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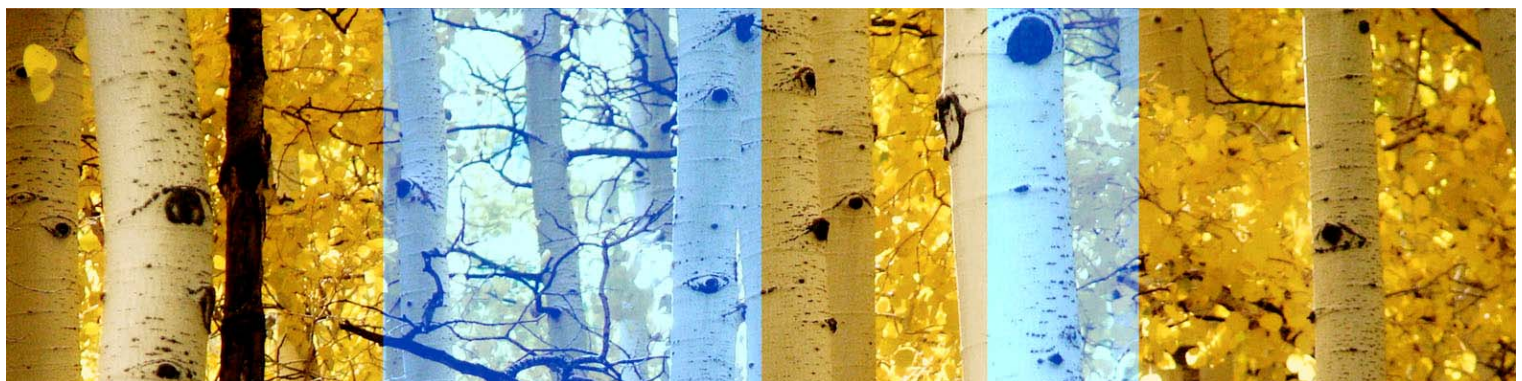
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Financing for Sustainable Forest Management in Nepal

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Dr. Swoyambhu Man Amatya

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ABBREVIATIONS

APP	Agriculture Perspective Plan
BISEP-ST	Biodiversity Sector Programme for Siwalik and Terai
BPD	Budget Planning Directive
BZ	Buffer Zone
CA	Conservation Areas
CF	Community Forestry
CBS	Central Bureau of Statistics
CDM	Clean Development Mechanism
CFM	Collaborative Forest Management
CFUG	Community Forest User Group
CFUGC	Community Forest Users Group Committee
DDC	District Development Committee
DFDF	District Forest Development Fund
DFID	Department of International Development
DFO	District Forest Office
DG	Director General
DFPSB	District Forest Product Supply Board
DFPSC	District level Forest Products Supply Committee
DFRS	Department of Forest Research and Survey
DFS	District Forest Schemes
DoF	Department of Forests
DNPWC	Department of National Parks and Wildlife Conservation
DPR	Department of Plant Resources
DSCWM	Department of Soil Conservation and Watershed Management
EDR	Eastern Development Region
EIA	Environmental Impact Assessment
EPAN	Energy Producers Association of Nepal
ERI	Environment Resources Institute
FAO	Food and Agriculture Organization of the United Nation
FCPF	Forest Carbon Partnership Facility
FDF	Forest Development Fund
FECOFUN	Federation of Community Forest Users Nepal
FMUDP	Forest Management and Utilization Development Project
FPDB	Forest Products Development Board
FPDC	Forest Product development Committee
FUG	Forest User Groups
FUGC	Forest User Groups Committee
FWDR	Far-Western Development Region
FWP	Forest Working (management) Plans
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GMF	Government Managed Forest
GoF	Government of Finland
GoN	Government of Nepal
Ha	Hectares
HPPCL	Herbs Production and Processing Company Ltd
HR	Hunting Reserves
ICIMOD	International Centre for Integrated Mountain Development
ICRAF	International Centre for Research in Agroforestry
IEE	Initial Environment Examination
IFAD	International Fund for Agricultural Development
INGOs	International Non-Governmental Organizations
IUCN	International Union for Conservation of Nature

LAPA	National Framework on Local Adaptation Plan of Action
LDC	Least Developed Countries
LH	Leasehold Forestry
LLP	Landscape Level Planning
LSGA	Local Self Governance Act
MoF	Ministry of Finance
MoFSC	Ministry of Forests and Soil Conservation
MPFS	Master Plan for the Forest sector
MSFP	Multi Stakeholder Forestry Programme
MTEF	Medium Term Expenditure Framework
MWDR	Mid-Western Development Region
NAPA	National Adaptation Programme of Action
NCS	National Conservation Strategy
NEPAP	Nepal Environmental Policy and Action Plan
NF	National Forest
NFA	Nepal Foresters Association
NFP	National Forestry Plan
NGOs	Non-Government Organizations
NP	National Parks
NPC	National Planning Commission
NPWC	National Park and Wildlife Conservation
NTFPs	Non-Timber Forest Products
NTNC	National Trust for Nature Conservation
OFMP	Operational Forest Management Plans
PA	Protected Areas
PES	Payment for Environmental Services
REDD+	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
SDC	Swiss Agency for Development and Cooperation
SFM	Sustainable Forest Management
TCN	Timber Corporation of Nepal
TYIP	Three Year Interim Plan
UNDP	United Nations' Development Programme
USAID	United States Agency for International Development
VAT	Value Added Tax
VDC	Village Development Committee
WB	World Bank
WDR	Western Development Region
WR	Wildlife Reserves
WTLCP	Western Terai Landscape Complex Project
WWF	World Wildlife Fund

EXECUTIVE SUMMARY

Multiple values and contributions of forest ecosystems

Forest ecosystems are a major source of energy, animal fodder and timber in Nepal. In addition, they play a significant role in hydroelectric power generation and irrigation. The forest sector provides both formal and informal employment opportunities. Rural people depend on many non-timber forest products (NTFPs) for their subsistence needs. Furthermore, religious and spiritual values of forests are very important to Nepalese people. Deforestation and forest degradation are serious concerns.

Role of forests also acknowledged in other sectors' policies

Nepal has formulated various forestry plans and strategies in order to alleviate poverty, as well as to conserve the biodiversity of the country's ecosystems. The 1993 Forest Act and 1995 Regulations are the main legal instruments to translate the policy vision into practice. Similarly, the National Park and Wildlife Conservation (NPWC) Act and Buffer Zone (BZ) Regulations and Guidelines are the legal tools for Protected Areas (PAs) management. Also other sectoral policies and strategies have identified the role of forests and their importance in overall development. However, in some legislation there are conflicts and ambiguities.

Significance of community forestry

There are two main categories of forests in Nepal, National and Private. The National Forests (NF) are further divided into five categories depending on their management purpose. Of these categories, PAs, religious and Leasehold Forests (LF) are managed by the government whereas Community Forests (CF) are managed by Community Forest User Groups (CFUGs). CFUGs manage, in a sustainable manner, more than one quarter of the total national forests. Community Forestry generates a substantial amount of money mainly by commercializing timber and other forest products. The CFUGs often adopt a rigid management regime to obtain forest growth. However, the concerns of the rural poor in terms of utilizing forest resources need greater attention in the management of Community Forests.

Institutional framework for cross-sectoral coordination exists but is not implemented

The Ministry of Forests and Soil Conservation (MoFSC) is responsible for policy formulation and implementation in the forest sector. All five departments and parastatal organizations help the MoFSC in implementing various programmes. Civil societies and NGOs are becoming increasingly active in forest conservation and alleviating poverty. Moreover, federations and user group networks have been established. Various councils and committees have been set up in order to coordinate and implement cross-sectoral forest issues. However, the cross-sectoral coordination within and between various ministries in Nepal is poor.

Sources of forest revenue and the role of tourism

Revenues in the forest sector come mainly from the sale of timber, fuelwood and various items of NTFPs. Eco-tourism is also a major contributor to the national income in Nepal followed by community forestry and private forestry.

Key challenges

In the absence of a National Forestry Plan and/or Master Plan, the demand for financing sustainable forest management (SFM) is largely based on the periodic development plans. The priority of these plans keeps changing. Consequently, **forest policies are rarely translated into action in the field** and do not achieve continuity. Often the forest sector staff are not in a position to spend all the allocated budget. Furthermore, there have been some problems in the rampant transfer of government staff following the dissolution of Nepal's Constituent Assembly in May 2012. **A sort of anarchy has been prevailing in the country which has increased the frequency of illegal logging, deforestation and forest area encroachment, particularly in Terai and Churia regions.**

Among the key institutional challenges, the lack of good governance, lack of staff capacity, and the ignoring and overlooking of the Civil Service Act and Rules hinder the implementation of the planned programmes and activities. There are no criteria or indicators developed to manage the forest on a sustainable basis. **Political instability has weakened law enforcement, thus further weakening forest governance.** Community forestry has some challenges as well. **Local level community elites, who themselves are sometimes involved in illegal logging activities, have captured the Community Forest Users Group Committee (CFUGC).**

However, an enabling environment for financing Sustainable Forest Management (SFM) in Nepal exists. There are opportunities for leasing out the government forest land and donor agencies are supporting new and innovative forestry programmes. Various trust funds have been established for facilitating financing. Last but not least, community forestry has become a promising alternative forest management regime.

1. OVERVIEW AND KEY FACTS

1.1 Introduction and Methodology

This case study on forest financing in Nepal is a part of the study process “Facilitating Financing for Sustainable Forest Management in African and Least Developing Countries (LDCs)” which Indufor Oy, has carried out for the United Nations Forum on Forests (UNFF) Secretariat. The objective of this report is to provide information on forest financing in Nepal.

The study is carried out through desktop analysis and by gathering data from relevant key stakeholders. This was followed by several individual and small group meetings with concerned government agencies, experts and relevant International Non-Governmental Organizations (INGOs), NGOs and donor organizations. Data necessary for this study were also collected through extensive internet searches.

The study was carried out during September and October 2012. Altogether 18 institutions were visited and 32 persons interviewed. The list of the persons met is provided in Annex 1. Key expert group meetings were held for information sharing, brainstorming, enabling access to relevant data and commenting on the study.

1.2 Basic Facts

Nepal is a very small country in comparison with its neighbours, India in the South and China in the north. The altitude ranges from 70 metres above sea level in the south, to 8848 m at the summit of Mount Everest, in the north. The country covers a total area of about 147 181 km² with climate ranging from subtropical in the lowlands to alpine in the high mountains. Arable land cover is approximately 21%¹.

The country can be divided into five physiographic zones based on altitude: Terai, Siwalik, Middle Mountain, High Mountain and High Himal. Terai is a flat land inclining gently towards south of Nepal with average elevation from 70 m to 300 m. On its North lies the Siwalik, with elevation between 300 m to 920 m (DFRS, 2008). The Middle Mountains are located at an altitude of between 200 m and 3000 m between the Terai and the High Mountains. The High Mountain and High Himal fall in the northernmost part of the country on the border with China. The altitude in these regions is typically more than 2 300 m.

Administratively the country is divided into five Development Regions: Eastern Development Region (EDR), Central Development Region (CDR), Western Development Region (WDR), Mid-Western Development Region (MWDR), and Far-Western Development Region (FWDR).

The economy of the country is predominantly agrarian and characterized by low productivity. Nepal has a population of 26.6 million with a population density of 181 people/km². Approximately, 70% of the people are forest dependent². Populations of indigenous groups are difficult to distinguish. Because of the fragile political situation in Nepal, many groups are now claiming to be indigenous. The population of the country differentiated by caste or ethnic groups is presented in Annex 2.

Nepal's economic growth in terms of GDP was 3.5% in 2010/11 (CBS, 2011). Agriculture and forestry are estimated to constitute about 33% of the GDP followed by non-agriculture sectors such as industry, housing rents and the retail market (67%). The Human Development Index of

¹ HMGN/MoFSC. 2002. Nepal Biodiversity Strategy, Ministry of Forests and Soil Conservation, HMG, Nepal

² Source: Ministry of Forest and Soil Conservation, 2010.

the country is only 0.463³. The volume of foreign trade was USD5.8 million in 2011 (CBS, 2011).

1.3 Forest Resources, Management & Tenure

Forest resources

For technical purposes, Nepal follows forest and shrub definitions as prescribed by the United Nations Food and Agriculture Organization (FAO) but the 1993 Forest Act has a legal definition of forest land.

Nepal has very diverse flora consisting of 35 major forest types and 118 ecosystems. Some of the important forest types are as follows:

- Tropical forest (below 1 000 m)
- Subtropical broad-leaved forests (1 000-2 000m.)
- Subtropical pine forest (1 000-2 200 m)
- Lower temperate broad-leaved forests (1 700-2 700m)
- Lower temperate mixed broad-leaved forests (1 700 -2 200 m)
- Upper temperate broad-leaved forests (2 200 - 3 000 m)
- Upper temperate mixed broad-leaved forests (2 500- 3 500 m)
- Temperate conifer forest (2 000 - 3 000 m)
- Sub-alpine forests (3 000 - 4 100 m)
- Alpine scrub (above 4 100 m)

Forests and shrub land covers 39.6% of the total land area of the country. The FWDR has higher forest cover than in the rest of the country. The forest areas of Nepal by Development Regions are presented in Table 1.1 (DFRS, 1999).

Table 1.1 Forest & Shrub Area by Development Regions

Region	Total Land Area (ha)	Forest Area (ha)	Forest (% of total land area)	Shrub Area (ha)	Shrub (% of total land area)	Forest and Shrub Total (%)
FWDR	1 953 900	687 400	35.2	263 900	13.5	48.7
MWDR	4 237 800	1 192 400	28.2	442 000	10.4	38.6
WDR	2 939 800	734 300	25.0	256 900	8.7	33.7
CDR	2 741 000	918 600	33.5	233 800	8.5	42.0
EDR	2 845 600	736 100	25.9	362 600	12.7	38.6
Total	14 718 100	4 268 800	29.0	1 559 200	10.6	39.6

Source: DFRS (1999).

Deforestation and degradation

Deforestation and forest degradation is a serious concern in Nepal. The forest cover decreased from around 60% in the 1960s to 29% in the 1990s. As a result, the per capita forest area in the country has also declined to just 0.27 ha. Nepal lost 570 000 hectares (ha) of natural forests in the 27 years between 1964 and 1991 out of which 380 000 ha have been converted into agricultural land (Adhikari, 2002).

³ Human Development Report 2013, UNDP, New York, USA, 2013. Nepal sits at 157th of 186 countries.

The forest area decreased at an annual rate of 1.7%, whereas forest and shrub together decreased at an annual rate of 0.5% during the period 1978/79 to 1994 (DFRS, 1999). The increase in shrub land since 1978 to 1994 shows that forest areas are degrading and being converted into other land use types (Table 1.2).

Table 1.2 Change of Forest Coverage from 1978 to 1994

Year	Forest Area ('000 ha)	Percentage	Shrub area ('000 ha)	Percentage
1978*	5616.8	38.0	689.0	4.7
1986*	5504.0	37.4	706.0	4.8
1994**	4268.0	29.0	1560.0	10.6

Source: * HMG/ADB/ FINNIDA, 1988; ** DFRS, 1999.

The recent studies in 20 Terai districts also revealed that forest cover decreased at an annual rate of 0.06% from the period of 1990/91 to 2000/2001 (DoF, 2005). The Forest Resource Assessment Project (FRA) (2010-2014) is working to provide data on the current status of Nepal's forests, including trends in coverage, composition and deforestation. Illegal logging and encroachment are the main direct causes of deforestation, while underlying causes include weak forest governance and poverty. The direct causes and their connection with underlying causes are discussed below.

Illegal forest harvesting

There is significant illegal forest harvesting in Nepal and the volume varies with the number of incidences. However, it is very difficult to estimate the exact volume of illegal timber as there is no official data or records for illegal harvesting and smuggling. Most of the timber is consumed in local markets while some goes to neighbouring countries. There are several cases in the past when illegal harvesting has been exposed. Unfortunately the local forest department officials themselves have been involved in these illegal activities.

Box 1.1 Example of Involvement of Forestry Personnel in Illegal Forest Harvesting

In order to examine the cases of illegal harvesting and involvement of forestry personnel, the government convened a special judiciary court of enquiry on 13 August 2010. The judicial court found guilty and convicted 28 forest officers. Among the convicted was the then DG of the DoF who was charged for involvement in illegal logging and other illegal forest activities (www.mfcs.gov.np). Recently, the national daily newspaper *Gorakhapatra* (17 September 2012) reported that the Commission for the Investigation of Abuse of Authority moved to the special court a total of 195 personnel including the Regional Director of the FWDR, a joint secretary level officer of the Government, for being allegedly involved in the embezzlement of USD4.85 million by selling round timber (21 390 m³) from 108 CF in one of the hill districts of the country (Dadeldhura). Almost every day there is some news in daily newspapers regarding illegal forest harvesting and involvement of forestry officials.

Forest encroachment

Some 29 out of 75 districts in Nepal have severe forest encroachment problems. These include the Terai districts. People tend to encroach on forest land near their homestead regardless of whether it is in hills or in Terai. Additionally, the practice of shifting cultivation is very prominent in the Middle Mountain physiographic zone of the country.

It has been reported that around 91 100 ha of forest land have been encroached on since the establishment of Forest Department (1942) (Forest Secretary's presentation 16/9/2012). One main reason is the policy of the government for the settlement of landless people inside the forest area coupled with the poor physical infrastructure and lack of resources. In addition, the ease of transport, population pressure and lack of good governance and accountability also contribute. Although concerned forest officials try to move out encroachers from the forest land repeatedly, it has becoming an increasingly difficult task.

Tenure rights

The government owns all forest land area, except private land. However, some of the government forest land is handed over to communities as Community Forests (CF) and as Leasehold (LH) forest for management purposes. In these modalities the rights holders own the trees and other forest resources of such land.

1.4 Forests & Trees in the National Economy

Forest products, services, industry, and plantations

The forest ecosystems are a major source of energy, animal fodder and timber. Forest catchment areas are also the main sources of water used in hydroelectric power generation, irrigation and domestic consumption. Rural people depend on many NTFPs for their subsistence needs for food, fibre, medicine and shelter. Forests also serve important ecological functions such as biodiversity conservation.

Wood based industries play an important role in the national economy. The first mechanized wood-based industry, a match factory, was established in 1938. There are two plywood mills in Nepal whose total production capacity is 62 300 m²/a. Because of old machinery and a shortage of raw materials, these mills are operating at only about half of their capacity. There are no reliable data on plywood consumption in Nepal because there is an unrecorded flow across the border from India. Nepal also has six Katha⁴ factories with a total annual production of 650 tons of Katha and 700 tons of Catechu, an extract of the acacia tree, which is used as food, tannin and dye.

The timber and fuelwoods are the two most important items produced from the forests of Nepal. They are mainly produced in the Terai and Inner Terai districts. Most of the production is consumed within the country. Exporting timber is very expensive as there is 200% sales tax on the royalty rate. The volume of timber, fuelwood, poles and small timber production from the Government Managed Forest (GMF), community forests and private forests in the country is discussed in Chapter 5.

Forest plantations are established by the public sector in Nepal. Major plantation activities in the country were carried out in the late 1970s or during the 1980s. FAO (2006) has documented 49 000 ha, 52 000 ha and 53 000 ha of plantations in 1990, 2000 and 2005, respectively. The plantations constitute only 1.3% of the total forest area of Nepal. Some plantations are yielding timber and small diameter round wood. The small diameter round wood is normally used for furniture making and fuelwood, not for construction. Private sector forest plantations are also contributing to the national economy although the scale is quite low (2 300 ha) (DOF, 2005 b). These private companies have to find their own resources for establishing and for the subsequent operations required to maintain the plantations. Private tree planters largely grow fast growing trees especially used for small timber and firewood. In

⁴ Katha is an extract obtained from the heartwood of *Acacia catechu* and is used as e.g. dye.

Terai, mainly *Dalbergia sissoo* trees are raised as insurance for the marriage of a girl child. Private forest owners have to pay a 13% royalty to the government when selling their timber products. The royalty rate varies with tree species. Monoculture plantations especially of *Dalbergia sissoo* had posed some problem in the past due to root rot disease. The tradition of raising monoculture has now shifted towards agro-forestry practices and agricultural crops are grown in between tree crops.

Contribution to GDP

Nepal's GDP was estimated at USD18.7 billion for the fiscal year 2010-2011⁵ (Development Co-operation Report, 2012). The preliminary estimate of per capita GDP at current prices stands at USD642 for the 2010-2011 (MoF, 2012). GDP growth slowed to 3.5 % in the fiscal year 2010-2011 compared to 4% in 2009-2010. GDP growth reached about 4.5 % in 2012 (UN ESCAP, 2012). It has been reported that slow growth in Nepal in recent years has largely been due to political instability, frequent strikes in the country, persistent labour problems and severe electricity shortages (UNESCAP, 2012).

A comprehensive study on the contribution of the forestry sector to Nepal's GDP has yet to be carried out. Currently such contribution is calculated together with agriculture and fisheries. The three sectors together contributed to about 39.3% of GDP during the Ninth Five-year Planning period (1997-2002) (NPC, 2002). In the Tenth Five-Year Plan (2002-2007), however, the contribution had dropped to 34.9 % (NPC, 2007).

HMGN (2000) estimated the forest sector alone has contributed 15% of the GDP in the country (HMGN, 2000). Lebedys (2004) in contrast, estimated a contribution of just 3.5% in 2000 and 4.4% for the period 1990 to 2000. The estimation includes formal forest sector activities such as logging and wood industry only (informal activities are ignored). DFRS, NFA (2008) claims the FAO assessed share of GDP is much underestimated. A recent study conducted by the Nepal Foresters Association (NFA) reveals that the forest sector may contribute up to 28% of the total GDP (DFRS, NFA, 2008). The differences in these figures are most likely due to the contribution of forest sector in the past being generally accounted for as forest products from national forest or government-managed forests. However, currently a large portion of forests are managed by communities in the form of community forestry. This is complemented by leasehold forests and private forests that contribute to a large number of goods and services, and thus increase the importance of forests that was previously invisible in the government oriented statistics.

Employment opportunities

The forest sector provides employment to around 1.7 million people, which is 9.23% of the total economically active population in Nepal (ERI, 2011). ERI (2011) has included both formal and informal sectors while calculating total employment in the forest sector. Of this total, the vast majority (91.3%) are in the informal sector whereas the formal sector employs only 8.7%. The total numbers employed in both the formal and informal sectors are approximately 144 000 and 1 514 000, respectively (ERI, 2011). Figures of employment generated by Community Forestry and other management regimes are not available. However, the government and parastatal institutions are directly employing about 15 400 persons in the forest sector (Annex 3).

⁵ The fiscal year in Nepal runs from 16 July to 15 July of the following year.

Religious and spiritual importance of forests

Forests are very important both religiously and spiritually in Nepal. Many communities even worship them. According to Acharya (2002), around 80 species of plants found in forests in Nepal are used in socio cultural and religious festivals. Ingles (1994) states that the way forests are perceived and managed in Nepal depends a lot on the religious practices and beliefs of the people. The author further argues that religious forests provide a refuge for many species, which may otherwise have been locally extinct. Acharya (2002) also states that some plant species such as *Ficus religiosa*, *F. bengalensis*, *F. glomerata*, *F. glaberrima*, *Magnifera indica*, and *Phyllanthus emblica* are considered highly sacred by Hindu communities and they are worshipped and used for birth to death rituals.

Some of the other uses of the forest plant species are listed below:

- The sticks of *Prunus cerasoides* and *Butea monosperma* are used to perform the ceremony of *brata mandha* of young Nepalese boys
- A culture called *bel bibaha* is practiced in the Newar community where a young girl marries the Bel fruit *Aegle marmelos* before the onset of her menstruation,
- Sisters offer their brothers fruits of *Jungles regia* during the *Tihar* festival.

Forests are an important natural resource of Nepal. A large proportion of the population, especially rural dwellers, depend on the forest for their livelihoods. Forests in Nepal provide important watershed services serving e.g. hydroelectric power generation, irrigation and domestic consumption.

Wood based industries used to play an important role in the national economy of Nepal but presently they generate very limited income. However, major plantation activities carried out in the past are starting to yield various forest products. The forest sector is providing employment opportunities to 9.23% of the total economically active population in the country.

2. NATIONAL POLICIES AND INTER-SECTORAL LINKAGES

2.1 Macro-level Development Policies

The genesis of planned development in Nepal commenced in 1956. Since then, a three-year plan and eight five-year plans, followed by the Three Year Interim Plan (TYIP) (2007-2009) have already been completed. Currently the Three Year Plan (2010-2013) is being implemented.

Greater stress on the contribution of forests to the economic, social and industrial development of the country was only included in the **Fifth Five-year Plan (1975-1980)**. This period is considered as a landmark in the history of forestry development in Nepal. Since then the forest sector has been in subsequent plans. In the **Ninth Five-year Plan (1997-2002)** the forest sector was to support poverty alleviation through promoting and establishing participatory forest management and by implementing community-based development activities. The **Tenth Plan (2002-2007)** of Nepal was dedicated towards Poverty Reduction. It is also known as Poverty Reduction Strategy Paper (PRSP). One of the main thrusts of the in the plan was to manage forests, plant resources, herbs, watershed and bio-diversity conservation along with increasing employment opportunities through the development of forest based industries.

Three Year Interim Plan (2007-2009)

The government of Nepal (GoN) put forward various policies in the TYIP (2007-2009). These included policies to stop the encroachment of forests, to promote the commercialization of its products and to enhance the conservation and utilization of herbal products. Other policies within the plan focused on the overall long term management of the forest area and development of internal markets, promotion of exports and generation of employment by promoting forestry and forest-based industry.

Three Year Plan (TYP, 2010-2013)

The main objective of the Government in the current three year plan (2010-2013) is to sustain all sub-sectors of forests with balanced conservation, ensure people's participation in management and utilization of forest products, and minimize the challenges to the forest sectors while contributing to economic, social and environmental sectors.

2.2 Forest Sector Policies

2.2.1 National Forestry Plan 1976

The National Forestry Plan (NFP) of 1976 was the first forest policy in Nepal. This plan envisaged the proper and sustainable development of forests and forest industries, with an emphasis on making the country self-reliant in the daily needs of its people for fuelwood and timber (HMGN/ADB/FINNIDA, 1988b). This was followed by the preparation of Master Plan for the Forest Sector (MPFS) for 1989-2010 (MPFS, 1989). MPFS was a strategic framework for forest sector planning and policy development. It emphasized multiple objectives such as meeting the people's basic needs, taking appropriate ownership, conservation of ecosystems and fostering the local and national economies. The MPFS was reviewed in 2010. The revision however was incomplete. Therefore, in 2012 the Ministry of Forests and Soil Conservation (MoFSC) took the lead role in preparing a new plan for the forest sector under the leadership of the Secretary of Forests. In the absence of MPFS, the forest sector development in Nepal is guided by the periodic National Plans, for example, the Three Year Periodic Plans.

2.2.2 National Conservation Strategy 1988

The National Conservation Strategy (NCS) was prepared in 1988 as a national follow up response to the World Conservation Strategy adopted in 1980. NCS viewed the natural environment system in a holistic way. Wise use, protection, preservation and restoration were identified as the four key elements of the underlying strategy.

The NCS was also endorsed in order to set the conservation action agenda for drinking water, forestry, national parks and protected areas, medicinal plants, agriculture, pesticide control, livestock development and pasture management, conservation, trekking and mountaineering activities, environmental quality and cultural heritage.

2.2.3 Revised Forest Sector Policy 2000

The Government promulgated a new forest policy in 2000, particularly to imitate the management of large-scale forests of Terai, the Revised Forest Sector Policy (RFSP) 2000. It provided an update and amendments to the MPFS. Collaborative Forest Management (CFM) was introduced as the new forest management model to manage forests in Terai and Inner Terai. The model was developed in response to experience and views that forest management by hill communities was not meeting the needs of forest product users who lived far away from the forest. Implementation of CFM has been piloted in three Terai districts but it has not yielded the desired outcomes. One of the major challenges was a political one: the absence of local elected governments which would otherwise help in its implementation.

The RFSP policy has given recognition to the Agriculture Perspective Plan (APP), MPFS and the Nepal Environmental Policy and Action Plan (NEPAP). This policy, however, has yet to be translated into legal instruments (RFSP, 2000). The long-term objectives of the RFSP 2000 are:

- To meet the people's basic needs for fuelwood, fodder, timber, and other forest products on a sustained basis
- To contribute to food production through an effective interaction between forestry and farming practices
- To protect land against degradation and other effects of ecological imbalance
- To conserve ecosystems and genetic resources
- To contribute to the growth of local and national economies and thereby improve the quality of life of the people by managing land and forest resources, developing forest based industries, and by creating opportunities for income generation and employment.

2.2.4 Nepal's Forest Outlook for 2020

The MoFSC submitted a comprehensive strategy document entitled *The Future of Nepal's Forest Outlook for 2020* to FAO's Regional Office for Asia and the Pacific in 2008. The Outlook Study provides a glimpse of the evolution of the forest sector by year 2020. The strategy document stressed the changing role of the forest sector with the change in forest landscape, stakeholders and their interest.

Community Based Forestry Regimes have brought great change by restoring denuded landscapes and creating opportunities to produce diverse forest products and services to the wider stakeholders - ranging from local to international communities. In these contexts, strategies and priorities have been identified for reforming the forest sector of Nepal. Annex 4 outlines the strategies and priorities adopted to cope with the international and national changes in the forest sector in the country (Asia Forestry Outlook Study 2020: Country Report

NEPAL, 2008). Recently, GoN has taken the initiative to revise this strategy in order to accommodate emerging issues such as carbon trading and Payment for Environmental Services (PES).

2.3 Other Sector Policies

2.3.1 Agricultural Policy 1995

The Agricultural Perspective Plan (APP) of 1995 has identified four top forestry priorities. These are:

- I. Community forestry in the hills and mountains
- II. Commercial forest management in the Terai
- III. Private and leasehold forestry
- IV. Training, research and development (APROSC, 1995).

In addition, the APP supported the development and management of forage and pasture areas with a view to enhancing production from the livestock sector. It also pointed out that the commercial management of state forests needs strong political and bureaucratic commitment.

Some of the key recommendations made in the plan encourage implementation of the following activities:

- Private nurseries to produce quality seedlings
- Review of the existing practice of providing subsidized timber to meet the social needs
- Legal reforms to resolve the existing conflicts especially in the community forestry
- Measures to improve the efficiency of the forestry staff
- Availability of credit for viable large-scale forestry projects
- Research to generate suitable technological packages
- Reassessment of the contribution of forest sector to the national economy.

2.3.2 Environmental Policy (NEPAP) 1993

NEPAP was formulated in 1993 as a further refinement of the NCS. NEPAP identified major sectoral areas including land, forests and water resources. Degradation of the country's natural resources and declining soil fertility were acknowledged as the principal national environmental problem.

2.3.3 Climate Change Policy 2011

GoN formulated a policy to address the issues of climate change known as Climate Change Policy 2011. The policy stresses proper utilization, promotion and conservation of forest resources as a means of alternative livelihoods. The policy further outlines prioritizing and implementing programmes on the sustainable management of forests, agro-forestry, pasture, rangeland, and soil conservation to address the impact of climate change. It also promotes developing a mechanism for optimal utilization of international, regional and local funding resources and adapting a basin approach for water management through promoting the planting of multipurpose tree species in private fallow land areas affected by soil erosion, landslides and sloping land (GoN, 2011).

To deal with the impacts as well as opportunities from climate change to the forest and biodiversity sector, the National Adaptation Programme of Action (NAPA) has focused on

SFM. NAPA identified ecosystem health and services assistance through watershed and landscape level planning and management. The programme also includes empowering local communities and service providers with capacity to address key challenges posed by climate change while harnessing the potentials and economic benefits of forest management. NAPA produced a comprehensive list of prioritized adaptation options for forest and biodiversity conservation (NAPA, 2010). Both NAPA and the Climate Change Policy 2011 have made mandatory provision to disburse at least 80 % of the allocated budget for the implementation of adaptation and climate change activities at the local level.

Similarly, the National Framework on the Local Adaptation Plan of Action (LAPA), which was approved by the GoN in November 2011, identified forestry and watersheds as two important activities. It has already been piloted in 10 districts of the country (GoN, 2011). As a supplementary effort to the NAPA process, the study on climate change vulnerability mapping for Nepal was also carried out by the Ministry of Environment. This study provides information on the ecological sensitivity zones and districts of the country (MoE, 2010).

Given the importance of the climate change issues, the National Planning Commission (NPC) recently (2012) conducted a Climate Public Expenditure and Institutional Review. The review highlighted some of the gaps in expenditure tracking. The NPC has also recommended climate budget codes while preparing an annual budget for national development plans. Similarly, it has proposed a forward looking perspective on how climate finance may be administered in the years ahead (NPC, 2011).

2.3.4 Landscape Level Planning

Landscape Level Planning (LLP) is an initiative undertaken by the MoFSC. The main objective of the landscape level planning is to conserve and manage an array of ecosystems in lowland Terai and the nearby foothills. In this connection, the Terai Arc Landscape (TAL) Project is jointly implemented by the Department of National Parks and Wildlife Conservation (DNPWC), the Department of Forests (DoF) and the World Wildlife Fund (WWF) involving Non-Government Organizations (NGOs), partner conservation organizations, local people, and other stakeholders. The project aims to link 11 Nepalese and Indian trans-border protected areas with biological corridors. The project also aims to provide habitat for the long-term survival of wildlife species within the project area and to improve the socio-economic conditions of local people through economic opportunities. Moreover, there are other sector policies related to forestry such as hydropower and irrigation. These policies aim to minimize the adverse impacts of hydropower and irrigation infrastructure on biodiversity conservation.

2.3.5 Cross-sectoral Issues in Nepalese Forestry

The forest ecosystems are a major source of energy, animal fodder and timber in the country, and many cross-sectoral policies have placed emphasis on tackling the issues of forestry. Besides the MoFSC which has mandated to implement various policies such as Climate Change Policy 2011, as well as NAPA and LAPA programmes, other ministries (e.g. Ministry of Environment, Ministry of Cooperatives and Agriculture Development, and Ministry of Water Resources) have emphasized forestry issues in their policies. However, conflicts and ambiguities exist in some Acts (e.g. Local Self Governance Act 1998) regarding the collection of revenues and right to sell seasoned timber.

There is lack of coordination within and between sectoral Ministries/ Departments for implementing programmes that deal with cross-sectoral issues. There is no strong and standing coordination mechanism either at the central or district levels.

3. FOREST LEGISLATION

There are many institutions and Acts and Regulations that are relevant to forestry. Some of the clauses in these Acts and Regulations are in conflict with each other especially in revenue collection for the same products. These dual revenue collection rights should be resolved.

3.1 The Interim Constitution of Nepal 2007

Various legislation deals directly with forest financing. The key statutes are the 1993 Forest Act and the Forest Regulations of 1995, National Parks and Wildlife Conservation Act (1973), and Buffer Zone (BZ) Regulations. Based on these Acts, various guidelines and directives have been formulated and are operational.

3.2 Forest Legislation

3.2.1 The Forest Act 1993 and Regulations 1995

The Forest Act 1993 and Regulations 1995 are the legal instruments to translate the policy vision into practice. They aim to develop the forest sector through decentralization and the participation of individuals and groups. Furthermore, the Forest Act 1993 categorizes national and private forests on the basis of ownership. In Nepal, all non-private forests are owned by the state. The Act and the Regulations are focused on generation of income through the sale of forest products but neutral with regard to the ecosystem services provided by it.

The Forest Act and Regulations determine sanctions against forest-related illegal activities. The degree of the sanction depends on the severity of the offence. It can be anything from fines and confiscation of the illegal product to imprisonment.

3.2.2 National Park & Wildlife Conservation Act 1973, Buffer Zone Regulation

The National Park and Wildlife Conservation (NPWC) Act 1973, Buffer Zone (BZ) regulations and guidelines are the legal tools for Protected Areas (PAs) declaration and management. National Parks (NP), Wildlife Reserves (WR), Conservation Areas (CAs), Hunting Reserves (HR) and BZ are the main PA categories. All protected areas are managed by the government. To date, protected areas constitute more than 23% of the total land area of the country (DNPWC, 2010). The forest areas surrounding the protected areas have been declared as buffer zones. The forests in the buffer zones are generally managed in the manner as CFUGs would manage their forests. This management system is becoming a successful model for generating natural, human, financial and physical capital, as well as maintaining protected area eco-systems.

3.3 Other Legislation Related to Forests & Trees

3.3.1 Environment Protection Act 1995 and Regulation 1996

In 1996, the Environment Protection Act was promulgated, and in 1997, Environment Protection Regulations were formulated. The Act envisages the important relationship between economic development and environmental protection for sustainable development. It also acknowledges the need for mitigation measures to reduce the negative impact of environmental degradation on living beings and nature.

The Act and Regulations have mandatory provisions to conduct Initial Environment Examination (IEE) and Environmental Impact Assessment (EIA) studies before any development work begins. The Act and Regulation aim to analyse the impact of development interventions at various sectors. They are becoming effective tools to institutionalize the vision of sustainable development. So far IEE has to be carried out for a total of 24 forest sector proposals before they get initiated. Similarly EIA needs to be completed for 13 forestry related proposals before their initiation. Both IEE and EIA have to have clearly spelled out mitigation measures and every client has to abide by the provisions of the Act, Regulations and guidelines.

3.3.2 Local Self Governance Act 1998

Article 34 (2) of the Interim Constitution of Nepal, 2007 provides a basic framework for decentralization. The preamble of the Local Self Governance Act (LSGA) 1998 stipulates that *“participation of the entire people, including various ethnic tribes, indigenous people and vulnerable groups, is necessary for the institutionalization of development, allotment and mobilization of the resources, social equality, and balanced and equitable distribution of the benefits of development”*. According to Section 28 of this Act, the powers and functions of a Village Development Committee (VDC) are divided into 11 broad areas of which ‘Forest and Environment’ is one.

The LSGA empowers District Development Committees (DDCs) and VDCs to acquire revenues and requires each local government unit to draw up a development plan of their own. It has made provisions for VDCs and DDCs for carrying out afforestation on fallow lands and hills, and for planning and implementation of different programmes concerned with conservation of soil and biodiversity. Section 58 (d and e) of the Act provides VDC the right to sell seasoned timber, fuelwood, twigs, branches, bushes, grass and straw within the VDC area for income generation. However, they are not allowed to sell these forest products outside the country. Similarly, section 215 (2) empowers the DDCs to levy taxes on wool, resin, herbs, slate and sand, and animal products such as bone, horn, wing, leather etc., except those items prohibited pursuant to the prevailing law, and section 218 empowers the DDCs to sell sand, boulders, stones and driftwood lying within its boundary.

3.3.3 Irrigation Rules 1999

Irrigation rules 1999, amended in 2003, has provisioned for planting trees along the irrigation channels. Channel users have to register with the District Forest Office (DFO) to have the right to plant forest trees (not fruit trees) on the banks of irrigation channels following the approved plan and prevailing Forest Act and Regulations. Channel users can obtain formal approval from the concerned forest authorities to use the channel banks and plant appropriate trees (Irrigation Rules, 1999).

3.3.4 Financial Act 2011

This is one of the most influential legal instruments promulgated annually by the Ministry of Finance (MoF). It empowered the government to implement its financial proposals, levy fees, taxes and duties, and to assume any other financial liability.

Similarly, the MoFSC is mandated to make laws for any specific revenue generation activities for forest financing. MoFSC can fix the royalty, fees, taxes and other types of duties but has to

be approved by the MoF on a yearly basis, either through budget speech or written approval from MoF.

4. FOREST MANAGEMENT AND INSTITUTIONS

4.1 Main Administrative Categories of Forests

GoN has classified forests into two main categories for the purpose of their management: National Forests (NF) and Private Forests (PF). The ownership and control of NF lies with the government and that of PF with the individual private tree owner. NF includes all non-private demarcated or non-demarcated forest lands, paths, ponds, lakes or streams and river-beds inside such forests, and waste or uncultivated or unregistered lands surrounded by forest or situated near adjoining forests. For management purposes, the NF is further divided into five categories:

- Government Managed Forests (GMF),
- Protected Forests (PF),
- Community Forests (CF)
- Leasehold Forests (LHF), and
- Religious Forests.

GMF and protected forests

GMFs are managed by the Government. Forest development works such as harvesting, enrichment plantations, as well as other forest protection and production activities mentioned in the approved working plan are carried out in the GMF. The government owns of all forest products obtained from these forests.

Protected Forest

If the Government deems that any portion of a NF is of special environmental, scientific, cultural or other special importance, it may declare such portion as a Protected Forest. Protected areas, in Nepal, are allocated for the conservation, management and use of flora, fauna, landscape of ecological importance along with the natural environment, wildlife and its habitat through preservation and prudent use. The basic objectives of declaring protected areas are to prevent disappearance of species native to the country by employing biological principles. This concept of biological management also takes into account the economic, political, administrative, social and humanitarian conditions. Protected areas consist of conservation areas, hunting reserves, wildlife reserves, and national parks. The works in the protected forest are carried out according to the approved plan. The National Parks and Protected areas in Nepal cover a total area of approximately 33 120 km² (22.5 % of the total geographical area of the country). There are provisions in the National Parks and Wildlife Conservation Act that specimens for scientific collection can be made with the permission of the concerned authority but the Act does not allow any commercial collection of any plant or animal within the protected area.

Community forests - Essence and management

The 1993 Forest Act has special provisions for handing over the NF to the local communities through Community Forestry Users Groups (CFUG). One of the essences of CF is the ownership of the forest products and the income thus raised by selling the forest products. There are set rules and regulations which have to be followed by the local communities for managing forest areas in a sustainable way.

The general assembly of the CFUG is the overarching body that finalizes the plan before it is submitted to the DFO for approval. The plan is generally implemented by an executive committee nominated by the general assembly. Community forests are those parts of the NF that are managed by the community through these groups. General rules related to community forests include:

- All accessible forests are to be handed over to users to the extent they are able and willing to manage.
- FUG shall protect, manage and utilize these forests.
- FUG shall get all products and income from the forests.
- Priority is given to management of existing natural forests rather than to establishment of new plantations.
- No part of NF suitable to be handed over to the CFUGs as community forest shall be given away as a leasehold forest.
- Each FUG has to prepare an operational plan for managing the forest.

Normally a forest management plan spans five years. The operational plan should include:

- Forest description – name, boundary, area, forest type, forest condition
- Forest map
- Division of forest into blocks and its description – name, boundary, area, aspect, slope, soil, forest type, main species, age and condition of natural regeneration
- Objectives of forest management
- Forest protection methods
- Forest management activities – thinning, cleaning, pruning and other forest management activities
- Nursery, plantation, income-generating activities and their time table
- Description of potential sites for herbal (medicinal) plants cultivation, herbal species, their cultivation program and timetable
- Procedures to use income generated through forest products distribution and other sources
- Provisions for penalties, which may be inflicted on users any of their operations contravene the operational management plan
- Provisions for protection of wildlife
- Other matters directed by DoF.

Should the CFUG committee not operate as per the approved operational management plan, the government may take back the forest handed over to the communities. In the past there have been some cases of forest withdrawals from communities to the government. However, at present CFUG is managing more than one quarter of the total national forest in a sustainable manner. More than 19 000 CFUGs are involved in community forestry managing about 1.65 million ha of forests and benefiting approximately 2.17 million households (Personal communication with Ms Apsara Chapagain, President, FECOFUN, 2012).

However, Community Forests still need to meet the needs of the rural poor in terms of utilizing forest resources. A study carried out by Pokharel (2012) suggests that there is a need to consider the concerns of pro-poor CFUGs in terms of their forest products when regulating forest resources. The study reports that regulating forest products in community forestry is essential as it creates a favourable environment for regenerating resources by reducing pressure in the forests. The CFUGs often adopt rigid management regimes in the name of forest growth. Collection of dead branches and fallen twigs from the CF may cause a little damage in forest growth due to human movement in the forest but not significantly. A less rigid

management regime also reduces the possibility of fire hazards in the forests. The study further stresses that CFUGs should favour the poor by adopting a less rigid management regime.

Community forestry operational guideline

Community Forestry has been very successful in protecting forests, mostly on denuded hill slopes and barren land. There is a more or less set process for handing community forests to communities. The process is very participatory and provides a strong sense of ownership which has made the community forestry programme a success. In order to simplify procedure and streamline the activities that various CFUGs would be implementing, a community forestry guideline was prepared and implemented in 1995. The guideline was reviewed by the concerned stakeholders and amended in 2001 to suit the changed context. The guideline was further amended in 2008 to make it more relevant in terms of the existing policies, acts and regulations. This revised guideline, published by the DoF, also provided a process for fund mobilization.

The Community Forestry guideline provides a list of activities that FUGs are allowed to implement. Some of the important activities are listed below:

- Forest protection
- Forest Development
- Enrichment
- Income generation
- Soil conservation
- Institutional development
- Training or workshop, and
- Activities related to community development

Income generation and use

Community forestry generates its income mainly through timber sales. The timber is harvested according to the approved working or management plan prepared by the Forest Users' Committee. The price of timber varies with the species. Sal (*Shorea robusta*) fetches the highest price; currently about USD525 per m³ in the open market. It has been recorded that only 4250.9 m³ of timber were sold by community forests in the country in 2010/11. The volume of timber sales was very high (around 165 000 m³) in the fiscal year 2009/10. There was rampant illegal timber felling in most community forest areas during 2010 because of political unrest and involvement of timber mafias. The government had to intervene in timber harvesting along with commissioning a proper investigation (DoF, Annual Report, 2010/11).

In terms of benefit sharing arrangements, the CFUGs are enjoying the full benefit by using timber, fuelwood, fodder, litter, NTFPs and other environmental services within the group. The CFUG may sell the forest products, within or outside the group, that are obtained by managing the community forests according to the approved operational plan.

One of the unique characteristics of Community forestry in Nepal is that all the forest product benefits from community forests belong to the CFUG. The CFUG members can use the forest products for themselves or they can sell to outsiders. CFUGs have the right to use 100% of the income derived from the sale of forest products (timber and non-timber), except the timber of two species viz. *Shorea robusta* (sal) and *Acacia catechu* (khayer). The CFUGs have to pay 15% of the sale price to the Government Treasury from the sale of these two particular species,

The community forestry guideline clearly dictates the use of income that is generated by community forestry. CFUGa are allowed to use the generated income in the following manner:

- 25% of the total income should be spent on activities that develop and manage the forest.
- 35% of the total income should be spent on activities that help raise the socio-economic status of marginalized women, dalit and indigenous communities.
- 40% of the total income will have to be spent on community development activities. The community development activities have to be endorsed by the General Assembly.
- The income so generated has to be deposited in a banking account with joint signatories. The deposited funds can be withdrawn through joint signatures of either of the president of the CFUG or Secretary and the treasurer.

Leasehold Forests

GoN may grant any part of NF as Leasehold Forest for the following purposes:

- a) To produce raw material for forest based industries.
- b) To plant trees to increase the forest products for sale or distribution, or for use.
- c) To operate the tourism industry in a manner conducive to conservation and development of forests.
- d) To run agroforestry in a manner compatible with the conservation and development of forests.
- e) To operate farms of insects, butterflies and wildlife in a manner conducive to conservation and development of forest.

This forestry program focuses on rehabilitating highly degraded forests and land resources while engaging local people. The target beneficiaries are families below the poverty line with special emphasis on the landless, women and ethnic groups such as *Magar, Thami, Praja and Tamang*. The government hands over the lease land for a period of 40 years initially. If the Government feels that the lease has implemented all activities satisfactorily, as per the plan, it can extend the lease tenure for another 40 years.

Also the Forest Act allows the GoN to lease forest land to the corporate sector and industry through an open tendering process. The successful bidder has to pay a royalty of USD3 to 15⁶ per ha per year depending on the physiographic zones of the country. This royalty rate increases by 10% each year.

Religious Forests

Religious forests are National Forests handed- over to certain religious institutes, groups or communities for non-commercial utilization of the forest products produced. Activities such as cutting of standing trees, causing deterioration of the environment or damage or loss to the public or causing erosion in the watershed area are not allowed in religious forests. A total of 54 300 ha of forest have been recorded under this category (LFP, 2007).

Private Forests

Private forest represents the forests or trees planted, nurtured or conserved on any private land that belongs to an individual as defined by the prevailing law. However, individuals have to register such lands at the office of the concerned DFO. Each individual is required to provide plantation and other details in accordance with the prevailing rules and regulations. A total of 23 000 ha of land have been categorized under this type of forest (DoF, 2005 b).

⁶ 1USD = 85 NRs at the current exchange rate.

PFs mainly generate income through selling timber. It has been recorded that around 73 000 m³ of timber was sold by various PFs in 2010/11. The volume of timber sales was about 2 710 000 m³ in the fiscal year 2009/10 (DoF, Annual Report 2009/10 and 2010/11).

4.2 Steps Towards SFM

The NFP of 1976 marked the beginning of sustainable forest management practices in Terai and the hills. The initial NFP recommended the preparation of Forest Working (management) Plans (FWP) for each division. FWPs were formulated for a few districts of the Terai and Dang Forest Division in the Siwalik physiographic zone. However, except for the implementation of some timber stand improvements and other cultural operations, the management plans were generally not enforced.

In 1984, after decentralization, all the District Forest Offices were directed to prepare District Forest Schemes (DFS). Consequently all the forest offices in 1988 formulated DFS for the five fiscal years. Several working schemes of various districts were approved by the Government. Similarly specific action plans were approved and were to be implemented. Yet due to a lack of resources, organization problems, and physiographic challenges the plans specified in the forest working schemes could not be implemented effectively.

In order to manage Nepalese forests sustainably, the Forest Management and Utilization Development Project (FMUDP) initiated forest management plans in Bara and Rautahat districts, of Terai, in 1993 with the financial and technical assistance of Finnish Government. This was implemented for over 5 years but due to strong opposition from Civil Society and NGOs, and ineffective monitoring system of the Government, the project could not yield the desired outcomes (personnel communication with Director General, DFRS; Chief Technical Advisor Forest Resource Assessment Project, 2012). While the GoN appears to be committed to managing its forests based on scientific principles the dream of managing forest resources scientifically has not come to fruition.

4.3 Institutions Responsible for Managing the Forest Sector

There are two departments responsible for forest financing and managing forest resources sustainably. Three parastatal organizations under the Ministry are also helping to manage the forest resources sustainably and generating finance from selling forest products. Additionally, there are five Regional Offices which represent the Ministry (MoFSC) at the regional level. MoFSC regulates all forestry functions in the country. Its structure is given in Annex 5.

Departments

1. Department of Forests (DoF)
2. Department of National Parks and Wildlife Conservation (DNPWC)

Parastatals

1. The Timber Corporation of Nepal (TCN)
2. Forest Products Development Board (FPDB)
3. Herbs Production and Processing Company Limited (HPPCL)

4.3.1 Departments

Department of Forests

DoF is responsible for managing the forest resources sustainably for the conservation of the natural environment and for supplying the forest products to the people. The specific functions of the department are:

- Protection, management and utilization of forests and conservation of natural resources.
- Planning, implementation and coordination of forestry development activities.
- Supporting and facilitating the MoFSC on policy formulation.
- Increasing people's participation in forest management; particularly in plantation and resource conservation in forests.
- Contributing to the economic development of the country through revenue generation from forest products.
- Improving the livelihood of the community through effective implementation of forestry programs.

DoF is also responsible for enforcing forest legislation. There have been several changes in the organizational structure in the past. In 1984, in response to the decentralization process, five Regional Forest Directorates in all five Development Regions, and seventy five district forest offices were established in the country. The organizational structure was again modified in 1993. This modification covers 74 district forest offices, 84 sub divisions and 98 range posts. DoF is the only organization that has its office at the district and lower level. The organizational structure of DoF is provided in Annex 6.

Department of National Parks and Wildlife Conservation (DNPWC)

DNPWC is responsible to conserve and manage the rich and diverse biological diversity of the country. It also encourages scientific research for the preservation of wild genetic diversity. It administers a vast network of PAs. Out of the 30 PA units (10 National Parks, 3 Wildlife Reserves, 1 Hunting Reserve, 6 Conservation Areas and 12 Buffer Zones), 2 Conservation Areas (Annapurna and Manaslu) are managed by NGOs. However, Kanchenjunga Conservation Area (KCA) is managed by the local Forest User Committee (FUC). The remaining PAs are managed directly by the DNPWC. The Nepalese Army is involved in the protection of PAs. More than 4 500 Nepalese army personnel are designated for the purpose. About one million people are directly or indirectly benefiting from the Buffer Zone programme. The organizational structure of the DNPWC is provided in Annex 7.

4.3.2 Parastatal Organizations

Timber Corporation of Nepal (TCN)

TCN is a semi-autonomous body under the MoFSC. TCN was established during the 1960s with the objective of collecting and selling forest products in the 33 Terai Districts of the country and had branches in most of these districts. In 1988-89 the Fuelwood Corporation of Nepal merged with the TCN. The institution has a government mandate to meet the forest products demands of the urban population and sells sawn wood and fuelwood as appropriate. The TCN acquires round wood from the DoF and produces sawn timber. DFO allocates forest products to the District level Forest Products Supply Committee (DFPSC) to first satisfy district demands. Of the remaining stock, each DFO sells 50% and provides the remaining 50% to the TCN for sale in the open market.

Forest Products Development Board (FPDB)

FPDB is also a semi-autonomous body under the MoFSC. It was established in 1975 with a view to supplement timber, fuelwood and needs of the population and to supply poles for electric transmission lines. The FPDB has established more than 10 000 ha of plantations in Terai districts (Sarlahi, Mahottari) by clearing degraded Sal (*Shorea robusta*) forest and other forests types and replacing them with fast growing species such as *Eucalyptus*, *Tectona grandis*, and *Dalbergia sissoo*. It sells round wood (logs), fuelwood and poles harvested from its own plantations and wood residue as raw materials for the particleboard industry.

Herbs Production and Processing Company Limited (HPPCL)

With an aim to conserve the valuable species of medicinal and aromatic plants, GoN established HPPCL in 1981. Some of its functions are to process and distil the medicinal herbs and aromatic plants collected in wild form and cultivated by private individuals and also from its own farm. HPPCL sells the essential oils produced and collected on the domestic market and also exports them to international markets.

The company has its own land (350 ha in Terai). It has been carrying out the cultivation and processing of medicinal and aromatic plants on 200 ha while 100 ha have been distributed to the landless local farmers to generate an income by cultivating the essential oil bearing plants. This organization provides the opportunity for the landless farmers to cultivate medicinal and aromatic plants by leasing the company's own land. HPPCL provides a buy back guarantee for the farmers' produce.

4.4 Civil Society and NGOs

The role of civil society and NGOs in the forest sector of Nepal has been increasing. With the advent of community forestry in Nepal, federations and user group networks have been established. Such federations are strongly involved including in advocacy campaigns in the forest sector. The Federation of Community Forestry Users of Nepal is one example.

Federation of Community Forestry Users of Nepal (FECOFUN)

FECOFUN, established in 1995, is an autonomous, non-profit, membership organization that is accountable to its constituency – the FUGs. It is one of the largest civil society networks in Nepal. It has the following four major objectives:

- To advocate the rights of CFUs
- To strengthen local capacity
- To establish linkages
- To lobby on behalf of the forest users.

FECOFUN works with NGOs, and local and international donors to raise awareness in civil society about community forests legislation and the roles and responsibilities of different groups in community forest management. It also promotes the empowerment of women and disadvantaged groups by facilitating their integration into the community process and making sure that their voices are heard when decisions are made. Furthermore, FECOFUN provides legal advice and assistance to FUGs and collaborates with researchers, academics and other civil society groups to provide technical inputs for income-generating activities within FUGs.

In the 1995 Forest Regulation, FUGs are allowed to find ways to achieve financial sustainability. This statute requires that FUGs spend a quarter of their income on forest management. However, many FUGs spend most of their income on construction of local trails,

school buildings, culverts and irrigation canals. Others are supporting livelihoods options for the rural poor and marginalized groups in their communities. All the FUGs are voluntarily united under the umbrella of the FECOFUN to ensure their rights are protected and not curtailed by the government.

Nepal Agroforestry Foundation (NAF)

NAF is a non-governmental, non-profit organization founded in 1991 by agroforestry practitioners, leaders of community-based organizations (CBOs), professionals and farmers of the Dhading, Kavrepalanchowk, Ramechhap and Sindhupalchowk districts of Nepal. A recent advancement in promoting applied agriculture, forestry and agroforestry in the country, has been NAF's establishment of a private forestry college (only in Nepal) in affiliation with the Tribhuvan University (TU) in 2005 to produce qualified people in this sector. NAF conducts training courses for farmers groups, cooperatives and CBOs as part of its extension program. The regular training courses include NTFPs management and marketing, agroforestry trainers' training (TOT), exposure/cross visits for farmers to successful agroforestry sites, fruits propagation, soil conservation and integrated watershed management, institutional/organizational management, group mobilization and dynamics, animal health improvement, seeds collection & marketing, and savings & credit cooperative management. Currently NAF is working with Action Aid Nepal, in the Rasuwa district.

Civil societies and conservation areas

GoN formulated a policy of handing over management of National Parks and Wildlife Reserves to NGOs and Civil Society in 2004. Following this policy NGOs and communities at local level are managing some of the mountain landscapes such as the Sacred Himalayan Landscape (SHL). Consequently, a large portion (3 182 ha) of forests was handed over to 17 communities of Langtang National Parks Buffer Zone and Kanchenjunga Conservation as communities' forests (WWF, 2011).

4.5 Other National & International Organizations

The International Centre for Integrated Mountain Development (ICIMOD)

ICIMOD is a regional inter-governmental learning and knowledge sharing centre serving the eight regional member countries: Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan. It is based in Kathmandu, Nepal. ICIMOD aims to assist mountain people to understand the issues of climate changes, adapt to them, and make the most of new opportunities, while addressing upstream-downstream issues.

It supports regional trans-boundary programmes through partnership with regional partner institutions, facilitates the exchange of experience, and serves as a regional knowledge hub. During the early years of its establishment, it focused on watershed management, among others. Currently, it is focusing on sustainable natural resources management. It has carried out some pilot studies on payment of environmental services (PES) in protected areas of the country (www.icimod.org).

International Union for Conservation of Nature (IUCN)

In Nepal, IUCN is working for the most disadvantaged groups which are also most dependent on natural resources for their livelihoods and are most vulnerable to environmental shocks and natural disasters. IUCN Nepal has, identified "poor and socially excluded households and women dependent on biodiversity for livelihood security" as direct beneficiaries

(www.iucn.org). Currently it is working to address the challenges to Nepal's biodiversity and most vulnerable communities. Also a project entitled *Enhancing Livelihoods and Food Security from Agroforestry and Community Forestry in Nepal* is operational. This project is being implemented by eight Nepalese partners in collaboration with the University of Adelaide, University of New South Wales and IUCN taking the lead role.

World Wildlife Fund (WWF)

WWF started working in Nepal in 1967. It works closely with the MoFSC through DNPWC and DoF, Ministry of Environment, Science and Technology, Water and Energy Commission Secretariat (WECS) and National Trust for Nature Conservation (NTNC). Besides the national priority areas, WWF-Nepal also works on conservation issues of regional and trans-boundary importance. Since the early 2000s it has implemented landscape level biodiversity conservation strategies in partnership with Government and other donor agencies especially to conserve flagship and priority key species, forests and freshwater, and to mitigate the threat of climate change to communities, species and their habitats, WWF is currently focusing its work in Terai Arc Landscape and Sacred Himalayan Landscapes, including Koshi River Watershed Basin.

National Trust for Nature Conservation (NTNC)

NTNC was established in 1982 by a Legislative Act as an autonomous and not-for-profit organization. It is mandated to work in the field of nature conservation. The NTNC addresses needs and welfare of the local people integrating a conservation and development program with active people's participation. It complements the government programme of biodiversity conservation both in sub-tropical plains and the high Himalayas. Its activities in the lowlands are based in and around the Chitwan National Park, the Bardia National Park and the Shuklaphanta Wildlife Reserve located in the Central, Western and Far-Western Development Regions of the country respectively. Similarly, the trust is managing three protected areas in the mountain region. They are: the Annapurna Conservation Area Project (ACAP), the Manaslu Conservation Area Project (MCAP) and Gaurishankar Conservation Area Project (GCAP). These protected areas are managed by the concerned forest users' committees.

There is a Regional Cooperation between neighbouring countries especially among south Asian countries through SAARC (South Asian Association for Regional Cooperation). There are possibilities of processing and trading of high value low volume Non-Timber Forest Products with India and China. In the case of biodiversity conservation trans-boundary conservation activities with India are already in place and preparations are being made with Bhutan and China for biodiversity conservation.

4.6 Cross-sectoral Coordination

In order to implement the activities that are related with various sectors, cross-sectoral implementation mechanisms have been developed both at the central and local levels. In order to bring all foreign donors onto one platform and to harmonize their activities, the forest Sector Coordination Committee was created by the MoFSC. Formal and informal working groups are established whenever the need arises.

The National Development Council, chaired by the Prime Minister, gives directives to the NPC on various development issues. This council normally reviews the progress of the projects, mainly the priority programmes, once in two years. All Ministers, Secretaries and Director Generals from all government institutions are invited to observe council meetings and, if need be, to speak on behalf of their respective institutions on the issues raised during the meeting.

Members of civil society, corporate bodies, and well known individuals are also invited to attend the meetings. The council notes the issues and the decisions taken are materialized through the concerned implementing agencies.

The National Planning Commission prepares periodic development plans for the country and guides the sectoral forestry policy through its Agriculture and Forestry Division. This division is headed by the Joint secretary level staff the NPC. All Director Generals within the MoFSC along with the chief of the planning divisions of the concerned departments try to resolve issues that need cross-sectoral coordination. Appropriate authorities of the forest administration participate and endorse decisions of the committee/ sub-committee and other groups in the cross-sectoral issues related to forest resources.

In many cases there are permanent coordination committees at various ministries related to forestry. For example, the Environmental Protection Council chaired by the Prime Minister provides guidance regarding formulation as well as implementation of environmental policies. The Ministry of Environment (MoE) is responsible for implementing the programmes of NAPA, LAPA in the country. In order to have a common understanding in implementing programmes related to forestry, the Project Advisory Board meets and makes appropriate decisions. All concerned Secretaries, including the MoFSC, are members of the Environmental Protection Council. The Secretary of MoE is the chair and Joint Secretary of the MoFSC is one of the members of the board. This board has the provision to invite members from outside government entities i.e. from national and international organizations, and civil societies. However, with all these provisions, the inter-sectoral co-ordination among and between various ministries is very poor in Nepal. For example, obtaining IEE and EIA approval to implement forestry and related projects/ programmes takes more than a year depending on its nature. Hydropower projects take more time to obtain an approval letter than e.g. hospitals.

At the field level a District Forest Coordination Committee under the chairmanship of the Regional Forest Director is in place and cross-sectoral coordination from the forest sector perspective should take place through the Committee. The field level of coordination, however, is very weak in Nepal. This is mainly because of the lack of good governance within the forestry sector and other sectors, unresponsiveness of the concerned staff in delivering service, and a lack of accountability.

Previously the District Development Committee (DDC) and Village Development Committee (VDC) planned and developed programmes collectively but currently. The local government is run by civil servants. Each government entity does planning independently grossly ignoring the needs of other sectors. Coordination is lacking between these entities and the impacts of this can be seen in the implementation phase of activities. To give an example, most roads on hills are constructed without any consideration of erosion, soil loss and sedimentation of lower streams. Furthermore, the authority provided in the DDC and VDC regulations to collect revenue from forest products such as collections of sand and rock from rivers have drastically changed their courses and have created sedimentation problems. The impact of these collections is increasingly becoming apparent as flash floods, stream bank cuttings and flooding ensue.

5. FINANCIAL FLOWS FOR SFM

5.1 Domestic Sources of Revenue Generation

Revenues in the forest sector are mainly generated from the royalty obtained from timber, fuelwood and various items of NTFPs. In addition there are revenue sources such as fees for eco-tourism, poles for electricity transmissions, and aromatic and medicinal herbs. The royalty rates are determined on the basis of the value of each product by the MoFSC. Rates are validated in the annual budget speech normally delivered by the Finance Minister and/or published in the Nepal Gazette.

Royalty payment is compulsory for collecting and/or using important forest products from Government Managed Forest (GMF) for commercial purposes. There is a set mechanism for royalty payment and seasons for entering the forest for collecting forest products, including NTFPs. Each individual collecting NTFP has to abide by the Rules and Regulations provided in the Forest Act, regulations and directives. Each DFO is responsible for collecting taxes, fees and royalty for the timber, fuelwood and other NTFPs harvested or collected within their area of work.

For the purpose of royalty collection NTFPs are differentiated into two groups: one for herb and aromatic plants, and the other for products derived from trees such as leaves of *Taxus baccata*, resin from pine, and bark from *Daphne* species. The first group is known as Medicinal and Aromatic Plants mostly used for medicinal purposes. They are also known as *Jadibuti* in Nepali. Normally NTFPs are collected by individual/group collectors at the local level. The collectors get some money from small retailers. NTFP traders pay the royalty of NTFPs collected in bulk to the DFO. The amount of money deposited depends on the quality of forest products collected and the royalty for that product. All royalty rates are reviewed as necessary by the MoFSC and are published in the Gazette for public information.

The volume of timber collection and hence the sale amount depends on various external factors (such as trees uprooted naturally through heavy winds, legal felling of trees, felling of trees at the construction of priority projects). Trees are supposed to be harvested as per operational forest management plans but in some cases illegal harvesting takes place due to e.g. political turmoil and weak governance.

Revenues from forest products and services

Table 5.1 provides the total volumes of timber, firewood, poles and small timber collected for past five years. The figure includes the production of the DFO, TCN, and District Forest Product Supply Board (DFPSB). The poles and round wood comes from *Eucalyptus* plantations owned by FPDB.

The government departments in forest sectors (DoF and DNPWC) and other parastatals (TCN, FPDB and HPPCL) generate revenue from selling timber and fuelwood, levying fees, and selling various types of medicinal and aromatic herbs, other essential oils obtained, and distilling medicinal and aromatic plants. The volume of timber and fuelwood collected and sold varies yearly. It has been reported that in the fiscal year 2010/11, the revenue generated by selling timber and firewood together was extremely low (USD419 910) in comparison to that of the previous year (2009/10) (USD4 567 690) (Table 5.2).

Table 5.1 Total production of timber, fire wood, poles and small timber

Fiscal year	Timber (m ³)*	Fuel wood (m ³)*	Poles (m ³)**	Round wood (Small timber)**
2010/011	5898.94	5790.79	340.20	8355.07
2009/010	34708.35	19931.10	1030.84	9719.42
2008/009	2279.02	27448.94	1345.20	5981.18
2007/008	36005.31	24254.37	603.21	2630.92
2006/007	35849.37	26484.32	1920.09	3030.24
2005/006	26188.64	20769.56	Not available (NA)	NA
2004/005	34765.71	377328.49	NA	NA

Source: * Harmo Ban. Department of Forests, Annual Reports from 2004 to 2011,

** FPDB, Official Record, 2012

Table 5.2 Revenue generated from forest products and services (000' USD)

Fiscal Year	Timber and Firewood*	Poles and other Products**	Herbal Products*	Non-Timber Forest Products*	Eco-tourism and Other Related Activities ***	Essential Oils ****
2010/011	419.91	661.53	312.72	333.72	3200.32	972.28
2009/010	4567.69	678.40	279.72	668.72	1883.33	972.28
2008/009	4889.62	617.95	506.37	789.39	1769.39	564.11
2007/008	4327.09	248.92	404.22	1267.08	1655.88	NA
2006/007	4984.92	369.82	258.38	582.02	1445.61	NA
2005/006	3361.53	NA	231.11	370.42	878.67	NA
2004/005	4439.86	NA	191.54	1100.22	78.80	NA

Source: * Hamro Ban. Department of Forests, Various Annual Reports from fiscal year 2004 to 2011, ** FPDB Official Report 2012 *** DNPWC, Annual Report (July 2010-2011). **** HPPCL Official Report, 2012

Table 5.2 suggests that prior to the fiscal year 2010/11 the revenues were relatively stable from timber collected by the DoF. The revenue generated from eco-tourism and related activities, however, are increasing. There was a sharp decline in the revenue collected by the DoF in 2010/11 from timber due to the decision of the Government (16 July 2010) to ban timber sales.

Eco-tourism

Eco-tourism is a major contributor to the income of protected areas. The protected areas play an important role in the tourism industry of Nepal, both by attracting people to visit the country and by providing activities. Many of the key species of wildlife and examples of cultural diversity are found in and around the protected areas. Recently investment in ecotourism has been extended to other protected areas as well. The protected areas earn significant tourist revenues in the form of park entrance, hunting fees and also trophy hunting. In fiscal year 2010/11, DNPWC generated a total of USD3.20 million through such activities (DNPWC, 2011). It has recorded 455 327 tourists (Nepali as well as foreigners) at various National Parks and Protected Area Systems of the country. Furthermore, a total of USD32 830 was generated from granting hunting licenses at hunting reserves (DNPWC, 2011).

Revenues from Community Forest and Private Forest

Each CFUG has to pay to the Government 15% of its income obtained from selling timber, fuelwood and other forest products. CFUG uses the remainder generated in various forestry and related activities. Similarly, 13% as Value Added Tax (VAT) is applied to timber and other products coming from private forests. The VAT is based on the royalty rate as decided by the government (Table 5.3).

Table 5.3 Revenue generated from Community Forests and Private Forests

Fiscal year	CF (15% of total sales)* USD'000	PF (13% of total sales)* USD'000
2010/011	143.00	500.02
2009/010	1854.85	636.64
2008/009	854.46	661.80
2007/008	883.79	373.12
2006/007	22.20	24.65
2005/006	113.01	47.43
2004/005	569.25	NA

Source: * Hamro Ban. Department of Forests, Various Annual Reports from fiscal year 2004 to 2011

5.2 Financing from Government Budget

Most public sector finance comes from the government treasury in Nepal. Parastatal organizations such as TCN, FPDB and HPPCL have to generate their own financing, but in practice these organizations also receive government donations.

The Tenth Plan (2002-2007) is estimated to spend a total of USD63.59 million in different programmes. Of this amount, USD54.36 was allocated for six P1-, and three P2-level forestry programmes⁷. The forestry programmes planned to be implemented during the Tenth Plan Period are presented in Table 5.4 as the latest data is not available.

Table 5.4 Priority forestry programmes the Tenth Plan Period (2002-2007)

Programme and Projects	Expected Expenditure (million USD)
P1 Programmes	
Community and Private Forest development programme	22.82
Poverty alleviation through national and leasehold forest	3.46
Implementation of National Forest Operational Plan	2.31
Herbs and Non-Timber Forest Development programme	1.79
Upper Churia Watershed Management programme and other Siwalik range conservation programme	4.62
Project Monitoring and Evaluation programme	0.26
P2 Programmes	
Forest Research Survey and publicity programme	1.67
Genetic Resources and Biodiversity Conservation programme	11.67
Lower hill district Soil and Water conservation programme	5.77
P3 Programmes	
Total	63.59

Source: Tenth Plan (2002-2007). National Planning Commission, 2002. Singh Durbar, Kathmandu, Nepal

⁷ In Nepal, government programs are designated to three priority levels, P1, P2 and P3 (P1 being the highest and P3 the lowest priority) based on national priority and contribution to poverty alleviation and number of direct beneficiaries, and level of people's participation in programmes.

The main aim of the Tenth Plan was to alleviate poverty. Hence, the budget allocations were also made aiming at those programmes that alleviate rural poverty in a more tangible way.

Macro level development goals change from one planning cycle to the next. For example, the Tenth Plan was directed towards poverty reduction. The Interim Plan was directed towards reconstruction, rehabilitation and reintegration. The goal of the present three year plan (2010/11-2012/13) is to generate employment, reduce the poverty level and reduce social disparity, among others. The priorities become dissipated and not pursued.

During the TYIP period (2007/8-2009/10), the GoN proposed to only spend USD40.64 million in the forest sector. The present data is not available because the compilation process has not yet completed. The amount allocated in the forest sector was nearly half that of the previous plan. Although the Community and Private Forestry development programme received top priority, the budget allocated for this programme was cut down by nearly one third of the previously allocated budget. Forest resource development, biodiversity conservation and research programmes were the new additions, and the highest allocation was on this programme with estimated expenditure of USD10.8 million. The forest sector programme implemented during the TYIP period is presented in Annex 8.

Just before the completion of the TYIP, the Government again prepared a Three Year Plan instead of normal five year. It has allocated USD 438.8 million during the Three year plan period (2010/11-2012/13). Running fiscal year (2012-13) is the last year of this plan period but because of the political instability and conflicts among the political parties no formal budget has been allocated in this plan. The allocated annual budget has not been disbursed on time. Table 5.5 shows the projected programme along with the set targets.

Table 5.5 Three Year (2010/11-2012/13) projected programme along with the set targets

Programme/ Projects	Set target
1 Formation of Community forests Groups (Number)	1700
2 Handing forest to communities (Ha)	120000
3 Make available leasehold forest for marginalized communities through forming sub-groups (Groups)	800
4 Implementing activities for poor communities (Groups)	1000
5 Preparation of climate change adaptation plan (Groups)	1000
6 Raising seedling and plantations on private, community and public land (District)	55
7 Promoting forest based industries District)	75
8 Removal of forest encroachment (District)	75
9 Monitoring and evaluating 6,000 operational plans renewal of 15000 operational plans (District)	40
10 Preparation of 400 sub-watershed management plan and implementing 300 of them (District)	67
11 Establishing small scale forest based industries (number)	75
12 Biodiversity registration (District)	75
13 National level forest resources survey (District)	75
14 Programme for REDD forestry and climate change (District)	75
15 Planning of integrated Chure watershed (District)	24
16 Programme on Forest governance (District)	75
17 Demarcation of forest land (District)	75
18 Preparation of Forest Management Plan (District)	75
19 Reforming M &E strategy and implementation (District)	75

Source: The Three Year Plan (2010/11-2012/13) National Planning Commission, 2011 Singh Durbar, Kathmandu, Nepal

Table 5.5 shows the programme that has to be undertaken during the current three year period. During the plan period, a total of USD73.1165 million has been allocated to the MoFSC⁸. Most of the programmes aim at covering all the administrative districts of the country. However, integrated Churia Watershed, Monitoring and Evaluation activities and the operational plan revision has not covered all the administrative districts of the country.

5.3 Use of Government Budget & Budgeting Process

MoF is the sole authority in approving government budgets in Nepal. It uses a Medium Term Expenditure Framework (MTEF) to form government budgets. This framework provides the guidelines for allocating the budget with respect to the expenditure incurred in previous allocations. There is a set mechanism for budget planning and approval. The procedures for determining the annual budget, its priorities, and justifications behind the budget decisions are dictated in the Budget Planning Directive (BPD), published by MoF. The BPD is revised and updated from time to time to accommodate new concepts and to make improvements. For the budget provisions, MoF has already published the MTEF for the Fiscal Year 2011/ 12-2013/14.

The set process is used to determine the budgets for both operations and programmes. The operational costs include salaries, utilities and other unforeseen items. NPC provides the budget ceiling for each Department and the Department in turn tries to fit their plan and programme within the ceiling. The planning division of the MoFSC holds budget planning meetings in all Five Development Regions of the country in Jan/ Feb for the next year's budget allocation based on the ceiling provided by the NPC.

The annual programme is discussed both at the District and Regional level and the programme budget is sent to the relevant Departments for approval. After review of the proposed plan and programme, the budget is then sent to the MoFSC for approval. The planning division of the MoFSC takes the lead in negotiating the plan and budget with the NPC. The NPC in turn approves the plan and programme and returns to the MoF for their consent. Normally the plan and programme, along with the corresponding budget is approved by the MoF but some programmes are dropped or not allocated a budget from the MoF. This happens mostly with P3 programmes. The entire budget planning process of the MoFSC is provided in Annex 9

The final budget approval comes from the Cabinet Secretariat and is announced by the Minister of Finance in the Parliament. Normally the budget is approval by the parliament in mid-July each year but because of the political reasons, the budget for 2011/12 was delayed and only quarter of the budget total has been approved for the fiscal year (2012/13).The total budget allocated to the MoFSC forest sector is very nominal proportion of the total budget allocation (Table 5.6).

Table 5.6 Budget Allocated to the MoFSC

Fiscal year	Allocated Budget (000 USD)	Growth Percent
2011/12	73 116.50	26.72
2010/11	57 699.20	24.66
2009/10	46 283.53	30.74
2008/09	35 399.80	8.82
2007/08	32 531.16	

Source: Ministry of Finance, Official Record, 2012

⁸ As the budget speech has not yet been held for the 2012-13 fiscal year and the earlier budgets were also delayed for various political reasons, a comprehensive budget programme for the forest sector could not be presented.

5.4 Government's Flagship Programme

Nepal has initiated a flagship programme aiming at conserving the fragile Churia range of the country. The Churia range, which runs more or less parallel to the Terai physiographic zone of the country, geologically, is very vulnerable. Unless these ranges are protected through conserving forest and soil, the Terai plains would suffer severe siltation problems on irrigation channels, unavailability of fresh water and drying up of rivers. The President of Nepal took the initiative to protect the Churia range. Thus, the programme has been named the President Churia protection/conservation programme. The government has allocated USD2.9395 million for implementing the programme for the 2012-13 fiscal year, without any donor support. However, the duration of the programme is not known.

5.5 Forest Development Fund 2007

MoFSC established the Forest Development Fund (FDF) in 2007. The purpose of the fund is to develop a decentralized and sustainable financial system at the local level to enhance the livelihood of the local people through mass afforestation, conservation and effective management and utilization of local forests; It will also carry out research and studies related to forest management. The FDF provides funding for the establishment of nurseries for free distribution of seedlings and to make necessary arrangements for protecting and nurturing the planted trees. It supports the development of forest based industries, including research, studies, analysis and the identification of markets.

The FDF operates both at the national and district levels, and has a board of directors for management at each level. The sources of funding for district-level FDF are the following fees and contributions:

- (i) Approximately USD2.2 per m³ from the commercial sale of forest products from the GMF, CF, forests managed under collaborative arrangements, and protected area
- (ii) Approximately USD2.2 per m³ from the sale of forest products from private forests
- (iii) Contribution from District Development Funds
- (iv) Cash and material grants provided by donor agencies

Likewise, sources of funding of the central FDF are:

- (a) 25% contribution of district FDF, amount generated through CDM
- (b) Cash and material grants provided by donor agencies
- (c) Other support.

The other support, however, is not spelled out and no actual funds have been generated by the central level FDF since its establishment.

Although the amount collected varies with the district, so far a total of USD10.96 million have been deposited in the District Forest Development Fund (Official report DoF, 2009/10).

5.6 Donor Supported Programmes

5.6.1 Bilateral and Multilateral Projects

The GoN is implementing a number of bilateral forestry projects in the country with funding from the Government of Finland (GoF), Japan International Cooperation Agency (JICA), Swiss Agency for Development and Cooperation (SDC) and Department for International Development (DFID) (Table 5.7). These donor agencies have been either providing funds directly to the government or implementing conservation and development projects.

Table 5.7 List of on-going bilateral projects in the country

Project	Duration	Total Budget (million)	Funding Agency	Funding Process
Forest Resource Assessment	2009-2014	EUR4.7 (USD6.392)	Finland	Direct Funding
Participatory Watershed Management and Local Governance Project	2009-2014	USD5.0	JICA, Japan	Direct Funding
Improving Research Capacity of Forest Resource Information Technology	2010-2012	USD0.4	Finland	Direct Funding
Forest Preservation Program Nepal	2010 - 2012	JPY600 (USD0.488)	JICA, Japan	Direct Funding
Multi Stakeholder Forestry Program	2012-15	USD61.8	SDC, DFID and Finland	SDC, DFID and Finland

The Multi Stakeholder Forestry Programme (MSFP) listed in Table 8 aims to improve livelihoods and resilience of poor and disadvantaged people in Nepal. It will also develop the contribution of Nepal's forest sector to economic growth, poverty reduction and tackling climatic change. The GoF, SDC and DFID have agreed to jointly fund USD57.31 million for the first four years of MSFP and plan to provide an indicative total grant value of USD158.6 million over a ten-year period (Table 5.8)

Table 5.8 Estimated Budget for Multi Stakeholder Forestry Programme

	DFID £ m	SDC CHF m	GoF €m	Total (Million US\$)
First Financial Phase (2011-2015)	20 (32 USD)	14 (17.64 USD)	10.2 (13.26 USD)	62.9
Full multi-stakeholder implementation phase (2015-2021)	20(32 USD)	26 (32.76 USD)	23.8 (30.94 USD)	95.7
TOTAL	40 (64 USD)	40(50.4 USD)	34 (44.2USD)	158.6

Source: Personnel comm. (Peter Neil, MSFP, 2012)

In addition, ten multilateral projects are ongoing in the country with funding from the FAO, Global Environment Facility (GEF), United Nations Development Programme (UNDP), International Fund for Agricultural Development (IFAD), WWF, World Bank (WB), International Centre for Integrated Mountain Development (ICIMOD), Asian Development Bank (ADB) and DFID. The total amount allocated and the duration of the project period is highlighted in Table 5.9.

Table 5.9 List of on-going multilateral projects in the country

Project	Duration	Total budget (Million)	Funding agency	Funding process
1. Technical Assistance for Leasehold Forest and Livestock Program in Nepal	2010-2014	USD 3.5	Finland through FAO	Project funding (Direct)
2. Western Terai Landscape Development Project	2005-2012	USD 10.5	GEF, UNDP, WWF	Direct
3. Conservation and Sustainable Use of Wetland	2007-2012	USD 2.4	GEF, UNDP	Direct
4. Leasehold Forest and Livelihood Development Program (Second Phase)	2005-2013	USD 12.77	IFAD	Through Govt
5. Strengthening Regional Cooperation for Wildlife Conservation Project (IDA)	2011-2015	USD 3.0 (2 M SDR)	WB	Direct
6. Strengthening Institutional Capacity of DNPWC for the Effective Management of Mountain PAs	2011-2014	USD 0.5	WB	Through Govt
7. REDD Forestry and Climate Change	2009-2012	USD 3.6	WB	Through Govt
8. PPCR Component 1: Under negotiation	2013-	USD 41	ADB	TBD
9. PPCR Component 5: Under negotiation	2013-	USD 5	WB	TBD
10. Kailash Sacred Landscape: Under negotiation	2012	USD 1	ICIMOD	Direct

Source: Ministry of Forests and Soil Conservation, 2012.

Currently, a number of forestry projects have been supported in different districts by various international aid organizations. However, it has been reported that due to the increasing political conflict and lack of a sitting parliament and local bodies, development work at the local level, has been severely hampered. Some donor agencies have also threatened to pull out their development aid for Nepal, including CF projects (www.forestsmonitor.org/reports).

5.6.2 Non-Governmental Aid

The GoN is currently receiving some aid for forestry development from a number of international organizations to conserve biodiversity, forestry and related activities (Table 5.10)

Table 5.10 Non-Government Aid in the forest sector

Name	Duration	Budget (Million USD)	Funding agency
Terai Arc Landscape Program	2007-2012	5.8	WWF
Sacred Himalaya Arc Landscape Program	2007-2012	3.4	WWF
APFNet	2011-2012	0.5	Asia-Pacific Network for SFM and Rehabilitation
HariyoBanProgram	2012-2016	30	USAID/WWF

Source: Ministry of Forest and Soil Conservation, Official record, 2012

These projects aim to manage forest resources in a sustainable manner to improve livelihoods of forest dependent communities; to monitor and enhance capacity for forest inventory, carbon projects and equitable benefit sharing; to address drivers of deforestation and forest degradation, and help increase community participation in forestry activities.

5.7 New & Innovative Financing Sources

5.7.1 Payments for Environmental Services

In recent years, there has been increasing interest in the market based mechanism of payment for ecosystem services (PES), in which beneficiaries of ecosystem services provide economic incentives (voluntary or mandated by law) to the providers of the services including e.g. park authorities and local communities. Until 2000, Nepal had no experience of PES in a protected area context. There has been low level of awareness on the issues such as environmental goods and services and possible benefits to be obtained and equitable sharing. The major stakeholders (local people, local institutions, beneficiaries of ecosystem services, and policy makers) lack awareness of ecosystem services and their value.

A decade ago (2003) some pilot case studies on PES were carried out in Nepal with support from donor agencies, such as the International Centre for Integrated Mountain Development and World Agroforestry Centre, to compensate and reward upstream communities of some watersheds in Nepal. These studies indicated that it is possible to develop and implement a PES mechanism over common property resources as long as people have user rights over such resources. Appropriate measures for the quantification of services are required, including building policy instruments and institutional arrangements. PES works both at national and local levels.

In Nepal payments for ecosystem services (PES) so far mainly work as an incentive based mechanism to conserve water resources. Some of the PES schemes that are operational in Nepal include Kulekhani Hydropower PES, Dhulikhel Drinking Water Supply and rewarding Buffer Zone Committees (WTLCP, 2012). Western Terai Landscape Complex Project (WTLCP) has also piloted PES in Kailali and Kanchanpur districts to promote effective conservation. In this project, FUGs are the sellers of water services, while irrigation users are the service buyers (Table 5.11). The proceeds generated from selling of services are used for service enhancement, forest conservation, monitoring and public audit (WTLCP, 2012).

Table 5.11 Example PES Pilot Projects

Site/ District	Environment service	Buyer	Seller
Kanchanpur	Water	Sitaram Irrigation User Committee (58 households irrigating 66 ha land)	Baijanath CFUG (285 households managing 195 ha forest from last 10 years)
Kanchanpur	Water	Brahmadev Irrigation User Committee (202 households irrigating 220 ha land)	Siddhanath CFUG (302 households managing 585 ha from last 15 years)
Kailali	Flood control	Geta VDC, Kailali	Chetna women CFUG (47 households managing 59.02 ha forest), Sahid Sanghari CFUG (254 households managing 44.96 ha forest) and Panchawati women CFUG (86 households managing 23.4 ha forest)

ICIMOD and Forest Action carried out a PES feasibility study in Shivapuri-Nagarjun National Park, which lies to the north of Kathmandu. The national park is well recognized for its rich biodiversity and watershed services. It provides up to one third of the piped water supply in the Kathmandu Valley. Water from the catchment is also used for generating hydroelectricity, irrigating paddy fields, bottled water, and the soft drink industry. The feasibility study does not provide any information on the methodology used or the services of sellers and buyers.

Another study by ICIMODs at Sundarijan catchment near Kathmandu valley has estimated the value of the water services at USD870 per hectare per year. The revenue was calculated after deducting all the expenses for water distribution and electricity generation. It has also estimated the cost incurred by farmers living in and around the National Parks, such as damage in agriculture and livestock by wildlife and limited access to market, among others. It was USD498 per household per year. The annual cost to the park authority for managing and guarding the park was USD55 (ICIMOD, 2011).

The feasibility study revealed that there is ample scope for developing a PES scheme for other parks/ protected areas of the country. The study has provided the following steps for further promotion of PES in protected areas in Nepal. They are:

- Review and development of supportive policies for adopting the PES mechanism
- Piloting a PES scheme, and documentation and dissemination of the process and lessons learned from the pilot projects
- Development of a regulatory framework for implementing PES, using the experience and lessons from local participation and benefit distribution in protected areas in Nepal
- Public awareness building for greater support of PES in protected areas
- Clarification of the roles and responsibilities of multiple stakeholders in protected areas and PES management.

Work to establish a PES system was also carried out in 2003 by the International Centre for Research in Agroforestry (ICRAF), in collaboration with Winrock International between the upland communities and Makwanpur DDC in the Kulekhani, covering a 12 500 ha watershed area and the Kulekhani hydropower plant in Makwanpur district of Nepal (Joshi, no date). All hydropower plants, by law, must pay royalties to the government which, in turn, channels the money at various levels to development activities. According to prevailing government regulations (the LSGA and Financial Ordinance 2004), 12% of the government-allocated royalties should be used in the district that houses the hydropower plant, 38% is allocated for other districts in the development region where the hydropower district is located, and the remaining 50% is for other development regions of the country. Hence Makwanpur DDC receives 12% of the royalties paid by the Kulekhani hydropower plants to the government. This fund is deposited in the Environment Management Special Fund (EMSF) and managed by the DDC. The EMSF received about USD3 000 in 2006-2007, about USD5 000 in 2007-2008 and about USD10 000 in 2008-2009. However, the 2009-2010 allocation remains pending due to local conflict and there is no indication if the generated money has been used for establishment of village forest/plantation and other SFM activities (Joshi, n.d.). The money can be used to support conservation and development programmes proposed by watershed communities. The study concluded that EMSF could be considered a viable model for paying upland watershed communities for providing ecosystem services.

Similarly, a study carried out by Khatri (n.d.) revealed that PES in Kulekhani has provided a mechanism for transferring hydroelectricity revenue to the local communities to support rural development. The Kulekhani experience demonstrates that a PES scheme can be issued at the community level and is not necessarily constrained by individual choices and land tenure issues. The long tradition of forest management at the community level is certainly a major strength in this type of implementation.

PES implementation, in Nepal, is still in its initial stages yet the experiences show that there is the possibility to establish PES at two levels. PES for recreation and water service regulation can exist at the local level and payment for carbon sequestration, and soil erosion protection services may exist at national/international level.

As in most developing countries, the budget available for conservation and protection is generally inadequate for effectively managing their protected areas. In many LDCs, like Nepal, encroachment inside protected areas, conflict with local people, illegal hunting and extraction of forest products, deforestation, and forest degradation are common. The Nepal case shows that PES could offer opportunities to reconcile the needs of various users of natural resources and to provide incentives for sustainable natural resource management.

5.7.2 Carbon Finance

Financing from carbon is a new concept in Nepal. It is on trial basis, in the Terai Arc Landscape programme. The WWF has already created a renewable energy carbon project based on 7 500 individual household biogas units. The amount of carbon absorbed is based on calculating the “reduction of greenhouse gases emissions that would otherwise be produced from the breakdown of livestock and human waste and from the burning of fossil fuels and firewood that would occur in the absence of biogas stoves” (WTLCP, 2012). So far two bio-gas projects are registered as CDM projects in Nepal (WTLCP, 2012). It has been reported that from these two projects annual carbon revenue was around USD60 000. This amount meets around 50% of the current annual expenditure of the Biogas Support Programme, including subsidies (WTLCP, 2012). Oli and Shrestha (2009) report that the forest carbon stock in Nepal in 2005 was 897 million tons, and Community Forests sequester 1.8 tons of carbon per hectare per year on average. This indicates Nepal’s huge potential for forest-based carbon crediting.

5.7.3 REDD+ Programmes

Nepal’s annual mitigation potential from Reduced Emission from Deforestation and Forest Degradation (REDD) are 15.97 million tons of carbon dioxide (CO₂) and 4.4 million tons of CO₂, respectively (ICIMOD, 2009). This suggests that Nepal has good potential for attracting REDD+ funding. The country has already become a signatory party to the United Nations Framework Convention on Climate Change (UNFCCC). It has established a REDD cell within the Ministry of Forest and Soil Conservation (MoFSC). This cell is equivalent to a division and is headed by a Joint Secretary of the MoFSC. The Readiness Preparation Proposal (R-PP) was approved in 2010 and is in the implementation stage. Eight national and international agencies are piloting climate change and REDD+ activities in the country. The pilot projects/programmes have provided some early lessons such as the need for appropriate data collection, establishment of a Forest Carbon Fund, capacity enhancement of FUG and raising awareness, especially of marginalized and disadvantaged groups including women. Based on the watershed REDD+ pilot programme have been initiated in Chitwan, Gorkha and Dolakha districts and FUGs were provided some financial support. The pilot REDD+ activities implemented by various national and international agencies as reported by Mandal (2011) are provided in Annex 10.

5.7.4 Buffer Zone Management

The fourth amendment of the NPWC Act and Buffer Zone Management Regulation 1999 allows sharing of 30-50% of the total income from BZ in its overall development. Altogether,

there are 12 BZs declared so far. The BZ programme is aimed at peoples' participation in conservation for long term sustainability. The program has now spread over 83 VDC of 27 districts and covers 5 783 km² of land area with over 0.7 million people (DNPWC, 2010). The Buffer Zone User Committee (BZUC) is allowed to spend some or all of the funds in community development activities. The park authority allocates the money as per the work plan prepared and submitted by the BZUC so as to implement various biodiversity conservation activities upon approval from the MoFSC. A total of USD4 407 (at the constant price of the 2008/09 fiscal year) has been released to 2008/09 for buffer zone / conservation area management and socio-economic development activities (DNPWC, 2009) since the programme was initiated.

5.7.5 Compensatory Payment Approaches

This mechanism has been developed with a view to discouraging conversion of forest land to other purposes. It directs that the *"responsible agency has to plant equal area of forests in the area specified by the DFO and bear all the protection and management cost up to five years when the forest have been converted for non-profit purposes. In case of profit making purposes, responsible agencies are required to (i) plant 25 trees for every single tree felled or harvested and (ii) plant equal area of forests in the area specified by the chief warden and bear all the protection and management cost up-to five years"* (WTLCP, 2012).

Following the above policy, the MoFSC has imposed a 5% environment tax on eight hydropower projects on their profit. It is necessary to obtain the permission of the MoFSC for the construction of hydropower projects. The Energy Producers Association of Nepal (EPAN) is opposing the above compensatory payment policy of the government. EPAN does not see any rationale to impose an environmental tax on hydropower projects as they see the construction of hydropower projects as stopping deforestation which otherwise would happen due to the collection and burning of fuelwood. However, the amount of profit generated by hydropower projects and the sectors which have utilized the proceeds is not known.

5.8 Private Investment in the Forest Sector

Information on private sector investment in forestry is very scarce. However, some forest based industries, operated by the private sector, are in operation. Many of them do not have their own plantations to feed the industries but use raw materials obtained from government managed forests. In lieu, these industries pay royalties to the DoF. The royalty rate is fixed by the government.

The production from mines and quarries on forest lands are considered forest products in the forest legislation of Nepal. There are stone, gravel, slate, lime and marble quarries operating on forest land in various parts of the country. Private entrepreneurs are involved in such activities. Statistics on the production of these materials is not available. There are some forestry related associations such as the Nepal Rosin Association, Nepal Herbs and Herbal Products Association, Nepal Forests Products Entrepreneurs Association, Nepal Chamber of Commerce, Nepal Katha Mill Association, Federation of Nepalese Chamber of Commerce and Industry, Handicraft Association of Nepal, Bamboo and Rattan Society of Nepal in the country. But they appear to look at the overall welfare of the respective companies. Most of them operate in the form of NGOs. All associations have to be registered as per the prevailing regulation.

There is very little foreign direct investment in the private sector. Dabur Nepal, since its inception in 1992, is one of the private sector companies engaged in promoting medicinal and

aromatic plant products through direct funding. It had exported medicinal products worth USD32.19 million contributing over USD2.57 million to the Nepalese treasury over a period of just one decade (www.dabur.com/nepal).

Nepal's Forest Outlook for 2020 has also recognized private sector investment as one of the priority sectors for planning and investment. So far it has not clearly stated the type of incentives to be provided by the government to the private sector.

In brief, government revenue mainly comes from the royalty obtained from the sale of timber, fuel wood and various items of NTFPs. Additionally, community forestry user groups has to pay to the Government 15 % of its income obtained from selling timber, fuel wood and other forest products. Similarly, 13 % as Value Added Tax (VAT) is applied to timber and other products coming from private forests. Eco tourism is a major contributor to the income of protected areas in the form of fees and hunting licenses and the DNPWC generates a substantial amount from such activities. There are potentials for generating revenue from trees outside the forests. However, it has not been computed yet.

There is volatility regarding the forest revenue between different fiscal years mainly because of the political uncertainty. The royalty rate is sometimes fixed with the interest of the politicians/ concerned minister. Hence, the revenue rate gets fluctuated. Eco-tourism is also a major contributor to the income followed by the Community Forests and Private Forests. Almost all programmes are run using the government budget. However, some trust fund and several donor agencies (GoF, JICA, SDC, DFID, FAO, GEF, UNDP, IFAD, WWF, WB, ICIMOD and ADB) are helping to implement large scale, new and innovative programme in the country.

6. DEMAND FOR FINANCING FOR SFM

The demand for financing Sustainable Forest Management (SFM) in the country is largely based on the periodic development plans. All annual development plans, including that of the forest sector are approved by the government. The volume of the government budget that a sectoral ministry receives depends on the national priority programmes. The current Three Year Plan (2010/11- 2013/13), therefore, is the basis for requesting government budget allocation to the forest sector so as to implement SFM and its related activities.

DoF is one of the main responsible institutions with a legal mandate for implementing SFM activities. DoF publishes an annual report for each fiscal year embracing all the activities they have implemented. DoF has implemented five P1 and five P2 projects or activities spending a total of USD4.2 million for P1, and USD1 million for P2 projects. The physical progress is measured in terms of the actual quantitative achievements whereas the financial progress is measured by the amount (budget) spent in achieving the particular activity (target). The thematic programmes implemented during the 2010-2011 fiscal year are presented in Table 6.1.

Table 6.1 Thematic Programmes Implemented by DoF for the 2010/2011 Fiscal Year

Serial Number	Name of the Project	Actual Expense (USD'000)	Priority	Physical Progress (%)	Financial Progress (%)
1	Leasehold forestry and livestock development (Centre, 5 Regions, and 22 Districts)	1 221.61	P1	94.65	94.65
2	Community Forest Development Programme (56 Districts)	1 456.28	P1	95.22	95.74
3	Forestry for Livelihood Programme (15 Districts)	633.68	P1	83.41	94.71
4	Dolkha-Ramechap Community Forestry Programme (3 Districts)	115.58	P1	94.22	74.49
5	President Chure Protection Programme (23 Districts and Center)	797.60	P1	87.43	86.02
Total		4 224.75		90.99	92.58
1	National Forest Development and Management Programme (47 districts, Training wing of Tikauli, and center)	568.72	P2	96.99	89.05
2	Herbal Development Programme (29 Districts and Centre)	243.35	P2	92.02	92.67
3	Forest Management and Tree improvement (Centre)	158.75	P2	100.0	88.84
4	Information Dissemination Programme	38.47	P2	100.0	97.04
5	Tiger Protection Special Programme (8 Districts, 2 Regions and Centre)	35.00	P2	44.58	26.52
Total		1 044.29		86.72	83.44

Source: Hamro Ban (2010-2011), Annual Report, DoF, 2012.

It is noted that the DoF has not been able to spend all the allocated budget in implementing the above mentioned thematic programmes. On average, for P1 projects DoF could spend only 92.58% of its allocated budget in 2010/11 and achieved 90.99% of the set target, and for P2 projects it has spent only 83.44% of the total budget and achieved only 86.72% of the set target (Table 6.1).

Besides the above thematic programme, DoF also implemented a Biodiversity Sector Programme for Siwalik and Terai (BISEP-ST) jointly supported by the GoN and SNV, and dedicated for the conservation of overall biodiversity of low land Terai and its adjoining region (Siwalik) in the 2010/11 fiscal year. A total of USD369 520 was spent. Of the total, GoN contributed USD193 690 and the remainder (USD175 830) was donated by SNV. In this programme again the DoF has not been able to spend the entire allocated budget. The project's thematic areas covered and the financial progress achieved are given in Table 6.2.

Table 6.2 Activities undertaken by DoF under BISEP-ST Programme

Project Areas	Thematic areas	Government budget ('000 USD)	SNV Donation ('000 USD)	Physical progress (%)	Financial progress (%)
Centre	<ul style="list-style-type: none"> • Networking • Interdepartmental Coordination • Donor meeting • Monitoring and Evaluation 	50.42	30.12	93.65	82.01
Region	<ul style="list-style-type: none"> • Publications on thematic subjects • Governance • Strengthening Agro-forestry Networking 	29.44	31.64	98.60	83.0
Districts	<ul style="list-style-type: none"> • Implementing Community Forestry Programme • Support to implement Religious forest, National forests, Leasehold forests programmes • Support implementation of Collaborative forest management • Supporting income generation activities • NTFP promotional activities on private and public lands • Preparation of information materials 	37.94	37.76	82.19	71.35
Districts	<ul style="list-style-type: none"> • Institutionalizing joint M&E process • Implementing various livelihood programmes • Promotion of Biogas and Renewable energy • Forest entrepreneurship capacity building 	75.89	76.28	98.09	81.98

Source: Hamro Ban ((2010-2011), Annual Report of DoF, 2012.

6.1 Abrupt Change in Government Administration and Policy

Nepal entered a new period of political instability following the dissolution of Nepal's Constituent Assembly in May 2012. This has posed some institutional challenges resulting in constant changes in GoN staffing at a high level as well as district-level staff. There are some vacant top level administrative positions in remote districts. This has helped escalate illegal logging, deforestation and encroachment, particularly in *Terai* and *Churia* regions. This situation is further aggravated by the lack of staff capacities to curb illegal activities and the increase in illegal activities causing a loss of government revenue from the forest resource.

Furthermore, the MoFSC keeps changing its policy especially regarding timber harvesting. Felling of green trees was banned during 1990/91 and the policy lasted for years. The timber production in 2010/11 was just one-sixth of what it was in 2009/2010. The price of construction timber was tremendously high because of limited supply of forest products on the market. In July 2011 the government again banned the selling of timber. This has caused a negative impact on total timber and fuelwood production, which not only hampered the revenue generation for the government but also forced the general public to buy timber and other wood from the black market. These private mill owners could charge what they liked. This resulted in consumers obtaining construction timber from countries like Indonesia and or being forced to buy alternative species available within the country.

6.2 Absence of Local Governance in Priority Setting

Municipalities, District Development Committees (DDC) and Village Development Committees (VDC) . These committee members used to be elected by public vote at the district and village level. The Local Self Governance Act and Regulations have provided ample scope for local level planning and setting priorities but at present there are no elected personnel in Municipalities, DDCs and VDCs because of the political disagreement among different political parties in Nepal. Therefore, these institutions are currently run by civil servants. Government officers are working as the chiefs of the Municipalities, DDCs and VDCs depending on the category. Kathmandu Metropolitan City, for example, is running by a special class government officer. In the absence of these elected bodies/ representatives, forestry planning at the village level, is set by the concerned ranger or District Forest Officer. These civil servants, in general, are not accountable for the forestry development programme of the concerned villages as they are transferred frequently.

In conclusion, in the absence of a national forestry plan and or Master Plan, the demand for financing Sustainable Forest Management (SFM) in the country is largely based on the periodic development plans. However, the priorities in these periodic development plans keep changing from one plan to another. There have been frequent transfers of government staff following the dissolution of Nepal Constituent Assembly in May 2012. The frequent transfer of civil servants has very much hampered the forestry development activities in Nepal.

A sort of anarchy has prevailed in the country which has helped escalate illegal logging, deforestation and encroachment, particularly in *Terai* and *Churia* regions. This is merely because of political instability. Political instability has meant stakeholders ignoring the standing rules and regulations thereby governance has increasingly become weak. The issue has been further aggravated by the poor service delivery because of corrupt mind set of forestry staff and limited technical capacity to curb the illegal activities. Consequently, there are some losses in government revenue as well.

7. FINANCING GAPS AND KEY CHALLENGES

7.1 Financing Gaps

The forest sector programmes are currently not guided by a National Forestry Programme or Master Plan. The Master Plan for the Forestry Sector (MPFS) exhausted in 2010. MPFS has served as principal policy and planning framework for the forestry sector in Nepal. Since then, no comprehensive national level forestry plan has been prepared. Hence, forestry sector programmes are guided by three year interim plans only.

Most forestry programmes are only spelled out in periodic plans. Thematic areas such as the President Churia Conservation Programme and other nationally important programmes are highlighted in the various levels of policies. However, in many cases the policies are rarely implemented in the field. It is very difficult to pinpoint the financing gaps in forestry because there is little continuity of the programmes from year to year. However, Table 6.1 and Table 6.2 provide information on the activities undertaken and the progress made in terms of the allocated amount. It appears as if the government departments of the MoFSC are not in a position to spend the budget they have received.

One of the main reasons for the low level of spending of allocated programme budgets is that disbursements are not done in time. The Finance Minister releases the budget for the forthcoming fiscal year usually in the second week of July. However, it is not fully transferred to the districts until the end of August. The government process to obtain services from private individuals and companies is very lengthy because of the cumbersome provisions in the procurement Act. The effective working months are limited and in many cases the set targets are not met so the budget is not fully spent. In 2012 for example, the budget did not get approved and the government was budget was reduced to only one third of the total. Additionally, the working environment in the districts, in many cases, is not conducive because of political instability. Most of the top level officers avoid making concrete decisions especially on money related activities. This situation is aggravated by the frequent transfer of officials who are supposed to implement the activities as per the set target.

Additionally, in some cases there are budget shortfalls because of unforeseen priorities that come to hand. When the budget falls short, MoF makes it a point to provide additional budget to complete the assigned programme for the sector in question. In the annual budget there is also some provision for allocating money under a budget category entitled 'unallocated'. This type of budget is often used to complete some of the activities that need additional funding. The budget source is largely from the government treasury. Some institutions have their own funding sources such as the forest fund. The implementing agency can borrow some funds from the trust so as to complete the on-going activity.

Donors are also requested to provide funding in order to complete the programmes or projects if they need large amount of additional money. Some important national programmes do receive donor funding.

7.2 Funding Sources for the MoFSC

Thee MoFSC is the only responsible government institution to seek finance for SFM. It receives financial support for implementing SFM from the following sources:

- Government budget
- Multilateral projects
- Bilateral donor projects

- Non-government aid
- Forest Development Fund.

The MoFSC spent USD63.80 million during the tenth plan period (2002-2007). It receives government financing annually from the MoF to implement activities aimed at SFM. The share of forestry, 2.1% of the total budget, is not very high in comparison to other sectors such as Agriculture (15.85%), and Electricity, Gas, and Water (19.48%). During the Three Year Interim Plan period (2007/8-2009/10), the MoF set aside USD40.25 million for the MoFSC. This is a third less than during the previous planning period and only 1.03% of the total budget of the country. For the current Three Year Plan period (2010/11-2012/13) the Government of Nepal has allocated USD72.78 million and the share of forestry within the plan period is about 1.44% of the total budget.

7.3 Key Challenges in Forest Financing in Nepal

7.3.1 Lack of Capacity in Implementing Annual Set Targets

There is a lack of technical capacity and sufficient human resources to implement the set targets. For example, DoF and its district level offices were not able to spend all the allocated budget. As noted earlier, DoF spent only 90.62% of its allocated budget and achieved only 88.85% of set targets. Similarly, the physical and financial targets have not been met in the Biodiversity Sector Programme for Siwalik and Terai (BISEP-ST), a programme dedicated to the conserving of overall biodiversity of low land Terai and its adjoining region (Siwalik) and jointly implemented by the Government of Nepal and SNV. The same applies to the other Departments within the MoFSC.

7.3.2 Inconsistencies in Legislations Related to Forests

The legislation is inconsistent on the use of natural resources. For example, the 1993 Forest Act states that DoF can fix the royalty and put a levy on the forest products whereas the Local Body Financial Administrative Regulations (2007) have granted adequate power to local administrations (DDV/ VDC) to impose tax on the forest products. Thus there are conflicts over revenue collection from forest products between DoF and local authorities (DDC, VDC).

Moreover, the Forest Act and Regulations are outdated in view of the changing context especially the existing royalty rate of NTFPs.

7.3.3 Poor Forest Sector Governance & Political Instability

In order to ensure good governance, the Civil Service Act, 1993 has been amended to incorporate trade union rights. For effective service delivery, the directive for Making Public Service Facilities Effective (2004) is in operation. However, in many cases it is increasingly becoming difficult to translate the concept of good governance into practice. Forestry sector governance is largely dominated by central authority. The process of decision making has yet to be decentralized. The structure of this sector, in general, is set up under a command and control philosophy.

Related to the challenges in governance there is a revenue collection problem in the sector, mainly caused by the weak regulatory environment. There are two main anticorruption institutions at the central level that look after corruption cases in Nepal, including the forestry sector. These institutions normally investigate only when the corruption cases are filed.

Additionally, these institutions lack human and financial resources, which hinder them from tackling all the corruption cases of the country.

Political instability is a major bottleneck and problem for forestry investment in Nepal. Political instability and conflicts weaken law enforcement and encourage unlawful acts that result in accelerating deforestation, illegal forest harvesting and forest encroachment

7.3.4 Role of CFUGs

Despite having some successes, many studies on CF in Nepal (Pokharel, B, and Nurse, M. no date; Ojha, H., Persha, L. and Chhatre, A. 2009) have indicated that poor people are still not benefiting equitably. The big challenge in CF is to overcome elite capture and make the process more equitable. According to Dahal and Chapagain (no date) the CFUG executive committee members often make decisions without allowing discussion in the general assembly. Additionally, the financial and decision-making autonomy granted to CFUGs by the Forest Act of 1993 is being undermined by the CFUG executive committee. One of the biggest challenges in recent years has been that CFUG committee personnel themselves are increasingly becoming involved in illegal tree harvesting activities (Box 7.1).

Box 7.1 Example of illegal forest tree harvesting

During the Nepalese festival of *Deain and Tihar*, (during the 3rd week of October to 2nd week of November), it has been reported that the CFUG chairman, forest officials and timber mafia all jointly illegally harvested more than 425 m³ of *Shorea robusta* trees from the forest area of Sunsari district, east Nepal, which fetched USD568 182.0 (*Anapurna Post*, November 25, 2012).

7.3.5 Conflict in CFUGs & Governance

CF is one of the main management strategies in Nepal's forest sector. The high dependency on forest products and services among people in Nepal makes this sector important but disputed because many stakeholders have a vested interest. As stated earlier CFs are managed by the Community Forest Users Group Committee (CFUGC). Two types of conflicts i.e. conflict between UGC and users, and among users have been apparent in CF. Force and avoidance are the two major types of strategies adopted by most of the UGCs to manage the conflicts. The strategies are more or less successful in resolving the conflicts, although apparently within the CFUGs the elite make the major decisions.

Pokharel, B, and Nurse, M. (no date) have reported many unresolved issues and challenges in all areas of CF capital as well as its governance. CF is, in many cases, captured by elite groups. The benefit sharing process is most disputed because the poor, disadvantaged groups are marginalized. These groups lack access to financial capital (the CFUG fund).

7.3.6 Lack of SFM criteria

Forests in Nepal are yet to be managed sustainably. Some criteria and indicators were developed in the past for sustainable management. But these criteria and indicators were not tested fully. However, an attempt has been made in Kapilbastu district in Terai to lease the government land and engage in some agro-forestry practices but was not successful because the ownership of trees rests with the government and the leaseholder could not remove the trees on time because of the lengthy bureaucratic process. Additionally, the royalty provisions in the Leasehold Forestry regulations are very high and are not conducive for small-scale entrepreneurs.

7.3.7 Low Level of Forest Certification Activities

A forest certification scheme was initiated in the two community forests of Dolkha and Bhajang districts with financial support from the United States Agency for International Development (USAID) (NFA, 2007). Forest Certification was distributed to just over 10 000 ha of forest through the Rainforest Alliance. Currently 21 CFUGs are associated with this programme covering more than 14 000 ha of forest. A Forest Certification National Working Group was established as early as 2005 and a project for developing forest certification national standards in Nepal has been in operation since 2006. Despite these efforts, the forest certification process has not gained momentum because of three main challenges. They are very costly activities; the government has not allocated adequate money for this activity and there is a lack of awareness and human resources for their implementation. However, donor agencies/ local and international entrepreneurs could be attracted if the forest certification process were easy and swift.

7.3.8 Institutional Setup

Different organizations have procedures, rules and regulations and it takes a long time to obtain permission to carry out activities in the forest sector in Nepal. Thus the process is very lengthy and does not create a supportive environment for entrepreneurship and investment in the forest sector.

The forest sector faces various challenges. The key challenges are lack of capacity in implementing the set targets, inconsistencies in legislations related to forests, and lack of good governance. Weaknesses in the management of the forest sector, among other things, have opened up many risks of corruption. Moreover, there are problems of revenue leakage. Forest sector does not have any criteria and indicators to manage forests sustainably. Additionally, the royalty provisions of leasehold forestry for profit generating purposes are very high and are not conducive for SFM.

Additionally, Community Forest management is also posing some challenge. Impoverished people, within communities, are not receiving equal benefits. Elites have captured the committees and make the decisions without allowing discussion in the general assembly. One of the biggest challenges in recent years has been that CFUGs committee personnel themselves are increasingly becoming involved in illegal forest tree harvesting activities.

8. OPPORTUNITIES & THE ENABLING ENVIRONMENT FOR FINANCING SFM

8.1 Existing Policies & Legislation on Benefit Sharing

Despite various challenges, there is an enabling environment for financing SFM in Nepal. For example, the fourth amendment of the NPWC Act and the Buffer Zone Management Regulation (BZMR) (1996) allow sharing of 30-50% of the total income of the Parks and Reserves with the local communities to implement community development activities. The buffer zone management programme of Chitwan and Lamtang National Parks are good examples of benefit sharing. They receive about 50% of the money collected by the park to be invested back into conserving biodiversity and other forest developmental works. So far the government has declared 12 Buffer Zones extending to 83 VDCs of 27 districts covering 5783.2 km² of the total land area and over 0.7 million people. The BZ programme is aimed at the peoples' participation in conservation for long term sustainability. The programmes vary as per the need of the local communities. The BZMR of 1996 and Guidelines 1999 have authorized the BZ users committee to establish a fund through:

- a) Income received for sale of proceeds of forest products
- b) Funds received from sharing revenue of the protected area
- c) Fees received from issue of hunting licenses
- d) Donations/ financial assistance of donor agencies or individuals.

8.2 Opportunity of Leasing Government Forest Land

The concept of Leasehold Forestry (LF) was introduced in 1991, after the initiation of the Hill Leasehold Forestry and Forage Development Project (HLFFDP), which was financially supported by IFAD. The programme was initially launched in the four hill districts then later extended to 10 districts. The project completed its last phase in 2003. Currently there are two types of Leasehold Forestry programme in Nepal. One is aimed at alleviating poverty and the other is for the corporate and industrial sectors. The GoN has also given high priority to the Leasehold Forestry (LF) Programme as one of the important livelihood strategies for many rural poor, landless and marginalized households of the hilly region. At present, the programme has been launched in 26 districts of Nepal (mostly hill districts and also includes some Inner-Terai districts like Chitwan, Makwanpur and Dang). The programme has been found instrumental in improving the livelihoods of many landless and impoverished populations in the Middle Mountains and Inner Terai region of Nepal 2002. So far 14 730 ha of forest land has been handed over to poor communities.

Impoverished populations wishing to have leasehold forestry do not have to pay any fee or royalty to the government whereas if the area is leased out for profit generation purposes, the leaseholder has to pay a very high rate which also increases by 10% every year. The rate of leasing out the land depends on the physiographic zones of the country. It is high in the Terai region as compared to the mountain areas.

Similarly, the 2002 Forest Act (second amendment) provisioned for leasing forest land to the corporate sector and/or industry through an open tendering process. The Government could hand over the lease land for a period of 40 years initially and if the Government feels all activities have been implemented as per the plan satisfactorily it can extend lease tenure for another 40 years.

8.3 Support from Multilateral Development Agencies

There are multilateral and bilateral donor agencies that are supporting the government's initiatives on biodiversity conservation, livelihood improvement and sustainable utilization of natural resources.

Nepal received significant support for Community Forestry from the 1970 into the 1990s. The World Bank has financed three forestry projects in Nepal since 1980: the Community Forestry Development and Training Program (FY 80, IDA USD17 million); Second Forestry Project (FY 83, IDA USD18 million) and Hill Community Forestry Project (FY 90, IDA USD30.5 million). The three projects all sought to assist the development of Community Forestry, and tried to blend investment in plantation establishment and other services with support for tenure reforms. The World Bank support for forestry in Nepal was suspended in the late 1990s, as was also to some extent the involvement of other donors. Donor support in Nepal appears now to have increased again with the onset of international interest in the issue of climate change mitigation and adaptation through the forest sector. For example, DFID, in collaboration with the SDC, and the GoF recently announced their intention to support a major new national forestry program over the next 10 years.

Similarly, the World Bank's Forest Carbon Partnership Facility (FCPF) is now supporting the development of a REDD+ Strategy and Program under the leadership of the MoFSC with a USD200 000 grant. The REDD+ program at present is carrying out studies and supporting consulting activities for the possible marketing of forest carbon emissions reductions, designing relevant monitoring systems and a review of related policy developments. The GoN has also expressed interest in participation in the Bank's Forest Investment Program (a component of the Climate Investment Fund family).

Recently, DFID has announced a £50 million (USD80 million) grant assistance to Nepal for tackling climate change. Out of the total grant, £40 million (USD66 million) is set aside for supporting the National Forestry Programme (NFP) with other donors.

The Forest Resource Assessment Project (FRA) (2010-2014) is working to provide hard data on the current state of Nepal's forests, including trends in their area of coverage and composition. The results of the FRA could provide a strong evidence base for policy, legislation and regulation at the national level.

8.4 Establishment of Endowment and Trust Funds

Various projects implemented in Nepal have established community endowment funds to encourage conservation and improve local livelihoods. Communities and individuals within a given CFUG can obtain a loan which is mobilized either through the cooperatives or community forestry coordination committees. However, in practice the loans have not yet been realized.

MoFSC has established a trust fund to develop an appropriately decentralized and sustainable financial system at the local level to enhance the livelihood of the local people through mass afforestation, conservation and effective management and utilization of local forests; and to carry out research and studies related to forest management.

FECOFUN has made a decision recently (2012) to establish a Community Forestry Social Security Trust Fund with the objectives of helping those employees that have been wildlife victims (personnel comm., with Ms. Apsara Chapagain, President FECOFUN, 2012).

8.5 Possibilities for PES & Carbon Trading

The PES feasibility studies revealed ample scope for developing a PES scheme for the protected areas system of the country. For example, watershed services could be viable options for developing various PES schemes in the country. Similarly, there is a huge potential for carbon income through REDD+ projects in Nepal because country's annual mitigation potential from REDD is very high.

8.6 CF as an Alternative Management Regime

CF is becoming a valid method of alternative forest management. Pokharel, B, and Nurse, M. (no date) analysed the benefits CF is providing to communities. The study revealed that CF is providing an opportunity to increase natural, social, human, financial, and to some extent the physical capital of community forest users. The study further reports that there are positive changes in forest condition and canopy cover of community forests has increased from 11% to 23%. The availability of forest products had also increased with a concurrent reduction in the time spent for collecting forest products.

Through the CF Programme a number of trainings, workshops and exposure visits have been conducted for a various organizations and individuals at community, government and NGO levels. These have increased knowledge and skill related to forest silviculture, community development, organizational management and leadership development. CFUGs have carried out many community development activities on their own such as construction of village trails, small bridges, community building, schools and temples.

CF has created a positive impact on livelihood development through enhancing the supply of wild edibles used by the poor, increased availability of forest products to farmers, and more reliable product supply. It also provides increased employment opportunities and more diversified livelihood portfolios (Ojha at al. 2009). CF has enabled households to diversify their livelihood strategies to a greater extent than was possible before, including undertaking forest-based income-generating activities like cultivating spices in the forest understory and tapping resin from selected tree species.

CF can be a viable forestry management regime in Nepal. However, the challenges mentioned in earlier parts need to be resolved.

To conclude, there are opportunities in leasing out the government forest land for developing several types of economic activities. Donor agencies, multilateral, bi-lateral agencies are supporting new and innovative forestry programmes. Various trust funds have been established for financial flow and there are ample possibility of working with PES and Carbon trading schemes. Additionally, CF is becoming a fertile venue of alternative forest management regime.

Despite all constraints and challenges, there is an enabling environment for financing SFM in Nepal. There are provisions of sharing income from BZ, leasing out government land for eco-tourism and other type of forestry entrepreneurship development. Multilateral and bilateral donor agencies are interested to support government's initiatives on biodiversity conservation, livelihood improvement and sustainable utilization of natural resources. Forest inventory is on-going and the data could be a strong evidence base for policy, legislation and regulation at the national level. Various types of trust funds are already established to encourage conservation and improve the livelihood of the people.

9. RECOMMENDATIONS

Forest and trees play an important role in the national economy. The following recommendations are made based on the study undertaken on financing for SFM in Nepal.

- The inter-sectoral coordination within and between various ministries needs to be strengthened. A standing Monitoring and Evaluation Division under the chairmanship of the Prime Minister should be established to monitor and evaluate the inter-sectoral coordination along with the set targets.
- The conflicting clauses relating to revenue collection on the same products, both in the LSGA 1998 and Forest Act/ Regulations, should be resolved as soon as possible. A task force should be formed to harmonize them.
- Corruption in the forest sector is rampant and the relevant officials, in general, are not accountable for their actions. The reward and punishment provisions are not effective enough to minimize the corruption cases in this sector. Due to corruption there are problems of revenue leakage. Therefore, it is highly recommended that provisions set out in the special court under the Corruption Control/ Prevention Act, 2002 should be reviewed and amended.
- The Forest Act 1993 and Regulations 1995 are neutral with regard to the ecosystem services provided by forests. Therefore, they should be revised to include revenues from forest ecosystem services.
- The role of the private sector should be acknowledged. The existing Act and Regulations should be reviewed so that an enabling environment for private sector investment in the forest sector is introduced.
- The institutional structure of the implementing agencies especially that of the DoF, is set up under philosophy of command and control. The present structures of the DoF and Regional Directorate are not effective in delivering various types of services that the forest sector should provide. It is therefore recommended to look at these existing structures in terms of effective and efficient service delivery, collection of revenue and capacity to carry out forestry programmes both at the central and local levels.
- Studies on Community Forestry have indicated that conflicts between the Community Forestry User Group Committee and other users are posing problems in benefit sharing among impoverished and vulnerable people. CFUC members are increasingly becoming involved in illegal forest tree harvesting activities. Therefore, it is recommended that the community forestry working plans should be reviewed especially on items such as allowable cut prescribed in the plan. Additionally, an effective monitoring mechanism for harvesting should be put in place and the provisions of equitable benefit sharing should be fully implemented.
- A comprehensive study of the specific contribution of the forest sector to Nepal's GDP has not been carried out. Therefore, it is highly recommended that a study on the contribution of forestry to GDP should be undertaken.
- A PES feasibility study in some protected areas of the country revealed ample scope for developing a PES scheme. It is therefore recommended that a pilot scheme on PES should be initiated in other protected areas of the country in order to raise public awareness that may result in greater support of PES in protected areas.

- The REDD+ pilot projects/ programmes implemented in some areas have provided some early lessons on the need for data, establishment of Forest Carbon Fund, capacity enhancement of forest user groups and the need to raise awareness, especially among marginalized and disadvantaged groups including women. Hence, REDD+ could be another potential modality for funding.
- Compensatory payment schemes for profit-making agencies could be another venue for forest financing. The MoFSC has imposed a 5% tax on profit generated by hydropower projects, and the sectors which have utilized this income, are not known. It is therefore recommended to examine the potential areas where the resources could be ploughed back into sustaining the hydropower catchment area.
- Protected area management systems are increasingly facing problems of human and wildlife conflicts. Although the NPWC Act and Regulations provide compensatory provisions they have not been effective in addressing all types of conflicts. It is recommended that a Wildlife Damage Fund be established so as to provide immediate relief to the wildlife conflict victims.
- In Nepal, all public sector finance comes from the government treasury. In general, the MoFSC gets a very low budget. Despite the low budget level, there are still challenges to use all of the allocation due to late issuance of disbursements. To enable attainment of planned goals the timing of disbursements should be reviewed in consideration of the seasonal nature of forest sector activities and need for timely funding.

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Annex 1

List of individuals / experts met

Name	Position	Institution	Contactaddress
1 Ms. ApsaraChapagain	President	Federation of Community Forestry Users Nepal	P.O. Box 8219, Kathmandu, Nepal Tel:+977 1 4485263
2 Mr. Bacchu Shah Kanu	Member	Federation of Community Forestry Users Nepal	P.O. Box 8219, Kathmandu, Nepal Tel:+977 1 4485263
3 Mr. BishalGhimire	Assistant Planning Officer	Department of Forests	Mobile: 977 9843151222 Email: abghimire@gmail.com
4 Mr. BhimPrakashKhadga	Vice-President	Federation of Community Forestry Users Nepal	P.O. Box 8219, Kathmandu, Nepal Tel:+977 1 4485263
5 Mr. BrajKishorYadav	Director General	Department of Forests	Tel: 977-4227574 Email: brajkishoryadav@yahoo.com
6 Mr. DharanidharKahtiwada	Secretary	Office of the Prime Minister and Council of Ministers.	Tel: +977 1 4211015
7 Dr. DineshPariyar	Chief	Pasture and Fodder Division, Nepal Agriculture Research Council	Khumaltar, Lalitpur Tel: +977 5542903
8 Mr. HariharSigdel	JointSecretary	Ministry of Forests and Soil Conservation.	Tel: +977 1 4211868 Email: harihar.sigdel@gmail.com
9 Mr. JagannathKoirala	Joint Secretary, National Project Coordinator	Western Terai Landscape Complex Project	P.O. Box 24417 Forestry Complex, Babar Mahal
10 Dr. Jay Ram Adhikari	Under Secretary	Ministry of Environment, Science and Technology.	Email: jradhikari@hotmail.com
11 Mr. KailashRajPokharel	Under Secretary	Ministry of Finance, Foreign Aid Coordination Division.	Tel: 977-1-4211372
12 Dr. Krishna ChandraPaudel	Secretary	Ministry of Forests and Soil Conservation	Email: mofsc_sec@mofsc.gov.np Tel: +977 1 4211567
13 Mr. ManojAcharya	Under Secretary	Ministry of Commerce and Supplies	Tel: +977 1 4211616
14 Mr. LalManiJoshi	Secretary	Ministry of Commerce and Supplies	Email: lalmanijoshi@yahoo.com) Tel: +977 1 4211446
15 Mr. Lal Shankar Ghimire	Joint Secretary	Ministry of Finance Foreign Aid Coordination Division	Email: lghimire@mof.gov.np Tel: +977 1 4211837
16 Dr. LaxmanJoshi	PES Expert	International Centre for Integrated Mountain Development	Tel: +977 1 5003222
17. Ms. LaxmiPyariTapol		Department of Soil and Watershed Management	BabarMahal, Kathmandu
18 Mr. LokdarshanRegmi	Joint Secretary	Ministry of Finance Budget and Programme Division	Tel: +977 1 4211801
19 Mr. MeghBahduarPandey	Director General	Department of National Parks and Wildlife Conservation	Email: pandey.megh@gmail.com Babar Mahal, Kathmandu
20 Mr. Naindra P. Upadhaya	Joint Secretary	Ministry of Commerce and Supplies	Email: naindra@yahoo.com

Name	Position	Institution	Contactaddress
			Tel: +977 1 4211546
21 Mr. Nutaraj Pokharel	Under Secretary	Ministry of Commerce and Supplies	Tel: +977 1 4211458
22 Mr. Peter Neil	Forestry Advisor Donor Focal Point	Multi Stakeholder Forestry Programme, Nepal.	Email: p-neil@dfid.gov.uk
23 Mr. Ramesh Shakya	Deputy Director General	Department of Forest Research and Survey	Tel: +977 1 4233510
24 Mr. Resham Dangi	Joint Secretary	Ministry of Forests and Soil Conservation	Email: reshamdangi@hotmail.com Tel: +977 1 4211868
25 Dr. Santosh Rayamajhi	Associate Professor Coordinator	Institute of Forestry, Tribhuvan University, Pokhara	ComForM Project, Institute of Forestry, Pokhara, Nepal.
26 Mr. Sahas Man Shrestha	Director General	Department of Forest Research and Survey	Tel: +977 1 4233510
27 Mr. Shankar Prasad Adhikari	Joint Secretary	Office of the Prime Minister and Council of Ministers	Email: sadhikari@opmcm.gov.np Tel: +977 1 4211015
28 Mr. Sridhar Prajapati	Executive officer	Nepal Foresters' Association	Tel: +977 1 4220401
29 Mr. Thakur Bhandari	Executive member	Federation of Community Forestry Users Nepal	P.O. Box 8219, Kathmandu, Nepal Tel: +977 1 4485263
30 Mr. Tuomo Kotimäki	Chief Technical Advisor	Resource Assessment Project	Babar Mahal, Kathmandu, Nepal
31 Mr. Upendra Khanal	Under Secretary	Ministry of Finance	Email: uptekhanal@yahoo.com)
32 Dr. Yam Malla	Country Representative	IUCN, International Union for Conservation of Nature	Kopundole, Lalitpur, Nepal Tel: +977 1 5527781

Annex 2

Population by caste / Ethnic group in Nepal (%)

Groups	Percent
Chetri	15.80
Brahmain	12.74
Magar	7.14
Tharu	6.75
Tamang	5.64
Newar	5.48
Muslim	4.27
Kami	3.94
Yadav	3.94
Rai	2.79
Gurung	2.39
Dhimai/ Dholi	1.72
Limbu	1.58
Thakuri	1.47
Sarki	1.40
Teli	1.34
Chamar/ Harijan/ Ram	1.19
Koiri	1.11
Others	19.31

Annex 3

List of Government institutions and the number of employees in forest sector

Institution	No. of employees
Ministry of Forest and Soil Conservation	78
Department of Forests	7366
Department of Plant Resources	349
Department of National Parks and Wildlife Conservation	968
Department of Soil Conservation and Watershed Mgmt.	540
Department of Forest Research and Survey	105
Five Regional Directorate	94
Five Regional Training Centres	79
Nepal Army in National Parks and Wildlife Reserves	5929
Total	14,778

Corporation/ Board	
The Timber Corporation of Nepal	345
Forest Products Development Board	178
Herbs Production and Processing Company Limited	108
Total	631

Annex 4

Strategies and priorities to reform forestry as presented by the Nepal Outlook Study, 2008



Indufor

Restructuring of forest sector to cope with federalism	Reinventing and transforming forestry institutions	Policy and legal reforms	Valuation of forestry contribution	Formulating and adopting standards for SFM	Linking Community Based Forestry and protected areas system with Carbon Credits mechanism
<ul style="list-style-type: none"> • Determining the authorities, responsibilities and right of National forest management, and benefit sharing mechanism among center, federal and local governments. • Identifying linkages among community based forestry institutions, local and federal governments 	<ul style="list-style-type: none"> • Redefining the core values and principles of forestry institutions according to the changing context • Redefining the roles of forestry institutions. • Re-allocating the functions that reflect the values • Structural reform of forestry organizations to make them enable to undertake the various functions. • Planning and developing of human resources according to the institutional demand. • Privatization of public enterprises such the Timber Corporation of Nepal (TCN), • Forest product Development Board (FPDB) and Harbal Production and • Processing Company Limited (HPPCL) • Setting sectoral and cross sectoral coordinating mechanisms. 	<ul style="list-style-type: none"> • Review and reform of conflicting sectoral and cross sectoral policies and regulations. 	<ul style="list-style-type: none"> • Conducting research to determine environmental services sectors and developing • Conceptual and methodological guidelines for their economic valuation. 	<ul style="list-style-type: none"> • Developing and adopting context based forest management systems for SFM. • Formulating standards for SFM • Implementing them in forest management and monitoring systems. 	<ul style="list-style-type: none"> • Determining the impact of climate change on forests, formulating climate change • Mitigation and adaptation policies and plan for forest sector.

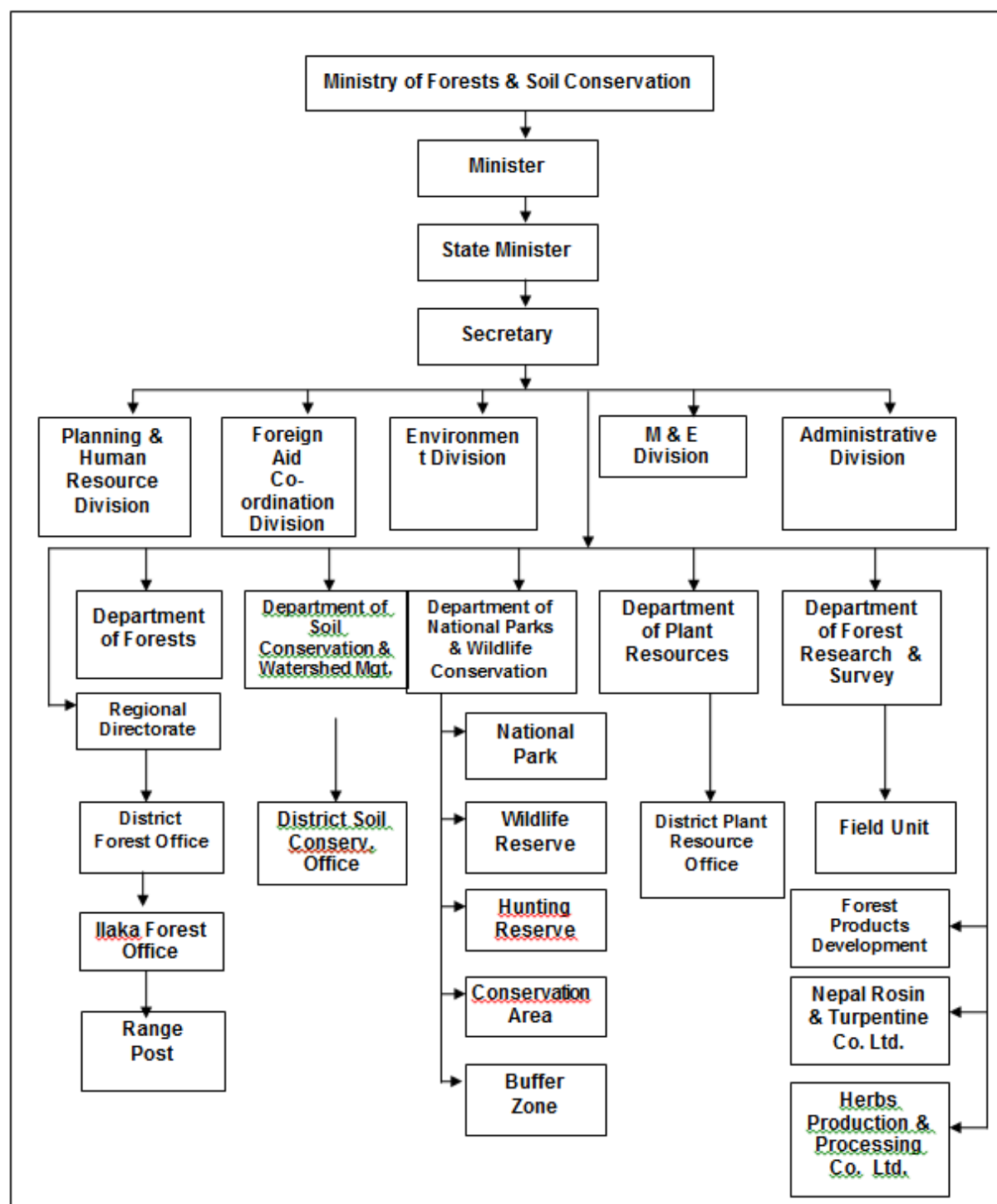
Forestry governance: Making it inclusive, transparent and responsive	Globalization: Enhancing forest sector for comparative advantages	Linking forestry with poverty alleviation	Balancing economic development and environmental conservation	Forestry research and development	Watershed conservation and integrated development
<ul style="list-style-type: none"> • Setting mechanism for democratic and participatory policy formulation • Enhancing transparency and responsive governance in forestry institutions • Formulating standards to measure good governance in forest sector organizations 	<ul style="list-style-type: none"> • Nepal should start biodiversity registration, product standardization, certification and eco-labeling to get comparative advantages from forest products. 	<ul style="list-style-type: none"> • Forest sector should be in high priority and government increase annual budget allocation for forest sector programs. • Re modeling leasehold forestry and make them pro poor. • Focus should be given for pro-poor community based forestry • Increasing the productivity of forest land through products diversification. • Active management of community forests. • Establishment of forest based entrepreneurs. • Sustainable harvesting of NTFPs, domestication, processing and marketing • Linking forestry with carbon market mechanism. 	<ul style="list-style-type: none"> • Part of the Benefits /revenue generated from the development programs should be shared to mitigate the environmental impacts made by the development interventions conserve watersheds and its resources. 	<ul style="list-style-type: none"> • Reviewing of existing forestry research modalities • Reinventing forestry research organizations to make them more effective. • Establishing coordinated research mechanism among sectoral and cross sectoral research institutions for identifying research issues, conducting research activities and disseminating research results 	<ul style="list-style-type: none"> • Linking watersheds management with poverty alleviation through conserving and mobilizing of watershed resources such as water, forest, land and human resources.

Conservation, domestication, sustainable harvesting, Processing and marketing of NTFPs	Landscapelevelconservation	Alternative energy
<ul style="list-style-type: none"> • Technological development for domestication of NTFPs species. • Establishing NTFPs based enterprise development • Linking NTFPs with market mechanism 	<ul style="list-style-type: none"> • Reducing human wildlife conflict through formulating appropriate policy measures. • Linking biodiversity conservation and poverty alleviation 	<ul style="list-style-type: none"> • Nepal has to learn experiences from those countries and formulate country based policy for producing bio-fuel energy.

Source: Asia Forestry Outlook Study 2020: Country Report NEPALMinistry of Forests and Soil Conservation, SinghaDurbar, Katmandu, NEPAL, June 2008.

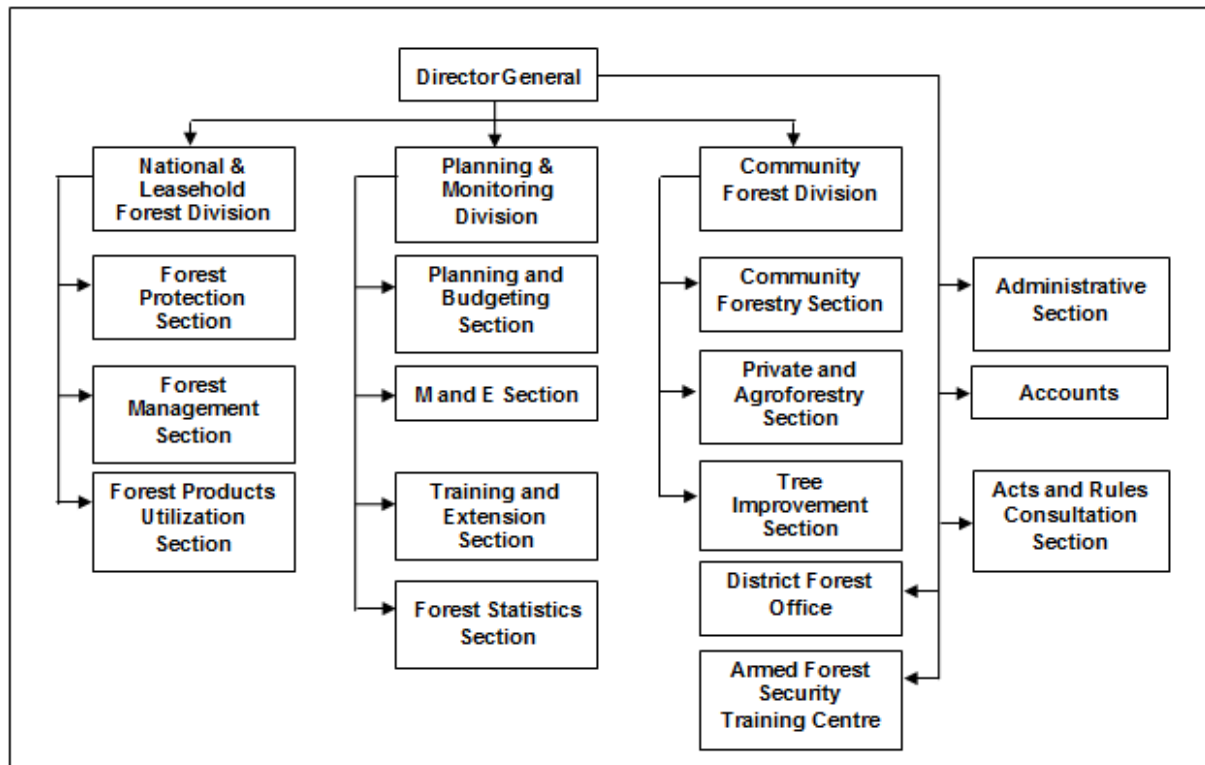
Annex 5

Organizational structure of Ministry of Forest and Soil Conservation



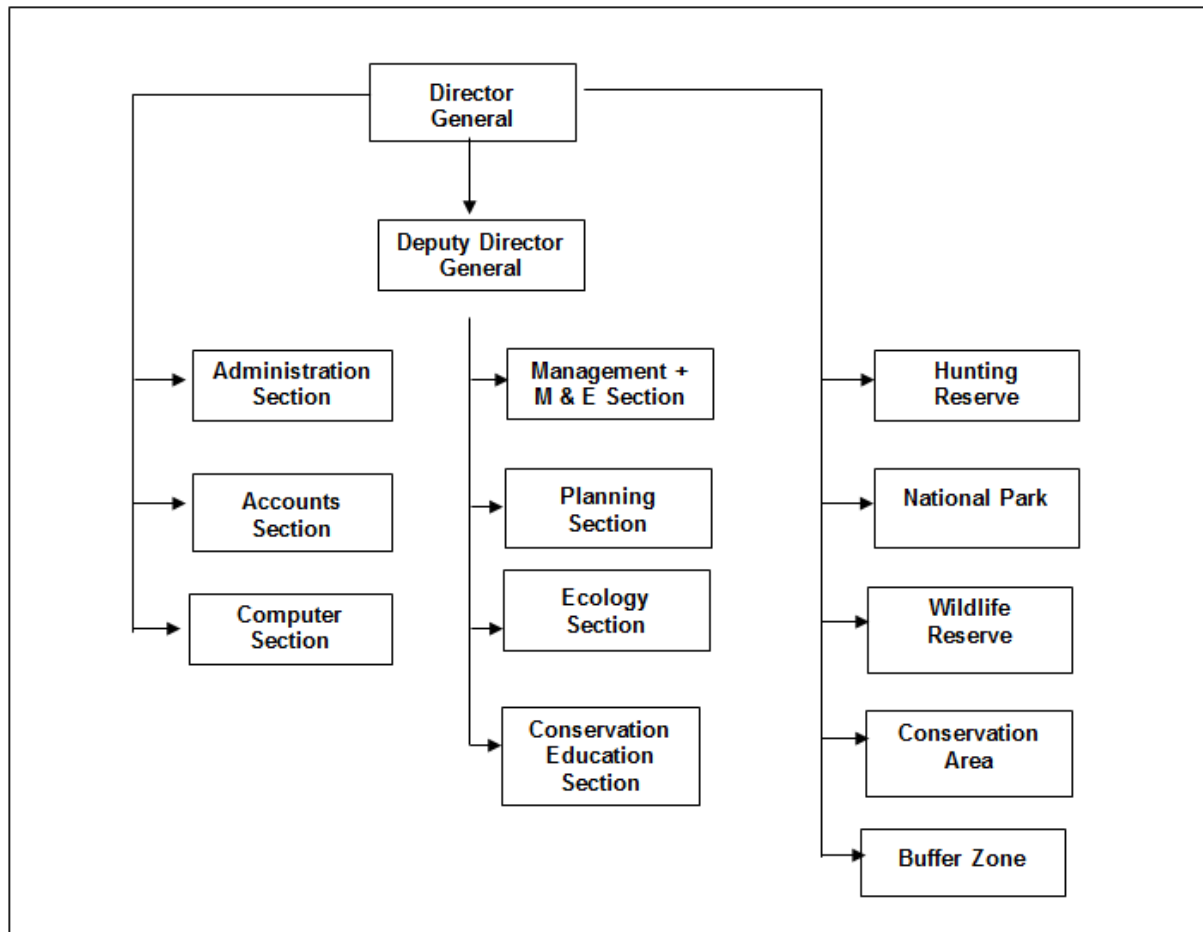
Annex 6

Organizational structure of the Department of Forests



Annex 7

Organizational structure of the Department of National Parks and Wildlife Conservation



Annex 8

Estimated budget for forestry activities for the fiscal year (2006/07)

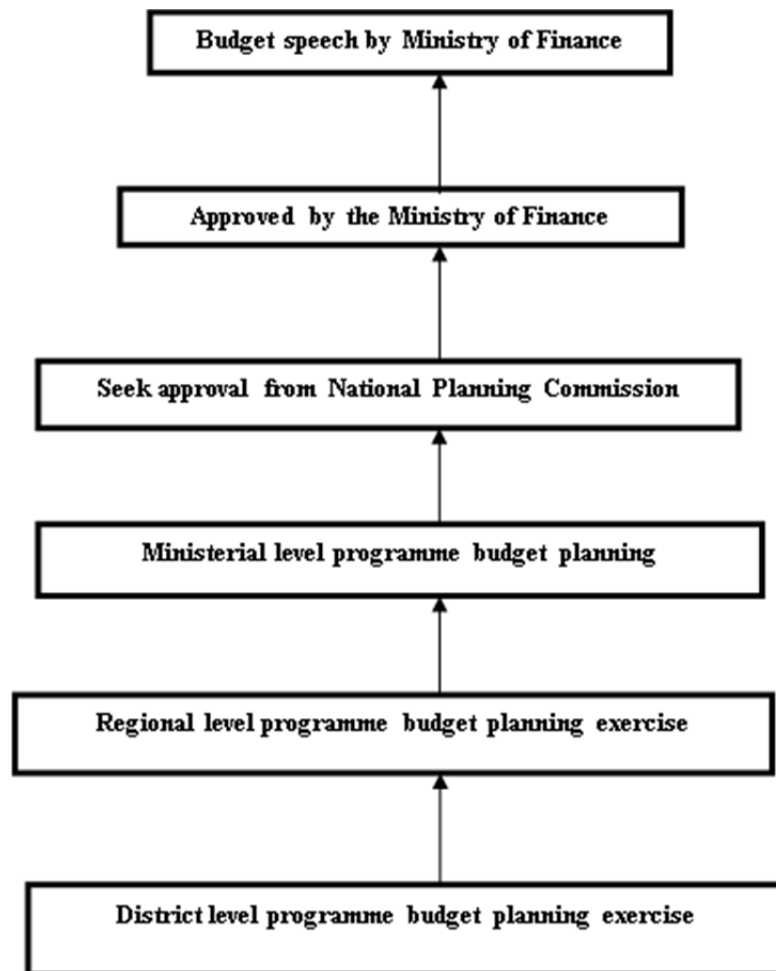
Programme/ Projects		Estimated expenditure (million USD*)
1	Community and Private Forestry development programme	8.12
2	National and Leasehold Forest development	5.48
3	Forest Resource development, Biodiversity Conservation and Research Programme	10.78
4	Herbs and Non-Timber Forest Development programme	0.73
5	Soil Conservation and Watershed Management programme	10.58
6	Forest Research Survey and publicity programme	0.57
7	Human Resource Development Programme	0.82
8	Policy and Legal Reform programme	0.01
9	Monitoring and Evaluation programme	0.04
10	Forest certification	0.02
11	Infrastructural development	2.78
12	Institutional reform	0.18
13	Implementation of approved NBSIP Project	0.53
Total		40.64

*1 USD = 65.41 Nepalese Rupees

Source: The Three Year Interim Plan (2007/8-2009/10)

Annex 9

Programme Budgeting Process in the MoFSC



Annex 10

Agencies involved in the REDD+ programme

Types of programme	Institution involved in the programme	Remarks
Support to user Group for sequestering forest carbon.	ICIMOD, FECOFUN	Experiment based on watershed in three districts
Poverty alleviation through REDD.	WWF, Nepal	Experiment based on landscape at the western districts
Local level capacity building about REDD	RECOFT	Local level in the district
Adaptive programme on climate change through forest management	SDC, Finnish Ministry of Foreign Affairs	Forest Users Group
Capacity enhancement programme for indigenous, janajati communities	Federation of Indigenous communities of Nepal	Specially aimed at raising the awareness among the indigenous communities.
Capacity development of Collaborative Forest Users Group	SNV	Collaborative Forest Users Group of Banke district.

Source: Hamro Ban. Annual Report, DoF, 2010/11

Exchange rate:

Fiscal year	Rate (USD: NRs)	Reference
2011/12	88.45	Nepal Rastra Bank (NRB)
2010/11	77.65	NRB
2009/10	74.54	CBS, 2011
2008/09	76.88	CBS, 2011
2007/08	71.20	NRB, 2012
2006/07	65.41	NRB
2005/06	73.5	NRB
2004/05	70.75	NRB
2002/03	78.0	NRB
1999/00	72.20	NRB

Source: Central Bureau of Statistics, National Planning Commission Secretariat, Government of Nepal, Kathmandu, Nepal. 2011.

NRB, 2012 (website: www.nrb.gov.np)



Indufor ...forest intelligence

Indufor Oy

Töölönkatu 11 A
FI-00100 Helsinki
Finland

Tel. +358 9 684 0110

Fax +358 9 135 2552

indufor@indufor.fi

www.indufor.fi

Indufor Asia Pacific Ltd

7th Floor, 55 Shortland St
PO Box 105 039
Auckland City 1143
New Zealand

Tel. +64 9 281 4750

Fax +64 9 281 4769

indufor@indufor.fi

www.indufor-ap.com

