firewood from 5.8 million ha of forest (1.4 ha in the Tarai and 4.4 million ha in hills and mountains) is estimated at 21.7 million m³/year (8.3 million m³ from the Tarai and 12.1 million m³ from the hills and mountains) giving an average potential productivity of 6m³/ha from the Tarai and 3m³/ha from hills/mountains. Very little of this potential productivity is systematically harvested or sustainably utilised. Over the past 3 decades community-based forest management, including community forestry, collaborative forestry and other modalities, has been developed and promoted to harness the productive potential of forests – with a focus on local people's benefit. Private forests tend to be more productively managed but forest areas are small and scattered. There is significant potential to increase tree cover and forest product production from private land to contribute to meeting the growing forest product needs of the country. Active forest management under all the different forest management modalities is needed to realise these benefits. Experience has shown that to do this requires involvement, engagement and partnership between communities, households, the private sector (including investors) and government.

Community-managed forests make-up a large proportion of accessible forest in Nepal. This includes Community, Pro-poor Leasehold, and Collaboratively managed forest and also Conservation Areas, Buffer Zones, Public Land Management, Protected Forests and Urban Forests. In all these situations local communities are the key stakeholders in forest management, conservation and as beneficiaries

and ways will be sought to enable communities to benefit more from active and sustainable forest management through the provision of forest products and environmental services.

Private forest comprises all trees and forests grown on private land and also includes leasehold forests leased by private institutions for commercial raw material production (normally plantation establishment). The category also includes the cultivation of NTFPs/MAPs on private land and institutional leasehold land. Ways will be sought to increase productive and sustainable management of all kinds of private forest resources.

Government forests are the remaining forests which have not been transferred into community-based forest management or the institutional leaseholder forestry. These are residual forests that will be managed by the government directly (in the interim period) and eventually through public-community-private partnership arrangements.

Forests falling in National Parks and Reserves are considered separately and are included in the key Thematic Area 2, Managing Ecosystems and Conserving Biodiversity. This entails more restricted approach to biodiversity conservation mainly implemented by the state agency, Department of National Parks and Wildlife Conservation.

The actual supply of forest products from Nepal's forests is far less than its potential - mainly because of conservative management prescriptions, lack of market linkages and ambiguous policies and government decisions. The regulatory system for harvesting, processing and transporting timber (and some other products) is complex, time-consuming and a disincentive to compliance. The system also lends itself to misuse as a means for reducing transaction costs on forestry business. There is a large gap between the supply and demand for timber, fuel-wood and NTFP/MAPs and the restricted supply of domestic timber has led to a significant increase in timber imports over the past decades. Assuring stronger and more secure tenure rights to communities, adoption of better and more appropriate silvicultural systems and more predictable rule of law will stimulate more active forest management and enhance the wood and NTFP/MAP supply.

What Needs To Be Done?

The following strategies and actions will be applied for all forest management modalities including community-based forest management, private forest management state forest management.

a. All Forest Management Modalities

- Stabilise the overall level of forest cover in Nepal at 40% of the land area with approximately equal amounts of forest areas in the Tarai (including inner Tarai), Middle Hills and Mountains.
- Promote and continue to support a diverse range of forest management modalities reflecting Nepal's socio-economic, cultural and environmental diversity
- Prepare and implement DFSPs in line with national forestry sector land-use planning policies using multi-stakeholder, decentralised and bottom-up processes to identify and agree areas for different forest management modalities
- Prepare, update and implement forest management plans for all forest areas under all forest management modalities
- Develop and revise operational guidelines for all forest management modalities based on consultation with relevant stakeholders and based on adaptive learning
- Promote and secure the supply of plantation materials to meet national needs through commercial private nurseries
- Clarify the role and authority of the four major actors (central government, local government, community and private sector) in forest management, harvesting/production, marketing, revenue sharing and taxation (if necessary be amending the Forest Regulations)
- Shift the role of government in forest management towards a more facilitating and enabling one, focusing on establishing and supporting partnerships, monitoring, coordinating, enforcing regulations and setting out transparent and enabling policies to achieve the FSS.

- Review and revise the Forest Act and Regulations in the light of this FSS to re-create an enabling legislative framework for implementation of this strategy.

b. Community-based Forest Management

The following strategies and actions will be implemented for all modalities of community-based forest management:

- Promote community-based forest management in national development planning (all modalities) as a priority sub-sector for Nepal, reflecting its important contribution to poverty reduction and its potential to enhance people’s livelihoods and contribute to economic development
- Expand the scale of community-based forest management (to cover 40% of Nepal’s forest area) to reflect its importance and in recognition of the pride that the country has in the achievements made so far.
- Recognise community based forest management as an entry point for integrated land-use contributing to food security, bio-energy, watershed and biodiversity conservation, climate resilience ecotourism and community development
- Empower and safeguard tenure security for forest user groups to access, manage, sustainably harvest, use, and sell forest goods and services
- Promote systems for Payment for Ecological Services that enable all modalities of community-based forest management to benefit from production and sustainable use of environmental services such as watershed conservation, biodiversity and forest-carbon
- Ensure that community-based forest management as a key complement for REDD+ in Nepal
- Recognise and define traditional and customary use-rights and needs of vulnerable groups including minority *janajati* groups who depend on forests (such as *chepangs* and *rautes*) and others such as *kusundas*, *dalits*, landless people, disaster victims, disabled people etc. in community-based forest management
- Provide a common and consistent support structure for all modalities of community-based forest management that covers: administration through the government institutional structure, financial support and provision of technical and social services (largely through civil society and the private sector)
- Ensure proportional inclusion and representation of economically poor and marginalised groups of people at all levels of leadership and decision-making processes in community-based forest management
- Promote gender equity, inclusive development and social and economic upliftment of poor, women, *dalits*, *janajatis*, *adibasi* and other marginalised people in community-based forest management planning and implementation
- Use community-based forest management to promote gender equality, inclusive development, and social and economic upliftment of poor and marginalised people.
- Promote the establishment of pro-poor revolving funds at group level by leveraging funds from other district based public agencies as DDC, Distinct Forest Development.
- Continue to support the establishment and functioning of networks and associations of local forestry groups (of all kinds) – particularly for marketing and product development and for ensuring gender equality and inclusive development

Within the broad category of community-based forest management there are different modalities that are applicable under forest management and socio-economic situations. All these will continue to be supported under the FSS with the following strategies and approaches for each modality:

a. Community forest management
<p>Tenure rights and accountability</p> <ul style="list-style-type: none"> • Expand community forestry in all regions of the Nepal using participatory land use planning e.g. DFSPs to identify potential areas • Safeguard and strengthen the autonomous status of CFUGs as provided in the legal provisions of

<p>the Forestry Act and Forestry Regulations</p> <ul style="list-style-type: none">• Recognise and include traditional and customary users and distant forest users in community forestry (particularly at high altitudes and in the Tarai)• Review and revise the Forestry Act (1993) and Forestry Regulations (1995) to make the CFUG (executive committee and general assembly) accountable for all forest operations and forest offences/non-compliance with CFUG rules in community forests• Establish a monitoring system (possibly involving local government) to ensure CFUGs and their representative bodies are well-governed and comply with the legal framework
<p>Regulatory and fiscal policy</p> <ul style="list-style-type: none">• Simplify permit systems for harvest and transport of forest products from community forests• Remove VAT from the sales of products from community forests (as for agricultural products)• Support and encourage CFUGs to invest their own funds in forest management/improvement and in livelihoods promotion – especially for poor and marginalised people• Establish a system of fair compensation for community forest converted to other uses
<p>Intensive forest management</p> <ul style="list-style-type: none">• Support intensification of community forest management through:<ul style="list-style-type: none">○ Classification of CFUGs based on their productive potential and support needs○ Provision of local level technical services to CFUGs e.g. trained local persons○ Demonstration and capacity development○ Linking CFUGs with markets to stimulate commercial yet sustainable management of community forests
<p>Capacity development</p> <ul style="list-style-type: none">• Strengthen the organisational and leadership capacity of CFUGs focusing on gender equality and social inclusion• Enhance the technical and social development capacity of forestry service providers (in both government and civil society) for supporting intensive forest management and livelihoods enhancement
<p>Gender equality and social inclusion</p> <ul style="list-style-type: none">• Establish and support sub-groups within CFUGs for women, dalits, janajatis, adibasi, specific users etc. and focus capacity development support around them• Establish representative GESI forums at national and sub-national levels comprising of gender focal points from different organisations to highlight issues, share experiences and empower marginalised groups• Encourage and support CFUGs to increase income and job opportunities for poor and marginalised households
<p>Income, employment and enterprise</p> <ul style="list-style-type: none">• Encourage community-private partnerships for investment in forest-based enterprises (including for ecotourism)• Support CFUGs to engage in commercial activities through mechanisms such as micro-credit/revolving funds, enterprises, income generation and land allocation• Identify private sector service providers to disseminate market information and other support for CFUGs to access markets for commercial products from community forests• Explore and pilot the use of IT and social media to provide market information for forest products from community forests
<p>Monitoring, knowledge management</p> <ul style="list-style-type: none">• Identify a system for self-assessment indicators for monitoring CFUG performance, finance, governance etc.• Document and disseminate lessons of community forest management performance, process and best practices to inform a wider audience (national and international)

b. Collaborative forest management
<ul style="list-style-type: none"> • Expand collaborative forest management in the Tarai and inner Tarai where there are residual blocks of national forests, based on participatory land-use planning and identification of potential areas from DFSPs • Undertake a comprehensive review with a view to reforming the collaborative forest management modality covering: <ul style="list-style-type: none"> ○ Decentralised and inclusive institutional structure ○ Managerial and financial autonomy ○ Transparent and accountable decision making ○ Equitable benefit sharing (within the CFMG) ○ Benefit sharing from collaborative forest management between government (central and local) and local people ○ Technical aspects of forest management planning, yield regulation and regeneration • Identify investment opportunities for private sector partnerships with CFMGs to enhance sustainable and productive forest management and marketing and processing of forest products (especially timber)
c. Pro-poor leasehold forest management
<ul style="list-style-type: none"> • Expand pro-poor leasehold forestry based on participatory land-use planning e.g. DFSPs to identify potential areas • Classify LFUGs into (i) those that are institutionally robust but need minor support; (ii) those that are institutionally strong but require additional inputs; (iii) those that are institutionally non-functional and may need revoking. Consolidate and strengthen the first two categories with well-defined support mechanisms and services. Explore options for the third category including the possibility of embedding with adjacent other modalities of community-based forestry. • Pilot and test models for scaling-up and clustering LHFUGs based around specific production models and integrating these with farming systems and value chains
d. Public land management
<ul style="list-style-type: none"> • Assess the availability of potential public land suitable for forestry purposes in Tarai and inner Tarai and expand the area coverage accordingly based on participatory land use planning and identification of potential areas through DFSPs • Review the legal status and provisions of public lands (including land under transmission lines, alongside highways and irrigation canals, on river banks and flood plains), which could be used for forestry purposes and build appropriate legal frameworks to ensure tenure rights on such land. • Review existing public land management models already initiated and put in place improved and appropriate support structures with actions for: legal and tenure strengthening; institutional support; financial support; and technical support • Strengthen the provision of services for inputs for LHFUGs (seeds/seedlings, seed money and technology etc.) through local government, NGOs and development partners.
e. Urban forestry
<ul style="list-style-type: none"> • Initiate and develop a new participatory Urban Forestry programme for identified municipalities in close association with municipalities and relevant local stakeholders • Promote urban forestry as partnership approach with the private sector (through corporate responsibility); local <i>tole</i> groups; cultural and religious institutions and other voluntary organisations with appropriate roles for each. • Establish a national urban forestry support unit involving government, local government/municipality and possibly the private sector e.g. through out-sourcing to facilitate and promote urban forestry. • Integrate urban forestry and urban forestry plans as an integral component of urban planning by municipalities through legal provisions and through bylaws on creation of open-space, tree planting for amenity, recreational facilities and safety • Raise awareness amongst urban dwellers on the significance of urban forestry

f. Religious and cultural forest management
<ul style="list-style-type: none"> • Strengthen the identification and legal status of religious and culturally valued sites to safeguard their preservation • Collaborate with religious and cultural institutions in partnership with the private sector to deliver support for biodiversity conservation and enhancement of the spiritual values of these sites
g. Buffer zone forestry
<ul style="list-style-type: none"> • Expand buffer zones to all the remaining National Parks and Reserves (Shivapuri-Nagarjun National Park and Dhorpatan Hunting Reserve) and expand buffer zone activities in other existing buffer zones • Incorporate the provisions of other community-based forest management modalities as appropriate into buffer zones and by incorporating the legal provisions for these e.g. rights to harvest, utilise and sell surplus forest products • Reform the legal framework (acts, regulations) applying to buffer zones to simplify processes and strengthen tenure rights of users and user groups including provision of authority of collection and sale of drift-wood gathered outside core protected areas • Clarify the roles and authority of different institutions to support buffer zones and forestry groups in buffer zones • Establish a national PA management fund by integrating the present bio-diversity fund and wildlife relief fund. Use this for transferring resources to low earning buffer zones and for providing immediate wildlife relief/compensation and other activities
h. Conservation area management
<ul style="list-style-type: none"> • Review and consolidate existing rules on conservation areas and develop these into a formal legal framework ensuring a transparent process, tenure and use rights and equitable benefit-sharing and forest product use provisions. • Provide judicial authority of conservation area offences to the appropriate District Forest Officer instead of deputing ‘liaison officer’ from the DNPWC. • Establish and strengthen community councils to manage conservation areas and transfer this responsibility to them in a phased manner.
i. Protected forest management
<ul style="list-style-type: none"> • Develop a new modality for protected forests including all necessary legal provisions and participatory models of conservation and forest management taking into consideration existing forest management modalities and experiences with these. • Identify landscapes that will benefit from application of protected forests (especially in the <i>Chure</i> Region) to conserve their ecological functions, biodiversity, water resources and links to upstream and downstream watershed management. • Promote and develop community-based approaches and develop integrated site specific and people-centric conservation practices for protected forests with defined roles and responsibilities of key stakeholders and benefit sharing mechanisms at each landscape level and by ensuring the rights of the indigenous and local communities. • Develop local incentive mechanisms for conserving protected forests such as sustainable micro-enterprises and other off-farm and off-forest income generating activities. • Promote community based PES mechanisms within and between protected forest areas to address climate change and upstream and downstream linkages.

c. Private Forest Management

The strategic approach to private sector forest management will be to promote and expand private involvement and investment in the production of forest products from public and private land to enhance sustainable supplies of forest products and services, to enhance rural incomes, create ‘green’ jobs and to contribute to national economic development and inclusive growth. The following strategies and actions will be implemented for private sector forest management across all regions of Nepal:

Regulatory and fiscal policies

- Review and revise Forest Act and Regulations on the light of the strategy to promote private sector involvement in forest management:
 - To enable management of existing, natural forests (not only degraded or bare land) under leasehold arrangements for sustainable commercial production
 - To make annual rental fees (for leasehold forestry) compatible with incentives for sustainable wood and NTFP/MAP production
 - To Simplify permit systems for forest product harvesting, logging, transport, processing and marketing for private, leasehold and other forest management modalities
- Exempt forest products from private land from VAT (as for agricultural products)
- Review the present royalty system on timber and put into place a revised system based on market prices for timber and international best-practice

Support for private forestry

- Engage, promote and facilitate private sector production and marketing of seedlings (of both trees and NTFP/MAPs) and confine government seedling production to research, demonstration etc.
- Support the establishment of private-farmer partnerships for guaranteed buyback of systems for on-farm tree and other products
- Strengthen programmes to stimulate public awareness of the economic and social benefits of private and commercial leasehold forestry

Institutionalisation

- Facilitate the promotion of private forest owners and managers in establishing and widening their network of cooperatives and associations.
- Include private forest owners and managers as members in the multi-stakeholder forestry forums at different levels
- Support the establishment of partnerships between the private sector, communities and local government and national forestry agencies for stimulating intensive forest management and increased forest productivity.

d. Government Forest Management

The strategic approach for government forest management is to gradually bring such areas into different forest management modalities to improve their quality and productivity, with only residual forests remaining under direct state management. Transfer of residual government forests into other appropriate community-based, commercial leasehold forests or other modalities will be planned in a transparent and systematic manner using participatory land-use planning at a broad landscape level (DFSPs) and in accordance with national land-use plans and laws. Any remaining residual areas will remain under government management with different strategies being applied for such areas in different ecological regions:

Tarai and Inner Tarai

Tarai and Inner Tarai forests are characterised by their potential high productivity, relatively easy access, high value forest products and susceptibility to illegal logging. The forest management strategy for Tarai and Inner Tarai forests will be to:

- Bring forest under all forest management modalities under intensive management (resulting in high productivity and increased supplies of forest products from sustainable forest management planning) including from community-based forest management, private forest management and government forest management in the residual areas as identified under DFSPs
- Establish government- private partnerships for commercial leasehold forestry and also for residual government managed forests
- Promote and expand private forestry (farm forestry and agro-forestry) on non-forest land and expand public land forestry on community or non-forested land

- Facilitate and support forestry enterprises and industries
- Develop forestry practices for reclaiming and managing flood plains and stabilising river-banks within and outside forest areas using assisted natural regeneration and other appropriate interventions
- Make information publicly available on annual production and supply of forest products available to facilitate the development of forest-based enterprises that require guaranteed supplies of raw material and to foster a competitive market for these
- Identify means for speeding the sale of harvested forest products from forests under all management modalities to reduce losses due to deterioration
- Enhance professionalism, technical proficiency and competitiveness in harvesting and logging of forest products through simplified licensing mechanisms

Chure

The Chure is characterised by fragile soils, unstable geology and vulnerability to flash floods, soil erosion and drought. In this zone, forests play a particularly important role in soil and water conservation. The strategy for managing residual government forests in the Chure is to:

- Define the boundary of the vulnerable Chure area and delineate this on district land-use maps to incorporate into DFSPs for each district
- Identify where vulnerable Chure forests are not yet under any existing forest management modality and develop a plan for phased transfer into various potential management modalities based on participatory identification of potential management modalities.
- For existing forest management modalities develop and implement forest management plans primarily focusing on conservation of Chure landscape through integrated soil and watershed management and promotion of forest cover and species that have soil binding properties and economic value such as grasses and NTFPs and using known technologies.
- Identify opportunities for PES and linking upstream/downstream land and water users and develop these into specific programmes to be supported
- Identify and delineate appropriate sites for quarrying stones, boulders and sand with adequate socio-economic and environmental safeguards
- For residual government forests develop forest management plans largely based on forest and soil conservation (low productivity and low intensive management) working closely with the Department of Soil and Water Conservation and local stakeholders

Middle Hills

In the middle hills the strategy is for all forest areas to eventually be transferred to community-based forest management modalities that result in sustainably managed forests meeting local forest product and socio-economic needs including incomes and jobs. The strategy for government forest management is to:

- Identify any residual government forest areas through participatory land-use planning and identify alternative forest management modalities for this including incorporation into existing community-based management areas

High Mountains

High mountain forests are less accessible for forest management purposes and local populations are often sparse. Immediate productive potential for timber is limited by poor road access although these forests are rich in biodiversity and NTFPs/MAPs and have considerable potential for eco-tourism. The strategy for forest management of government forests and pasturelands in high mountain areas is for less intensive management focusing on biodiversity conservation, wildlife (including wildlife farming), NTFPs/MAPs and eco-tourism in partnership with local communities and with private partnerships for tourism promotion and for NTFP/MAP marketing and development.

- Identify high altitude landscapes and forests within them into potential and existing forest management modalities through participatory district-level (DFSPs) and broader regional planning including cross-border planning
- Based on this, identify residual areas of government forest and develop plans for their phased systematic transfer into the preferred management modality

- For the residual areas, develop low intensity forest management plans focusing on forest conservation for biodiversity, pastureland, NTFP/MAP management and cultivation and ecotourism.
- Additionally, support the existing community-based forest management groups in these areas to incorporate transhumant practices that ensure graziers rights and traditions of access to pasture and forest products
- Promote private forestry to maximise benefits from abandoned farm land and fulfil the national commitment of maintaining 40% forest cover.
- Where appropriate support extensive managed forest/pasture landscapes based on local knowledge and practices with low intensity management over extensive areas
- Identify areas for potential partnership with private entrepreneurs and/or civil society organisations for ecotourism development through a commercial leasehold forest management modality especially where adjacent to trekking routes, national parks/buffer zones and other tourism destinations

KEY THEMATIC AREA 2: MANAGING ECOSYSTEMS AND CONSERVING BIODIVERSITY

Thematic Purpose

Conserve and sustainably manage Nepal's diverse flora, fauna and ecosystems and promote their scientific, socio-economic, recreational and cultural values.

Why Is It Required?

Nepal is a global biodiversity hotspot. Under various international treaties and obligations Nepal is committed to conserving its rich biodiversity resources. The country's wildlife and ecosystems have become major international tourist attractions and generate significant revenue whilst in many areas local people still rely on local plant and animal resources for their subsistence livelihoods.

Currently 23% of the area of Nepal is set aside for conservation of ecosystems and genetic resources. This includes National Parks (10,853 km²), Wildlife Reserves (979 km²) and Hunting Reserves (1,325 km²) with Buffer Zones making up another 5,602 km². Not only do these protected areas conserve a large number of species and ecosystems, but they also have value for recreation, tourism and the local economy.

People-centred and community-based approaches linking conservation with the development and livelihoods of local people have had positive effects over the past two decades with some successful conservation impacts on flagship species such as tiger, rhino and wild buffalo and a reduction in human-wildlife conflicts. There have also been several successful high profile translocation programmes for elephants and blackbuck that have enhanced these conservation efforts. Apart from its network of protected areas for in-situ conservation, Nepal has 11 botanical gardens, a central zoo and several small regional zoos and breeding centres for elephant, vulture and gharial. These contribute to ex-situ conservation of plants and animals and also serve as resources for scientific study, conservation education and recreation.

Conservation in Nepal still suffers from major challenges. Many threatened plant species and middle-hills ecosystems are poorly represented in current protected area network and botanical gardens do not properly represent species from the high mountains and the eastern Tarai-Siwaliks. Despite some successful conservation efforts the number of threatened bird species continues to increase whilst climate change, infrastructure development and urban expansion continue to affect biodiversity and wildlife habitats and erode the integrity of the protected area network. Human-wildlife conflicts still persist and compensation systems are inadequate. Illegal trade and poaching of wild animals and plants remain serious threats to conservation although they are now being tackled through joint efforts by park administration, Nepal police, Nepal Army and civil society. The concentration of visitors in only a few protected areas is a challenge because it has local effects on the environment and on local consumption of resources. The legal framework for protected areas is still contested around the processes of protected area declaration, governance, power-sharing between government and local citizens and benefit-sharing. Administrative structures and capacities, particularly of specialised staff of DNPWC, are insufficient to manage the large protected areas in Nepal and to implement people-centred conservation approaches whilst DPR lacks the capacity and resources to meet current research needs such as bio-prospecting, DNA barcoding and pest risk assessment. Both DNPWC and DPR suffer from governance issues including outdated working styles, centralise decision-making and limited transparency and accountability in common with other departments of MFSC.

What Needs To Be Done?

a. Reforming policies and laws

- Review the legal and policy framework for conservation and management of biodiversity through a consultative and inclusive process and determine changes that are required to (i) conform with decentralised governance; (ii) safeguard gender equity and social inclusion; (iii) streamline

<p>relations between central and local government; (iv) implement a more extensive landscape-level approach to conservation (rather than the enclave approach implicit in the existing PAs and (v) ensure delivery of Nepal's international obligations in the changed socio-political context following consultative and inclusive processes. Based on this review implement the recommended agreed actions</p> <ul style="list-style-type: none"> • Review and update management of existing PAs on a site by site basis including the strength and role of the Nepal Army, a wider role for buffer zones and strengthened involvement of local communities and local government as beneficiaries and decision-makers for PAs. • Clarify and if necessary revise, policies and laws to enable wildlife farming/research and breeding (for commercial purposes) including captive elephant management
<p>b. Conserving and managing species and ecosystems in-situ</p> <ul style="list-style-type: none"> • Formulate and implement landscape level management plans for each PA including ecosystem assessment, resource inventory, habitat management, local participation and incorporation of indigenous and customary use practices. • Prepare and implement participatory conservation plans for endangered species of wild animals, birds and reptiles incorporating the provisions of non-commercial breeding centres, habitat conservation (including nesting sites and wetland) and extensive public awareness and actions. • Review and update Species Conservation Action Plans -SCAP (tiger, elephant, rhino, snow leopard and red panda) and make SCAP of other endangered species (Musk deer, Gaur etc.) • Explore potential options for the conservation of representative ecosystems of the country that without further increase in the area covered by PAs e.g. through management agreements, existing networks of community-based forest management areas, incentives and better use of existing PAs. • Assess the status of invasive alien species in PAs and identify and implement appropriate remedial and preventive measures. • Increase awareness, collaboration and cooperation with police, customs, agriculture and related agencies for the enforcement and implementation of national quarantine, sanitary and phyto-sanitary legal provisions for preventing the entry of invasive alien species. • Strengthen social and environmental safeguards while implementing development activities such as large scale infrastructure, construction, hydropower, transmission lines, highways, irrigation canals, railways etc. in areas of high biodiversity significance. • Review and revise biodiversity monitoring systems complementing the National Biodiversity Strategy and Action Plan including community-based biodiversity monitoring and citizen scientists.
<p>c. Conserving and managing species ex-situ</p> <ul style="list-style-type: none"> • Extend the network of zoos across the country utilising a range of management modalities including partnerships between government, communities and private entrepreneurs and investors • Enhance the conservation education and demonstration functions of Nepal's botanical gardens and increase the species numbers and coverage across different ecological regions. • Translocate and re-introduce endangered species based on ecological studies • Conduct regular botanical surveys and update the national herbarium including a more comprehensive and publically accessible database of Nepali plant species
<p>d. Reducing human-wildlife conflicts</p> <ul style="list-style-type: none"> • Develop a more systematic approach to reducing human-wildlife conflict through local preparedness and response, public awareness raising and education, warning systems, skilled human resources and appropriate technologies. • Decentralise and simplify the relief provisions to compensate for wildlife damage and use incentives to promote shifts in cropping patterns and land use in areas surrounding PAs. • Establish and strengthen the function of wild animal rehabilitation centres
<p>e. Controlling wildlife poaching and illegal wildlife trade</p> <ul style="list-style-type: none"> • Strengthen cooperation, collaboration and networking among national and international

<p>agencies/institutions to streamline efforts to combat wildlife poaching and illegal trade.</p> <ul style="list-style-type: none">• Enhance institutional, technical and logistical capacity of various organisations and networks (such as NTCC, NWCCC, WCCB at the centre and in districts and by improving communications and knowledge sharing.
<p>f. Increasing employment and economic prosperity</p>
<ul style="list-style-type: none">• Establish breeding centres of common wild animals for commercial farming and promote farming and cultivation of commercially valuable flora and fauna through public-private partnerships and through charitable organisations• Diversify and expand wildlife tourism to encompass all PAs across the country through infrastructure development, local capacity building, tourism services and private sector partnerships and by putting in place different entrance fee structures for different areas.• Explore opportunities for enhancing local jobs and the local economy inside buffer zones and adjacent to PAs through community-private partnerships and investment.• Support valuation and regulated payment schemes for the ecological services of forests including both carbon and non-carbon benefits with wildlife/biodiversity conservation premiums• Support the development of floriculture and commercial flower seed production focusing on Nepal's distinctive and internationally recognised flower species in association with private sector partners and investors.
<p>g. Safeguarding Nepal's international agreements and obligations</p>
<ul style="list-style-type: none">• Participate in the global dialogue on conservation of biodiversity and ecosystems and within Nepal focus on investment in actions to retain the qualities of the country's World Heritage Sites and Ramsar Sites as designated.

KEY THEMATIC AREA 3: RESPONDING TO CLIMATE CHANGE

Thematic Purpose

Strengthen the climate resilience of people, communities, forests and ecosystems and mitigate global climate change through REDD+ approaches.

Why Is It Required?

Review of progress on climate change and forestry has shown that there have been some important achievements in adaptation and mitigation. The government formulated its climate change policy in 2011 and has prepared the National Adaptation Plan for Action (NAPA). The policy aims to increase the resiliency of communities and forest ecosystems to climate change and stipulates that funds will be mainly channelled through local communities for this. Climate affects all areas in the forestry sector and hence actions on climate change need to be integral to all 7 key thematic areas.

The forestry sector is a particularly important one in the context of Nepal's climate change agenda. The critical importance of forests as carbon sinks and as potential sources of carbon emissions when forests are lost or become degraded is recognised by the REDD+ process that Nepal is undergoing. The Forest Carbon Partnership Facility of the World Bank is providing assistance for preparation of Nepal's REDD+ strategy – this will be an integral part of the FSS outlined here. Forests themselves also suffer from the adverse effects of climate change including increased forest fire incidence and increased infestation with alien species. Effects of climate change on forest growth, productivity and regeneration are also likely but are as yet unclear. However the resiliency of forests ecosystems needs to be enhanced to cope with increased temperatures, droughts and flooding in different locations.

Since forests provide important climate change related services – especially carbon sequestration and carbon emissions reduction, systems for Payment for Ecological Services form a potentially viable approach for the forestry sector that can contribute to forest conservation and local community economic development. Further piloting is required to test this. In addition, local forestry groups provide a strong institutional base for community-based adaptation planning and implementation. As inclusive and well-governed local institutions, community-based forest management groups of various kinds can be effective for implementing actions to enhance the climate resilience of the most vulnerable households. Their role is being increasingly recognised in NAPA and in local adaptation plans.

What Needs To Be Done?

Nepal's strategy on climate change for both adaptation and mitigation as these relate to the forestry sector are already documented in NAPA and in the processes of REDD+. These strategic approaches will be integral to this FSS with the additional element that all approaches being used for implementation of the FSS will incorporate enhancing climate resilience of forests and of the most climate-vulnerable people who depend on them.

a. Forestry strategy for climate change adaptation

- Implement the forestry-related provisions of NAPA and LAPAs through the approaches indicated in the FSS e.g. participatory, transparent, community-based and gender and socially inclusive
- Adapt and improve forest management plans to safeguard the functional diversity of forest ecosystems and by enhancing the forests resilience to climate change (climate proofing forests) e.g. by site-based actions and locally applicable technologies to manage fires, enhance forest water storage and regulate water runoff, stabilise soils and resist invasive alien species and pests.
- Increase awareness and capacity of all stakeholders (especially through community-based forest management groups at local levels) to respond to climate change and increase their resiliency.
- Promote income diversification to amongst the most vulnerable household members of community-based forest management groups to enhance their resilience
- Strengthen the capacity of local forest groups of all kinds engage in LAPA processes and become

key implementers of LAPAs.

b. Climate change mitigation and REDD+

- Integrate REDD+ objectives with forestry sector planning by focusing on poverty alleviation, economic growth and biodiversity conservation.
- Mitigate identified drivers of deforestation and forest degradation by integrating them into forestry sector planning at all levels (site-based plans, operational plans, DFSPs and national plans)
- Clarify forest carbon rights and strengthen access of local communities to carbon benefits in an equitable and transparent way
- Support Nepal's participation in financing mechanisms for both regulated and/or voluntary carbon markets and ensure equitable benefit sharing to support livelihoods of poor and marginalised people.
- Scale up and expand the coverage of PES approaches based on lessons from earlier pilots
- Integrate systems for measuring and monitoring forest carbon and forest carbon emissions into forest resource assessment at all levels from national to local sites
- Promote commercial approaches to bio-energy and other alternative energy through community-private partnerships
- Increase the efficient use of wood and processed wood products as construction and furnishing materials.
- Increase the efficiency of wood using industries to reduce wood waste and make better use of forest resources.

KEY THEMATIC AREA 4: MANAGING WATERSHEDS

Thematic Purpose

Improve and restore land, its sustainable productivity, its environmental services (soil and water conservation and aesthetic value) and its climate resilience to enhance the livelihoods and food security of rural households.

Why Is It Required?

Nepal is prone to high levels of soil erosion and watershed degradation due to its geology, mountain topography and monsoon climate. This results in high levels of erosion and surface run-off and high frequency of landslide. Other factors such as improper land use resulting in forest degradation and soil compaction, excessive grazing, use of unsuitable agriculture practices on steep slopes, road construction in fragile landscapes with insufficient attention to integrated conservation measures and haphazard collection of building materials from river courses especially in the Chure and Bhabar areas have further exacerbated these problems of land and watershed degradation. Climate change is also having a significant effect – especially due to the greater frequency of extreme climate events (high rainfall, droughts and floods) and widespread rural road construction.

The Department of Soil Conservation and Watershed Management has effectively undertaken preventive and rehabilitative programmes coupled with educational and awareness-raising programmes to improve and restore watched condition. These programmes have focused on land treatments to protect critical areas and to restore already damaged areas. These have resulted in some important but usually only localised impacts. For example, degraded land has been rehabilitated and gullies and landslides have been stabilised reducing the threat to local people's life and property. However, because of the physical scale of these programmes, physical impacts are still relatively insignificant when compared with the actual requirements for soil and watershed conservation at a national level and many areas have remained unattended and untreated. Soil conservation and watershed management services are currently provided through the DSCWM offices in 56 districts and cover less than 10% of the areas of these. Despite a number of issues, challenges and threats, a lot of potentials/opportunities exist. Demand for the services of DSCWM remains high in all parts of the country.

Stability and condition of watersheds affects human safety, food security and biodiversity conservation. Soil and watershed conservation actions aim to increase water resources (quality and quantity) for drinking, irrigation and hydropower – all of which are essential for the country's prosperity and to improve rural livelihoods.

The overall strategy for managing watersheds in Nepal is to increase the extent of action on the ground by focusing on identified hotspots/sites (as at present) and also by adopting new institutional arrangements and partnerships to broaden responsibility for watershed management away from being the sole responsibility of DSCWM. Actions will also be concentrated in the vulnerable Chure region. This means establishing effective partnerships involving local government and DSCWM and also including other natural resource and non-natural resource sectors (such as agriculture, livestock, roads, hydropower and possibly others) along with community groups (of various kinds) and the private sector (especially private landowners).

What Needs To Be Done?

a. Policy and legal framework

- Develop an updated policy and regulatory framework for soil and water conservation that facilitates the new strategy of institutional partnerships for implementation and action, river basin planning and landscape approaches.
- Strengthen the role of DSCWM at the district level to ensure local accountability as well as better coordinated action across various sectors.

- Promote gender equality, inclusive development and social and economic upliftment of poor, women, dalits, janajatis, adibasi and other marginalised people in soil and watershed plans and programmes.

b. Re-organising and capacity building

- Re-organise DSCWM to enhance its role as coordinator and facilitator rather than implementer of soil and watershed management actions – especially at local government level.
- Enhance technical capacity, leadership and communication, professionalism, positive working culture and mind-set of DSCWM staff

c. Planning and coordinating for integrated watershed management

- Develop a regional plan for the Chure using a participatory landscape approach that enables critical sites to be identified, local communities and civil society to be actively involved and local institutional mechanisms to be used for financing and implementing site treatment and resource conservation activities along with measures for enforcing proper excavation techniques and sites for stones, gravel and sand extraction.
- Increase the coverage of soil conservation and watershed management activity across the country
- Ensure that all relevant sectoral plans at district level (including local development plans) incorporate soil and watershed conservation components.
- Strengthen local level coordination and collaboration for consolidated soil, water and watershed conservation and management measures.
- Increase water and soil conservation through appropriate and low cost technologies including technologies for water harvesting and water conservation and for conservation farming in different ecological zones
- Formulate and implement systems for Payment for Ecosystem Services (PES) methodologies for managing and financing watershed services.

d. Conservation education and awareness

- Coordinate with development partners and government around infrastructure development projects to ensure best practice in implementation of soil and watershed conservation actions e.g. roads, hydropower etc.
- Increase public awareness, knowledge and capacity on soil and water conservation, land productivity improvement, land stabilisation and disaster reduction methods and practices through extension, communication and demonstration
- Support and implement programmes focusing on disaster management, climate change adaptation and overall environmental awareness for local communities in partnership with other sectoral agencies, civil society and local government

KEY THEMATIC AREA 5: PROMOTING ENTERPRISE AND ECONOMIC DEVELOPMENT

Thematic Purpose

Promote involvement and investment by the private sector in growing forestry crops (including NTFPs/MAPs), carrying out forestry operations, managing forest based enterprises and industries, promoting eco-tourism and enhancing the growth of forest-based enterprises of all kinds for increased rural employment, economic growth and opportunities for poor and marginalised people to move out of poverty.

Why Is It Required?

Forests (including shrub-land) have significant potential to contribute to small and medium scale industrial and economic development. Despite this, the forestry sector has contributed very little towards national economic and local economic development for a number of reasons. The MPFS attempted to stimulate growth of the commercial forest management sector – but this was largely unsuccessful. Amongst the approaches for doing this, commercial leasehold forestry proved to be particularly ineffective. Nowadays there are more areas of forest under controlled management and after several decades of growth resource availability in community forests far exceeds local subsistence requirements. This then represents an opportunity to market and utilise this surplus.

The Forest Act (1993) and the associated regulations indicate a diversity of potential productive forest management modalities for national forests that is matched by increasing growing stock in forests where protection has been successful (such as community forests in the middle hills). However these opportunities are weakened by excessive regulation on harvesting, movement, transport and sale of forest products that then creates a disincentive for commercial forest management. Considering the large area of forests, only small quantities of forest products are legitimately supplied to industry from managed forest and overall supplies of forest products are far less than could potentially be produced. Not only does this reduce government revenues, it also limits the expansion of the wood-using industry and the commercialisation of the forest sector with associated benefits such as cash incomes and jobs in rural areas.

Royalty rates act as disincentive to commercial utilisation because they do not relate to the costs of production nor to the value of products themselves. Wood traders and consumers feel that the present royalty rates for wood are set too high and comparison of Nepal's royalty rates with those of other countries seems to confirm this. VAT is imposed on timber sales and some NTFPs produced from private land whereas there is no VAT on the production and sales of agricultural commodities thus stifling private farmer involvement in commercialisation of such products. Government still gives preferential treatment to the Timber Corporation of Nepal (TCN) for the supply of timber (logs) at reduced rates although even despite this TCN is unable to operate on a fully commercial basis. This contributes to market distortions and creates a disincentive for private investment.

The private sector, although recognised as being critical to the achievement of economic goals in the forest sector is rarely engaged in policy dialogue in a meaningful and productive way and a representative body with business expertise and knowledge of the commercial aspects of the forest sector and product markets is lacking at present. At the same time, current policies and regulations tend to restrict and hinder rather than stimulate private investment in forestry.

For the 5,000 + wood-based industries registered and operating in Nepal, impractical environmental standards, dual taxation, inconsistency in the auction system, lack of private sector participation in policy-making process and lack of transparency in decision-making processes resulting on erratic and confusing regulations creates uncertainty and challenges to the growth of wood-based industries. At the same time a considerable amount of unregulated trade and utilisation of forest products exists - partly a consequence of the excessive regulatory restrictions placed on the wood-using sector.

Taxation, loan regulations and land-related laws are also not favourable for the establishment of small-scale private and community-based enterprises that need bank loans and tax breaks to enable them to become established. Compared with this, larger scale industries and other sectors have easier access to finance, taxation opportunities and banking facilities.

What Needs To Be Done?

a. Policy and legal framework
<ul style="list-style-type: none"> • Recognise the private sector as key partners for commercialisation and economic development in the forestry sector and establish formal institutional partnerships and structures to enable them to be actively engaged • Revise fiscal and legal provisions relating to forest based industries at all scales in Nepal including revising ceilings on land-holding for private forestry, the leasing process of government forest land for private managers, taxation and tax incentives and VAT (treating forest products from private land on a par with products from agriculture). • Simplify the procedures and guidelines to regulate the harvest, transport, processing, value addition and marketing of forest products from private forests and various other management modalities used in national forests. This includes simplifying the mechanism to differentiate/tag the origin of the products (whether from national forest or private land) to ease the transportation, certification, taxation and royalty. • Establish links with financial institutions to make forestry a priority sector that will provide credit facilities and loans to private tree growers and forestry entrepreneurs similar to those available in the agriculture sector. • Review and revise regulations for the establishment of systems for micro-credit and revolving funds with a view to improving the access of small forest enterprises to start-up finance – especially those creating job opportunities and other benefits for women, poor and other disadvantaged groups. • Revise the status of TCN with a view to full privatisation • Strengthen measures to reduce illegal trade in forest products by reducing barriers to legality (especially administrative and procedural barriers); improved monitoring and tracking systems; certification and deregulation of price controls and market intervention by government.
b. Capacity building of partners and stakeholders
<ul style="list-style-type: none"> • Develop improved understanding and skills amongst government, community and civil society of business and enterprise management and use of new technologies related to production, harvesting, processing, packaging, branding, marketing and exporting of forest products. • Establish and deliver CTEVT accredited training modules/courses to develop a cadre of skilled workers in various operations in the forestry sector (including harvesting, logging, saw-milling, carpentry etc.) and gradually replace untrained workers in the sector by accredited workers giving priority to women, poor and socially disadvantaged persons. • Enhance the safety and security of forestry workers as per the existing labour laws and raise awareness amongst communities, the private sector and other stakeholders of forest product laws and regulations, labour laws and Nepal’s national and international commitments on these.
c. Increase and intensify the sustainable supply of forest products
<ul style="list-style-type: none"> • Increase the area of forest (under all forest management modalities) coming under predictable and sustainable forest management regimes that will supply raw materials (timber and non-timber) to forest based industries. • Support the development of private-community partnerships for product sales, by-back agreements and investment into forest resources to stimulate engagement of community-based forest management groups of different kinds in commercial forestry • Promote cultivation and domestication of indigenous and high value trees and NTFPs/MAPs on private land including endangered species by providing seeds, seedlings, technologies, policy supports

- Reclassify forest products in light of new technology and use (such as wood and timber) and revise wood-grading system for better product valuation.
- Create incentives for private investors to invest in modernising their forestry operations, equipment and practices that minimise losses, improve product quality and efficiency and enable better harvesting, conversion, handling, storing, and processing of different products.
- Support to develop professional service provision in government, communities and private sector to raise quality forest crops, and to harvest, convert, process, and market the forest products.
- Enhance/extend national and export market for MAPs and NTFPs by supporting in analysis, quality assurance and certification.
- Promote partnerships between forest management groups and the private sector to increase investment and management of eco-tourism enterprises and recreation in forests for employment and revenue generation.

d. Stimulate market demand for forest products

- Conduct awareness campaigns amongst the public and timber enterprises to create a better understand and demand for legitimately sourced forest products and support these campaigns by increasing the market availability of products that are certified, fairly traded, bona fide and identifiable as being of local origin
- Carry out market research to identify consumer needs and preferences for forest products of various types.
- Support value-chain studies and identification of new product uses and markets (both national and international) working closely with potential investors and entrepreneurs

KEY THEMATIC AREA 6: ENHANCING CAPACITIES, INSTITUTIONS AND PARTNERSHIPS

Thematic Purpose

- To increase capacity, competency, inclusiveness and leadership of human resources with opportunities in education, training, coaching, counselling and career development in order to achieve the goal of forestry sector.
- To enhance performance and potentials of human resources with effective management (motivation, team building, process improvement, delegation, decision making etc), HR system and organisational development (communication, change management, change in working culture, belief and values).
- To make the forestry sector institutions competitive, decentralised and people-centric, and create a conducive working environment through well-defined functions and improved governance.
- To ensure increased participation and leadership of women, Dalit, Adibasi, Janajati, socially excluded groups and poor in forestry resources management, decision-making and benefit sharing.

Why Is It Required?

Forestry organisations and the human resources within them are the main drivers for the planning implementation and monitoring of forestry sector policies, legislation, plans and programmes. The changed socio-political context (poverty, migration, urbanisation, change in political system), economic contexts (free economy, globalisation, demands for green products) and environmental context (the climate change movement) along with the emergence of the active civil society have necessitated changes in the forestry sector organisations to enable them to be more competitive, productive, context specific and accountable to the people.

After the implementation of MPFS, reorientation and re-training of forestry staff were emphasised to help them shed their traditional 'police' roles and adopt new roles as the people's partners in development. For this, the regional training centres were established and institutionalised in all 5 development regions. These training centres together with other donor supported projects under the MoFSC organise a larger number of trainings covering a wide range of topics. This contributed significantly towards attitudinal and capacity shifts in the forest sector. In addition, forestry education has expanded and there are now several different institutions offering forestry-related qualifications from certificate level to PhD. Despite such a progress, several issues and challenges exist. The forestry education curricula have not able to capture the emerging needs of the MFSC. Similarly, the training has not able to make much needed changes in the attitude and behaviour of staff and the changes in the way they work. Almost all programs identified that a lack of specialist staff was a constraint to more effective implementation. Human Resource Management has been a neglected function in the MFSC lacking many of the key HR systems that would characterise a modern and effective government agency such as guidelines and principles for: recruitment, terms and conditions, code of conduct, transfer, performance appraisal, career path, counselling, training, promotion and grievance handling. MFSC also lacks a comprehensive and transparent human resources information database.

Entrenched cultural and attitudinal issues are still important constraints for forest sector institutions and individuals. There are still significant issues relating gender, equality and social inclusion that apply equally to community based, non-government, and government organisations in the forest sector. Organisations are similar to living organisms; therefore, they are dynamic in nature demanding

regular change in their structures, styles, objectives and functions. However, the existing administration system is heavily characterised by over administration⁷ and weak governance. As a result, institutional and governance issues such as inefficiency, ineffectiveness, corruption, political interferences, poor coordination and collaboration, demoralisation of staff, declining professionalism and social images have remained important issues to address.

Attempts have been made to constitute standing committees representing different stakeholders to contribute to sector governance at different levels. However, these have not been properly institutionalised. Since 1990 there have been many changes in Nepal's institutional landscape including the rise of an active and vocal civil society, decentralised government at district and VDC levels, expansion of community based organisations and their capacity, increasing role of private sector and greater public awareness of the need for transparency and accountability amongst government institutions. To keep pace with these changes, develop partnership with multi-stakeholders and enhance performance the government organisations need to change the way they function with appropriate reforms.

To strengthen performance and capability of forestry sector organisations and human resources the following the strategy emphasises action on:

- a Human resource development and management
- b Institutional and partnership development

What Needs To Be Done?

a. Human Resource Development and Management

a. Policies principles and guidelines
<ul style="list-style-type: none"> • Develop and adopt HRM/D principles and policies with affirmative actions for the inclusion of women, Dalit, Janajati, Adibasi and others socially excluded groups'; selection and appointment of right person for the right jobs; performance and competence based appraisal, transfer, incentives, and promotion; institutionalisation of learning and career development; and fair and effective grievance handling mechanism. • Formulate and implement HR operational guidelines (mechanisms for recruitment, appointment, terms and conditions, code of conduct, induction, transfer, performance appraisal, career path, career planning and counseling, training and development, promotion and grievance handling etc) to mainstream HRM/D principles and policies. • Mainstream implementation of GESI strategy, 2008 by developing and disseminating gender-mainstreaming guidelines to all forestry sector stakeholders. • Maintain zero tolerance policy on sexual harassment and gender-based violence in every organisation in forestry sector. • Mainstream GESI in every plan and programme of DNPWC and DPR with appropriate role out strategy of MFSC's GESI vision and strategy.
b. Attitudinal change, morale, motivation and grievance handling
<ul style="list-style-type: none"> • Strengthen attitudinal aspects (mind-set, positive attitude, commitments, enthusiasm and morale) of staff and cultural aspects (background beliefs, traditions and practices) of organisation through coaching, mentoring, team building and organisational development. • Develop code of conduct to promote positive conversations, commitment, professionalism, and foresters' public image. • Manage change in institutional cultures and values to enhance appreciation of women, and disadvantaged groups.

⁷An extraordinary proliferation of managers in an organisation who control events but do not themselves produce anything real or useful (Ehrenfeld, 1993)

- Address the grievances of staff (manifesting from issues related to work rule, policy, procedure, health and safety regulation, work environment, individual victimisation and so on) through appropriate grievance handling mechanism and skills.
- Re-orient all staff of DNPWC towards people-centred approaches of conservation, management and update their job descriptions.

c. Forestry education

- Coordinate and collaborate with Agriculture and Forestry University, Institute of Forestry (Tribhuvan University), the School of Environmental Science & Management (Kathmandu University) and other NRM education institutions to continually update forestry curricula and improve teaching as per the current and future need of forestry sector.
- Coordinate with Forestry Education Institutions to increase women, Dalit, Janajati, Adibasi and others socially excluded groups' enrolment in forestry education to enhance their engagement in forest management.
- Enhance interactions and knowledge sharing among university faculties, students, forestry staff and other stakeholders.
- Support NRM education institutions (including students) to carry out research based on forestry sector's need
- Integrate community based forestry education in school curricula and involve students and educational institutions in community based forestry activities.
- Include a separate incentive package in the HRD plan to make a new generation of foresters and other actors more knowledgeable about the complexities and uniqueness of High Altitude areas.
- Restructure and strengthen the existing organisational structure of the forestry sector conducive to High Altitude areas with special incentive and motivation packages of career development and promotion.

d. Skills and capacity development

- Develop skills and capacity of staff through coaching, mentoring and training including pre-service and in-service training.
- Conduct comprehensive capacity need assessment of women, Dalit, Janajati, Adibasi and others socially excluded groups and carry out relevant trainings.
- Support (with curriculum, technique and methodology, technology, resource person etc.) to develop skilled human resources required for private sector promotion in forestry sector.
- Improve the quality of training through a thorough capacity assessment, training plan, training evaluation, and delivery of training programs in line with the theory of change.
- Link training as an investment for the future (not as a reward) and link it with posting, transfer and job performance of the staff.
- Develop and maintain learning centres and libraries at different levels to encourage learning and development.
- Develop mechanisms of accrediting forestry related training in forestry council (to be formed) and in Council for Technical Education and Vocational Training (CTEVT).
- Enhance capacity of training section and regional training centres with adequate and capable human resources, physical facilities, logistics, finances, curriculum and training materials.
- Orient the forestry staffs at all levels to encourage and implement the gender and social inclusion friendly policies and procedures.
- Re-organise DPR to increase the core competency in terms of taxonomic research and mapping, phytochemical analysis and research, pharmacological research, and bio-technology development including tissue culture and carry out further research on bio-prospecting, DNA barcoding, Invasive Alien Species, pest and weed risk assessment and plant patent.
- Enhance organisational capacity of DNPWC (including increased logistics, equipment, infrastructure, laboratory, knowledge management, data base management, and information dissemination)
- Enhance capacity of staff, stakeholders, and community groups with appropriate capacity assessment and training plans.

<ul style="list-style-type: none"> Regularise the staff of breeding centres in the DNPWC and develop separate administrative regulation for the recruitment, promotion, transfer, and career development of hattis (staff of hattisar)
<p>e. Managerial and leadership competency</p>
<ul style="list-style-type: none"> Strengthen managerial and leadership capability of staff (particularly senior staff and office heads) through appropriate management and leadership development education, training, counseling, mentoring and practice. Enhance leadership and management competencies in collaboration with Nepal Administrative Staff College and other national and international management institutions.
<p>f. Human Resource Management and Human Resource Development and information systems</p>
<ul style="list-style-type: none"> Establish HRM and HRD function as a part of the core functions of the MFSC with orientation of managing people and emphasis on performance, learning, and career development. Develop and implement a comprehensive human resource information system database with personal information, career information (postings, transfers, development, promotion), and performance appraisal information in order to improve HR management. Develop feedback system in staff performance appraisal to help improve work performance. Enhance self-esteem and develop a culture of appreciation and public recognition of good work of staff in order to attract and retain competent human resources. Make staff prepared for the change in responsibilities, scope and jurisdiction associated with the restructuring of state (federalism).
<p>g. Recruitment, placement, promotion and transfer systems</p>
<ul style="list-style-type: none"> Select right person for the right job during recruitment/placement or transfer through a process of job profiling and personnel profiling. Respond specific needs of women and disabled staff during placement, promotion and transfer. Strengthen orientation and induction of new recruitments. Make transfer mechanisms planned, consultative, predictable and with uniform criteria. Develop mechanisms for the retention of institutional memory during staff transfer. Develop promotion system taking into account innovativeness, productiveness and ability to manage higher-level roles and responsibilities.

b. Institutions and Partnerships

<p>a. Forestry Sector Reform</p>
<ul style="list-style-type: none"> Improve the way forestry organisations function/perform by strengthening the process of policy formulation and service delivery, increasing interactions among stakeholders and enhancing shared vision and understanding among all staff and stakeholders. Make all departments and district level organisations service oriented, responsive, accountable and people-centred with adequate devolution, delegation of authority and required financial, HR and logistic support. Re-organise and re-structure DNPWC and related organisations and improve their governance, working style, management style and working culture. Revisit and re-define the roles and functions of MFSC (from centre to district level), providing appropriate roles and responsibilities to private sector, NGOs, and CBOs as per their areas of competencies in delivering forestry services. Review and amend forest and conservation related acts and regulations to ensure effective participation of women and disadvantaged groups at all levels in forest and natural resource management and development. Reorient the mind-set, skills and roles of forestry personnel in the changed socio-political, democratic, and global environmental context and develop a 'new attitudes' (positive attitude,

<p>mind-set, belief, value, ethics etc.) and 'new skills' (leadership, communication, facilitation and quality control) to develop forestry sector as a living and learning organisation.</p> <ul style="list-style-type: none"> • Develop working principles and mechanisms, and promote public-community-private partnership at different levels. • Begin a process of privatisation of the Timber Corporation of Nepal and Herbs Production and Processing Company Ltd, and assess the relevancy, effectiveness, efficiency, and sustainability of The Forest Product Development Board and implement the result of assessment. • Abolish the district level Forest Product Supply Committee and outsource its humanitarian function of supplying wood to disaster affected families to appropriate institutions such as Red Cross, and its other functions to private sector. • Review the functions and performance of various conservation related institutions (NTNC, and councils, committees) in the changed socio-political context and make them competitive, transparent and accountable. • Establish and strengthen an independent forestry council to support and advise government for forest planning, implementation, evaluation and quality assurance. • Establish and institutionalise a separate forest financing entity with representation of multi-stakeholders. The entity to have sources from GoN, Private and donors and make the funds available to interested and capable stakeholders to implement the various forestry program on sustained basis and ensure budgetary provisions for GESI promotional activities. • Review and re-structure the forestry sector organisations including human resource needs (type, qualification/competencies, number, level etc) on a periodic basis. • Increase representation of women, Dalit, Janajati, Adibasi and others socially excluded groups' in MFSC's structure and decision-making positions through positive discrimination as provisioned in HRM/D strategy. • Establish GESI unit under the HRM/D Division of the Ministry with well-defined roles and responsibilities (job descriptions) ensuring that the authority and responsibility are assigned to Gender Focal Points (GFPs). • Expand and strengthen the GFPs at all the Departments, Regions and Districts with sufficient financial and human resources. • Maintain gender and ethnic diversity in organisations, agencies and others ad-hoc committee from national to local level by ensuring proportional representation
<p>b. Transparency and accountability</p> <ul style="list-style-type: none"> • Increase right to information of people and stakeholders related to forestry information, decisions, plans, policies, programs, budgets, audit reports etc through appropriate dissemination and communication using ICT. • Develop and strengthen a MIS using modern technologies that generate, synthesise, store and retrieve data and information related to forestry sector organisations at district, regional and central levels. • Use evidence-based decision-making process to enhance transparency and predictability. • Develop a well-defined staff placement, transfer, promotion, and career development process/mechanism with appropriate performance monitoring
<p>c. Policy process and enforcement</p> <ul style="list-style-type: none"> • Policy process?? • Strengthen existing law compliance and enforcement mechanism by making play field equal avoiding "rule by law" and "rule behind the game". • Mainstream GESI strategy across all levels of forestry sector organisations. • Develop and implement a comprehensive participatory framework with well defined indicators, roles and responsibilities to diagnose, monitor and assess forest governance at central, regional and district levels. • Adopt the Gender Responsive Budgeting guideline of the Ministry of finance during planning, programming and budgeting and ensure that allocated budget appropriately monitored and

reported.

d. Coordination, collaboration and partnership

- Revive the Forestry Sector Coordination Committee with increased multi-stakeholder participation, defined roles, responsibilities and working mechanisms for policy-program harmonisation, priority setting, and resource allocation including donor supports.
- Develop linkage, partnership and trust among the existing and emerging actors in forestry sectors such as federations, associations, civil society, private sector and media to promote forestry agenda and forest governance
- Define roles and responsibilities of local government in matters related to community based forestry in the context of federal structure of the country.
- Enhance the performance of DSCWM with appropriate governance and monitoring systems.

KEY THEMATIC AREA 7: MANAGING AND USING FORESTRY SECTOR INFORMATION

Thematic Purpose

- To enhance the capability of forestry sector institutions to generate, curate, store, and retrieve forestry related user-friendly data and information at various levels required for policy makers, planners and resource managers through periodic forest survey and inventory.
- To strengthen the capacity and partnership of the government, academic, non-government and private sector for the effective, applied and adaptive research and technology development.
- To develop and implement result-based monitoring and evaluation system and integrate with policy formulation, planning process and accountability verification.
- To develop and institutionalise documentation/archiving system of data, information and knowledge (including monitoring, reporting and verification) and effectively utilise and communicate.

Why Is It Required?

The forestry sector contributes tremendous benefits to society and the nation in terms of essential forest products and ecosystem services. Being a biological system, it needs to be carefully monitored especially regarding its management practices, growth, and several other affecting factors. All operations in the forest has to be seriously observed, verified and reported. Besides, it will also be helpful in assessing the contribution of Nepal's forest in terms of carbon sequestration.

Population growth coupled with increase in standard of living of the people had significantly escalated the demand for various forest products and services while the scope for the growth of forest area has been limited due to other contesting land uses. Thus, the forestry sector has to rely more on increasing its productivity from the available coverage.

Though a large population of the country is dependent on forest for their various livelihood related as well as other needs, they are not fully aware of massive direct and indirect contributions of forest and the benefits they derive. Moreover, in the context of 'Climate Change' and its relation to forest, enormous awareness campaign is needed.

What Needs To Be Done?

a. Forestry sector information

- Conduct forest resource survey and inventory periodically (preferably in an interval of five years) and update forest resources related information by physiographic region and political boundaries.
- Carry out district and local level inventory (including community based forests, government managed forests, private forests, watersheds, protected areas) by relevant field based implementing agencies with the technical support of relevant central office.
- Make forestry related information, maps and reports widely available through web. Store Open Source Information System (OSFIS) developed by FRA Nepal Project in Government Integrated Data Center (GIDC) after completion of the project. Update these databases periodically as the inventory is carried out in future and store them in web.
- Design, develop and regularly update MIS system at the Ministry of Forests and Soil Conservation (MFSC), its Departments and sub-national offices comprising disaggregated data such as gender and socio-economic features on different programs and management regimes.
- Develop participatory indicators for monitoring and evaluation (M&E) of project processes, outputs, outcomes and impacts related to gender and social inclusion
- Develop and enhance capacity and the capability of the MFSC, its departments and sub-national offices by equipping with adequate logistics and facilities and training of staff on MIS.

- Establish forest resources information system and disaggregate the data, including participation of different sex, gender and socio-economic groups.

b. Forestry research and technology development

- Establish and strengthen a competitive and autonomous Forest and Plant Research Organisation by assessing the competency, relevancy and effectiveness of DFRS and DPR.
- Implement applied and adaptive research, and manage research on forest management (timber, non-timber MAPs), utilisation, conservation, livelihood promotion, economic development, and policy process.
- Redefine the role of government research organisation as an enabler of research and technology development, to provide strategic direction, and formulate policy for the sub-sector.
- Establish and strengthen research laboratory and human resources to address pest and disease control
- Form a Forest Research Committee under the Forestry Research Institution to prioritise research agenda and themes; and assign relevant research themes/topics to competent strategic partners.
- Establish a flexible funding mechanism including the participation of private sector for research and technology development to ensure implementation of prioritised research through competent partner research institutions.
- Build the capacity of the forestry research institution and promote research partnership with national and international research institutions.
- Recruit and develop competent and motivated human resources for forestry research and technology development considering multi-disciplinary background, gender and social inclusion.
- Develop and execute a central database system for all research carried out by government organisations, universities, NGOs, and private sectors in Forestry sector in Nepal by the research institution. Establish a central depository of all research reports carried out on Nepal, and make it widely accessible through web.
- Conduct research on all types of forest regimes (government managed, community managed, privately managed forests, agro-forests), watersheds, protected areas and biodiversity, and climate change; job creation, enterprise and economic development related to forestry.
- Establish adequate research facilities (including those for pest and disease) in relevant institutions.
- Carry out research and disseminate the results both on bio-physical, and socio-economic aspects of tree plantations, NTFP/MAPs cultivation, growth and yield, and financial and economic returns from plantations, cultivations, agro-forestry practices and other management practices.
- Promote and institutionalise certification of forests, forest products including chemical composition in a phased manner by awareness raising, creating operational modality, and capacity building.
- Generate and provide new knowledge, information, and technologies on farming of high value NTFP/MAPs and fast growing tree species including information on growth and yield, and financial/ economic return.
- Develop and disseminate appropriate harvesting, grading, storing, initial processing and packaging methods and techniques.
- Establish and operate marketing information system on prices of various forest products at strategic locations for wider stakeholders.
- Establish institutional mechanisms to provide certification of origin, and certification of sustainable and legal harvest.

c. Monitoring, evaluation and MIS

- Design a practical Result Based Monitoring and Evaluation System in line with NPC guideline for all forestry sector programs including those implemented by private sector, and orient development partners and concerned stakeholders for its compliance. Also incorporate the FSS milestones and indicators in the system.
- Design and implement an integrated online monitoring database system of MFSC linked with all

its units across the country. Link this database to GIS environment.

- Develop capacity and capability for Monitoring and Evaluation specifically of all M & E units under MSFC, Departments and field level offices.
- Evaluate the FSS in an interval of 5 years as per the M & E framework of FSS by a third party.
- Develop criteria and indicators to monitor and evaluate the performance of various forest management regimes including protected areas and watersheds.
- Support to develop national capacity and mechanism for international forest certification systems and for legality verification

d. Communications and knowledge management

- Develop a central documentation and knowledge management unit in MFSC, Departments, regions, and districts to systematically store and archive all M&E related data and reports, and other information.
- Make available all information, reports, forest management plans, programmes, budgets, audit reports, decisions and documents through dedicated public websites for wider accessibility, and to enhance transparency and accountability.
- Strengthen the central forestry library with access to various national and international online databases; and ensure adequate facilities.
- Strengthen nodal spokespersons of MFSC and its departments not only for communication but also to use them to build public relations and to improve image of the institution as well as forestry sector.
- Reinforce publicity units of MFSC and its departments for enhancing communication and knowledge management.

PART 4 DELIVERING THE VISION

Part 3 identifies the outline strategies and key actions that need to be implemented to achieve the goal and outcomes of the FSS. This part focused on how these strategies will be implemented starting with overall implementation principles i.e. that define the methods that will be used for the FSS. This is followed by a matrix showing key institutional roles responsibilities for making the FSS happen in each of the seven key thematic areas.

Having identified what strneeds to be done in Part 3, this section focuses on how the various strategies and actions will be implemented.

4.1 IMPLEMENTATION PRINCIPLES

- **Informing and Guiding**
- **Regulating**
- **Financing and creating incentives**
- **Clarifying roles and responsibilities**
- **Leadership by government and ownership by all stakeholders**
- **Working through service providers and in partnerships**
- **Cross-sectoral working and harmonising strategies**
- Participatory policy development backed up by legislative reform

4.2 ROLES AND RESPONSIBILITIES

Key Thematic Area	Sub-theme	Key state actor	Potential partnerships	Cross-sectoral collaboration
1. Managing Nepal's forests	a. Community-based forest management	MFSC; Department of Forests	State/community (for all modalities of community-based forest management) Community-private (for all modalities for investment, enterprise, product sales and marketing) Local government-community (for collaborative forest management) State-private for provision of support services (all kinds)	
	b. Private forest management	MFSC; Department of Forests	State-private (for commercial leasehold forestry)	
	c. Government forest management	MFSC; Department of Forests	State-private (for forest management services)	
2. Managing Ecosystems and conserving biodiversity		MFSC; Department of National Parks and Wildlife Conservation		
3. Responding to climate change		MFSC;		Ministry of Environment
4. Managing Watersheds		MFSC; DSWC		
5. Promoting Enterprise and Economic Development		MFSC; Department of Forests		

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6. Enhancing capacities, Institutions and Partnerships	a. Human resource development and management	MFSC		
	d. Institutions and partnerships			
7. Managing and using Forestry Sector Information	a. Forestry sector information	MFSC; FRS		
	e. Forestry research and technology development	MFSC; FRS;		
	f. Monitoring, evaluation and MIS	MFSC; Department of Forests; DNPWC; DSWC		
	g. Communications and knowledge management			

4.3 APPROACHES AND METHODOLOGIES

The approaches that will be used to deliver outcomes of the FSS in all the key thematic areas are necessarily based on the eight strategic pillars identified in Part 2.1.

a. Approaches

The 8 strategic pillars identified in Part 2 identify the foundation for the FSS that wi

Strategic Pillar	Approach
1. Sustainably managed resources and ecosystem services	<ul style="list-style-type: none"> • Landscape level approach as a tool for resource planning, conservation, management, monitoring, evaluation, learning and knowledge sharing. • Forest land-use planning in line with national land use policy for all state forests at different levels (national/regional/district/village) covering all forest management regimes i.e. Community Based Forestry; Forests under Protected Areas; Institutional Leasehold Forests; Forest managed under public-private partnerships and government conserved (residual) forests. • Support for Payment for Ecosystem Services approaches to link upstream/downstream resource users, value environmental services and share resource benefits more equitably
2. Conducive policy process and operational environment	<ul style="list-style-type: none"> • Adoption of evidence-based policy-making processes with legislation development taking place post-policy to strengthen and enable implementation. • Strengthen roles of Forest Sector Coordination Committee and establish a Forestry Council create platforms for stakeholder engagement and influence on policy processes
3. Responsive and transparent organisations and partnerships	<ul style="list-style-type: none"> • Establishment of a National Forest Entity to channel funds, improve delivery, transparency and effectiveness of development programmes • Development of cross-sector working approaches especially at decentralised levels (district and village) to enhance synergy between sectors, reduce duplication and inconsistency and transaction costs on local people
4. Improved governance and effective service delivery	<ul style="list-style-type: none"> • Multi-stakeholder approach with forums for information sharing, transparency, participatory planning, monitoring and public accountability at all levels from centre-village. • Use of public forums for decision-making and ensuring accountability e.g. public audits • Bottom up planning processes (annual planning) incorporating different stakeholder perspectives and building voice for socially excluded groups • Partnership approach between government and civil society for delivery of a broad range of services at all levels across the forestry sector. • Clarify roles of state/NGOs & civil society/communities for the delivery of programmes, projects and their components (see Annex 1)
5. Security of community	<ul style="list-style-type: none"> • Revise existing legislation, clarify inconsistencies between

tenure	<p>legislation and reduce ad-hoc policies and directives to strengthen community tenure security for all types of community-based forest management</p> <ul style="list-style-type: none"> • Capacity building approach at community/group level and amongst supporting service providers and networks to generate better understanding around tenure and legal issues and status
6. Private sector engagement and economic development	<ul style="list-style-type: none"> • Partnerships between private sector and government agencies and communities for service delivery, investment, commercial/enterprise expertise and reduced bureaucracy • Partnerships between government and private sector for commercial leasehold forest management • Involvement of private sector including forest industry, financial sector and private forest owners in multi-stakeholder forums as appropriate
7. Gender equality, social inclusion and poverty reduction	<ul style="list-style-type: none"> • Application of existing MFSC Gender and Social Inclusion Strategy across all forest sector institutions • Capacity development for women and other socially disadvantaged groups to enable them to be better represented and have a more effective voice in forestry institutions of all kinds • Disaggregated monitoring systems highlighting impacts of FSS on women, poor and socially disadvantaged people
8. Climate change mitigation and resilience	<ul style="list-style-type: none"> • Consistency with REDD+ approaches as separately defined in Nepal's Readiness Preparation Plan and REDD+ strategy • Community based adaptation approach consistent with NAPA, LAPA and other planning approaches targeted at the most vulnerable communities

b. Partnerships and cross-sectoral collaboration

c. Planning processes

d. Participatory and bottom-up annual sector planning

e. National forest entity

to deliver transparent, effective and targeted programmes and financial support

f. Monitoring and review

System for monitoring FSS

- Responsibility for monitoring
- Information collection on milestones
- Annual reports and public participation
- Mid-term review and corrections

PART 5 ANNEXES

Annex 1: Role, functions and responsibilities of different actors and their partnerships

Annex 2: Priority programmes and strategic interventions in different ecological zones

Annex 3: Forest Sector Strategy monitoring framework

Annex 4: Maps

Annex 5: Other strategies, from forestry and other sectors, influencing the Forest Sector Strategy

Annex 6: Key forestry sector tools including legislation, regulations, guidelines, directives and others

Annex 7: Timeline of the Forestry Sector Strategy development process

Annex 8: List of organisations and individuals involved and consulted during the MPFS review and the Forest Sector Strategy development process

ANNEX 1: ROLES, FUNCTIONS AND RESPONSIBILITIES OF DIFFERENT ACTORS AND THEIR PARTNERSHIPS

Actor	Official roles	Motivating factors for current practices	New roles to be played in FSS
Government			
MFSC, DoF, DFOs	<ul style="list-style-type: none"> • Enabling - development of policies, legislation, plans and programmes and their implementation • Provisioning of technical services - plantations, extension and technology transformation • Regulating - patrolling and protecting the forest, issuance of permits, monitoring and sanctioning of rule breakers • Judicial adjudicating - forest crimes • Administrating- administration of staff and coordinating with other agencies and stakeholders • Collecting revenue - tax and revenue collection from forestry activities • Planning and budgeting - increasing budgetary support of foreign aid demands for increased engagement of project management 	<ul style="list-style-type: none"> • Gatekeeper of forest management and forest products sale • Exercise of power and authority • Individual job and financial security, incentives/benefits. • Carrier advancement (including exposure to foreign countries) 	<ul style="list-style-type: none"> • Enabling - designing policies and procedures to enable others to perform their responsibilities through legislative frameworks. • Technical service provider - they should adequately provide technical services to different forest management regimes • Facilitation- such as to community based resource management, private sector engagement in enterprise development • Coordination role- particularly at local level-coordinate to mobilise various actors to promote forestry sector development based on their comparative advantage
Semi-government institutions	<ul style="list-style-type: none"> • Facilitate the supply of timber, fuel-wood, NTFPs/MAPs after processing them for commercial needs 	<ul style="list-style-type: none"> • Monopoly of timber trade (TCN), • Secured job and income 	<ul style="list-style-type: none"> • Privatised the TCN and HPCCL • Review the functions of FPDB and make it more competitive

<p>Local government administration (DDC, VDC)</p>	<ul style="list-style-type: none"> • Environmental services in the defined territory • Protection and utilisation of natural resources at local level • Revenue generation through tax and auction by selling boulder, stone and sand for local development 	<ul style="list-style-type: none"> • The focus is for revenue generation rather than sustainable resource management 	<ul style="list-style-type: none"> • Take active role in integrated natural resource management • Coordinate all actors for inclusive and transparent forest management • Contribute to local livelihood and climate change adaptation
<p>Civil Society</p>			
<p>Networks and federations</p>	<ul style="list-style-type: none"> • Advocacy on people's right (including tenure rights) for natural resources, environment conservation • Linking policies and practices-bringing best practices from the field to the policy process • Focus benefit sharing towards vulnerable and marginalised groups 	<ul style="list-style-type: none"> • Inclusive representation of various stakeholders and their needs • Institution building and empowerment of local people • Incentives (salaries, wages, exposure visits etc) • Grassroots mobilisation to generate political power 	<ul style="list-style-type: none"> • Mobilising citizens' pressure for democratic and inclusive forestry sector • Linking policies and practices-bringing best and innovative practices from the field • Empowerment of marginalised groups • Advocacy to balance sustainability of resources and livelihood • Watchdog body monitoring the performance of policies, programs and their implementation
<p>NGOs</p>	<ul style="list-style-type: none"> • Service providers, bridging the gap between policies, practices, and local knowledge • Rights advocates • Promoting inclusive and democratic governance • Volunteerism and adaptive to local contexts 	<ul style="list-style-type: none"> • Institutional recognition as a competent a field level organisation • Improvements in professional career • Incentives (salaries, wages, exposure visits etc) • Political mobilisation 	<ul style="list-style-type: none"> • Engage in innovative works, and provide services transparently and democratically • Putting pressure for democratic and inclusive forestry sector • Empowerment of marginalised groups • Advocacy on balancing the sustainability of resources,

			<p>livelihoods and securing local people's rights</p> <ul style="list-style-type: none"> • Strengthen local knowledge on sustainable resource management
Community			
Local elite	<ul style="list-style-type: none"> • Community mobilisation, and organisation • Conservation and sustainable natural resource management 	<ul style="list-style-type: none"> • Recognition (symbolic power) • Influencing and Leading the decision making process • Political mobilisation 	<ul style="list-style-type: none"> • Building democratic and inclusive community organisations • Creating enabling environment to engage poor and marginalised sections in decision making and benefit sharing • Act as change agents of local development • Liaison with other stakeholders
General users	<ul style="list-style-type: none"> • Conservation and sustainable management of natural resources • Equal participation in decision making and benefit sharing 	<ul style="list-style-type: none"> • Focus on their own households' benefits from common resources and its management (employment, income) • Engage in decision making and improve capacity/capability 	<ul style="list-style-type: none"> • Engage in decision making and benefit sharing • Gain skills and knowledge on sustainable forest resource management and livelihoods • Raise voices for inclusive and democratic practices in decision making process
Private Sector			
Companies/investors	<ul style="list-style-type: none"> • Quality and competition • Investment, knowledge and technology, marketing and employment • Enlarge the market share and take leadership • Economic growth - profit from forestry sectors 	<ul style="list-style-type: none"> • Maximise profits from investments • Give low attention to sustainability of resources 	<ul style="list-style-type: none"> • Bring entrepreneurship in forestry and enterprise development • Generate local employment, reasonable profit and local economic growth • Transparent operation of forestry enterprises
Development Partners			

<p>Technical and Financial Assistance</p>	<ul style="list-style-type: none"> • Support for sustainable forest management, environment conservation and climate change adaptation • Support for livelihoods and economic growth (targeted at poor and socially disadvantaged) • Support for establishment of democratic and inclusive forest institutions and good governance • Enhance skills, capacity and capability of forestry staff and other forestry sector stakeholders 	<ul style="list-style-type: none"> • Fulfil international commitments on aid • Promote policy process to make it more inclusive and democratic • Addressing the increasing threats posed by environmental degradation and climate change • Contributing to the livelihood and climate resiliency of the people 	<ul style="list-style-type: none"> • Promote democratic and inclusive practices in the forestry sector • Promote innovation, skills, capacity and knowledge systems • Comply with the international commitments on foreign aid • Support scaling-up of best practices and institutionalising the lessons • Enhance the capacity of state and non-state actors in forestry sector • Make aid disbursement more effective and transparent
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ANNEX 2: PRIORITY PROGRAMMES AND STRATEGIC INTERVENTIONS IN DIFFERENT PHYSIOGRAPHIC REGIONS

Programs	Tarai	Chure (Hills)	Mid-Hills (including inner-Tarai)	High Mountains (including High Himal)
Major strategic focus of FSS	<ul style="list-style-type: none"> Intensive forest management Public-Private-Partnership (PPP) Private forestry (Farm Forestry as well as Agro-forestry) Public land forestry Centre for forestry enterprises and industries 	<ul style="list-style-type: none"> Conservation oriented management and operations Integrated Watershed Management (with focus on PES) Objective of forest management geared towards protection of fragile Chure ecosystems 	<ul style="list-style-type: none"> Intensive forest management with due attention to environmental concerns (following land use policy) Public-Private-Community-Partnership Micro-enterprises and entrepreneurship development 	<ul style="list-style-type: none"> Intensive management of high value MAPs and other NTFPs IWM at basin as well as sub-basin level focusing on Conservation of biodiversity and local environment Managed pastures Micro-enterprises and entrepreneurship development
A. Managing Forests				
a. Community based forest management	<ul style="list-style-type: none"> Community-based forestry as the priority theme in all physiographic region Adapt key principles of landscape approach as a tool for resource planning, conservation, management, monitoring, evaluation, learning and knowledge sharing. Intensify forest management as per the forest land-use policy Forge Public Private Partnership (PPP) and Public Private Community Partnership (PPCP) wherever possible Development District Forestry Sector Plan (DFSP) with delineation of various zones considering objectives of forest management Identification of management regimes through multi-stakeholder process Promotion of private sector for efficient and effective delivery of various services (marketing, technical backstopping, etc.) 			
i. Community forestry	<ul style="list-style-type: none"> Consolidation of existing CFs in line with DFSP objectives of management Production oriented intensive management Governance improvement 	<ul style="list-style-type: none"> Consolidate CF balancing conservation need of the area and basic needs of the local people. Implement integrated watershed management 	<ul style="list-style-type: none"> Intensify forest management in CFs Promote CF in remaining forest areas Governance improvement 	<ul style="list-style-type: none"> Consolidate existing CFs considering/ incorporating issues of seasonal users (transhumance, NTFP collectors, etc.) Intensify management of MAPs and other NTFPs Initiation of intensive forest

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	<ul style="list-style-type: none"> • Responding distant users' need 			management in appropriate sites
ii. Pro-poor leasehold forestry	<ul style="list-style-type: none"> • Initiation of pro-poor leasehold forestry in suitable area 	<ul style="list-style-type: none"> • Consolidation and strengthening of existing LFUGs 	<ul style="list-style-type: none"> • Consolidate and strengthen existing LFUGs • Focus LF in districts having potential large areas of degraded forests 	
iii. Collaborative forest management	<ul style="list-style-type: none"> • Promote and strengthen CFM in remaining potential areas • Revision of forest management planning from sustainable forest management perspective 		<ul style="list-style-type: none"> • Explore and promote CFM in potential inner-Tarai areas 	
iv. Public land management	<ul style="list-style-type: none"> • Identify and promote suitable public-land area for forestry purpose 			
v. Religious and Cultural forests	Strengthen and promote in potential areas			
vi. Urban forestry	<ul style="list-style-type: none"> • Promote in coordination with local government, private sector and civil society 	<ul style="list-style-type: none"> • Promote in coordination with local government, private sector and civil society 	<ul style="list-style-type: none"> • Promote in coordination with local government, private sector and civil society 	<ul style="list-style-type: none"> • Promote in coordination with local government, private sector and civil society in growing towns and tourist centers
vii. Buffer Zone management	<ul style="list-style-type: none"> • Strengthen existing buffer zone forestry institution 	<ul style="list-style-type: none"> • Strengthen existing buffer zone forestry institution 	<ul style="list-style-type: none"> • Strengthen existing buffer zone forestry institution • Declare buffer zone in remaining national parks and reserves 	<ul style="list-style-type: none"> • Strengthen existing buffer zone forestry institution • Declare buffer zone in remaining national parks and reserves
viii. Conservation areas			<ul style="list-style-type: none"> • Develop 	<ul style="list-style-type: none"> • Develop comprehensive CA

			<p>comprehensive CA act and regulations</p> <ul style="list-style-type: none"> • Consolidate and strengthen the local institutions and handover the management to local institution 	<p>act and regulations</p> <ul style="list-style-type: none"> • Consolidate and strengthen the local institutions and handover the management to local institution
ix. Protected forests	Develop legal instruments and strengthen existing institutions			
b. Private forest management	<ul style="list-style-type: none"> • Simplify regulatory procedures • Develop and practice incentive mechanism to promote Private Forestry 			
i. Private forestry	<ul style="list-style-type: none"> • Promote private forestry in less productive or marginal farmlands (following the prescriptions of land-use policy) • Support both Farm-Forestry (blocks of trees on farmland) as well as Agro-forest (such as inter-cropping, alley cropping) 	<ul style="list-style-type: none"> • Promote agroforestry based on Sloping Agriculture Land Technology (SALT) in existing privately owned sloping farmlands 	<ul style="list-style-type: none"> • Promote private forestry in less productive or marginal and/or abandoned farmlands • Promote agroforestry based on Sloping Agriculture Land Technology (SALT) in existing privately owned sloping farmlands 	<ul style="list-style-type: none"> • Promote private forestry in less productive or marginal and/or abandoned farmlands • Promote agroforestry based on Sloping Agriculture Land Technology (SALT) in existing privately owned sloping farmlands

<p>ii. Institutional leasehold forestry</p>	<ul style="list-style-type: none"> Identify and delineate potential area for Institutional leasehold forestry while preparing DFSP Facilitate Institutional leasehold forestry in delineated areas 		<ul style="list-style-type: none"> Identify and delineate potential area for Institutional leasehold forestry while preparing DFSP considering land values such as suitable for ecotourism and conservation Facilitate Institutional leasehold forestry in delineated areas 	<ul style="list-style-type: none"> Identify and delineate potential area for Institutional leasehold forestry while preparing DFSP considering land values such as suitable for cultivation of MAPs/NTFPs, ecotourism and conservation Facilitate Institutional leasehold forestry in delineated areas
<p>iii. Cultivation of MAPs/NTFPs on private land</p>	<ul style="list-style-type: none"> Develop and promote suitable models for MAPs/ NTFPs farming (prioritised species suitable to the location) for both small as well as big farmers considering economy of scale Provide necessary support for production, processing and marketing 			
<p>c. Government forest management</p>	<ul style="list-style-type: none"> Identify and delineate residual national forests (government managed forest) while preparing DFSP; identify suitable regimes and phase-wise handover for their intensive management 			
	<ul style="list-style-type: none"> Intensive management of forest to increase the sustained supply of forest products and income/employment 	<ul style="list-style-type: none"> Conservation of Chure landscape through integrated soil and watershed management mainly focusing on promotion of species that have soil binding properties and economic value such as grass and NTFPs 	<ul style="list-style-type: none"> Intensive management of forests to increase the sustained supply of forest products and income/ employment 	<ul style="list-style-type: none"> Intensive management of accessible forests and pastureland and promotion of wood utilisation Conservation, management and farming (including wildlife) of high value MAPs and other NTFPs Conservation of biodiversity and watersheds and promotion of eco-tourism
<p><i>B. Managing Ecosystems & Conserving Biodiversity</i></p>				
<ul style="list-style-type: none"> Manage habitat, increase and maintain stable population of key species of the regions In-situ and ex-situ conservation of threatened species both flora and fauna Develop an equitable benefit sharing mechanism between various PA (considering all types of income accrued from PA system) 				
<p>a. National Park and Reserve Management</p>	<ul style="list-style-type: none"> Manage habitat considering the requirements of the major species Conserve and maintain the serenity of the ecosystems 			

b. Plant Resources Conservation	<ul style="list-style-type: none"> Develop technology for the in-situ and ex-situ conservation of floral genetic resources for all physiographic regions 			
i. Botanical gardens	<ul style="list-style-type: none"> Establish and maintain botanical gardens representing all major ecosystems of the region 			
ii. Herbariums	<ul style="list-style-type: none"> Update herbarium records periodically and document 			
iii. Floriculture	<ul style="list-style-type: none"> Promote and support commercial floriculture 			
c. Zoo Management	<ul style="list-style-type: none"> Establish zoo 		<ul style="list-style-type: none"> Maintain, expand and establish zoo 	<ul style="list-style-type: none"> Establish zoo
C. Responding to Climate Change				
a. Strengthening people's climate resilience	<ul style="list-style-type: none"> Develop site specific and need based climate resilient technologies and support their adaptation 			
b. Climate-proofing forests and ecosystems	<ul style="list-style-type: none"> Assess the impact and vulnerability of due to climate change and implement the recommendations 	<ul style="list-style-type: none"> Develop site specific and need based climate resilient technologies and support their adaptation 	<ul style="list-style-type: none"> Develop site specific and need based climate resilient technologies and support their adaptation 	<ul style="list-style-type: none"> Develop site specific and need based climate resilient technologies and support their adaptation
c. Mitigating climate change through REDD+	<ul style="list-style-type: none"> Develop ground rules/regulations for accessing benefits from REDD+ mechanism 			
D. Managing Watersheds				
a. Land Use Planning	<ul style="list-style-type: none"> Develop forest land use plan following the national land use policy 			
b. Integrated watershed management	<ul style="list-style-type: none"> Promote land reclamation and river bank stabilisation 	<ul style="list-style-type: none"> Delineate critical watersheds/sub-watersheds and implement integrated watershed management 	<ul style="list-style-type: none"> Delineate critical watersheds/sub-watersheds and implement integrated watershed management at sub-basin level 	<ul style="list-style-type: none"> Delineate critical basins and watersheds and implement integrated watershed management
E. Promoting Enterprise and Economic Development				
<ul style="list-style-type: none"> Develop supportive policy instruments and environment for investment Carry out a study to ascertain the status of all forest based enterprises in the country and develop support mechanism for their upgrading and sustainability Assist in developing Public-Private-Community-Partnership (PPCP) Design and regularly update a forest product related market information system at district, region and center 				

a. Wood-based enterprise and industry development	<ul style="list-style-type: none"> • Ensure sustained supply of raw materials • Support importation of new/advance technologies through visit and training • Facilitate foreign direct investment • Support in enhancing quality of the products 	<ul style="list-style-type: none"> • Support green micro-enterprises where environmentally feasible 	<ul style="list-style-type: none"> • Ensure sustained supply of raw materials • Support importation of new/advance technologies through visit and training • Facilitate foreign direct investment • Support in enhancing quality of the products 	<ul style="list-style-type: none"> • Ensure sustained supply of raw materials • Support importation of new/advance technologies through visit and training • Facilitate foreign direct investment • Support in enhancing quality of the products
b. MAPs/NTFP enterprise development	<ul style="list-style-type: none"> • Ensure sustained supply of raw materials • Support importation of new/advance technologies through visit and training • Facilitate foreign direct investment 	<ul style="list-style-type: none"> • Support green micro-enterprises where environmentally feasible 	<ul style="list-style-type: none"> • Ensure sustained supply of raw materials • Support importation of new/advance technologies through visit and training • Facilitate foreign direct investment 	<ul style="list-style-type: none"> • Ensure sustained supply of raw materials • Support importation of new/advance technologies through visit and training • Facilitate foreign direct investment
c. Eco-tourism development	<ul style="list-style-type: none"> • Promote eco-tourism in suitable areas (in and outside PAs) 			
<i>F. Enhancing Capacities, Institutions and Partnerships</i>				
<ul style="list-style-type: none"> • Provide required and necessary training, mentoring, study tours and exposures during pre-job and on-the-job to improve capacity of existing human resources • Coordinate with academic institutions to improve curricula to address the current need of the institution and update recruitment process • Equip institutions with all necessary tools and equipment • Reform institutions to make it more effective and efficient, and forge coordination and partnership among relevant institutions to harness synergy 				
<i>G. Managing and Using Forestry Sector Information</i>				
<ul style="list-style-type: none"> • Keep up-to-date information with regards to forests, forestry growth, forestry personnel, related institutions, investment, other stakeholders related to forestry sector, impact of the programs, etc. using feasible state of the art tools and technology 				

ANNEX 3: FORESTRY SECTOR STRATEGY MONITORING FRAMEWORK

Description of summary	Indicators	Means of verification	Frequency	Risk and key assumptions
Vision: <i>Potentials of forest ecosystems, biodiversity and watersheds fully optimised for peoples' prosperity</i>				
<p>Goal: <i>Forest ecosystems and watersheds sustainably managed and climate resilient through a decentralised, competitive and well-governed forestry sector providing increased income, employment and inclusive development opportunities</i></p>	<ul style="list-style-type: none"> % of forest area in the country % of forest area intensively managed % of forest products exported % of self-sufficiency of wood products from domestic production % of GDP contribution from Forestry Sector % change in tourism income from protected areas % of forest sector contribution to household income % of productive job creation from forestry sector Amount of carbon stock in forest and in wood product use 	<ul style="list-style-type: none"> Forest Resource Survey Report Annual Trade Reports from Trade Promotion Center and MoF Forest data base (MIS) and reports from Ministry and Departments CBS reports GDP study District Forest Management Plans Survey Studies and Reports 	<ul style="list-style-type: none"> 5 year Annually Annually 2 times 2 times 	<ul style="list-style-type: none"> Enabling policy environment Stable political environment and functioning rule of law. Adequacy, predictability, and stability of forest agency budgets and organisational resources
<p>Outcome 1: Increased productivity of forests and sustained supply of products and services</p> <p>Objectives:</p> <ul style="list-style-type: none"> ▪ Intensify sustainable forest management and increase forest productivity ▪ Expand forests, trees and NTFP/MAPs cultivation in and outside forest areas ▪ Promote community based forestry and ensure their tenure rights and capacity in forest management, conservation and utilisation ▪ Ensure transparent, predictable and stable supply of 	<ul style="list-style-type: none"> Deforestation rate/ Area under forests Area under intensive management by physiographic region and management regime Area under trees and NTFP/MAP cultivation in and outside forests Per hectare Mean Annual Increment of wood by 	<ul style="list-style-type: none"> Forest Resource Survey Report Departments MIS and annual reports Survey Reports 	<ul style="list-style-type: none"> Once Annually 	<ul style="list-style-type: none"> Collective understanding, readiness and support of government, communities, media and other

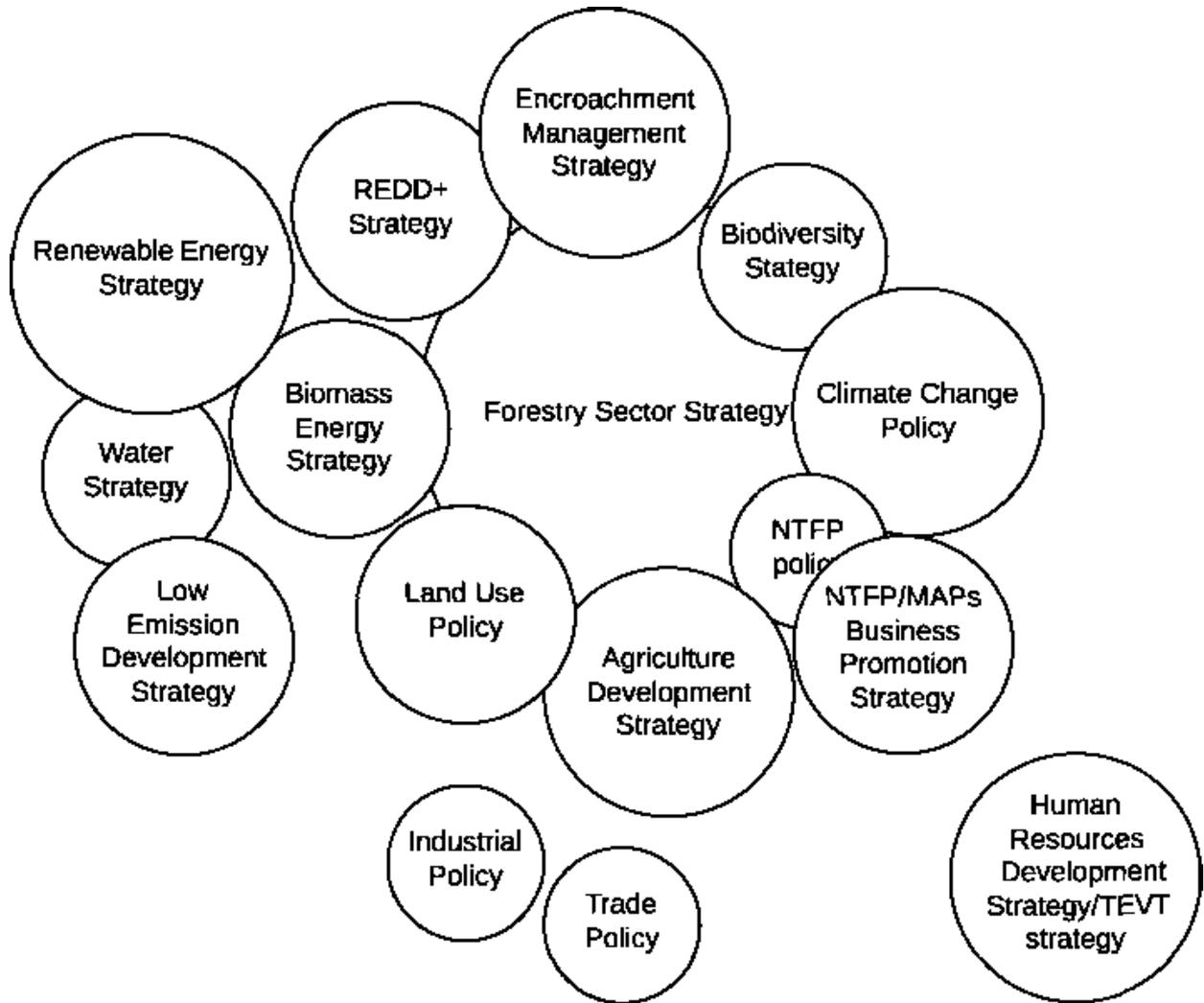
<p>forest products and services</p> <ul style="list-style-type: none"> ▪ Improve harvesting technology of forest products and promote green products ▪ Develop tools and techniques to reduce the incidence and damage incurred by forest fire, insects and disease ▪ Strengthen forest planning through improved research and forestry information 	<p>physiographic region and management regime</p> <p>Quantity of NTFP/MAPs traded and revenue generated per year</p> <p>Percent of area under community based management</p> <p>Per year timber harvested and supplied in the market</p> <p>Per year incidence of forest fire and area affected</p>	<p>Inventory reports</p> <p>District Forest Management Plans</p> <p>Forestry sector's forest fire incidence reports and other reports</p>	<p>2 times</p> <p>2 times</p> <p>Annually</p>	<p>stakeholders.</p> <p>Enabling operational environment and fiscal policies</p>
<p>Outcome 2: Improved biodiversity, watersheds and ecosystem services</p> <p>Objective:</p> <ul style="list-style-type: none"> ▪ Improve habitat management of major flora and fauna by restoring, conserving and managing corridors, connectivity, bottlenecks and other landscapes. ▪ Promote the scientific, socio-economic, recreational and cultural values by adopting people-centred approaches and optimally managing diversity of flora, fauna, genetic resources and ecosystems ▪ Control wildlife poaching and illegal trade of wild fauna and flora, and reduce human-wildlife conflict ▪ Conserve biodiversity (flora and fauna) hot spots and environmentally fragile ecosystems/landscapes of Chure and other areas ▪ Enhance safety, food security and aesthetic values of landscapes by improving and restoring land, its productivity and water quality ▪ Promote integrated watershed management by strengthening up-stream and down-stream linkages ▪ Promote research and studies on ecology, habitat and genetic resources (plant and animal species) 	<p>No of ecosystem managed and conserved</p> <p>Population of mega-wild species</p> <p>No of incidence of human-wildlife conflict</p> <p>No of cases of illegal trade and poaching</p> <p>Percent of permanent ground cover in critical watersheds</p> <p>Per unit land productivity in intervened watersheds</p> <p>Soil erosion rates in different land use</p> <p>Annual sedimentation level in river beds under bridges</p> <p>Number of new plants identified and stored in herbariums</p>	<p>Wild animal census reports</p> <p>DNPWC and DoF reports</p> <p>National Disaster Reports</p> <p>Survey/Studies reports</p> <p>Watershed Management and River Basin Plans</p> <p>DSCWM Reports</p> <p>DPR Reports</p>	<p>2 times</p> <p>Annually</p> <p>Annually</p> <p>2 times</p> <p>2 times</p> <p>annually</p>	<p>do</p> <p>International communities recognise and support to biodiversity conservation</p>

<p>Outcome 3: Improved livelihoods and contribution to national economic development</p> <p>Objective:</p> <ul style="list-style-type: none"> ▪ Increase GDP contribution from forestry sector ▪ Diversify and optimise the utilisation of forest products and services ▪ Promote competitiveness in supply and value addition of forest products and services ▪ Promote community based, private forestry, and enterprise development for livelihoods improvement and wealth creation for poor ▪ Emphasise to create and expand decent forest base jobs and income through backward and forward linkages ▪ Increase roles and investment of private sector in farming forestry crops (including NTFP/MAPs), forestry operations (including service delivery), forest based enterprises, and eco-tourism 	<p>GDP contribution from forestry sector</p> <p>Type and quantity of wood and non wood products processed within the country</p> <p>Quantity and value of imported wood products per year</p> <p>Quantity and value of wood and NTFP/MAP certified and other products exported per year</p> <p>Number of poor and disadvantaged groups getting benefits from CBF</p> <p>Number of people employed in productive jobs in forestry sector</p> <p>Amount of investment by private sector in forest industry</p>	<p>GDP study report</p> <p>Annual Trade Reports from Trade Promotion Center and MoF</p> <p>Survey and study reports</p> <p>Department reports</p> <p>CBS /FNCCI reports</p>	<p>2 times</p> <p>Annually</p> <p>2 times</p> <p>Annually or as available</p>	<p>Enabling policy for private sector engagement and investment</p> <p>Government, communities and private sector accountable for stable policy and practice of sustainable forest management</p>
<p>Outcome 4: Developed a devolved, competitive, accountable and inclusive forest sector organisations and institutions</p> <p>Objective:</p> <ul style="list-style-type: none"> ▪ Reform and create an enabling policy and operational environment ▪ Make the forestry sector institutions competitive, decentralised, people-centric and accountable ▪ Define role and functions of state forestry institutions and transfer some of the functions to other entities ▪ Increase participation, competency, and leadership of women, indigenous, other socially excluded groups and poor ▪ Strengthen the governance and capability of forestry organisations at all levels ▪ Enhance partnership, collaboration and coordination among sectoral agencies, academic institutions, civil 	<p>Clarity, consistency, and coherence of policies, laws, regulations, and directives</p> <p>Existence and use of internal accountability mechanisms with measures of performance standards and performance-based rewards, and penalties</p> <p>Incentives for agency staff to enforce forest laws, including investigation and prosecution</p> <p>Type and number of functions performed by state and non-state agencies</p> <p>Adaptive management planning</p> <p>Public confidence on forest agencies (in policy,</p>	<p>Job descriptions</p> <p>Study report</p> <p>Perception/Governance survey reports</p> <p>Forest act, regulations and directives</p> <p>MIS and annual reports of Departments</p> <p>Departmental websites</p> <p>Audit reports</p>	<p>2 times</p> <p>2 times</p> <p>1 time</p> <p>Annually</p> <p>Annually</p> <p>Annually</p>	<p>Positive mindset, attitude and trust among stakeholders</p> <p>Extent to which government engages with, creates space for, and supports the participation of civil society, indigenous peoples, and forest-dependent communities in forest-related processes and decision making</p>

<p>society and private sector</p> <ul style="list-style-type: none"> ▪ Ensure transparency of quality information at various levels ▪ Establish a separate entity for financing forestry sector development 	<p>business, services and governance)</p> <p>Security of tenure rights to forest resource including carbon</p> <p>Percentage of representation and leadership of women, indigenous, other socially excluded groups and poor</p> <p>Public availability of data, plans, directives, circulars, budgets and other information</p> <p>Accountability and responsiveness of non-forestry institutions towards forestry sector development</p> <p>Number and functioning of multi-stakeholder forums at different levels</p> <p>Establishment of financing entity and disbursement of fund to different stakeholders</p> <p>Establishment and performance of forestry council</p>	<p>Regulations and guidelines related to financing entity</p> <p>Annual budget allocation of MFSC</p>	<p>2 times</p> <p>Annually</p>	
<p>Outcome 5: <i>Established a climate resilient society and forest ecosystem</i></p> <p>Objective:</p> <ul style="list-style-type: none"> ▪ Enhance adaptive capacity of local communities and forest ecosystems ▪ Promote community based resilient and mitigation measures ▪ Establish forest carbon trade mechanisms by linking with forest, biodiversity and watershed conservation and management ▪ Develop and strengthen mechanisms for payment of ecosystem services ▪ Encourage low carbon development by promoting timber and renewable energy 	<p>Number of people affected from climate induced disaster</p> <p>Area of alien species affected forests</p> <p>Carbon stock in forest</p> <p>Income received from forest carbon trade</p> <p>Number of local projects with PES system</p> <p>Amount of wood products used in construction and in furniture</p> <p>Percentage use of renewable energy</p>	<p>National Disaster Report from MoH</p> <p>Study reports</p> <p>Forest Carbon Survey report</p> <p>National carbon trade (REDD+) reports</p> <p>PES related reports</p> <p>Sample survey</p> <p>WECS and AEPC reports</p>	<p>Annually</p> <p>2 times</p> <p>2 times</p> <p>2 times</p> <p>Annually</p> <p>2 times</p> <p>annually</p>	<p>Coordination among different agencies and sectors</p> <p>Certainty of REDD financing and disbursement to real beneficiaries</p>

ANNEX 4: MAPS

**ANNEX 5: OTHER STRATEGIES, FROM FORESTRY AND OTHER SECTORS,
INFLUENCING THE FOREST SECTOR STRATEGY**



ANNEX 6: KEY FORESTRY SECTOR 'TOOLS' INCLUDING LEGISLATION, REGULATIONS, GUIDELINES, DIRECTIVES AND OTHERS

Year	Policy or legal tools	Major Provisions
1957	Private Forest Nationalisation Act	Nationalisation of large forest area under landlords.
1973 (amendment 3rd in 1989 and 4th in 1993) ⁸	National Parks and Wildlife Conservation Act	<ul style="list-style-type: none"> • Categorisation of Protected Areas; • Management of Protected Areas • Designation of Buffer Zones
1982	Decentralisation Act	<ul style="list-style-type: none"> • Authority to District and Village Development Committees; • Promotion of Users' Committee
1982	Soil and Watershed Conservation Act	<ul style="list-style-type: none"> • Management of Protected Watersheds
1982	Nepal Trust for Nature Conservation Act	<ul style="list-style-type: none"> • Management of Conservation Area
1988	National Conservation Strategy	<ul style="list-style-type: none"> • Conservation Strategy of Nepal
1989	Master Plan for the Forestry Sector	<ul style="list-style-type: none"> • Initiation of Program approach in Forestry Sector • Provision of Users' Committees and Community Forest Management
1993	Forest Act	<ul style="list-style-type: none"> • Categorisation of forests based on land ownership and forest tenure; • CFUG empowered to manage forests; • Orientation towards people centered forestry • Extent of quasi-judicial authority of forestry officials reduced
1993/1998	Nepal Environment and Policy Action Plan	<ul style="list-style-type: none"> • Policies related to environmental sectors developed
1995	Forest Regulations	<ul style="list-style-type: none"> • Forest Act implementation made easier. • Forest tenure and governance related to community, leasehold and religious forests clarified. • Forest products sales and distribution clarified
1995 Revision in 1999 and 2001	Community Forestry Directives	<ul style="list-style-type: none"> • Requirement for inclusion of growing stock and annual allowable cut in the Operational Plan of Community Forests
1995 Revision in	Guidelines for Community Forestry Development Program	<ul style="list-style-type: none"> • Detailed procedure for Community Forest hand over, harvesting rules, Fund

⁸ Under this Act 10 regulations are enacted which are National Park and Wildlife Conservation Regulation 1974, Chitwan National Park Regulation 1974, Wildlife Reserve Regulation 1977, Himalayan National Park Regulation 1979, Khaptad National Park Regulation 1987, Bardiya National Park Regulation 1996, Buffer Zone Management Regulation 1995, Conservation Area Management Regulation 1996, Conservation Area Government Management Regulation 2000, Kanchanjangha Conservation area Management Regulation 2007

2001 and 2008		<ul style="list-style-type: none"> mobilisation and expenditure Provision of livelihood promotion through Community Forestry
1996	Environment Protection Act	<ul style="list-style-type: none"> Provision of Environmental Impact Assessment and Initial Environmental Examination
1997	Environment Protection Regulations	<ul style="list-style-type: none"> Provision of EIA and IEE in the forestry sector of Nepal
1998	Tiger Conservation Plan	<ul style="list-style-type: none"> Plan to expand the population of Tiger in Nepal
1999	Buffer Zone Management Guidelines	<ul style="list-style-type: none"> Procedure of managing the Buffer Zone of Nepal
2000	Revised Forest Policy	<ul style="list-style-type: none"> Provision of Collaborative Forest Management in the Tarai zone of Nepal Provision of sharing some revenue from the Community Forests of Nepal
2000	Local Self Governance Regulations	<ul style="list-style-type: none"> Detailed procedure for the implementation of Local Self Governance Act
2001	Soil Conservation and Watershed Management Working Guidelines	<ul style="list-style-type: none"> Procedure for implementing Soil Conservation and Watershed Management in Nepal
2002 Revised in 2014	Nepal Biodiversity Strategy	<ul style="list-style-type: none"> Strategies to conserve biodiversity of Nepal
2002	Water Resource Strategy	<ul style="list-style-type: none"> Concept of river basin approach of water management
2002	Poverty Reduction Strategy	<ul style="list-style-type: none"> Strategy to reduce poverty in Nepal
2002	Leasehold Forest Policy	<ul style="list-style-type: none"> Provision of leasing part of National Forest to private entities for commercial purposes
2003	Herbs and NTFP Development Policy	<ul style="list-style-type: none"> Provision of conserving, managing and utilising NTFPs in Nepal
2003	Strategic Plan on Tarai Arc Landscape	<ul style="list-style-type: none"> Strategies to conserve the landscape of Tarai from Mahakali to Bagmati River
2003	Policy to hand over Protected Area Management to NGOs and others	<ul style="list-style-type: none"> Provision of assigning management of PAs to NGOs and others
2003	Working Policy on Wildlife Domestication, Reproduction and Research	<ul style="list-style-type: none"> Promoting Private Sector in domestication and research of wildlife in Nepal
2003	Domestic Elephant Management Policy	<ul style="list-style-type: none"> Provision of managing domestic elephants in Nepal
2003	Rhino Conservation Plan	<ul style="list-style-type: none"> Plan to expand the number of wild rhino in Nepal
2004	Human Resource Development Strategy of MFSC	<ul style="list-style-type: none"> Strategy to better manage the human resources of the Ministry of Forests and Soil Conservation
2004	Snow Leopard Conservation Plan	<ul style="list-style-type: none"> Plan to conserve the snow leopard of Nepal
2004	Guidelines for Inventory of Community Forests	<ul style="list-style-type: none"> Provision of taking forest inventory in the community forests of Nepal
2006	Nepal Biodiversity Strategy	<ul style="list-style-type: none"> Plan to implementation of various

Revision in 2014	Implementation Plan	components of Biodiversity in Nepal
2006	Strategic Plan on Sacred Himal Landscape	<ul style="list-style-type: none"> • Plan to conserve the Sacred Himal landscape of Nepal
2008	Gender, Equity and Social Inclusion Strategy	<ul style="list-style-type: none"> • Strategy to include gender and various social groups on Nepal in decision making in the forestry sector of Nepal
2008	Guidelines on Leasehold Forestry	<ul style="list-style-type: none"> • Procedure to allocate leasehold forests in Nepal
2011	Wildlife Damage Relief Guideline	<ul style="list-style-type: none"> • Procedure to provide relief to the damage done by wildlife in Nepal
2011	Forest Carbon Measurement Guideline	<ul style="list-style-type: none"> • Procedure to measure forest carbon in Nepal
2011	Collaborative Forest Management Directives	<ul style="list-style-type: none"> • Procedure to allocate forests for collaborative forest management
2011	Formation and Operational Directives on District Forest Sector Coordination Committee	<ul style="list-style-type: none"> • Procedure for the formation and operation of inclusive DFCC in Nepal
2011	Procedure for handing over Leasehold for commercial purpose and poor families	<ul style="list-style-type: none"> • Further procedure to lease part of National Forests for livelihood (poor) and commercial purposes
2011	Presidential Chure Conservation Program Directives	<ul style="list-style-type: none"> • Procedure to implementation the President's Chure Conservation program
2012	National Wetland Policy	<ul style="list-style-type: none"> • Policy to conserve and utilise the wetlands of Nepal

ANNEX 7: TIMELINE OF THE FOREST SECTOR STRATEGY PREPARATION PROCESS

Time	Activity
January 2013	<ul style="list-style-type: none"> • Consultant team members finalised and contracted • Office establishment process initiated • Initial sharing about the Strategy Development Process and collecting views on the process from the stakeholders in Regional Planning Workshops
February-March 2013	<ul style="list-style-type: none"> • Fully operational office with basic required facilities established • Clarifying terms of reference; development and modification of ToR for all consultants required for this process. • Initial sharing about the Strategy Development Process and collecting views on the process from the stakeholders in Regional Planning Workshops • Identification and hiring of required consultants and assistants for review process • Finalised TOR after revision • Finalised revised work-plan • Collection of various relevant documents and reports for review • Desk review started
April-May 2013	<ul style="list-style-type: none"> • Initial consultation with various Kathmandu-based stakeholders about the FSS preparation process • Finalised the FSS preparation process • Prepared detailed checklist, guidelines and methodology for the review of 12 MPFS programs + Climate Change related + GESI related • MPFS Review process initiated • Review process continued
June-September 2013	<ul style="list-style-type: none"> • MPFS review continued • Review for FSS continued • FECOFUN started consultation with local level stakeholders (various representative communities) and regional level stakeholders mainly focusing on FUGs, CBOs, CSOs and NGOs. • GESI team carried consultation at central and regional level stakeholders • Preliminary background reports of MPFS review prepared
October 2013	<ul style="list-style-type: none"> • A series of consultation workshops were carried out to: <ul style="list-style-type: none"> · Initiate a creative dialogue among forestry stakeholders and enhance ownership to set a future direction of forestry sector. · Craft/develop shared vision/goals/strategy of FSS. · Identify potential themes/programmes/result areas/in the FSS. • Participants in various workshops included: <ul style="list-style-type: none"> · Frontline staff of MFSC (Rangers, Junior Technicians, Junior Foresters, etc.), · NGO/INGO/Federations/ Educators/Associations (includes FECOFUN, ACOFUN, NEFUG, IoF, KAFCOL, etc.)

	<ul style="list-style-type: none"> • Mid-level professionals of MFSC • Private Sector, Entrepreneurs/Processors/Innovators, etc. (includes bankers, traders, FNCCI, Forestry workers, traders associations, federations, etc.) • Policy/Decision making personnel (includes Ministry of Forests and Soil Conservation, Ministry of Finance, Ministry of Education, Ministry of Land Reform, Ministry of Federal Affairs and Local Development, etc.)
November-December 2013	<ul style="list-style-type: none"> • Draft MPFS review report prepared • GESI consultation report submitted • Preliminary findings of consultation carried by FECOFUN submitted • Consultation with key stakeholders continued • Drafting FSS continued
January-April 2014	<ul style="list-style-type: none"> • Draft MPFS review report submitted for peer reviewing and finalised • Report of consultation carried by FECOFUN submitted • Intermittent consultation with the key stakeholders including senior level MFSC personnel and Honorable Minister continued in the drafting process of FSS • Initial draft of FSS prepared
May 2014	<ul style="list-style-type: none"> • Draft FSS submission • Regional level consultation on initial draft of FSS
July 2014	<ul style="list-style-type: none"> • Comments on the Draft FSS from regional consultation • Finalisation of the FSS.

**ANNEX 8: LIST OF ORGANISATIONS AND INDIVIDUALS INVOLVED AND
CONSULTED IN THE MPFS REVIEW AND FOREST SECTOR STRATEGY
DEVELOPMENT PROCESS**