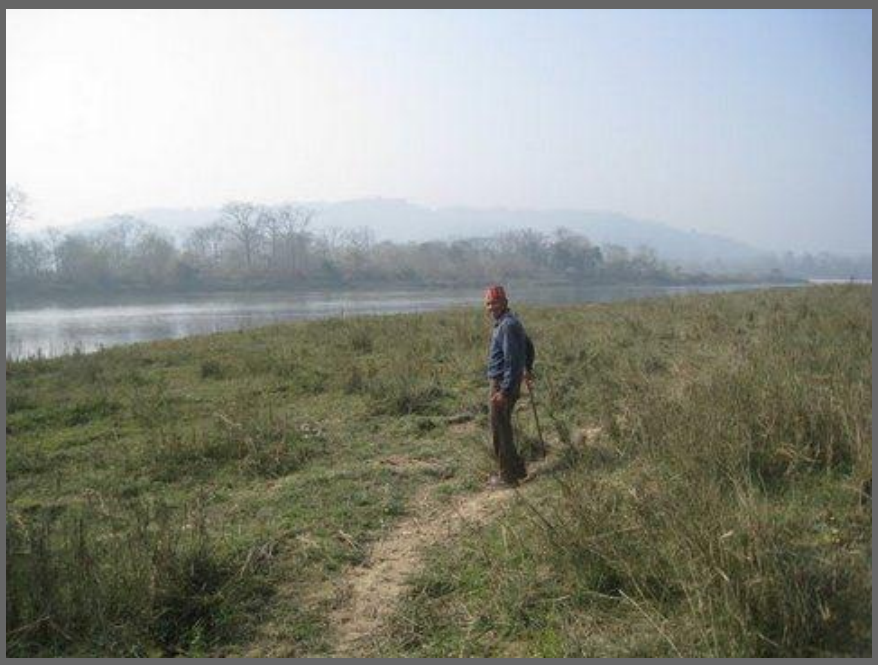
USAID | NEPAL
FROM THE AMERICAN PEOPLE

NEPAL BIODIVERSITY AND TROPICAL FORESTRY ANALYSIS

PROSPERITY, LIVELIHOODS AND CONSERVING ECOSYSTEMS (PLACE) IQC
TASK ORDER # AID-367-TO-12-00001



September 2012

This report was produced for review by the United States Agency for International Development. It was prepared by ECODIT for the Nepal Biodiversity and Tropical Forestry Analysis - Task Order No. AID-367-TO-12-00001

AUTHORITY

Prepared for USAID/Nepal under Prosperity, Livelihoods and Conserving Ecosystems (PLACE) Indefinite Quantity Contract number EPP-I-00-06-00010-00, Task Order # AID-367-TO-12-00001 awarded June 2012 and entitled "Nepal Biodiversity and Tropical Forestry Analysis."

This Analysis is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of ECODIT and do not necessarily reflect the views of USAID or the United States Government (USG).

PREPARED BY

Team Leader, Teri Allendorf, with the assistance of team members, Bijay Singh, Netra Timsina, and Natalie Elwell

ECODIT

1600 Wilson Blvd, Suite 1220
Arlington, VA 22209
USA
Tel: +1 703 841 1883
Fax: +1 703 841 1885
Web: www.ecodit.com

Cover photo taken by Teri Allendorf, Nepal Biodiversity and Tropical Forestry Assessment Team Leader, August 2012

[This page intentionally blank]

TABLE OF CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS ..... **VI**

EXECUTIVE SUMMARY ..... **X**

1. INTRODUCTION **1**

1.1 PURPOSE 1
1.2 METHODS 1

2. STATUS OF TROPICAL FORESTS AND BIODIVERSITY **2**

3. SOCIAL, ECONOMIC AND POLITICAL CONTEXT **8**

4. DIRECT THREATS AND DRIVERS **11**

5. ACTIONS NEEDED **13**

6. RELEVANT GOVERNMENT, DONOR AND NGO PROGRAMS AND ACTIVITIES **18**

6.1 GOVERNMENT 18
6.2 BILATERAL DONORS 19
6.3 MULTILATERAL DONORS 20
6.4 INGOS/NGOS 20

7. USAID COUNTRY STRATEGY AND PROGRAM **21**

7.1 EXTENT TO WHICH PROPOSED ACTIONS MEET NEEDS 21
7.2 THREATS FROM PROPOSED ACTIVITIES 22
7.3 OPPORTUNITIES FOR LINKAGES WITH PROPOSED ACTIVITIES 23

8. SPECIAL SECTIONS **25**

8.1 CLIMATE CHANGE 25
8.2 GENDER 27
8.3 CAPACITY 30

ANNEX A: SCOPE OF WORK FOR THE ANALYSIS ..... **A - 1**

ANNEX B: BIOGRAPHICAL SKETCHES OF TEAM MEMBERS ..... **B - 1**

ANNEX C: LIST OF PERSONS CONTACTED AND THEIR INSTITUTIONAL AFFILIATION ..... **C - 1**

ANNEX D: REFERENCES ..... **D - 1**

ANNEX E: CURRENT IUCN RED LIST AND NEPAL RED BOOK DATA ..... **E - 1**

ANNEX F: ENVIRONMENT-RELATED LEGISLATION, PLANS, PROGRAMS & STRATEGIES ..... **F - 1**

ANNEX G: INTERNATIONAL CONVENTIONS AND TREATIES ..... **G - 1**

ANNEX H: SUMMARY MATRIX OF THREATS, ACTIONS, EXTENT TO WHICH USAID ADDRESSES THREATS & RECOMMENDATIONS ..... **H - 1**

ANNEX I: CLIMATE CHANGE STAKEHOLDERS, ACTIVITIES, AND MAJOR EVENTS ..... **I - 1**

ANNEX J: CAPACITY TOOLS, TECHNIQUES, AND INDICATORS ..... **J - 1**

ANNEX K: STRENGTH, GAPS AND POTENTIAL ACTIONS– CAPACITY DEVELOPMENT (BASED ON FIELD INTERACTIONS AND STAKEHOLDERS CONSULTATIONS) ..... **K - 1**

ANNEX L: MAPS ..... L - 1

LIST OF ABBREVIATIONS AND ACRONYMS

Although an effort was made to reduce the number of acronyms used in this text, in some cases this was necessary. Whenever the acronym or abbreviation appears the first time it is defined in the text. The following list is provided for ease of reference by the readers of this document.

ACOFUN	Association of Collaborative Forest Users in Nepal
ADB	Asian Development Bank
ADS	Automated Directives System
ANSAB	Asia Network for Sustainable Agriculture and Bioresources
BZDC	Buffer Zone Development Council
BZUGs	Buffer Zone User Groups
CA	Constituent Assembly
CAMC	Conservation Area Management Committees
CAP	Community Adaptation Plan
CBS	Central Bureau of Statistics
CC	Climate Change
CCC	Climate Change Council
CCMD	Climate Change Management Division
CDCS	Country Development Cooperation Strategy
CDG	Community Development Group
CDO	Community Development Organization
CF	Community Forests
CFM	Collaborative Forest Management
CFUG	Community Forest User Group
CHAL	Chitwan-Annapurna Landscape
CIP	Climate Investment Funds
CLAC	Community Learning and Action Center
COFSUN	Community-Based Forestry Supporters Network
COR	Contracting Officer Representative
CPA	Comprehensive Peace Agreement
CPN (Maoist)	Communist Party of Nepal (Maoist)
CPN (UML)	Communist Party of Nepal (Unified Marxist-Leninist)
DADO	District Agriculture Development Office

DDC	District Development Committee
DFID	Department for International Development
DFO	District Forest Office
DFRS	Department of Forest Research and Survey
DG	Democracy and Governance
DISCO	District Soil Conversation Office
DNPWC	Department of National Park and Wildlife Conservation
DRR	Disaster Risk Reduction
EBA	Ecosystem-based Adaptation
EIA	Environmental Impact Assessment
EIG	Education for Income Generation
FAA	Foreign Assistance Act
FAO	Food and Agriculture Organization of the United Nations
FECOFUN	Federation of Community Forest Users Nepal
ForestAction	Forest Resource Studies and Action Team
FRA	Forest Resource Assessment
FtF	Feed the Future
GDP	Gross Domestic Product
GESI	Gender Equity and Social Inclusion
GLOF	Glacial Lake Outburst Risk Reduction Project
GoN	Government of Nepal
HICAP	Himalayan Climate Change Adaptation Program
HIMAWANTI	Himalayan Grassroots Women's Natural Resource Management Association
ICIMOD	International Center for Integrated Mountain Development
IFAD	International Fund for Agricultural Development
INGO/NGO	International/Non-governmental Organization
IUCN	International Union for Conservation of Nature
JICA	Japan International Cooperation Agency
LAPA	Local Adaptation Plans of Action
LCDS	Low Carbon Development Strategy
LFUG	Leasehold Forestry User Groups
LGCDP	Local Governance Community Development Program
LIBIRD	Local Initiatives for Biodiversity Research and Development

LRPs	Local Resource Persons
MAP	Medicinal and Aromatic Plants
MCCICC	Multi-stakeholder Climate Change Initiatives Coordination Committee
MoAD	Ministry of Agriculture Development
MoEST	Ministry of Environment, Science and Technology
MoFALD	Ministry of Federal Affairs and Local Development
MoFSC	Ministry of Forest and Soil Conservation
MOU	Memorandum of Understanding
MSFP	Multi-stakeholder Forestry Program
NA	Nepal Army
NAPA	National Adaptation Programme of Action
NARC	Nepal Agricultural Research Center
NCS	National Conservation Strategy
NFI	National Forest Inventory
NLSS	Nepal Living Standard Survey
NORAD	Norwegian Agency for Development Cooperation
NP	National Park
NPC	National Planning Commission
NR	Nepalese Rupees
NRM	Natural Resource Management
NTFP	Non-timber Forest Products
NTNC	National Trust for Nature Conservation
PA	Protected Area
PES	Payment for Ecosystem Services
PLA	People's Liberation Army
PPCR	Pilot Program on Climate Resilience
REDD	Reducing Emissions from Deforestation and Forest Degradation
RFP	Request for Proposal
RRN	Rural Reconstruction Nepal
SALT	Sloping Agriculture Land Technology
SDC	Swiss Agency for Development and Cooperation
SOW	Scope of Work
SPCR	Strategic Program for Climate Resilience
TAL	Terai Arc Landscape

TMI	The Mountain Institute
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
VDC	Village Development Committee
WB	World Bank
WOCAN	Women Organizing for Change in Agriculture and Natural Resource Management
WR	Wildlife Reserve
WWF	World Wildlife Fund

EXECUTIVE SUMMARY

Purpose

The purpose of this assessment is to conduct country biodiversity and tropical forestry analyses for Nepal. The previous analysis was done in March 2006 and updated in 2010. This assessment addresses the requirements of Sections 118 (Tropical Forests) and 119 (Biodiversity Analysis) of the Foreign Assistance Act of 1961 (as amended), ADS 201.3.8.2, Tropical Forests, and ADS 201.3.9.2, Biodiversity Analysis for country strategic plans. The legislation states:

> FAA Sec 118 (e) Country Analysis Requirements. Each country development strategy statement or other country plan prepared by the Agency for International Development shall include an analysis of:
>
> (1) the actions necessary in that country to achieve conservation and sustainable management of tropical forests, and
>
> (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified.
>
> and
>
> FAA Sec 119 (d) Country Analysis Requirements. Each country development strategy statement or other country plan prepared by the Agency for International Development shall include an analysis of:
>
> (1) the actions necessary in that country to conserve biological diversity, and
>
> (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified.

In addition to the basic requirements of a 118/119 assessment, this assessment has three specific components: (i) an analysis of climate change impacts on biodiversity and forests; (ii) incorporation of gender into the assessment; and (iii) a review of capacity among organizations to implement forest and biodiversity programming. As USAID/Nepal is in the process of revising its development objectives in line with the Country Development Cooperation Strategy process, as well as key new programs at the Agency, such as USAID Forward and Feed the Future, this assessment also highlights the links between forestry and biodiversity and these new USAID initiatives.

Status of Nepal's tropical forests and biodiversity

Community-based management is a hallmark of Nepal's advances in sustaining their forests and biodiversity. Nepal has taken a number of different approaches to community management, including: community forestry, buffer zones around national parks, conservation areas, leasehold forestry, protected forests, and collaborative forest management. Community-based forestry is the second largest forest management regime after government-managed forestry. Local communities in Nepal are managing about one-third of the country's forests, and the area under their protection has tripled in the past two decades. Community-based management is the primary reason that forest degradation and loss has declined significantly overall and even reversed in many areas, particularly the

mid-hills. Between the 1960s and 1990s, the forest cover decreased from 60% to 29%. However, after the advent of community forestry, forest cover has increased to 40% in 1994, the last year for which national forest information is available. In addition, community forestry has contributed to decreased poverty and also contributes to social development activities.

Nepal has also been successful in directly conserving biodiversity and forests with one of the highest percentages of land under government protection (more than 23 percent), putting it in the top 20 countries and second in Asia for the percentage of its surface area that is protected. Nepal has a history of successful species conservation, with action plans for rhinoceros, tiger, snow leopard, and vulture. It also is at the forefront in linking communities to benefits of protected areas, with conservation areas and buffer zone management.

Threats to forests and biodiversity

While Nepal has made considerable progress in sustaining its environment over the past 40 years, its political instability and economic and demographic context mean that there are on-going threats to forests and biodiversity. Most threats fall under one of these two categories:

(1) Loss and conversion of natural habitat through conversion to agriculture, encroachment, grazing, creation of roads and service corridors, and extraction of materials for construction such as sand and gravel.

(2) Overexploitation and illegal exploitation of biological resources, including extraction of timber and non-timber forest products and poaching of wildlife.

Additional threats include natural systems modification in the form of dams and fire, invasive species, and climate change.

Actions required for conserving tropical forests and biodiversity

(1) Strengthen and expand community-based models of conservation, such as community forestry

Community management, through community forestry, conservation areas and buffer zones, are the most successful mechanisms to date in Nepal for the protection of forests and biodiversity. Community-based natural resource governance structures have continued to function during the period of political instability in Nepal. When other institutions and processes failed, communities continued to protect their forests and water resources. Communities are very effective at mitigating many of the threats to forests and biodiversity. For example, a forest that is managed by a community is less likely to face encroachment from resettlement and illegal extraction and poaching.

However, communities continue to need support to strengthen the social process of conservation (governance issues) and management of natural resources. In terms of governance, successful existing models of community conservation, such as community forest and buffer zone management, continue to need support as they face issues such as elite capture of benefits and gender and social inclusion. In terms of managing natural

resources, more is needed to help communities define and quantify sustainable extraction levels and to explicitly incorporate biodiversity conservation, ecosystem benefits, climate change adaptation, and upstream and downstream linkages into community management strategies.

In addition to supporting existing groups, full consideration should be given to maximizing community-based management of forests not under community management. Large portions of Nepal forests are still unmanaged (such as 90% of the Terai forests, which are under government control). We recommend that existing models of successful community conservation be expanded to these areas and we encourage collaborative exploration of different methods of community-based management by communities and government to find the best models for different contexts. Some argue that community forestry is more difficult to implement in the Terai due to various factors, such as ethnic heterogeneity, larger forest sizes, and more valuable timber, and that new models of community management need to be implemented in these contexts, such as Collaborative Forest Management and Leasehold Forestry. Others argue that community forestry in the terai is not as difficult as sometimes portrayed (for example, some say that an additional 10 percent of government forest is being managed unofficially by communities in the terai) and that the value of the timber in the terai is a key variable making it difficult for government to relinquish control to communities.

However, all versions of community-based management systems need to find a healthy balance between protection of biodiversity and ecosystem services and the consumption needs of people, both for subsistence and for the market (commercial purposes). What the correct balance is, and whether it should differ in different places, is one of the underlying reasons that Nepal is experimenting with a diversity of approaches as it works through these issues.

Our main recommendations, in order of priority, are:

1. Expand the amount of forest under community management, especially in the Terai;
2. Support all forms of community-based management systems to incorporate sustainable extraction, biodiversity conservation, ecosystem services, climate change, and upstream and downstream linkages into their management strategies. Communities already recognize many of these aspects of forest conservation, but specific mechanisms need to be developed to incorporate these aspects into management;
3. Support existing models of community conservation to address governance issues such as gender and social inclusion and the capture of benefits by elites; and
4. Support newer models, such as collaborative forest management, leasehold forestry, and protection forests, to ensure they are developed in line with maximizing management by, and benefits, to the communities themselves.

(2) Build government's and civil societies' ability to gather and synthesize the information necessary for informed decision-making

Missing from much of the discussion around conservation in Nepal is the data needed to support the current understanding of many of the issues. For example, the last National

Forest Inventory was carried out in 1994 and continues to serve today as the basic reference for reporting the deforestation rate. While the 1994 NFI results are even now used to tell a story of degradation across Nepal, we know that forests have been restored and that there is forest now where once it was bare land. However, there is no national map of community forests in the Department of Forest Research and Survey, which is responsible forest inventory and mapping. There are maps and GIS layers found in different projects but data vanishes once a project is completed. We do not know in reality what percentage of forest in Terai is under community forest, nor how many community forests there are or where they are. At this point, there is no way to evaluate the influence of community forests in forest management, sustainable livelihoods, or in governance and equity. An updated assessment is critical in order to determine if and how forests have changed since the 1990s when the vast majority of forests were brought under community management.

There is the same lack of data for many of the threats to forests and biodiversity. For example, while the threats assessment included in Nepal's Readiness Preparation Proposal (REDD 2010-2013) is often quoted by donors and NGOs, the report itself notes that: "This quick assessment did not include a detailed evidence-based analysis. Hence it is not possible to offer firm recommendations for the all various issues and challenges identified." We are not singling this report out, only using its truthful statement as an example of what is equally true of this and most other assessments.

Information-based decision-making is necessary from the national to community levels. At the national level, there needs to be more emphasis on evidence on which to base policies and implementation. At local levels, people need more access to technical information on sustainable extraction and biodiversity conservation. There is also a need to compile and make accessible the information and data that may already exist. Often, information sits with different institutions within the government or NGOs and is not shared. Mechanisms for information-sharing should be encouraged.

We recommend, in order of priority:

1. A comprehensive evaluation of the current state of Nepal's forests should be conducted;
2. A central location for data collection and dissemination should be established and clear protocols for data sharing should be established at the outset; and
3. All donor projects should be required to develop and implement a plan for making the data collected publicly accessible.

(3) Support an enabling environment by putting existing and newly drafted policies into practice and building capacity of institutions to enact them

Nepal has existing policies and many newly drafted policies that have the potential to be very effective if implemented. Careful attention needs to be given to these policies as they are implemented to ensure biodiversity and forest conservation is integrated within them and that they are compatible with one another. This will require good governance at all levels of government, which is lacking now. Supporting the government and civil sector to

provide an enabling environment for community conservation is critical for the success of community management.

Recommendations for linking Conservation of Tropical Forestry and Biodiversity to USAID/Nepal's Country Development Cooperation Strategy process

We recommend that USAID develop or adopt a framework that mainstreams the environment into its development objectives and that will link biodiversity and forestry to the other USAID program areas, such as economic growth, health, and disaster risk and reduction. This framework could be based on a sustainable livelihoods approach or a green economy approach. The key is to link development and economic growth with a triple bottom line: sustaining and advancing economic, environmental and social well-being. A framework that takes these three goals equally into account would provide a platform for sectors to talk with each other and enable them to plan in an integrated fashion.

1. INTRODUCTION

1.1 PURPOSE

The purpose of this assessment is to conduct country biodiversity and tropical forestry analyses for Nepal. The previous analysis was completed in March 2006 and updated in 2010. As USAID/Nepal is in the process of revising its development objectives in line with the Country Development Cooperation Strategy (CDCS) process, as well as key new programs in USAID Washington, such as USAID Forward and Feed the Future (FtF), this assessment also highlights the links between forestry and biodiversity and these new initiatives.

This assessment will address the requirements of Section 118 (Tropical Forests); and 119 (Biodiversity Analysis) of the Foreign Assistance Act (FAA) of 1961 (as amended), ADS 201.3.8.2, Tropical Forests, and ADS 201.3.9.2, Biodiversity Analysis for country strategic plans. The legislation states:

> FAA Sec 118 (e) Country Analysis Requirements. Each country development strategy statement or other country plan prepared by the Agency for International Development shall include an analysis of:
>
> (1) the actions necessary in that country to achieve conservation and sustainable management of tropical forests, and
>
> (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified.
>
> FAA Sec 119 (d) Country Analysis Requirements. Each country development strategy statement or other country plan prepared by the Agency for International Development shall include an analysis of:
>
> (1) the actions necessary in that country to conserve biological diversity, and
>
> (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified.

In addition to the basic requirements of a 118/119 assessment, this assessment has three additional components: (1) an analysis of climate change impacts on biodiversity and forests; (2) gender-specific analysis and incorporation of gender into the overall assessment; and (3) a review of capacity among organizations at the micro, meso and macro-levels to implement forest and biodiversity programming.

The Scope of Work (SOW) for this analysis is presented in ***Annex A***. Both the SOW and the format for this report were developed using the Agency's most recent guidance for conducting Biodiversity Assessments.[1]

1.2 METHODS

Dr. Teri Allendorf, Dr. Bijay Singh, and Netra Timsina, with help from Natalie Elwell, from USAID Gender Development office who worked conducted the analysis fieldwork in Nepal

[1] USAID and ARD, Inc. *Tropical Forestry and Biodiversity (FAA 118 and 119) Analyses): Lessons Learned and Best Practices from Recent USAID Experience*, 2005.

from July 31-August 21, 2012 (see ***Annex B*** for Biographical Sketches of the Team Members). Fieldwork was preceded by a document review. The Team Leader also met with stakeholders in Washington, DC before departure to Kathmandu.

The team met with the USAID/Nepal Environment Officers to confirm the scope and schedule of the assessment. The Team and USAID also agreed on a report outline that met the requirements of the FAA 118 & 119 and the Mission's needs.

The team subsequently met with Mission staff to gain a better understanding of current and planned future activities. USAID/Nepal is currently preparing its CDCS. In order to understand the general programming theme of the new results framework, the consultants met with relevant Mission staff charged with developing the CDCS as well as representatives of teams and other mission staff. The recommendations given in the final chapter of this assessment are based upon current understanding of program priorities, but as details of mission programming are evolving, these recommendations may need to be adapted.

The team interviewed nearly 200 people from relevant government agencies, bilateral and multilateral donors, civil society organizations and local communities (see ***Annex C***, List of Persons Contacted and Their Institutional Affiliation). The team conducted three stakeholder meetings and two field trips. Stakeholder meetings were held in Pokhara, Nepalgunj and Kathmandu. These meetings allowed the team to meet with USAID/Nepal implementing partners, their beneficiaries and other stakeholders. The team also conducted a documentation review of books, papers and articles (see ***Annex D***, References).

2. STATUS OF TROPICAL FORESTS AND BIODIVERSITY

Community-based management is a hallmark of Nepal's advances in sustaining their forests and biodiversity. Nepal has taken a number of different approaches to community management, including: community forestry, buffer zones around national parks, conservation areas, leasehold forestry, protected forests, and collaborative forest management. Community-based forestry is the second largest forest management regime after the government-managed forest. Local communities in Nepal are managing about one-third of the country's forests, with the area under their protection tripling in the past two decades. Community-based management is the primary reason that forest degradation and loss has declined significantly overall and even reversed in many areas, particularly the mid-hills. Between the 1960s and 1990s, the forest cover decreased from 60% to 29%.[2] However, after the advent of community forestry, forest cover has increased to 40% in 1994, the last year for which national forest information is available. In addition, community forestry has contributed to decreased poverty and also contributes to social development activities.

Nepal has also been successful in directly conserving biodiversity and forests with one of the highest percentages of land under protection (>23%) in the world, putting it in the top 20 countries and second in Asia for most area protected. It has a history of successful species

[2] Food and Agriculture Organization of the United Nations – Forest Department, *Global Forest Resources Assessment: Nepal Country Report*, March 2009.

conservation, with action plans for rhinoceros, tiger, snow leopard, and vulture. It also is at the forefront in linking communities to benefits of protected areas, with conservation areas and buffer zone management.

Part of Nepal's success has come from the support of both the government and civil sector, including the media, who have all contributed to a legacy of supporting environmental education and awareness over a long period of time. People's understanding and awareness of Nepal's rich legacy of natural resources and biodiversity is high, with the vast majority of people recognizing multiple benefits from the environment – including conservation of wildlife, ecosystem service benefits, and esthetic and recreational benefits.[3]

Status of Tropical Forests

The last National Forest Inventory (NFI) was carried out in the 1990s. At that time, it was estimated that forest and shrub covered about 5.83 million ha, representing 39.6% of the total land area of the country.[4] The rate of deforestation was described as 1.7% per year. However, while these are the numbers commonly cited, they have little relevance for today. There are discrepancies in the data, and it has not been possible to confirm the estimates as the digital data and process to conduct the original analysis are not available.

An updated assessment is critical in order to determine if and how forests have changed since the 1990s, when the vast majority of forests were brought under community management. While the 1994 NFI tells a story of degradation across Nepal, villagers now say that the forests have been restored and that there is forest where bare land previously existed. A more recent study of Terai forests found that the deforestation rate between 1990/91 and 2000/01 was less than the previous estimates and varied from district to district. The study determined that thirteen districts had a decrease in forest cover, whereas the remaining seven districts had a positive change in forest cover.[5] Natural regeneration in the community forests is thought to be the major factor in increasing the forest cover. However, without an updated forest inventory, it is not possible to fully evaluate the impact of the current policies on forests in Nepal.

About 31% of Nepal's forests (1.71 of 5.5. million hectares) are managed by the local communities (Tables 1 and 2). This area does not include buffer zone area forest. The conditions of the community-managed forests are better than the government forests. There is some evidence that these community-managed forests are protected at the cost of nearby government forests; local communities protect their own forests and go to the government forests for timber, firewood, fodder, grazing and other forest products. However, people have also increased the amount of fodder and trees on private lands. The extent to which each, private resources and national government resources, supplement people's forest needs is not known and probably varies from area to area depending on a number of variables, such as size and distance of government forest, distance to roads, size of community forest, presence of immigrants, etc.

[3] Allendorf, T.D. "Residents' attitudes toward three protected areas in southwestern Nepal." *Biodiversity and Conservation*16 (2007): 2087–2102.
[4] Food and Agriculture Organization of the United Nations – Forest Department, *Global Forest Resources Assessment: Nepal Country Report*, March 2009.
[5] Government of Nepal, Ministry of Forest and Soil Conservation, Department of Forest. *Forest Cover Change Analysis of the Terai Districts (1990/91 – 2000/01*), Kathmandu, 2005.

Table 1: Amount of forest under different community-based managed regimes in Nepal

Type of Forests	(Hectares)
Community Forests	1,664,918
Leasehold Forests	38,997
Collaborative Forests	29,798
Total	**1,733,713**

Source: Leasehold Forestry and Livestock Programme, CF/DOF, August 2012

Table 2: Status of Community Forests (CF) in Nepal

Eco-zone	No. of districts	CF		CF Area		Households Members		No. of HHs in Nepal	% of HHs Coverage by CFUG
		Number	Percent	Area (ha)	Percent	Number	Percent		
Mountain	15	2,861	16.07	269,526	16.19	293,801	13.39	319,887	91.85
Hills	39	12,882	72.34	1,095,054	65.77	1,414,835	64.48	1,982,753	71.36
Terai	20	2,065	11.60	300,338	18.04	485,714	22.13	1,950,580	24.90
Total	**74**	**17,808**	**100.00**	**1,664,918**	**100.00**	**2,194,350**	**100**		
All women managed CF	69	1035	5.81	45,333	2.72	95,955	4.37		

Source: CF Division, Department of Forests, Kathmandu, 31 August 2012

In general, government forests are not adequately managed due to the limited number of government staff. While government forests in the mountain region are in relatively better condition due to their remoteness, timber is being illegally extracted and taken to Tibet. Government forest in the terai and Churia hills is being rapidly degraded due to open access resources for harvesting timber, firewood, fodder, non-timber forest product and medicinal and aromatic plant NTFP/MAP collection, fires, and open grazing. Moreover, this area is repeatedly encroached upon by organized groups of people backed by different political parties in a long and unstable political context. The forests in the inner terai and terai are the primary target of the encroachers, with the districts of Dang, Banke, Bardia, Kailaili, Kanchanpur, Bara, Parsa, Chitwan, and Rautahat at highest risk.

Status of Biodiversity

Nepal is rich in forest diversity. It has nine types of forest eco-regions (Table 3) and ecological zones ranging from lower tropical to alpine (see Map 1: Forest User Groups (FUGS) with Ecological Zones Map in ***Annex L***).

Table 3: Ecoregions - Distribution and Conservation Status of Forest Diversity in Nepal

Symbol	Ecoregion type	Distribution and Altitude (M)	Conservation Status
IMO115	Himalyan Sub-Tropical Broad-leaved Forest	Nepal, Bhutan India (500-1000)	Critical/Endangered
IMO301	Himalayan Sub-Tropical Pine Forest	Nepal, Bhutan, India, Pakistan (1000-2000)	Vulnerable
IMO401	Eastern Himalayan Broad-leaved Forest	Nepal, Bhutan, India (1500-3000)	Stable/Endangered
IMO403	Western Himalayan Broad-leaved Forest	Nepal, India, Pakistan (1500-3000)	Critical/Endangered
IMO501	Eastern Himalayan Sub-Alpine Conifer Forest	Nepal, Bhutan, India (3000-4000)	Vulnerable
IMO502	Western Himalayan Sub-Alpine Conifer Forest	Nepal, India, Pakistan (3000-4000)	Vulnerable
IMO701	Tarai-Duar Savannah and Grassland	Nepal, Bhutan, India (< 500)	Critical/Endangered
PA1003	Eastern Himalayan Alpine Shrub and Meadows	Nepal, Bhutan, India, China, Myanmar (3000-4000)	Relatively Stable/ Intact
PA1021	Western Himalayan Alpine Shrub and Meadows	Nepal, India (3700-4400)	Relatively Stable/ Intact
IM - Indo Malayan; PA - Palearctic			

Source: Bhuju, U.R., et. al., Nepal Biodiversity Resource Book, ICIMOD, pp. 31, 2007

Nepal is extremely rich in species diversity. The main focus of species conservation is on wildlife (mega fauna), such as the Bengal tiger, rhinoceros, and Asian Elephant. Information on other species currently on the IUCN Red List for Nepal is available in ***Annex E***.

Rhino Count in 2011: In early 1950s, there were believed to be more than 1,000 rhinos in Nepal. Within a decade, it decreased to somewhere between 90-108 individuals. This was due to the increase in human population in the Terai from a few thousand to more than a hundred thousand in that decade. After long-term efforts to save rhinos, the rhino population began to recover, and by 2000 its population had increased to 612. During the conflict, poaching increased and numbers declined to less than 500. The numbers are now rising again, and in the year 2011, the number of rhinos was 534. This rise is partly due to a goal set by the government of zero poaching for the year 2011. Financial assistance for anti-poaching plans and activities and setting up of Wildlife Crime Control Bureau are some of the steps the government took to pursue this goal.[6]

Double the Tiger Population by 2022: Nepal has made a commitment to double its tiger population by 2022. The tiger population was estimated at 157 in 2010 and 176 in 2012 in

[6] DNPWC. "Rhino Count 2011." Accessed September 28, 2011. http://www.dnpwc.gov.np/images/rhino%20count%202011%20press%20release.pdf

Nepal. The tiger is mainly in Chitwan National Park, Parsa Wildlife Reserve, Bardia National Park, and Suklaphanta Wildlife Reserve. The latest tiger count made public by World Wildlife Fund (WWF) Nepal shows an increase of 21 tigers since 2010 (15%). One reason for establishing Banke National Park in 2010, which is contiguous with Bardia National Park, is to expand habitat for tiger in the Terai.[7]

Wildlife Trade: Nepal and India signed an agreement on July 29, 2010, to curb illegal trade in animal parts and other conservation initiatives to boost wildlife in the two countries. The pact is a key step towards signing of a Memorandum of Understanding (MOU) on biodiversity conservation between the two countries[8].

Status of Birds in Nepal 2010: While the number of vulnerable and regionally extinct bird species has declined in Nepal between 2004 and 2010, the number of endangered species and the number of critical species has increased (see Table 4 below).

Table 4: Status of Endangered Bird Species in Nepal

Criteria	2004	2010	Difference
Vulnerable species	61	50	(-) 11
Endangered species	32	38	8
Critical species	40	61	21
Regionally extinct	9	8	(-) 1

Source: Bird Conservation Nepal and Department of National Parks and Wildlife Conservation. *The State of Nepal's Birds 2010*. Kathmandu, 2011.

Rhododendron Conservation: Tinjure-Milke-Jaljale Gurans Conservation Area, located in Sankhuwasabha, Taplejung and Terahthum districts, is rich in biodiversity consisting of 25 species of rhododendrons (Gurans). Called the "capital of Gurans", this area was also one of the priority areas identified in the Nepal Biodiversity Strategy Implementation Plan 2006-2010.

Status of Ecosystem Diversity

There are 118 ecosystems in Nepal; out of them 80 (67.8%) fall within Protected Areas. High Himal and High Mountains, including mid-hills, have the largest number of ecosystems (95) compared to Siwaliks and Terai (23).

[7] WWF. "Monitoring Tigers in Nepal." Accessed Sept28, 2012. http://worldwildlife.org/projects/monitoring-tigers-in-nepal
[8] DNPWC, "Details for MOU on forestry and biodiversity conservation between Nepal and India." Accessed September 28, 2012. http://www.dnpwc.gov.np/details-for-mou-on-forestry-and-biodiversity-conservation-between-nepal-and-india.html

Table 5: Ecosystems within Protected Areas of Nepal

Physiographic zone	No. of PAs	No. of ecosystems	No. of ecosystems in PAs
High Himal	9	43	32
High Mountain	4	52	33
Mid-hills	-	-	-
Siwaliks	7	13	5
Terai	-	10	10
Total	20	118	80

Status of Protected Areas

The protected areas in Nepal include 10 national parks, three wildlife reserves, one hunting reserve, six conservation areas and protected area buffer zones (see Map 2: Nepal Protected Areas in ***Annex L***). Protected areas have increased from 19.72% of Nepal's land in 2009 to 23.2% in 2012 with declaration of Banke National Park in 2010, Api Nampa CA in 2010 and Gaurishanker Conservation Area in 2011. Out of a total of 28,376 km^2 core areas and 5080 km^2 buffer zone areas, an additional 4387 km^2 (15.5%) of core area has been declared since 2010. These protected areas are administered under the Department of National Parks and Wildlife Conservation.

Similarly, out of the 133,325 hectares of seven protected forests, only one protected forest covering 176 hectares was declared in 2002, with the other six protected forests declared since 2011 (Table 6). Four of the protected forests, including Barandavar, Laljhadi-Mohana, Basanta and Khata, are important wildlife corridors, and the other three, including Madane, Panchase and Kankre Bihar, are rich in biodiversity. These protected forests are administered under the Department of Forests under the 1993 Forest Act. The protected forests are more conservation-focused with their emphasis on ecosystems and keystone species, while community-based forests are primarily managed for meeting the forest product needs of local community people.

Table 6: Protected Forests in Nepal Important for Ecosystem Conservation in Nepal

Name of PF	Approved Date	District	Area (Ha)	Main Features
Kankre Bihar	13 May 2002	Surkhet	175.5	Historical, biodiversity
Madane	28 Feb 2011	Gulmi (11 VDCs)	13,761	Biodiversity, eco-tourism, ecosystem, natural beauty
Barandavar	27 Feb 2012	Chitwan (15 VDCs & 2 municipalities)	10,466	Wildlife habitat and corridor
Laljhadi-Mohana	27 Feb 2012	Kanchanpur-Kailali (12 VDCs & 1 municipality	29,641.75	Wildlife habitat and corridor, wetland
Basanta	27 Feb 2012	Kailali	69,001.22	Wildlife habitat and corridor
Khata	27 Feb 2012	Bardia	4503.72	Wildlife habitat and corridor
Panchase	27 Feb 2012	Kaski, Parbat and Syangja (9 VDCs)	5775.73	Wildlife habitat, biodiversity, ecosystem, natural beauty
Total			**133,324.90**	

3. SOCIAL, ECONOMIC AND POLITICAL CONTEXT

Social and Economic Context

The population of Nepal in 2011 was 26.6 million, having grown 3.45 million in the last 10 years. The average growth has decreased from 2.25% in 2001 to 1.40% in 2011. Half of the population lives in the terai zone, 43% in the hill zone, and 7% in the mountain zone. The average household size has decreased from 5.4 persons in 2001 to 4.7 persons in 2011. Absent population, mainly due to migrant labor flows, was recorded at 1.92 million in 2011 against 0.762 million in 2001. The urban population has increased from 13.9% in 2001 to 17% in 2011.[9]

The proportion of female-headed households almost doubled between 2001 and 2011 (from 14% to 27%), mainly due to migration of males for labor opportunities outside of the country. Nearly 44% of households have at least one absentee currently living either abroad or somewhere else within Nepal. Differentiating between abroad and within country shows that slightly more than 29% of households have at least one absentee currently living abroad, whereas slightly more than 19% of households have at least one absentee currently living within the country[10]. The impact of out-migration makes it very difficult to find agricultural labor in rural areas and industrial labor industries. High migration of the male population has also put pressure on women to take on more responsibilities. While this creates stress on a household, it has also opened up avenues for women to take leadership roles and to participate in decision-making processes, including in community forestry and natural resource groups.

Remittance and tourism are the major source of foreign currency in the country. Total amount of remittance has increased more than five-fold, from Nepalese Rupees (NRs) 46 billion in 2003/04 to NRs 259 billion in 2010/11 in nominal terms. Average household income grew by more than 363% between 1995/96 and 2010/11 (NRs 43,732 versus NRs 202,374). During the same period, mean per capita income increased from NRs 7,690 to NRs 41,659 (an increase of 442%). During the last 15 years, per capita income of the poorest 20% of the population increased by more than 687%, while that for the richest 20% of the population increased by 387%.[11] Between 1995/96 and 2010/11, the proportion of households operating non-farm enterprises has increased from 24% to 35%.

There has been a remarkable growth in per capita consumption across all population groups over the last 15 years with the per capita consumption, in nominal terms, increasing from NRs 6,802 in 1995/96 to NRs 34,829 in 2010/11. Still, the proportions of children under 5 years of age who are underweight, stunted and wasted are 31%, 42% and 14%, respectively.

As people move away from farming and gain cash income from remittances and non-farm enterprises, their dependency on forests changes. This can have positive impacts on forests in that people may rely less on extraction of fuel wood and fodder, for example, but it can also have negative consequences in that higher incomes allow them to buy resources and consume more. For example, there have been studies that show when people can

[9] Government of Nepal – Central Bureau of Statistics, *Population Census Preliminary Report*, p. 7, 2011. http://cbs.gov.np/wp-content/uploads/2012/09/Population-Census-Prelliminary-Report-2011.pdf
[10] Government of Nepal – Central Bureau of Statistics, Nepal Living Standards Survey (NLSS), 2010/2011.
[11] Ibid.

afford to buy fuel wood or pay others to collect it, they actually use more. Therefore, the relationship between wealth and consumption is complex. The impacts of Nepal's changing economy, including the impacts of remittances and increased incomes, on forests and biodiversity are not clear.

Political Context

While Nepal has a good track record of commitment to the conservation of forests and biodiversity (see ***Annex F*** for a list of forestry and biodiversity policies and programs and ***Annex G*** for International Conventions and Treaties to which Nepal is a signatory), the political situation does not allow for adequate implementation of policies in any sector. Because of poor governance during a long political transition, corruption is high and the poor enforcement of laws and misappropriation of program and government funds can be observed in all the sectors. The government frequently changes and bureaucratic and policy level staff are transferred often. Morale of bureaucracy is very low as a rewards and punishment system is not enforced.

There are more than 30 political parties registered in the Election Commission. The four main parties are: Unified Communist Party Nepal - Maoist Party (UCPN-M), Nepali Congress (NC), United Marxist Leninist (UML) and Unified Democratic Madhesi Front (UDMF). The political parties had understood the peace process as a power-sharing agreement between those who collectively removed the King and reestablished democracy. However, the parties are now more interested in monopolizing power for themselves instead of sharing, and so power is passing between the leaders of different parties, Both democracy and the peace process have become secondary considerations.

The Ministry of Federal Affairs and Local Development (MoFALD) was formed from the former Ministry of Local Development, but there is no policy, strategy and program related to federal affairs as there is lack of consensus among major political parties as to the modality of federalism. In the absence of elected bodies within the local government (i.e., the District Development Committees (DDC) and Municipality and Village Development Committees (VDC)), local government officials (i.e. the DDC Local Development Officer and the Chief Executive Officers of Municipality and VDC Secretary) are working as local government chiefs. Due to poor governance and weak monitoring, there are many examples of actions taken against the officials of local bodies for misappropriation of local funds, which is a reflection of poor governance in the country.

Specific issues relating to the political context of forests and biodiversity include:

- The Master Plan for the Forestry Sector has expired, which is the major strategic policy guideline for forestry and biodiversity sectors in Nepal. Due to the lack of political accountability (weak political governance), the formation of new forestry sector strategy has not progressed yet.
- Some other policies such as the Agriculture Development Strategy, Reducing Emissions from Deforestation and Forest Degradation (REDD(strategy, Low Carbon Emission Strategy, National Conservation Strategy have just been initiated, but due to the weak political commitment, no significant progress has been made. Without proper political commitment, strategy development and implementation are likely to be retarded.

- Time and again, the Ministry of Forest and Soil Conservation has proposed an amendment of the Forest Act 1993, partly to address perceived issues of illegal felling in the terai. However, because of current political instability, the Forest Act's amendment is not the priority of the government. Also, there are conflicting interpretations of the proposed Forest Act amendment with the government arguing that the amendment is to control deforestation, while the Federation of Community Forest Users Nepal (FECOFUN) argues that the amendment as written is meant to fulfill the bureaucratic interests and hold more central control (curtail community autonomy) over community management.
- Forest degradation, deforestation, and poaching have been issues of hot discussion at the parliament and the parliament committee of natural resources (when there was a parliament before May 27, 2012). The parliament committee has formed a committee for investigation of deforestation and poaching, and the committee has submitted the report to the parliament. However, this report has not been discussed in the parliament due to the political instability.
- Smuggling of endangered species, such as Red Sandalwood, has been a major political issue during the conflict and post-conflict period as political instability is blamed for enabling smuggling of the endangered species.

4. DIRECT THREATS AND DRIVERS

While Nepal has made considerable progress in sustaining its environment over the past 40 years, its political instability and economic and demographic context mean that there continues to be on-going threats to forests and biodiversity. Most threats fall under one of two categories: 1) the loss and conversion of natural habitat and 2) the overexploitation of biological resources. Additional threats include natural systems modification (e.g. dams and fire), invasive species, and climate change. Below is a summary of the main threats within each category (a detailed list of threats is provided in ***Annex H***):

1. **Loss and conversion of natural habitat through conversion to agriculture, encroachment, creation of roads and service corridors, and extraction of materials for construction such as sand and gravel.**

Agricultural encroachment on forests is a main threat in Nepal because food needs continue to increase as population and wealth increases. The majority of Nepal's population, more than 70%, is directly dependent on agriculture for its livelihood. Encroachment is mainly an issue in the Terai and Churia, where new immigrants settle and clear forest for agricultural land. Additionally, these areas are repeatedly encroached upon by organized groups of people backed by different political parties. The districts of Dang, Banke, Bardia, Kailaili, Kanchanpur, Bara, Parsa, Chitwan, and Rautahat have had the most encroachment.

The number of roads being built at the local level without sufficient expertise is causing erosion and contributing to landslides on a wide scale across the country.

Primarily due to construction in urban areas, the mining of sand and gravel for cement is large. Some of the extraction is happening in and near protected areas, and is impacting rivers, water systems, and fragile ecosystems like the Churia hills.

2. **Overexploitation and illegal exploitation of biological resources, including extraction of timber and non-timber forest products, grazing and poaching of wildlife.**

While community forests in general have become healthier, not much is known about the sustainability of resource extraction of non-timber forest products. In addition, there is a fear that while people are protecting their community forests, they are encroaching on government-managed forests, both to extract resources and to graze livestock. However, little data exists and the extent of this problem is unknown. There is some indication that grazing happens primarily on the fringes of national government forest in areas closest to villages. Other anecdotal evidence from the eastern region indicates that people rely on their private lands for fodder and do not use the nearby forest.

Timber extraction is a problem although the extent is not well known. It is difficult to find data on the total production and trade involving timber exports and imports for Nepal due to the lack of organized data and the existence of illegal markets within the country and across the border with India and Tibet.[12] Most attention on timber is primarily limited to discussions

[12] Forest Monitor. "Production and Trade." Accessed September 28, 2012. http://www.forestsmonitor.org/fr/reports/549391/549399

of timber extraction within community forests and little attention is given to the current state of government forests, although illegal concessions have been handed out to the local contractors to win political favors and elections.[13] In the Terai, although less than 10% of the forest is managed by communities, a great deal of attention has been given to the perceived limitations of community forestry in that region. Much of the focus is driven by the value of the timber in the Terai, with the government reticent to see high revenues from timber, going to the communities. Meanwhile, little attention is being paid to the government-managed forests of the Terai and whether the government is adequately managing them.

Although poaching of key species for which there are action plans, such as tigers and rhinos, has decreased in recent years, there is a fear that poaching of less monitored species continues to be a problem. During our stakeholder meeting, it was mentioned that consumption of "bushmeat" was on the rise among the urban elite and middle-class.

Additional Threats:

- Natural System Modifications

Fire and dams are the two main threats within this category. Fire was often mentioned but the extent of the problem is not known. With climate change, the impacts of fire on forests and biodiversity may increase. However, no baseline exists, and there is no fire strategy being discussed other than suppression. Dams are a critical issue for forests and biodiversity, as is water management. There are plans for multiple dams in Nepal. While many of these plans have been on hold or delayed for many years, dams are a potentially large threat for forests and biodiversity in Nepal. Urban areas are lacking water, and agricultural development requires changes in water systems, all of which can impact water systems.

- Invasive Species

Six plant species are considered as a high threat to the native species habitat and ecosystem in Nepal. These are: (1) *Ageratina adenophora*, (2) *Chromolaena odorata*, (3) *Mikania micarantha*, (4) *Lantana camara*, (5) *Eichhornia crassipes* and (6) *Ipomoea carnea spp*. *Mikania micarantha* is a species of major concern in Chitwan NP for ecosystems and wildlife, where it is causing damage to both native plant species and fauna. For example, rhinos are spending more time foraging in the community forests as forage inside the park is decreasing. There are projects going on to find ways to control it, for example, through collection and conversion to briquettes for fuel. *A. adenophora* and *C. odorata* are aggressively colonizing abandoned slopes in the tropical to lower temperate zones. *L. camara* is a weed commonly found in wastelands. *E. crassipes* is considered the world's most widespread and serious invasive aquatic weed. *I. carnea* is also an aquatic invasive.

- Climate Change

Nepal, because it is a mountainous area, is very sensitive to global climatic change. Global warming in the Himalayas has been much greater than the global average with an average

[13] Forest Monitor. "The Terai Forests." Accessed September 28, 2012. http://www.forestsmonitor.org/fr/reports/549391/5493998

increase of 0.60 C per decade between 1997 and 2000.[14] Predicted impacts include vegetation shift in high altitudes, loss of species (in particular endemic species), loss of agricultural productivity, and negative impact on water resources. However, actual impacts of climate change in the Himalayas are not well understood. For more information see section 8.1 of this report on climate change.

Underlying Drivers of Threats

The key underlying drivers to biodiversity and forest loss in Nepal are population and economic activity, which will continue to increase. The population of Nepal will continue to increase with a predicted peak of 48.5 million people in 2070. Although the total fertility rate (children per woman) has dropped from 4.6 to 2.6 children in just 15 years, and is predicted to continue to decline as part of Nepal's demographic transition, additional factors, such as increased life expectancy, contribute to the growth rate. Infant mortality has been halved and the number of children fully immunized has doubled in 15 years. In general, these are very positive trends for human well-being, but in terms of sustaining livelihoods, it will put pressure on forests and biodiversity over the next few decades.

In addition to increases in population, increases in consumption will exacerbate pressure on forestry and biodiversity. Poverty in Nepal decreased from 42% in 1995-96 to 31% in 2003-04 to 25% in 2010-11.[15] This decrease in poverty corresponded with a rise in consumption. For example, the number of households responding that food consumption was inadequate declined from 50% in 1995-96 to 16% in 2010-11.

5. ACTIONS NEEDED

Threats to biodiversity and opportunities for its conservation can be seen as two sides of the same coin. For example, many threat analyses state that high dependency on forest and forest products is a threat or a driver of threats. However, all humans rely on forests for many every day needs, whether it is fuelwood and fodder in Nepal or furniture and office supplies in a New York high rise. What is special about Nepal is that the dependency is direct, which means that people are also highly invested in sustaining the resources on which they depend. Often, the farther away the consumer is from a resource, the less they see the impact of their extraction, and the less invested they are in sustainable extraction. People's direct dependency on forests in Nepal explains a great deal of the success of community forestry.

The key point from the perspective of conservation is that having people actively involved in managing their resources through community forestry provides the governance structure to mitigate most of the threats to forests and biodiversity, such as the illegal harvest of forest products, unsustainable harvest, overgrazing, expansion of invasive species, and forest fires.

However, some threats occur at scales that are not under the direct control of communities. For many of these higher scale threats, communities can act as watchdogs, but they cannot mitigate the threat on their own. For example, encroachment and resettlement (two versions

[14] Government of Nepal, Ministry of Forests and Soil Conservation. *Nepal Fourth National Report to the Convention on Biological Diversity*. Kathmandu, 2009

[15] Government of Nepal, Central Bureau of Statistics. *Nepal Living Standards Survey* (NLSS), 2010/2011.

of the same phenomena) and infrastructure development require planning and mitigation at higher scales than local communities. Finding an appropriate balance of forest, agricultural lands, urban areas and infrastructure (such as roads and dams) are decisions that need to be made by coordinated planning processes to determine the correct balance for the goals and priorities of the country. Good planning can ensure maintenance of a healthy amount of existing forest in balance with the agricultural needs of the country. These are decisions that have to be made based on good data and with a long-term vision and goals in mind.

We have grouped our suggestions for the conservation of forests and biodiversity in Nepal into three categories. The most critical are the first and second recommendations, but the third recommendation facilitates successful implementation of the first and second recommendations.

(1) Strengthen and expand community-based models of conservation, such as community forestry.

Community management, through community forestry, conservation areas and buffer zones, are the most successful mechanisms to date in Nepal for the protection of forests and biodiversity. It is community-based natural resource governance structures that have continued to function during the period of political instability that Nepal has been undergoing. When other institutions and processes failed, communities continued to protect their forests and water resources. Communities are very effective at mitigating many of the threats to forests and to biodiversity. For example, a forest that is managed by a community is less likely to face encroachment from resettlement and illegal extraction and poaching.

However, communities continue to need support to strengthen the social process of conservation (governance issues) and management of natural resources. In terms of governance, successful existing models of community conservation, such as community forest and buffer zone management, continue to need support as they face issues such as elite capture of benefits and gender and social inclusion. In terms of management of natural resources, more is needed to help communities quantify sustainable extraction and to explicitly incorporate biodiversity conservation, ecosystem benefits, climate change adaptation, and upstream and downstream linkages into community management strategies.

In addition to supporting existing groups, full consideration should be given to maximizing community-based management of forests not under community management. Large portions of Nepal forests are still unmanaged (such as 90% of the Terai forests, which are under government control). We recommend that existing models of successful community conservation be expanded to these areas and we encourage collaborative exploration of different methods of community-based management by communities and government to find the best models for different contexts. Some argue that community forestry is more difficult to implement in the Terai due to various factors, such as ethnic heterogeneity, larger forest sizes and more valuable timber, and that new models of community management need to be implemented in these contexts, such as collaborative forest management and leasehold forestry. Others argue that community forestry in the terai is not as difficult as sometimes portrayed (for example, some say that another 10% of government forest is being managed unofficially by communities in the terai) and that the value of the timber in the Terai is the key variable making it difficult for government to relinquish control to communities.

However, all versions of community-based management systems need to find a healthy balance between protection of biodiversity and ecosystem services and the consumption needs of people, both for subsistence and the market. What the correct balance is and whether it should differ in different places is the underlying reason that Nepal is experimenting with a diversity of approaches as it works through these issues.

Our main recommendations, in order of priority, are:

1. Expand the amount of forest under community management, especially in the Terai.
2. Support all forms of community-based management systems to incorporate sustainable extraction, biodiversity conservation, ecosystem services, climate change, and upstream and downstream linkages into their management strategies. Communities already recognize many of these aspects of forest conservation[16], but specific mechanisms need to be developed to incorporate these aspects into management.
3. Support existing models of community conservation to address governance issues such as gender and social inclusion and capture of benefits by elites.
4. Support newer models, such as collaborative forest management, leasehold forestry, and protection forests, to ensure they are developed in line with maximizing management by and benefits to communities.

Additional issues:

- Make policies less top-down: involve communities in developing policies and increase their awareness of policies.
- Consider multiple and innovative pathways for communication to increase people's participation in and awareness of policies. For example, women often have less access to information. Community radio stations may be one way to communicate with women and other groups that may not be as active in the community and are least likely to hear about community meetings, policies, etc.
- Consider how to reduce the politicization of natural resources to the extent possible. The best way to do this may be to maintain focus on the basic tenets of community forestry: participation, inclusion, and equity.
- Commit more resources (technical, financial, etc.) to the VDC level and below.
- Reconsider timber regulations in light of sustainable extraction and benefit maximization.
- Consider more the role of private forests and engagement with private sector as well as laws and policies that encourage sustainable use and transparency of private forests.

[16] Allendorf, T.D. "Residents' attitudes toward three protected areas in southwestern Nepal." *Biodiversity and Conservation* 16 (2007): 2087–2102.

- Understand different types of rights (such as procedural versus substantive), which is critical to understanding the ongoing discourse over natural resources in Nepal.[17]
- Continue to explore and incorporate NTFPs as part of a sustainable livelihoods framework.

(2) Build government and civil societies' ability to gather and synthesize information necessary for informed decision-making.

Missing from much of the discussion around conservation in Nepal is data to support the current understanding of many of the issues. For example, the last NFI was carried out in the 1990s, and it is this assessment that is used when people report the deforestation rate. While the 1994 NFI results are still used to tell a story of degradation across Nepal, we know that forests have been restored and that there is forest where bare land once existed. However, there is no national map of community forests in the Department of Forest Research and Survey which is responsible for forest inventory and mapping. There are maps and GIS layers scattered around different projects, but data vanishes once the project is completed. We do not know in reality what percentage of forest in Terai is under community forest, nor how many community forests there are or where they are. At this point, there is no way to evaluate influence of community forest in forest management, sustainable livelihood, or in governance and equity. An updated assessment is critical in order to determine if and how forests have changed since the 1990s when the vast majority of forests were brought under community management.

There is the same lack of data for many of the threats to forests and biodiversity. For example, while the threats assessment included in Nepal's Readiness Preparation Proposal (REDD 2010-2013) is often quoted by donors and NGOs, the report itself notes that: "This quick assessment did not include a detailed evidence-based analysis. Hence it is not possible to offer firm recommendations for all the various issues and challenges identified." We are not singling this report out, only using its truthful statement as an example of what is equally true of this and most other assessments.

Information-based decision-making is necessary from the national to community levels. At the national level, there needs to be more emphasis on evidence on which to base policies and implementation. At local levels, people need more access to technical information on sustainable extraction and biodiversity conservation. There is also a need to compile and make accessible the information and data that may already exist. Often, information sits with different institutions within the government or NGOs and is not shared. Mechanisms for information-sharing should be encouraged.

We recommend, in order of priority:

1. A comprehensive evaluation of the current state of Nepal's forests should be conducted (please see examples of critical questions below that should be addressed).
2. A central location for data collection and dissemination should be established and clear protocols for data sharing should be established at the outset.
3. All donor projects should be required to lay out a plan for how they will make the data collected publicly accessible.

[17] For more information, see www.iucn.org/dbtw-wpd/edocs/EPLP-071.pdf and http://www.rightsandresources.org/publication_details.php?publicationID=1363.

There is also a need to compile and make accessible the information and data that does exist. Often, information sits with different institutions within the government or NGOs and is not shared. Mechanisms for information-sharing should be encouraged. Some critical questions about Nepal's forests and biodiversity are:

- How have forests changed in size and condition since 1994 (the last inventory)?
- What are the current rates of deforestation and conversion to shrub land?
- How does the condition of community forests compare to government forests?
- What is the balance of use among community, private, and national forest to meet community needs?
- To what extent have forest resources (such as fuelwood and fodder) on private land increased?
- Are community forests protected at the cost of national forests?
- Which form of community-based management is most effective at conserving forests and biodiversity? Which form is most effective at meeting community needs? Which form maximizes benefits to forests and biodiversity as well as communities?
- What is the extent of illegal timber extraction in mountain areas and terai?
- While most attention in the terai is focused on corruption in the less than 10% of forests under community management, what is occurring in the government forest?
- Is "bushmeat" consumption increasing among middle class? How large a threat is it?
- How large a threat is fire? Has its occurrence changed over time? Is there more area being burned now or are the fires of greater intensity? What amount of fire is natural in these systems? Might there be the negative effects of fire suppression?

(3) Support an enabling environment by putting existing and newly drafted policies into practice and building capacity of institutions to enact them.

Nepal has existing policies and many newly drafted policies that have the potential to be very effective if implemented. Careful attention needs to be given to these policies as they are implemented to ensure conservation is integrated within them and that they are compatible with one another. This will require good governance at all levels of government, which is lacking now and supporting the government and civil sector to provide an enabling environment for the conservation of forests and biodiversity.

Recommendations include:

- Promote integration of conservation and sustainable use of natural resources into policies and promote synergies where possible.
- Ensure and promote compatibility among policies related to conservation of forests and biodiversity.
- Build the capacity of the government to implement the policies with a focus on decentralization and technical knowledge.

- Promote constructive relationships between civil society and government. The government cannot fully implement policies without a constructive relationship with civil society.
- Integrate forestry and biodiversity conservation into local planning as loci of power continue to devolve in Nepal, such as through the LGCDP (Local Governance Community Development Program) and the Local Self-Governance Act.
- Facilitate implementation and oversight of the system of environmental impact assessments (EIAs).
- Facilitate a process of planning for resettlement, in the context of good planning, and not as a matter of politics and political parties.
- Give consideration to the balance of power between community forestry groups, who often have more economic power from the selling of forest products, and local government, which has the political power.
- Support more diversity and representation across all levels of governance and government. For example, while community forestry has been successful at raising awareness of gender issues, the government is lagging in its implementation of gender policies. At present, only one woman is working in the Department of National Parks and Wildlife Conservation and policies are not gender-friendly (e.g., regulations allow women an allowance of two uniforms per year whereas men receive three).

6. RELEVANT GOVERNMENT, DONOR AND NGO PROGRAMS AND ACTIVITIES

6.1 GOVERNMENT

The responsibility for managing Nepal's natural resources is spread out across many Ministries and Departments (Table 7). In addition to existing policies, Nepal has many newly drafted policies, such as the National Forestry Strategy and the National REDD Strategy, as well as policies currently in the process of being updated, such as the National Biodiversity Strategy and the National Conservation Strategy.

Table 7: Government institutions responsible for forests and biodiversity conservations

Institutions	Key roles
Ministry of Forest and Soil Conservation (MoFSC)	Focal point for the Convention on Biological Diversity in Nepal
Ministry of Environment, Science and Technology (MoEST)	Focal point for the United Nations Framework Convention on Climate Change (UNFCC)
Ministry of Agriculture Development (MoAD)	Responsible for the conservation of agricultural and livestock Diversity
Ministry of Federal Affairs and Local Development (MoFALD)	Responsible for the development and implementation of Local Adaptation Plans of Action coordinated by DDCs and VDCs

Institutions	Key roles
National Planning Commission (NPC)	Coordinates the policy-making process on forestry, biodiversity and climate change
Department of Forests (DoF)	Responsible for protecting biodiversity in forests which fall outside the protected areas
Department of National Parks and Wildlife Conservation (DNPWC)	Responsible for the conservation of biodiversity in protected areas
Department of Forest Research and Survey (DFRS)	Responsible for conducting forest research and survey
Department of Soil Conservation and Watershed Management (DSCWM)	Responsible for flood and landslide control, conservation activities at watershed level
Department of Agriculture (DoA)	Responsible for the conservation of agricultural biodiversity
Department of Livestock Services (DoLS)	Responsible for the conservation of livestock biodiversity
National Agriculture Research Council (NARC)	Carries out agricultural and livestock research
Nepal Academy of Science and Technology (NAST)	Carries out chemical screening (bio-prospecting) of some medicinal plants, mostly conifers

6.2 BILATERAL DONORS

The major bilateral donors supporting forests and biodiversity conservation and climate change are UK aid from the Department for International Development (DFID), USAID, Swiss Agency for Development and Cooperation (SDC), Embassy of Finland, Japan International Cooperation Agency (JICA) and Norwegian Agency for Development Cooperation (NORAD).

DFID, SDC and Embassy of Finland have formed a multi-stakeholder mechanism to support the forestry sector in Nepal. A multi-stakeholder forestry program (MSFP)[18] (2012-2022) will be implemented with a focus on 35 districts with a possibility to extend to 61 districts. **DFID and the European Union** are supporting a climate change local adaption program as the part of the National Climate Change Support Program to the Ministry of Environment, Science and Technology. Local adaptation plans have been prepared by the District Development Committees and Village Development Committees of selected districts in Midwest and Far West region of Nepal with this support.

The Embassy of Finland is supporting the Forest Resource Assessment Project (FRA) through the Department of Forest Research and Survey (DFRS) to update the inventory of forests of Nepal. Key activities of the FRA Nepal project are: strengthening institutional capacity building, maintaining forestry sector information systems, collecting data of all forest-based resources and data sharing among forestry organizations. The Embassy of Finland is also supporting a project on Improving Research Capacity of Forest Resource Information Technology.

[18] MFSC, DFID, SDC, and GoF. *Multi-Stakeholder Forestry Programme (MSFP), Nepal, Common Programme Document*. 2011.

JICA has been supporting the Participatory Watershed Management and Local Governance Project with a focus on conservation of natural resources thorough improving governance at community level in two districts in Central region and six districts in Western region.

USAID has been supporting the Hariyo Ban Project, which is being implemented by a consortium of national and international NGOs. The Hariyo Ban project has three main interlinked components—biodiversity conservation, sustainable landscape and climate change adaptation—and is being implemented in nine districts of the Terai Arc Landscape project area and 10 districts of the Chitwan Annapuarna Landscape area.

6.3 MULTILATERAL DONORS

United Nations Development Program (UNDP), World Bank (WB), Asian Development Bank (ADB) and International Fund for Agriculture Development (IFAD) are the major multilateral donors in forest and biodiversity conservation and climate change in Nepal.

UNDP is implementing a number of projects: 1) community-based flood and glacial lake outburst risk reduction project (GLOF) in Solukhumbhu and other flood-affected districts; 2) Nepal Climate Change Support Program: building climate resilience in Nepal in 13 district of the Midwest and Far Western regions (technical support to LAPA); 3) ecosystem-based adaptation (EBA) in the Mountain Ecosystems Project (Nepal component of EBA) in Panchase area in partnership with United Nations Environment Programme (UNEP) and International Union for the Conservation of Nature (IUCN); 4) the Conservation and Sustainable Use of Wetlands Project is promoting the sustainable management and conservation of Nepal's nationally and globally threatened species, including migratory species that live there; and 5) the Western Terai Landscape Complex Project, which is promoting landscape level conservation in protected areas, their buffer zones and adjoining landscapes in 52 VDCs of Bardia, Kailali and Kanchanpur districts.[19]

WB has been supporting four major projects: 1) Strengthening Regional Cooperation for Wildlife Conservation, 2) Strengthening Institutional Capacities of Department of National Park and Wildlife Conservation (DNPWC) for the Effective Management of Mountain Alps, 3) Reducing Emission from Deforestation and Forest Degradation REDD Forestry and Climate Change, and 4) Strategic Program for Climate Resilience (SPCR).

IFAD has been supporting the Leasehold Forestry and Livestock Program.

The International Center for Integrated Mountain Development (ICIMOD) has been implementing regional projects on environmental change and ecosystem services in mountain regions across the Hindu Kush Himalayas. It has also focused on the Himalayan Climate Change Adaptation Program (HICAP). HICAP aims to generate knowledge of climate change impacts on natural resources, ecosystem services and the communities.

6.4 INGOs/NGOs

The major international NGOs with programs relevant to forest, biodiversity and climate change include World Wide Fund for Nature-Nepal (WWF), Care Nepal, Practical Action, Winrock Nepal, Oxfam GB, (IUCN), The Mountain Institute (TMI) and the Asia Network for Sustainable Agriculture and Bioresources (ANSAB).

[19] UNDP Nepal. UNDP in Nepal: Results from 2011, UNDP Nepal. 2011

Larger national NGOs with relevant programs include: the National Trust for Nature Conservation (NTNC), which engages in conservation of forest and biodiversity in Nepal and primarily works in national parks and conservation areas; Local Initiatives for Biodiversity Research and Development (LIBIRD) focuses on agro-biodiversity and climate change; Forest Resource Studies and Action Team (ForestAction) is working for forest management and climate change, particularly in linking the policy and practices; Rural Reconstruction Nepal (RRN) works for disaster risk reduction (DRR), including climate change; the Himalayan Grassroots Women's Natural Resource Management Association (HIMAWANTI) is a grassroots NGO formed by women who are engaged in forestry, biodiversity and agriculture; and Women Organizing for Change in Agriculture and Natural Resource Management (WOCAN) primarily promotes gender justice in natural resource management in Nepal.

Federations of forest user groups are also active in the field of forestry, biodiversity and climate change. The FECOFUN is the largest network of community forest user groups (CFUGs) in Nepal, primarily working for community forest management. Similarly, the Buffer Zone Development Council (BZDC) and Association of Collaborative Forest Users in Nepal (ACOFUN) are other networks of forest users groups actively involved in forest and biodiversity management in buffer zone and Terai forests, respectively.

Community-based forestry and biodiversity practitioners have formed a NGO called Community-Based Forestry Supporters Network (COFSUN) and is primarily providing capacity development services to user groups. Community Development Organization (CDO), an NGO, focuses on the forest and biodiversity management in buffer zone areas.

CFUGs, buffer zone user groups (BZUGs), Collaborative Forest User Group, Leasehold Forestry User Groups (LFUGs), Conservation Area Management Committees (CAMCs) and Community Development Groups (CDGs) are the major community-based institutions for forest and biodiversity conservation.

7. USAID COUNTRY STRATEGY AND PROGRAM

7.1 EXTENT TO WHICH PROPOSED ACTIONS MEET NEEDS

Currently, USAID supports two projects concerned with forests and biodiversity: the Hariyo Ban Project and the Nepal Tiger Genome Project. Hariyo Ban's goals are to mitigate threats to biodiversity, build capacity to manage across landscapes, and build resilience to climate change. The project works in two project areas: the Terai Arc Landscape (TAL) and the Chitwan-Annapurna Landscape (CHAL) (Figure 1). The project approach and proposed activities directly address the actions needed in Nepal to conserve forests and biodiversity with their emphasis on community conservation capacity and expanding the area under community management, as well as the links to livelihoods and climate change.[20] See Map 3 for "Protected Areas and WWF Conservation Landscape in Nepal" in ***Annex L***.

[20]USAID Nepal. "Hariyo Ban Program." Accessed September 28, 2012. http://nepal.usaid.gov/our-work/program-area/economic-growth-education-a-food-security/509-hariyo-ban-program.html

The Tiger Genome Project addresses the need for information for decision-making (the third action needed) in a very specific and focused way. The goal of the project is to build capacity for wildlife genetics for wild Bengal Tiger conservation in Nepal.[21] While an exciting project, it is unclear how strategic the program is in terms of addressing the most critical information needs. However, its broader outcomes, such as testing molecular forensics to aid in endangered species conservation and building human resources for application of molecular-based tools, will provide a strong foundation for conservation genetics in Nepal that can reap benefits far into the future. With its emphasis on making its data and results accessible and collaborating with multiple institutions, the project also has the potential to be a model for information-sharing across institutions.

A third program being funded by USAID has potential links with forests and biodiversity. The Initiative for Climate Change Adaptation (ICCA) was developed by the International Development Enterprises (IDE) and its partners *Rupantaran* and Resource Identification and Management Society Nepal (RIMS-Nepal), with the objective of working with communities and developing interventions that will improve their ability to adapt to climate change. The main goals of the program are to facilitate effective governance for climate change, diversify livelihoods to increase community resiliency, and identify adaptation interventions. This program is still being developed, and it is not clear how it will directly address threats to biodiversity and forests and feed into the recommendations in this report. Without close attention to linkages between climate change and forests and biodiversity (such as those found in Hariyo Ban), it is possible that the program may not mitigate threats as effectively as it might. Certainly, the potential for linkages is there as the program proposes to link forestry and agricultural development and the interventions it proposes to identify may serve the interests of both mitigating climate change and conserving forest and biodiversity.

7.2 THREATS FROM PROPOSED ACTIVITIES

The current USAID program that raises the most concerns in terms of possible threats to forests and biodiversity is the Feed the Future program. Key issues of concern include:

- Effects of irrigation systems on water tables;
- Impacts of activities on biodiversity (e.g, planting of exotic species such as lemongrass in community forests).;
- Types and amounts of fertilizers and pesticides required by new systems and varieties; and
- Negative aspects of substituting new hybrid varieties for local varieties.

However, the FtF program recognizes possible links between its program and mitigating climate change, which may help buffer negative impacts on forests and biodiversity. The FtF request for proposals (RFP), states that it seeks: "…opportunities to leverage resources and develop tools and strategies to minimize the adverse impacts of climate change on agriculture. Examples may include the adoption of more efficient irrigation practices requiring less water, conservation agriculture, use of weather data, crop and variety selection, and land use planning." All of these approaches to mitigating climate change can also contribute to the conservation of forests and biodiversity if designed carefully. Additionally, because the FtF program will work in the same geographic area and the RFP

[21] USAID. "Nepal Tiger Genome Project." Accessed September 28, 2012. http://ntgp.org.np/

specially requires the chosen contractor to work with Hariyo Ban, there is great potential for synergy between the programs.

7.3 OPPORTUNITIES FOR LINKAGES WITH PROPOSED ACTIVITIES

The environment is the underlying support system for all human activities. Nepal's approach to development recognizes the links between people's livelihoods and their environment. USAID/Nepal's approach over the years has also recognized these links and supported natural resource management through its various programs.

We recommend that USAID develop or adopt a framework that mainstreams the environment into its development objectives and that will link biodiversity and forestry to the other USAID program areas, such as economic growth, health, and disaster risk and reduction. Examples of frameworks include a sustainable livelihoods approach or a green economy approach. The key is to link development and economic growth with a triple bottom line: sustaining and advancing economic, environmental and social well-being. A framework that takes these three goals equally into account would provide a platform for sectors to talk with each other and enable them to plan in an integrated fashion. While it is beyond the scope of this assessment, We suggest some key documents such as the "Nepal Status Paper: United Nations Conference on Sustainable Development 2012 Rio+20 Synopsis"[22] and "Safeguarding the Future, Securing Shangri-La—Integrating Environment and Development in Nepal"[23] may serve as a starting point for developing this framework.

The current process of revising the National Conservation Strategy, which is being conducted by the National Planning Commission (NPC), the focal point of National Conservation Strategy (NCS), with support from the International Union for Conservation of Nature (IUCN), would also be extremely helpful as USAID/Nepal develops its programs. The objectives of the new NCS are to achieve the development and environmental goals of Nepal through sustainable use, management and governance of natural resources. Harmonization between sectoral strategies (agriculture, forest, water, energy, rural/urban development) and thematic strategies (biodiversity, climate change, gender, human rights) is central to revising the NCS.

Specific recommendations for each sector are:

Democracy and Governance

Some of the best models of governance in Nepal have centered on natural resources, such as forests and water. Community forestry is held up as one governance structure that continued to function during the political conflict. Some of the issues it has faced that can provide lessons for any programs in Democracy and Governance (DG) including: mobilizing the marginalized groups to create pressures on elites; developing clearer vision, indicators and purpose of the Forest User Groups and related Community Forestry organizations; and monitoring, promoting transparency, re-electing executive committees, creating ownership in the organizational change processes, improving communication, and promoting public hearings and auditing. As a result of improvements in its governance practices, changes in governance outcomes of community forests include more equitable benefit sharing;

[22] http://www.npc.gov.np/uploads/publications/2012021312345.pdf
[23] Khadka, Ram B., Barry Dalal-Clayton, Ajay Mathema, and Pujan Shrestha. *Safeguarding the future, securing Shangri-La – Integrating environment and development in Nepal*. International Institute for Environment and Development, May 2012.

enhanced transparency, participation and accountability; and improved pro-poor resource management practices.[24] Many of these innovations came in response to the emergence of second generation issues in the mid-1990s, and were facilitated by national NGOs, often with technical support from international organizations and bilateral donor projects.

Agriculture

In Nepal, forest and agriculture are one integrated system that provides livelihoods for the majority of Nepal's population. They cannot be considered in isolation from each other, and the impacts of changes in agricultural practices on forest need serious consideration. The raising of livestock depends on fodder from public, community and private forests. People extract seasonal products from the forest that contribute to their nutritional status. Changes in agricultural practices affect water, which is sustained by a healthy ecosystem. Agrobiodiversity is an important factor that contributes to the resilience of communities and is a particularly important resource as climate changes impact agriculture. Understanding the linkages between the environment and agriculture also highlights the role of women, who are responsible for the majority of both agricultural labor and forest extraction, especially of certain resources such as fuelwood and fodder.

Good agricultural practices can contribute to forest and biodiversity conservation. For example, intercropping systems, no tillage cultivation, non-conventional irrigation, treatment of wastes in livestock and agroprocessing, biogas and agroforestry are examples of good agricultural practices that link to improving the health of the environment.

Specific areas of potential linkage with agriculture include:

- The geographical areas of emphasis for the FtF program overlap with the biodiversity landscape of the Terai Arc Landscape that is now included in the Hariyo Ban program. These programs should be compatible and support each other.
- Sustainable agricultural practices need to account for the role of forests in agriculture, provision of fodder, nutrition and medicine.
- The role of women in agriculture and forest labor, in terms of labor allocation and responsibilities.
- The need to understand people's perspectives on the forest/agriculture interface and their goals for their future; for instance, what do communities want in terms of agricultural systems (levels of fertilizers and pesticides, local vs. hybrids varieties).
- Based on successes of Education for Income Generation (EIG), integrate environment, natural resources, biodiversity and forests into literacy packets.
- Link the nutrition elements of FtF with the role that NTFPs play in people's nutrition.
- Water-saving techniques, which clearly link environment and agriculture.

Health

People in Nepal know the importance of a healthy environment and want sustainable, healthy livelihood practices that do not negatively impact their own or their children's health. Clean energy and water issues are an obvious link between USAID's health and forests and biodiversity programs.

[24] Ojha, Hemant, Lauren Persha, and Ashwini Chhatre. *Community Forestry in Nepal: A Policy Innovation for Local Livelihoods*. International Food Policy Research Institute, 2009.

Climate Change Integration Pilots may be an appropriate way to integrate the health programs that focus on conserving water sources through planting of trees with forests and other sustainable management practices. Consideration should be given to where the water resources are (maybe they are in community forests) and the species of trees that are most appropriate (e.g., native species that meet fodder needs).

Disaster Risk Reduction

Disaster risk reduction and forests and biodiversity are most closely linked in terms of risk mitigation. Disaster-resilient communities are based on healthy ecosystems and diverse livelihoods. Healthy and diverse ecosystems are more robust to extreme weather events and provide natural defenses, whereas degraded ecosystems reduce community resilience. Intact forests and wetlands provide natural buffers to hazard events and reduce the impacts of climate change. They contribute to flood abatement, slope stabilization, coastal protection and avalanche protection. Ecosystem degradation reduces the ability of natural systems to sequester carbon, exacerbating climate-change impacted disasters. Promoting "green" road-building in Nepal may be an area within which DRR can work to help mitigate threats to forests and biodiversity.

8. SPECIAL SECTIONS

8.1 CLIMATE CHANGE

Policy Process on Climate Change

Climate change, in the form of increased temperature patterns and increased variability in the timing, intensity and form of precipitation, is already leading to differentiated impacts across Nepal. Future climate- induced changes are likely to exacerbate these impacts.[25] Climate change thus threatens to pose an additional, and potentially major, barrier to the already challenging development process in Nepal.

The climate change agenda has grown in significance in Nepal, driven largely by the international policy debate. Nepal signed the United Nations Framework Convention on Climate Change (UNFCCC) on June 12, 1992, and became a party to it in 1994 (GoN, 2011). From 2009, the Government of Nepal (GoN) has heightened its commitment to address the issue of climate change by organizing a Cabinet Meeting at Kalapatthar, near the base camp of Mount Everest, and issuing the "Kalapatthar Declaration" prior to the COP 15 in Copenhagen.

Currently there are two major national institutional structures operating at the government level for policy processes and coordination in climate change (CC) in Nepal: Climate Change Council (CCC) and Multi-stakeholder Climate Change Initiatives Coordination Committee (MCCICC). The CCC is a higher level body and is chaired by the Prime Minister with membership from various ministries and experts from academia, private sector and NGOs. The Ministry of Environment, Science and Technology (MoEST) has been the focal national focal point for the UNFCCC, and Climate Change Management Division (CCMD) in the ministry was established to coordinate ministries, key departments and agencies, local bodies and other organizations.

[25] Government of Nepal, Ministry of Environment. *National Adaptation Programme of Action (NAPA) to Climate Change*. Kathmandu, 2010.

The National Policy on Climate Change was approved by the Government of Nepal in 2011. The policy has delineated seven major areas of interventions: 1) climate adaptation and disaster risk reduction, 2) low carbon development and climate resilience, 3) access to financial resources and utilizations, 4) capacity building, people's participation and empowerment, 5) study and research, 6) technology development, transfer and utilization, and 7) climate-friendly natural resource management.[26]

The MoEST prepared the National Adaptation Programme of Action (NAPA), which was endorsed by GoN on September 28, 2010. NAPA has identified six thematic areas: 1) agriculture and food security, 2) water resource and energy, 3) forests and bio-diversity, 4) public health, 5) urban settlement and infrastructure, and 6) climate- induced disaster. NAPA has identified nine priority areas for immediate and urgent climate change adaptation work. The NAPA document also estimates the cost of the work that needs to be carried out under the nine areas and defines the governance structures for climate change adaptation work and the agencies responsible for planning and implementing interventions. The production of NAPA has paved the way for Nepal to access international funds for least developed countries to adapt to climate change.

The National Framework on Local Adaptation Plans of Action (LAPA) has been approved by the GoN in 2011 to implement the adaptation priorities identified by NAPA. The framework provides guidance on the preparation and implementation of LAPA and the integration of adaptation options into sectoral and development plans. MoEST has been implementing the Strategic Program for Climate Resilience (SPCR) under the Pilot Program for Climate Resilience (PPCR) supported by global climate investment funds (CIF). This LAPA framework is being piloted in 69 VDCs and one municipality in 13 districts of the Midwestern and Far Western regions of Nepal with the support of DFID and EU. Altogether there will be 70 LAPAs at the end of 2012.

MoEST is preparing the low carbon development strategy (LCDS) with an aim to shift the country's development path to a low carbon economy and achieve sustainable development based on the socio-economic and development priorities of Nepal.

The National Planning Commission (NPC), with support from the International Union for Conservation of Nature (IUCN), has begun a process of revising the National Conservation Strategy (NCS) to achieve the development and environmental goals of Nepal through sustainable use, management and governance of natural resources. The Ministry of Forest and Soil Conservation is now preparing the REDD+ strategy. The USAID-funded Hariyo Ban project has commissioned work for the development of a national REDD+ strategy.

NPC has assigned a code for climate change within the budget starting with fiscal year 2012/2013 because a strategic financial framework needs to be in place for a coordinated and effective implementation of climate programs.

[26] Government of Nepal. *Climate Change Policy*. Approved January 17, 2011.

The Hariyo Ban Program of USAID in the context of climate change policies and programs in Nepal

The Hariyo Ban Program of USAID has been initiated at a time when a number of policies and programs on climate change have just been approved and some are under development. Two out of three specific objectives of the Hariyo Ban program directly relate with the issue of climate change. Hariyo Ban has the potential to build on both the policy and implementation processes of climate change and innovate ways to addressing the threat posed by climate change to livelihoods of the people and conservation of forests and biodiversity. The geographical areas of the project (the Terai Arc Landscape and the Chitwan Annapurna Landscape, which includes the Seti and Marsyandi river basins) are highly sensitive to climate change impact. The recent Glacier Lake Outburst Flood (GLOF) in Seti River has proven this landscape to be a more climate change prone area.

The sustainable landscapes component focuses on reducing emission from deforestation and forest degradation (REDD) readiness by supporting the government to strengthen the capacity of REDD Cell in the MoFSC and developing the national REDD strategy. This component also aims to develop the mechanism for Payment for Ecosystem Services (PES). This mechanism is an innovative practice linking upstream and downstream landscapes with people who provide incentives for those who conserve the forest, biodiversity and ecosystems. The lessons can be up-scaled to other areas. Community Adaptation Plans (CAPs) appear to be another area of innovation in climate change adaptation that can complement the LAPA of the VDCs.

Recommendations for actions:

- Develop a functional relationship with government ministries and departments, the District Forest Office, District Soil Conservation Office and National Park Office by providing partial funding support to their programs. This will help in up-taking the lessons and outcomes of the projects by the government agencies and also in establishing strong coordinating mechanism for government and non- government agencies.
- Make strong linkages with VDCs and DDCs as the CAPs sustainability is dependent on the linkages with the VDCs' future planning.
- Mobilize local NGOs working in the areas of climate change in Hariyo Ban project areas, as they could be repositories of knowledge and skills in developing the capacity of local people for climate-resilient development.

8.2 GENDER

Women's dependence on and custodial care of biodiversity and forest resources has been acknowledged in Nepal's national policies and is often highlighted in conservation strategies. It is recognized that sustainable management of natural resources in Nepal requires that both men and women are engaged in conservation efforts. Women and men tap different forest resources to provide their contribution to the household and have different knowledge about the use and management of those resources. Women's participation in forest governance can even directly lead to improved conservation outcomes[27].

[27] Agarwal, Bina. "Gender and forest conservation: the impact of women's participation in community forest governance." *Ecological Economics* 68, 2785-2799.

However, women are still highly marginalized within natural resource sectors, particularly in technical training, decision making and leadership. This marginalization poses an increasing threat to biodiversity and forestry as more and more men migrate, leaving women to tend to their responsibilities without adequate training or information on management of the specific resources.

The national-level Gender Equity and Social Inclusion (GESI) strategy[28] has provided a platform for women to advocate for their rights through its implementation in all government sectors. As such, the Ministry of Forest and Soil Conservation (MoFSC) adopted a GESI strategy for the forestry sector in 2007, committing to equitable policies, governance (including a 33% reservation for women), organizational development and programming, and access to resources and benefits. To oversee mainstreaming of this strategy in program designs and strategies, MoFSC appointed gender focal points in each department. Taking this a step further, the 2008 community forestry guidelines specify that not only must the executive committees consist of 50% women, one of the two top level positions (chairperson or secretary) must be filled by a woman, and both husband and wife need to be included as household head in forest user groups[29]. Likewise, leasehold forestry requires both husband and wife to be listed as household head and mandates equality in participation, including at the coordination committee level.

Although Community and Leasehold Forestry have made great strides to improve gender equity in their management systems, challenges remain within these regimes, as well as within the broader sectoral context. USAID/Nepal is well poised to foster more desirable outcomes on gender equality given current projects and institutional relationships.

Gender equity issues to be addressed for improved conservation outcomes

Consistent application of GESI strategies. Not all forest management regimes have achieved designated quotas, and quotas are not even applied to staffing of ministries (women make up only 4% of forestry staff), institutions and projects. Buffer zone policies do reflect the same GESI policies as community forestry. NGOs working in the sector do not effectively apply GESI strategy at organizational or project levels.

Recommended actions:

- Apply GESI policies equally to community forestry and the other forest management regimes, such as buffer zones
- Engage with GoN ministers with relevance to forestry and biodiversity and encourage application of 30-50% women quotas across all levels of participation, including key decision-making positions
- Require and hold accountable concrete indicators of changes in status and advances toward gender equality in all USAID-supported projects

[28] Government of Nepal, Ministry of Forest and Soil Conservation. *Gender and Social Inclusion Assessment Update: Vol II,* Chapter 4: Forestry

[29] Giri, Kalpana. "Gender in Forest Tenure: Prerequisite for Sustainable Forest Management in Nepal." *Rights and Resources Initiative Brief* #1 of 4, 2012

Improved enabling institutional environment. Although the Institute of Forestry is surpassing the 10% enrollment quota for women, they are unable to attract or accommodate increasing numbers, particularly women from remote areas, due to the insufficient and dilapidated housing allocated to female students. Women in the Department of National Parks and Wildlife have an allowance of two uniforms per year whereas men get three.

Cultural and structural issues—both physical and organizational—pose barriers to women's employment in forestry and biodiversity. There is still an attitude within the sector that women cannot perform as effectively as men due to the physical constraints of the work and conditions, particularly outreach work in remote areas. While improving, chauvinistic attitudes and behaviors persist and often go unchallenged by administration and staff. Aside from the physical deficiencies of institutions, biological and safety concerns of women also go unacknowledged or unaccommodated.[30]

Generally, qualified women are not hired at a rate proportional to men within forestry and natural resource management organizations or are hired at levels below their qualifications. Women do not have the same access to information about jobs, counseling and networking opportunities as their male counterparts[31].

Recommended actions:

- Engage with universities and ministries involved in forestry and biodiversity to effect institutional changes that support gender equality:
  - Encourage infrastructure that meets women's needs
  - Support human resource policies that foster a culture of equality
  - Encourage the formation of a working group of staff and students to put forward innovative ideas for improving the learning environment and engaging women in the sector and to monitor changes

Effective participation. Despite quotas and other efforts to engage women as leaders in the forestry sector, even within Community Forestry, decision making above the household level remains the domain of men. Women in the "quota" leadership positions are often marginalized by the attitudes of predominant men or are unable to participate effectively due to the time or location of the meetings, their increasing workloads, or lower levels of training and preparation relative to their male counterparts.

Work in this sector, as designed by the government or NGOs, has not adjusted to accommodate or support women either as outreach workers or recipients of services. Furthermore, this outdated mode of operation does not permit men to have balance as fathers and husbands supportive of an equal relationship with their wives.

While more women are engaging in user groups and supporting conservation efforts with their labor, if/when activities become profitable, men tend to co-opt leadership and benefits.

[30] Giri, Kalpana. *Reflecting on Experiences: Women in the Forestry Sector in Nepal*. IOF. Pokhara, 2008.
[31] Ibid.

Recommended actions:

- Restructure field work for a more gender- (and family-) friendly approach.
- Support capacity building that fosters social change:
  - Literacy and organizational skills
  - Sensitization to importance of women's and men's contributions and value of equality in decision-making and leadership
  - Leadership training for women as well as men
  - Technical training for women as well as men
- Require differential modes of communication to effectively reach men and women.
- Support innovations that reduce gender gaps.
- Support user group guidelines that link benefits with contributions.

8.3 CAPACITY

Broadly speaking, capacity can be defined as the ability to perform tasks and produce outputs, to define and solve problems, and make informed choices. GoN has a policy to maintain 40 percent of the total land area as forest and conserve biodiversity through community-based forest resource management. Forests and biodiversity resources have also been the important part of the livelihoods of the rural people and hence the sustainable management of forests and biodiversity is crucial for Nepal. Capacity- building of both the governmental and nongovernmental forestry institutions, including the private sector, is important to achieve the environmental and livelihoods objectives stipulated by the national policies and plans. Assessing institutions for capacity building is thus a central element of preparing and implementing any kind of support through development cooperation.

Status of capacity strength at the national level. The Government of Nepal has developed a number of policies, laws, programs, action plans and institutions for forestry, biodiversity and climate change, and social inclusion. Within each ministry, there is a focal division and/or focal person responsible for implementing the policies, programs and action plans of cross-cutting issues. The ministries have training wings for capacity development of staff. Forestry, conservation and climate change projects implemented by the Government Departments have also included a capacity-building component in their activities. NGOs and Users' federations are active at national level in implementation of projects related to natural resource management and advocating for people's rights to natural resources.

Major capacity gaps at the national level. Coordination within and among the ministries and departments is weak. Several policy processes on climate change, forestry and agriculture are ongoing at the national level, but have weak coordination mechanisms as the policies and action plans at the national level are not mutually exclusive. The focal persons are weak in communicating and implementing the policies and strategies to meso- and micro-level within their system and across the ministries and departments. There is a lack of accountability to the policies and programs because implementation appears to be too weak. The effectiveness of training institutions and training courses is questionable.

Capacity strength at the district level. The government ministries have their district offices implement the program approved by the central government. The District Forest Office (DFO) is the main responsible agency for forest and biodiversity management at the district level. The District Agriculture Development Office (DADO), District Development Committee (DDC) and District Soil Conservation Office (DISCO) are also responsible for managing forest and biodiversity at the district level. The protected areas are managed at landscapes level, and the National Park Office is the institutional steward for the protection of forest and biodiversity in these areas. A number of NGOs and users' federations/network are working at the district level with a focus on agriculture, forestry, biodiversity, climate change and disaster risk reduction.

Gaps at the district level. The intent and vision of the policies and programs of the government are often poorly translated to the district level. The district level authorities have limited capacity to articulate the policy and program intentions. District level coordination of the stakeholders in forest, biodiversity and climate change is poor. The NGOs and federations working at the district level lack capacity in both organizational and technical aspects.

Capacity strength at the community level. Government, NGOs/INGOs, federations and networks work at the local level to develop the capacity of communities. They use a number of strategies for local level capacity development. They train Local Resource Persons (LRPs[32]) to develop skilled human resources within the community. The LRPs provide both the technical and organizational (governance improvement) strengthening support to local institutions such as CFUGs. Hariyo Ban, a project supported by USAID, also has been developing LRPs in climate change adaptation at the community level. In the project areas, local institutions such as CFUGs have been practicing Participatory Governance Assessment (PGA) to improve their internal governance. Community members have been organized in Community Learning and Action Centres (CLACs), which is proved to be a platform for the poor and marginalized groups to empower them.

Capacity gaps at the community level. Capacity gaps at the community level vary widely. The major trends at the local level is that the organizational development is in nascent form and appears to have no idea on the policy, legislations and guidelines of the forest and biodiversity management, formation of the group and preparation and implementation of action plans. As in the national and district level, coordination between the stakeholders at community level is questionable.

Recommendations for actions:

- Support policy coordination at ministries level to increase accountability of policies, laws and programs. Create an umbrella body at the National Planning Commission (NPC) level to harmonize polices in forestry, biodiversity, climate change, agriculture and other natural resource management, which would enhance the effectiveness of policy coordination.

[32] The approach of developing Local Resource Persons (LRPs) in forestry and biodiversity began in 2000 as the donors supported bilateral forestry projects such as the Livelihood and Forestry Project, supported by DFID, and Nepal Swiss Community Forestry Project, supported by the Swiss Agency for Development and Cooperation. Both experimented with this approach in their project areas. This approach was scaled up by FECOFUN and other NGOs working in the forestry sector.

- Support concerned ministries and civil society organizations at the national level to enhance their skills and knowledge on emerging issues (climate change, REDD, low carbon path, gender and social inclusion).
- Implement the programs through both the NGOs and government mechanisms in order to increase the effectiveness of the programs. A two-pronged strategy working with both government and non-government mechanisms would enhance the interactions of the stakeholders and ensure sustainability of the programs.
- Promote the national and local NGOs to implement the programs that will enhance the local capacity in delivering services and sustainability of the actions.
- Take stock of the national level and district level NGOs working in the field of forestry, biodiversity, climate change and disaster risk reduction and conduct capacity assessments of the identified NGOs in order to develop a strategy to implement the program through local institutions.
- Develop the capacity of district level stakeholders (both government and non-government) to grasp the national level policies and program and to put them into practice. More vertical interactions and dialogues are needed between the national authority and district authority to translate the policies and programs at the local level.
- Engage DDCs to coordinate and monitor the work of NGOs and government. Support district level organizations to improve their organizational capacity.
- Scale up and scale out the lessons coming from Community Learning and Action Center (CLAC) as implemented by the Hariyo Ban Project.
- Build on the existing practices of development of LRPs through which capacity development of local institutions can be enhanced (for both the technical and organizational support).

ANNEX A: SCOPE OF WORK FOR THE ANALYSIS

C.1 OBJECTIVES AND RATIONALE

The purpose of this Statement of Work (SOW) is to conduct country biodiversity and tropical forests analyses for Nepal. The previous analysis was done in March 2006 and updated in 2010.

The proposed analyses will address the requirements of Section 118 (**Tropical Forests**)**;** and 119 (**Biodiversity Analysis**) of the Foreign Assistance Act of 1961 (as amended), ADS 201.3.8.2, Tropical Forests, and ADS 201.3.9.2, Biodiversity Analysis for country strategic plans. The analyses are mandatory for the strategic planning process of new USAID Country Strategies and may not be waived, modified, or eliminated. The legislation states:

FAA Sec 118 (e) Country Analysis Requirements. Each country development strategy statement or other country plan prepared by the Agency for International Development shall include an analysis of

(1) the actions necessary in that country to achieve conservation and sustainable management of tropical forests, and

(2) the extent to which the actions proposed for support by the Agency meet the needs thus identified."

and:

FAA Sec 119 (d) Country Analysis Requirements.--Each country development strategy statement or other country plan prepared by the Agency for International Development shall include an analysis of-

(1) the actions necessary in that country to conserve biological diversity, and

(2) the extent to which the actions proposed for support by the Agency meet the needs thus identified."

By mandating these analyses, the United States Congress is recognizing the fundamental role that tropical forests and the conservation of biodiversity play in sustainable development. Based on these analyses, USAID/Nepal will define how its programs in the new CDCS contribute to conservation needs in Nepal. The analyses will also serve as a planning tool to assist USAID/Nepal in integrating environmental concerns into its overall program.

These analyses have a number of benefits to USAID Missions. Information from reviews carried out to satisfy Sections 118 and 119 may be useful background for the design and implementation of forest and biodiversity conservation activities. These analyses can also help to identify threats, stakeholders, and potential partners. The usefulness of Section 118 and 119 analyses in strategic planning for the CDCS is improved when they are conducted at an early stage in the strategic planning process for USAID programs. Section 118 and

119 assessments inform not only forest and biodiversity programs, but also activities related to poverty alleviation, agriculture, democracy and governance, water supply, disaster risk reduction, and natural resource based conflict. Well done 118 and 119 analyses help to identify low cost and/or effectiveness-enhancing ,cross-cutting and cross-sectoral linkages between activities. Section 118 and 119 analyses also facilitate 22 Code of Federal Regulations (CFR) 216 compliance within a Mission. A well done analysis, saves time and money through early identification of possible environmental compliance problems a Mission might face under USAID's environmental assessment and compliance regulation, if the Mission develops a strategy that involves activities that either directly or indirectly threaten biodiversity or tropical forests.

For additional information, contact the Asia Bureau's Environment Team Leader and the EGAT Bureau's Forest and Biodiversity Team. For further guidance and information on best practices see the reports: "Tropical Forestry and Biodiversity (FAA 118 and 119) Analyses: Lessons Learned and Best Practices from Recent USAID Experience" and "Best Practices for Biodiversity and Tropical Forest Assessments". Upon completion of the analyses, the Mission will submit the report to the Bureau's Environment Team Leader for final approval.

C.2. STATEMENT OF WORK

Under the direction of a Team leader, the analysis Team and/or Team Leader must evaluate tropical forest and biodiversity concerns in Nepal and must undertake the appropriate synthesis of the information addressing 1) actions necessary to conserve biodiversity, and 2) the extent actions proposed in the country strategic plans (particularly the forthcoming CDCS) meet, or could meet, the tropical forest and biodiversity needs thus identified. The latter includes identification of cross-cutting cross-sectoral linkages between proposed activities that would be low cost and/or enhance the effectiveness of proposed activities

The analysis Team and/or Team Leader must perform the following activities:

A) Data Collection:

1. Prior to departure, get acquainted with already existing background information about Nepal including relevant demographic reports like the 2011 demographic and health survey, the Mission's 2006 and 2010 Tropical Forest and Biodiversity Analyses (See C.7 for links to previous assessments), Environmental Performance Reports, the National Environmental Action Programs (NEAPs) and the Biodiversity Strategy Action Plan (BSAP), the National Adaptation Plan of Action and other relevant host country and/or donor environmental reviews specific to the country's natural resources, ecological and biological specificities, current status of tropical forests and biodiversity, climate change and sustainable landscapes, and institutional organizations. The Team and/or Team Leader should become knowledgeable about key stakeholders and donors in tropical forests and biodiversity, legislation related to tropical forests and biodiversity, and other relevant information required for the country analysis. Principal donors include the World Bank, DFID, ADB, SIDA, UNDP, SDC etc.

2. Prior to departure, the contractor shall hold meetings with the Asia Bureau's Environment Team Leader and Country Desk Officer, and other pertinent USAID

Washington Technical Staff to gather relevant information on regional programs and Agency environmental regulations. In addition, meetings shall also be held with relevant United States Government Agencies active in Nepal.

3. Prior to departure, the contractor shall hold meetings with non-governmental organizations (NGOs) suggested by USAID/Nepal. This includes teleconferences to obtain input from the Almaty-based Regional Environment Advisor/Asia and environment staff at USAID's Regional Development Mission for Asia (RDMA) in Bangkok.

4. The contractor shall, prior to his/her arrival, consult with Mission personnel to identify stakeholders and local officials with whom he/she wishes to conduct the interviews and identify priority site visits.

5. Upon arrival in Nepal, the Contractor under the direction of the Environment and Energy Team Lead at USAID/Nepal will hold meetings with the USAID Mission staff, including the supervisory program officer, to obtain detailed information about the programs, objectives, and goals under the Mission's current and planned strategy, particularly the CDCS. (It is advisable that the Contractor develop a questionnaire to circulate in the USAID/Nepal Mission prior to arrival to solicit background information and facilitate the preparation process.) (see section J.5 as sample reference). The Contractor and members of the USAID/Nepal's General Development Office, with input from other offices, such as the Office of Health and Family Planning Environmental Health Team, Disaster Risk Reduction team, the CDCS development team, and the Embassy Regional Environment Office as appropriate will discuss the planned activities required for the analysis as well as the approach that the Contractor will take during the performance on the ground.

6. The Contractor will hold meetings, as agreed with USAID/Nepal's General Development Office (GDO), with relevant local government institutions, agencies and Ministries. The Contractor will gather information, recommendations and experiences about past and planned activities from the officials and persons directly involved in tropical forest and biodiversity issues. The Contractor will gather detailed information about changes in the country's specificities, such as protected areas and endangered species since the 2010 report.

7. The Contractor will hold meetings with other international donors, agencies and NGOs involved in tropical forest and biodiversity programs in Nepal and become well informed about ongoing and planned activities by other donors and agencies.

B) Analysis:

Based upon the review of documents, interviews, and site visits, the Contractor will analyze the following:

1. The status of tropical forests and biodiversity in Nepal,

2. The social, economic, institutional, legal, and policy context for their use and conservation, including actions currently being taken by government, other donors, NGOs, and the private sector.

3. The key direct and indirect threats to tropical forests and biodiversity.

4. The actions necessary to conserve and sustainably manage tropical forests and biodiversity in Nepal in the current context based on analysis of Government, Donor, and NGO responses to meet these needs including identified gaps in knowledge, skills, orientation--at the individual or institutional level.

5. The implications for USAID or other donor programming (as detailed in the CDCS) and environmental monitoring on tropical forests and biodiversity; and

6. Potential recommendations, which shall define the actions for USAID/Nepal to consider ensuring tropical forest and biodiversity conservation.

7. Opportunities for integration with other sectors such as agriculture and food security, water, sanitation and health, and opportunities for education and awareness-raising.

8. The implications of climate change for forest and biodiversity conservation based on climate projections for Nepal and potential for integration of climate change responses within any USAID activities following the USAID Climate Change and Development Strategy.

9. The role of gender in conservation in keeping with USAID's new gender policy.

10. The capacity and associated enabling environment needed to implement conservation programs. Existing and required capacity should be analyzed at the macro, meso and micro levels. Identify criteria that can be used to measure Nepali organizations for effectiveness and potential impact in the sector.

C) Report:

Prepare a report describing the analysis and conclusions. This report must meet the legal requirement of FAA Sections 118 and 119 by: (1) clearly articulating the actions necessary to conserve tropical forests and biodiversity in Nepal, and (2) clearly describing the extent to which USAID actions proposed in the new USAID CDCS meets the needs identified. Analysis of gender, climate change and institutional and individual capacity should be incorporated as appropriate throughout the report and listed as separate recommendations as appropriate.

The report, of 20-30 pages in length (excluding annexes), shall include sections covering the following topics:

Title Page, including the date of completion of the analysis report

Table of Contents

A. Introduction, describing the purpose of the analysis and methods used in conducting it, including the timing of the analysis in relation to the timing of USAID CDCS.

B. An overview of the status of tropical forests and biodiversity in Nepal, including ecosystem diversity, species diversity, threatened & endangered species, genetic diversity, agricultural biodiversity, ecological processes and ecosystem services (including water resources), and values and economics of biodiversity and forests. Highlighting any updates from the 2010 assessment.

C. An overview of changes in the social, economic, and political context for sustainable natural resources management and the conservation of biodiversity and forests in Nepal, including the social and economic environment; institutions, policies, and laws affecting conservation; the national protected area system including all IUCN categories of protected areas; laws affecting the protection of endangered species; and participation in international treaties. An updated map of the protected areas system should be provided if available. Describe the institutional framework for environmental, tropical forest and biodiversity management, including organizational set-up at the national and local levels including community forests, relevant legislation and obligations under ratified international environmental agreements and conventions.

D. Description of the threats to biodiversity and forests, including direct threats and indirect threats or root causes of the direct threats.

E. Provide a list or description of the actions necessary to conserve biodiversity and forests in Nepal, logically flowing from the review of the threats, and what is currently being done by government, NGO, and donor programs that address those threats and recommended actions to address gaps. This should include identification of gaps in knowledge, skills, orientations--at the individual and institutional level--and ways in which these gaps might be addressed.

F. A review of government, NGO, and donor programs and activities that contribute to conservation and sustainable natural resources management, and an assessment of their effectiveness, strengths, and weaknesses. Data may be consolidated in a summary table of Donor and NGO projects (w/ $ amounts) since the last report in 2010 (include implemented, ongoing and planned) related to/or impacting biodiversity conservation (direct and indirect). Identify gaps where USAID could best leverage funds.

G. Provide a list of key institutions that have demonstrated capacity for achieving results in biodiversity and forestry sector.

H. Review of the proposed USAID/Nepal strategy and program, including all Objectives, followed by an analysis of the extent to which actions proposed for support by the USAID/Nepal's upcoming CDCS correspond to the needs identified in (F) above. This section should also point out any threats to biodiversity and forests from activities proposed for USAID support, and suggest mitigating actions. It should also identify opportunities for cross-cutting, cross-sectoral linkages with proposed activities (for all proposed Objectives and Program Areas); especially those that would be low cost and/or would enhance the effectiveness of the proposed activities.

I. Annexes to the report should contain, at minimum:

a. A consolidated matrix comparing the current THREATS identified, to ACTIONS needed, with EXTENT TO WHICH USAID addresses threats, & RECOMMENDATIONS for USAID to address threats
b. Current IUCN Red List and Nepal Red Book data
c. Environment-Related Legislation & Concepts, Plans, Programs, & Strategies (highlight changes since 2010)
d. International Conventions and Treaties (highlight changes since 2010)
e. The SOW for the analysis
f. Biographical sketches of analysis Team members
g. A list of persons contacted and their institutional affiliation
h. Other background or supporting material as needed such as maps.
i. All references used and cited in the report along with URLs used for information resources.

C.3. METHODOLOGY

Team composition and qualifications:

A four to five person team is suggested with the following composition and expertise as required to conduct this analysis:

International Technical Assistance (1 person): Senior Level Natural Resource Management Specialist with post-graduate qualifications in biology, zoology, forestry or closely related field in natural resource management or natural resource economics. The consultant will have adequate background in biodiversity and natural resource conservation to complete the FAA 118/119 analysis. Knowledge of USAID Strategic Planning process related to FAA 118 and 119 and knowledge of 22 CFR 216 is also desirable. Demonstrated expertise in assessing development programs for impacts on environment and ecosystems and of environmental impact assessments. Experience in the region and in Nepal desirable.

Local Technical Assistance (1 person): Senior Level Natural Resource Management Specialist with demonstrated experience in Nepal environmental law, policy and legal frameworks governing environmental management in Nepal and the analysis of relevant policies and thematic areas (including, but not limited to: biodiversity, forestry, water and/or ecosystem services). Good contacts within the Nepal government agencies, NGOs, international donors, and private sector is preferred. The Nepali member will work only in Nepal.

Capacity Building Specialist (1 person): An experienced analyst of individual and institutional capacities at the macro, meso and micro levels. The person should also be familiar and understand how capacity may exist yet there may be weaknesses in the enabling environment, or other weaknesses, including lack of awareness of key needed capacities, lack of resources, commitment etc that prevent capacities from being expressed.

Gender Specialist (1 person): An experienced analyst of the role of gender in conservation and/or climate change. Familiarity with USAID's new Gender Strategy and Gender

assessment policies and guidelines is essential. This individual may be identified from USAID pillar or regional bureau support staff.

USAID First Tour Officer (1 person): This individual will backstop and provide technical knowledge and administrative support to the FAA 118/119 assessment. Environment /Natural Resource Management training and/or experience conducting 118/119 assessments is highly desirable.

It is expected that 1-2 people will be responsible for the desk work, and the full team will participate in the field work. It is expected that there be as many local hire team members as possible or appropriate.

C.4. Deliverables:

A. The primary deliverable under this task order is a combined Tropical Forests and Biodiversity Analysis Report known as the FAA 118/119 report for USAID/Nepal that examines the tropical forests, biodiversity, natural resource management, the relationship between climate change and forests and biodiversity and other related environmental issues and identifies contributions and/or potential contributions to meet identified conservation needs by the Mission's proposed strategy. Per FAA, Sec. 118 and 119, the analysis must clearly address the following:

   (1) a summary of the actions necessary to achieve conservation and sustainable management of tropical forests; and

   (2) the extent to which the actions proposed meets the identified needs.

In addition:

   (1) the actions necessary in that country to conserve biological diversity; and

   (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified.

B. As this assessment is designed in parallel with the CDCS process in Nepal, the Assessment team is requested to provide a separate 3-5 page technical brief that guides the mission on how to sufficiently address priority issues of biodiversity conservation and sustainable forests management in the CDCS design process.

C.5. ANTICIPATED LEVEL OF EFFORT

The level of effort (LOE) for this assignment is a total of two months, beginning July 2012 to be allocated among the following as the contractor sees fit to accomplish the SOW:

Activity	Illustrative Timeline
Pre-departure meetings (Washington D.C.)	Weeks 1-2
Document review	Weeks 1-2
Field activities	Weeks 3-5
Drafting and submitting the Report	Weeks 6-8

C.6 SCHEDULE AND LOGISTICS

Meetings must be held in person or via teleconference with the Asia Bureau's Environment Team Leader and other pertinent USAID Washington Technical Staff prior to departure. The Contractor's Team and/or Team Leader will coordinate logistical arrangements with the USAID/Nepal's Environment Team and prepare a draft schedule of meetings and site visits acceptable to the Mission staff.

The Mission will assist the Contractor's Team by providing key references and contacts and will collaborate in the collection of data as applicable. USAID/Nepal will also help facilitate meetings with donors, host government agencies, and NGOs, as well as other USAID staff to fully brief the Team on USAID's program and future vision for their strategy.

An exit briefing will be held with USAID/Nepal Mission Director, Director of GDO, USAID/Nepal, MEO and other relevant Mission Offices/staff to discuss initial findings.

A draft report will be submitted to USAID no later than 15 business days from the end of field activities. USAID/Nepal Mission, REA/Asia and the Asia Bureau's Environment Team Leader and EGAT will review and provide written comments on the draft. The final report is expected within 15 working days of receipt of USAID comments. The contractor will submit the final FAA 118/119 Analysis to USAID/Nepal GDO Office electronically. The Mission will prepare a FAA 118/119 face sheet and submit the final document to the Asia Bureau Environment Team Leader in Washington, DC for approval. Once approved the 118 and 119 2012 report will be posted on the Development Experience Clearinghouse.

C.7 ANNEX I: REFERENCES AND DOCUMENTS FOR REVIEW

See:http://nepal.usaid.gov/downloads/all-downloads/category/4-economic-growth education.html

See:http://pdf.usaid.gov/pdf_docs/PNADE195.pdf; http://pdf.usaid.gov/pdf_docs/PNADE673.pdf;

USAID's Climate Change and Development Strategy can be found at http://www.usaid.gov/our_work/policy_planning_and_learning/documents/GCCS.pdf

http://www.usaid.gov/our_work/policy_planning_and_learning/documents/GenderEqualityPolicy.pdf

Previous 118/119 assessments:
http://nepal.usaid.gov/downloads/nepal%20tropical%20forestry%20and%20biodiversity%20assessment%20report.pdf
http://nepal.usaid.gov/downloads/faa%20118%20%20119%20assessment%20-updated-%202010%20-%20updated%20tropical%20forestry.pdf

ANNEX B: BIOGRAPHICAL SKETCHES OF TEAM MEMBERS

Dr. Terilyn Allendorf, Team Leader - Dr. Allendorf has been committed to working on issues related to biodiversity and the environment in Nepal since 1991. She was a Peace Corps Volunteer in Nepal from 1991-1993, and conducted research for her PhD in Conservation Biology on park-people issues in Nepal from 1994-1999. Later, as a member of the USAID biodiversity team from 2000-2002, she managed USAID-funded programs implemented by WWF and EnterpriseWorks Worldwide and conducted a review of community forestry in Nepal in 2001. Since 2002, she has carried out annual work trips to Nepal to implement conservation projects and to conduct research on the topics of protected areas, tiger conservation, community forestry, and gender in Nepal. She also brings experience with FAA 118/119 and relevant USAID policies. She coordinated and prepared significant portions of the first edition of the "Biodiversity Conservation Program Design & Management: A Guide for USAID Staff" and carried out an initial 118/119 assessment in July/Aug 2002 to help prioritize environmental and natural resource-related needs in Guyana. Dr. Allendorf also brings significant experience training and building capacity of staff of government agencies, NGOs, universities, and local community representatives in India, Myanmar, and Nepal. She has developed training sessions alongside local partners to address capacity needs, and has facilitated sessions on topics ranging from institutional capacity building and proposal writing to training on threats-based conservation and collaborating with communities to achieve conservation goals. She has a solid understanding of USAID policies and strong familiarity with biodiversity conservation issues in Nepal. She is conversationally fluent in Nepali and has basic reading and writing skills.

Dr. Netra Prasad Timsina, Capacity Building Specialist - Netra Prasad Timsina is an institutions and capacity building specialist with over 20 years of experience in forestry, biodiversity and natural resource governance. He has successfully coordinated and led research efforts and projects teams involved in analyzing and evaluating natural resource management efforts related to strengthening livelihoods, improving access to and control over natural resources, and increasing participation of women, low-income, rural, and disadvantaged populations in natural resource management. His career has included working with governmental, nongovernmental, and academic institutions at the international, national, and local levels to assess the enabling environment, identify gaps and deficiencies, and provide recommendations for policy and regulation reform. He has been particularly involved in promoting equitable access to, management of, and control over natural resources through policy briefs on topics such as improving women's participation in community forestry and building capacity of staff within his teams and partner organizations to empower disadvantaged communities.

Dr. Bijay Kumar Singh, Senior Natural Resources Management Specialist - Dr. Bijay Kumar Singh is an expert in forestry and natural resource management with over 30 years of experience implementing, managing, monitoring and evaluating forestry conservation and community forestry programs. He has served as a consultant with numerous national, and international organizations and NGOs, participating or leading assessments, evaluations, and research teams to look at linkages between forest conservation and biodiversity,

climate change, food security, gender, and sustainable livelihoods and make recommendations to agencies for improving programming to better address these issues. He has participated in several assignments with USAID/Nepal, including leading an Assessment of Climate Change, Forest and Biodiversity in Nepal, and the 2010 update to the 118/119 Assessment conducted in 2006. He has written/co-authored over 30 publications and reports on various issues related to forest conservation, and has organized and facilitated numerous local and international workshops and training seminars.

Natalie Elwell, Program Analyst, Office of Gender Equality and Women's Empowerment, USAID - Natalie Elwell is a Program Analyst in the Office of Gender Equality and Women's Empowerment at USAID whose current primary responsibilities include providing support for the implementation of the Agency's policy on gender, and advising the Climate Change team on gender integration into their portfolio, with a particular focus on gender and REDD+. Natalie also manages several women's leadership projects. Prior to joining USAID at the end of 2009, Natalie was the Associate Vice President for Gender at World Neighbors where she served as a technical advisor to field teams in 18 countries throughout Africa, Asia and LAC, designing their gender approach and building local capacity to integrate gender into long-term rural community development programs. Additionally, she supported action learning and documentation, strategic planning and advocacy efforts for endogenous development. Natalie also spent a number of years managing professional development programs for women NGO/CBO leaders and in refugee resettlement in the U.S. Natalie served as a Peace Corps Volunteer in Moldova from 1994 to 1996, where she taught English and environmental education. Her work on gender issues began in Moldova where she initiated and led a "women in development" group. Natalie is currently a (founding) Board member of Groundswell International, a partnership of local NGOs and resource people in Africa and LAC. She has a BA in Communication and received her MA in Sustainable Development from the SIT Graduate Institute in Vermont.

ANNEX C: LIST OF PERSONS CONTACTED AND THEIR INSTITUTIONAL AFFILIATION

SN	Name	Organization
Government Agencies		
1	Govinda Kafley	Leasehold Forestry and Livestock Program, Kathmandu
2	Babu Ram Bhandari	Ministry of Forests and Soil Conservation
3	Ram Prasad Lamsal	Ministry of Forests and Soil Conservation
4	Sagar Rimal	Ministry of Forests and Soil Conservation
5	Dr. Akhil Karna	Ministry of Forests and Soil Conservation
6	Dr. Annapurna Das	Department of Plant Resources
7	Krishna Acharya	Department of National Parks and Wildlife Reserves
8	Dr. Maheshwar Dhakal	Department of National Parks and Wildlife Reserves
9	Madan Raj Bhatta	Gene Bank, NARC
10	Prem Kandel	Forest Resource Assessment Project, DRFS
11	Dr. Damayanti Shrestha	Livestock Production Directorate
12	Dr. Hari Dahal	Ministry of Agriculture
13	Dr. Deepak Mani Pokharel	Ministry of Agriculture
14	Vidya Pande	Ministrry of Agriculture
15	Tulasi Chaulagain	Ministry of Environment, Science & Technology
16	Naresh Sharma	Ministry of Environment, Science & Technology
17	Lava K.C.	Ministry of Environment, Science & Technology
18	Purushottam Ghimire	National Planning Commission
19	Pashupati Koirala	Department of Forests
20	Dr. Keshav Premi	Department of Livestock Services
21	Bharat Pudasaini	Dept. of Soil Conservation & Watershed Management
22	Sahas Man Shrestha	Department of Forest Research and Survey
23	Lila Nath Paudel	District Forest Office, Kaski
24	Madhav Baral	District Forest Office, Kaski
25	Dinesh Shrestha	Department of Agriculture
26	Dhirendra Karki	Department of Agriculture
27	Dr. Rajan Pokharel	Western Regional Forest Directorate, Pokhara
28	Krishna Raj Neupane	Western Regional Forest Directorate, Pokhara
29	Diwaker Pathak	District Forest Office, Kaski
30	Bali Ram Pandit	Regional Training Center, Pokhara
31	Udhav Ghimire	District Soil Conservation Office, Kaski
32	Khagendra Baral	District Forest Office, Parbat

SN	Name	Organization
33	Indra B. Pachhai	District Forest Office, Parbat
34	Ashok Bhandari	Bardia National Park
35	Saraswoti Sapkota	Department of National Parks and Wildlife Reserves
36	Sunil Nepal	Banke National Park, Mahadev Puri Banke
37	Purushottam Wagle	Banke National Park, Mahadev Puri Banke
38	Rajendra P. Sharma	Banke National Park, Mahadev Puri Banke
39	Youba Raj Pokharel	Tree Improvement Section, Department of Forests
International Donors and Organizations		
40	Louis Chang	PPD USAID/Nepal
41	Netra Sharma	GDO USAID/Nepal
42	Leslie Long	PPD USAID/Nepal
43	J. Mueller	The OC USAID/Nepal
44	T. Barrett	GDO USAID/Nepal
45	Colin Homes	PPD USAID/Nepal
46	Timm Harris	PPD USAID/Nepal
47	Shanda Stimer	HFP USAID/Nepal
48	Jay Pal Shrestha	HFP USAID/Nepal
49	Evan Meyer	State Regional Environment Office
50	Shanker Khadgi	GDO USAID/Nepal
51	Silvia Feldman	GDO USAID/Nepal
52	Linda Kento	HFP USAID/Nepal
53	Shila Bulelund	OAA USAID/Nepal
54	Maria Barron	DGO USAID/Nepal
55	Anita Mahat Rana	GDO USAID/Nepal
56	Amy Prevatt	GDO USAID/Nepal
57	Jayanti Subba	GDO USAID/Nepal
58	John Stamm	GDO USAID/Nepal
59	Top Bahadur Khatri	Conservation and Sustainable Use of Wetlands in Nepal Project
60	Keshav Khanal	Hariyo Ban Project, Kathmandu
61	Judy Oglethorpe	Hariyo Ban Project, Kathmandu
62	Sandesh Hamal	Hariyo Ban Project, Kathmandu
63	Dhan Rai	WWF Nepal
64	Purna Kunwar	Hariyo Ban Project, Kaski
65	Kalyan Gauli	ANSAB
66	Dr. Narendra Pradhan	WWF Nepal
67	Santosh Nepal	WWF Nepal
68	Dr. Diwakar Chapagain	WWF Nepal

SN	Name	Organization
69	Subash Lohani	WWF Nepal
70	Bijan Gurun	WWF Nepal
71	Ugan Manandhar	WWF Nepal
72	Vijaya Prasad Singh	UNDP Nepal
73	Dr. Yam Malla	IUCN Nepal
74	Anu Adhikari	IUCN Nepal
75	Erin Hughes	Winrock International Nepal
76	Ganga Dahal	Rights and Resources International
77	Alex Smith	University of Montana
78	Faye Haselkorn	USAID/Nepal
79	Manohara Khadka	ICIMOD
80	Bidya Banmali Pradhan	ICIMOD
81	Dr. Laxman Joshi	ICIMOD
82	Navraj Pradhan	ICIMOD
83	Bimala rai Paudyal	SDC
84	Kripal Chaudhary	WWF/TAL
85	Rudra Neupane	PWMLGP, JICA
86	Ramu Subedi	Multistakeholder Forestry Project
87	Dr. Dharam Uprety	Multistakeholder Forestry Project
88	Dr. Chudamani Joshi	Embassy of Finland
89	Arun Adhikari	CARE/Hariyo Ban
90	Kuldip Paudel	CARE/Hariyo Ban
91	Lex Kassenberg	CARE Nepal
Civil Society Organizations		
92	Dibya Gurung	WOCAN
93	Rama Ale Magar	HIMAWANTI
94	Dr. Kaji Shrestha	Women Acting Together for Change and Family
95	Dr. Hem Sagar Baral	Himalayan Nature
96	Bhola Khatiwada	Community Based Forestry Supporters Network (COFSUN)
97	Gopal Parajuli	Chapakot Community Forest User Group, Kaski
98	Surbir Tamang	Chapakot Community Forest User Group, Kaski
99	Kalidas Subedi	Chapakot Community Forest User Group, Kaski
100	Parbati Adhikari	Chapakot Community Forest User Group, Kaski
101	Sarita Sunar	Chapakot Community Forest User Group, Kaski
102	Prof. Dr. Keshav Awasthi	Institute of Forestry Pokhara
103	Prof. Dr. Abhoy K. Das	Institute of Forestry Pokhara
104	Bir Bahadur Khanal	Institute of Forestry Pokhara
105	Anjana Shrestha	Institute of Forestry Pokhara

SN	Name	Organization
106	Suman Bhattarai	Institute of Forestry Pokhara
107	Rajan Subedi	Institute of Forestry Pokhara
108	Bhisma Devkota	Institute of Forestry Pokhara
109	Thakur Silwal	Institute of Forestry Pokhara
110	Binod Heyju	Institute of Forestry Pokhara
111	Dr. Krishna Tiwari	Institute of Forestry Pokhara
112	Hari Tripathi	Institute of Forestry Pokhara
113	Abadhesh Sing	Institute of Forestry Pokhara
114	Chiranjibi Upadhayaya	Institute of Forestry Pokhara
115	Bharat Mahato	Institute of Forestry Pokhara
116	M.Sc. and B.Sc. Students	Institute of Forestry Pokhara
117	Pushpa Raj Tiwari	LI-BIRD Pokhara
118	Dr. Pashupati Chaudhary	LI-BIRD Pokhara
119	Pitamber Shrestha	LI-BIRD Pokhara
120	Nar Bahadru Amgai	NTNC Pokhara
121	Bina Bhattarai	NTNC Bardia
122	Rabin Kadariya	NTNC Bardia
123	Shree Ram Bhimire	NTNC/Hariyo Ban, Bardia
124	K.P. Baral	District NGO Federation Kaski
125	Dinesh Shrestha	FECOFUN Kaski
126	Thakur Bhandari	FECOFUN Kaski
127	Tulashi P. Adhikari	FECOFUN Kaski
128	Gopal Gurung	Panchase Development Committee, Kaski
129	Dil Bahadur Bhattarai	Machhapuchhre Development Organization Kaski
130	Ganga Neupane	FECOFUN Kaski, Hariyo Ban
131	Sabitri Prajuli	Chapakot Community Forest User Group, Kaski
132	Laxmi Gurung	Women's Conservation Network, Karmela Village, Bardia
133	Krishna Bahadur Chaudhary	Deurali Hariyali BZ User Group, Chisapani, Banke
134	Shiv Kumar Rana	Dhakeri BZ User Group, Mahadevpuri, Banke
135	Sabita K.C.	Dhakeri BZ User Group, Mahadevpuri, Banke
136	Shiva Prasad Wali	Dhakeri BZ User Group, Mahadevpuri, Banke
137	Ganga Dutt Jaisi	Rara BZ User Group, Chisapani
138	Kaman Singh Khanal	Madhya Bindu BZ User Group, Mahadevpuri
139	Sabitra Pun	Banke BZ User Group
140	Prem B. Rokaya	Nawa Prativa BZ User Group, Nauvasta
141	Dr. Ambika Gautam	NRDC, Lalitpur
142	Manisha Bista	CMDN, Kathmandu

SN	Name	Organization
143	Shanker Paudel	Rupantaran Nepal
144	Santosh Kumar Paudel	FECOFUN/Hariyo Ban
145	Ram B. Bhandari	FECOFUN Banke
146	Kishor Rimal	FECOFUN/Hariyo Ban
147	Deepak Chand	FECOFUN/Hariyo Ban
148	Kesh Kumari Bhandari	FECOFUN Banke
149	Puspa Chaudhary	Ganapur-5 Banke, BVC
150	Imran Ansari	Banke UNESCO Club, Ganapur-5
151	Shova Ram Devkota	FORWARD
152	Buddha Sunar	DWO Banke
153	Gopal Nath Yogi	BEE Group
154	Dil Bahadur Pariyar	OCDC Banke
155	Balram B.C.	ISDC, Nepal
156	Dharma Lal Rokaya	ENDUDEC
157	Pradip Sharma	MSC Banke
158	Prabhat Kumar Thakuri	MSC Banke
159	Dhrub Raj Sharma	JFS Banke
160	Dinesh Chaudhari	NGO Federation
161	Rajendra Tharu	NGO Federation
162	Surendra Karki	Rural Reconstruction Nepal
163	Bimmi Panthi	NPJ Banke
164	Bimala Kaucha Magar	NPJ Banke
165	Netra Kala Shahi	SAC Nepal Banke
166	Shanti Dhakal	MUM, Banke
167	Ghan Shyam Upadhaya	NPJ Banke
168	Suresh Kumar Yadav	NPJ Banke
169	Ghana Shyam Nagarkoti	NGO Federation Mid-West Region
170	Sunil Kumar Pariyar	DANAR, Kathmandu
171	Bishnu Bahadur Nepal	DANAR, Kathmandu
172	Manjet Dhakal	Clean Energy Nepal
173	Sushila Nepali	Independent Consultant, Kathmandu
174	Dr. Meeta S. Pradhan	Consultant, Kathmandu
175	Shikha Shrestha	Gender Consultant, Kathmandu
176	Rajan Katru	ICIMOD
177	Ganesh Karki	FECOFUN
178	Naya Sharma Paudel	ForestAction Nepal
179	Ajaya Parajuli	Office of Acquisition and Assistance USAID /Nepal
180	Rajeeb Shakya	The OC USAID/Nepal

SN	Name	Organization
181	Santosh Gyawali	Senior Development Program Specialist USAID/Nepal
182	Les Long	Capacity Development Consultant USAID/Nepal
183	Braj Kishor Yadav	Department of Forests
184	Bijay Raj Paudyal	Department of Forests
185	Anup Joshi	University of Minnesota
186	J. Gabriel Campbell	The Mountain Institute

ANNEX D: REFERENCES

Agarwal, Bina. "Gender and forest conservation: the impact of women's participation in community forest governance." *Ecological Economics* 68 (2009), 2785-2799.

Allendorf, T.D. "Residents' attitudes toward three protected areas in southwestern Nepal." *Biodiversity and Conservation*16 (2007): 2087–2102.

Bird Conservation Nepal and Department of National Parks and Wildlife Conservation. *The State of Nepal's Birds 2010*. Kathmandu, 2011.

Bhuju, U.R., et. al., Nepal Biodiversity Resource Book, ICIMOD, pp. 31, 2007

DNPWC. "Rhino Count 2011." Accessed September 28, 2011. http://www.dnpwc.gov.np/images/rhino%20count%202011%20press%20release.pdf

DNPWC, "Details for MOU on forestry and biodiversity conservation between Nepal and India." Accessed September 28, 2012. http://www.dnpwc.gov.np/details-for-mou-on-forestry-and-biodiversity-conservation-between-nepal-and-india.html

European Commission. *Institutional Assessment and Capacity Development: Why, What and How? Tools and Method Series, Reference Document*, European Commission. 2005.

Food and Agriculture Organization of the United Nations, Forest Department. *Global Forest Resources Assessment: Nepal Country Report*, March 2009.

Forest Monitor. "Production and Trade." Accessed September 28, 2012. http://www.forestsmonitor.org/fr/reports/549391/549399

Forest Monitor. "The Terai Forests." Accessed September 28, 2012. http://www.forestsmonitor.org/fr/reports/549391/5493998

Giri, Kalpana. "Gender in Forest Tenure: Prerequisite for Sustainable Forest Management in Nepal." *Rights and Resources Initiative Brief* #1 of 4, 2012

Giri, Kalpana. *Reflecting on Experiences: Women in the Forestry Sector in Nepal*. IOF. Pokhara, 2008.

Government of Nepal. *Climate Change Policy*. Approved January 17, 2011.

Government of Nepal. *Poverty Assessment: POVERTY TRENDS IN NEPAL*, 2005.

Government of Nepal, Central Bureau of Statistics. *Nepal Multiple Indicator Cluster Survey 2010, Mid- and Far Western Regions, Final Report*. Kathmandu: Central Bureau of Statistics and UNICEF Nepal, 2012.

Government of Nepal, Central Bureau of Statistics. *Nepal Living Standards Survey* (NLSS), 2010/2011.

Government of Nepal, Central Bureau of Statistics. *Population Census Preliminary Report*, 2011. http://cbs.gov.np/wp-content/uploads/2012/09/Population-Census-Prelliminary-Report-2011.pdf

Government of Nepal, Ministry of Environment. *National Adaptation Programme of Action (NAPA) to Climate Change*. Kathmandu, 2010.

Government of Nepal, Ministry of Forest and Soil Conservation, Department of Forest. *Forest Cover Change Analysis of the Terai Districts (1990/91 – 2000/01*), Kathmandu, 2005.

Government of Nepal, Ministry of Forest and Soil Conservation. *Gender and Social Inclusion Assessment Update: Vol II,* Chapter 4: Forestry

Government of Nepal, Ministry of Forest and Soil Conservation. *Nepal Biodiversity Strategy Implementation Plan 2006-2010*, Kathmandu, 2006.

Government of Nepal, Ministry of Forests and Soil Conservation. *Nepal Forestry Outlook Study*, FAO Regional Office for Asia and the Pacific, Bangkok, 2009.

Government of Nepal, Ministry of Forests and Soil Conservation. *Nepal Fourth National Report to the Convention on Biological Diversity*. Kathmandu, 2009

Jens-Peter Barnekow Lillesø, Tirtha B. Shrestha, Lokendra P. Dhakal, Ratna P. Nayaju and Rabin Shrestha. "The Map of Potential Vegetation of Nepal - a forestry/agro-ecological/biodiversity classification system." *Development and Environment* 2, 2005.

Khadka, Ram B., Barry Dalal-Clayton, Ajay Mathema, and Pujan Shrestha. *Safeguarding the future, securing Shangri-La – Integrating environment and development in Nepal*. International Institute for Environment and Development, May 2012.

MFSC, DFID, SDC, and GoF. *Multi-Stakeholder Forestry Programme (MSFP), Nepal, Common Programme Document*. 2011.

NPC.Climate Change Budget Code: Quick Reference Guide, National Planning Commission, Government of Nepal, Singhadarwar, Katmandu, 2012.

Ojha, Hemant, Lauren Persha, and Ashwini Chhatre. *Community Forestry in Nepal: A Policy Innovation for Local Livelihoods*. International Food Policy Research Institute, 2009.

Ostrom, Elinor. "Beyond Markets and States: Polycentric Governance of Complex Economic Systems." *The American Economic Review* 100 (June 2010): 641-672.

UNDP Nepal. UNDP in Nepal: Results from 2011, UNDP Nepal. 2011

USAID Nepal. "Hariyo Ban Program." Accessed September 28, 2012. http://nepal.usaid.gov/our-work/program-area/economic-growth-education-a-food-security/509-hariyo-ban-program.html

USAID. *Performance Monitoring and Evaluation TIPS: Measuring Institutional Capacity,* USAID, 2011.

USAID. *Recent Practices in Monitoring and Evaluation –TIPS: Measuring Institutional Capacity*, USAID Centre for Development Information and Evaluation, 2000.

USAID and ARD, Inc. *Tropical Forestry and Biodiversity (FAA 118 and 119) Analyses): Lessons Learned and Best Practices from Recent USAID Experience*, 2005.

WWF-Nepal. *Nepal Protected Areas*, Hairyo Ban Project, Kathmandu, 2012.

WWF. "Monitoring Tigers in Nepal." Accessed September 28, 2012. http://worldwildlife.org/projects/monitoring-tigers-in-nepal

ANNEX E: CURRENT IUCN RED LIST AND NEPAL RED BOOK DATA

Number of Species in the IUCN Red List in Nepal

Category	Symbol	Plants	Mammals	Birds	Herpeto
Critically Endangered	CR	-	1	3	1
Endangered	EN	2	11	6	3
Vulnerable	VU	5	21	26	7
Near Threatened	NT	2	21	26	4
Least Concern	LC	24	130	813	39
Data Deficient	DD	1	1	-	10
Total		**34**	**185**	**874**	**64**

Source: Bhuju, U.R., et. al., 2007, Nepal Biodiversity Resource Book, pp. 31.

CR **Critically Endangered** The species is in imminent risk of extinction in the wild.
EN **Endangered** The species is facing an extremely high risk of extinction in the wild.
VU **Vulnerable** The species is facing a high risk of extinction in the wild.
NT **Near Threatened** The species does not meet any of the criteria that would categorize it as risking extinction but it is likely to do so in the future.
LC **Least Concern** There are no current identifiable risks to the species.
DD **Data Deficient** There is inadequate information to make an assessment of the risks to this species.

ANNEX F: ENVIRONMENT-RELATED LEGISLATION, PLANS, PROGRAMS & STRATEGIES

Major Forest and Biodiversity Related Legislations in Nepal

- The Internal Constitution of Nepal, 2007
- Forest Act, 1993
- Soil Conservation Act, 1982
- National Parks and Wildlife Conservation Act, 1973
- Local Self Governance Act, 1998
- Environmental Conservation Act, 1997
- Local Self-Governance Act, 1998
- Environment Conservation Act, 1997
- Forest Regulations, 1995
- Buffer Zone Regulation, 1996
- Environment Conservation Regulation, 1997

Policies and strategies providing guidance for the development of forestry sector programs are:

- National Conservation Strategy, 1988
- Master Plan for Forestry Sector, 1989
- Leasehold Forestry Policy, 2002
- Revised Forestry Sector Policy, 2000
- Forest Policy on Terai, Inner-Terai and Chure, 2000
- Nepal Biodiversity Strategy, 2002
- National Wetland Policy, 2003
- Terai Landscape Strategic Plan, 2004
- Non-Timber Forest Products Policy, 2004
- Agriculture Perspective Plan, 1995
- Tenth Five-Year Plan, 2002-2007
- Three-Year Interim Plan, 2007-2010 and 2010-2013
- Nepal Biodiversity Strategy Implementation Plan, 2006-2010
- Climate Change Policy, 2011
- National Adaptation Program for Action, 2010

- National Landuse Policy, 2012
- National Tiger Recovery Program: T X 2 by 2022
- National Agrobiodiversity Policy of Nepal, 2007
- National Agriculture Seed Policy, 2000
- National Strategy: Communication, Education, Participation and Awareness (CEPA) Strategy and Dissemination Framework for the Conservation and Wise-use of Wetlands in Nepal, 2011-2015
- Integrated Landscape Planning Directives, 2012

Projects in Ministry of Forest and Soil Conservation

Special Project

Project	Date	Budget	Budget	Funding Process
Chure Conservation Program	2012	NRs 260 M	Nepal Government	Indirect

Bilateral Projects

Project	Date	Budget	Budget	Funding Process
1. Forest Resource Assessment	2009-14	Euro 4.7 M	Finland	Direct
2. Participatory Watershed Management and Local Governance Project	2009-14	US$ 5 M	Japan	Direct
3. Improving Research Capacity of Forest Resource Information Technology	2010-12	US$ 0.4 M	Finland	Direct
4. Forest Preservation Program Nepal	2010-12	Yen 600 M	Japan	Direct
5. Multi Stakeholder Forestry Program	2012-15	US$ 61.8 M	SDC, DFID and Finnish	Indirect and Direct
6. Hariyo- Ban program	2011 - 2016	US$ 30 million	USAID	Indirect
7. Nepal Tiger Genome Project	2011 - 2013	US$ 0.27 million	USAID	Indirect

Multi-Lateral Projects

Project	Date	Budget	Budget	Funding Process
1. Technical Assistance for Leasehold Forest and Livestock Program in Nepal	2010-14	US$ 3.5 M	Finland through FAO	Direct
2. Western Terai Landscape Development Project	2005-12	US$ 10.5 M	GEF, UNDP, WWF	Direct
3. Conservation and Sustainable Use of Wetland	2007-12	US$ 2.4 M	GEF, UNDP	Direct
4. Leasehold Forest and Livelihood Development Program (Second Phase)	2005-13	US$ 12.77 M	IFAD	Indirect
5. Strengthening Regional Cooperation for Wildlife Conservation Project (IDA)	2011-15	US$ 3 M (2 M SDR)	World Bank	Direct
6. Strengthening Institutional Capacity of DNPWC for the Effective Management of Mountain PAs	2011-14	US$ 0.5 M	World Bank	Indirect

Project	Date	Budget	Budget	Funding Process
7. REDD Forestry and Climate Change	2009-12	US$ 3.6 M	World Bank	Indirect
8. PPCR Component 1: Under negotiation	2013-	US$ 41 M	ADB	TBD
9. PPCR Component 5: Under negotiation	2013-	US$ 5 M	WB	TBD
10. Kailash Sacred Landscape: Under negotiation	2012	US$ 1 M	ICIMOD	Direct

Other

Biodiversity Sector Project

Project	Date	Budget	Budget	Funding Process
Biodiversity Sector Program	2012	NRs 31 M	Nepal Government	Indirect

Non-Governmental Project

Project	Date	Budget	Budget	Funding Process
Terai Arc Landscape Program	2007-12	US$ 5.8 M	WWF	Direct
Sacred Himalaya Arc Landscape Program	2007-12	US$ 3.4 M	WWF	Direct
Demonstration of Sustainable Forest Management with Community Participation in Nepal	2011-12	US$ 0.5 M	APFNet	Direct

ANNEX G: INTERNATIONAL CONVENTIONS AND TREATIES

Name of Convention	Entry into force in Nepal
United Nations Conventions to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, 1994	January 13,1997
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989	January 13, 1997
Vienna Convention for the Protection of the Ozone Layer, 1985	October 4,1994
United Nations Framework Convention on Climate Change, 1992	July 31,1994
Convention on Biological Diversity, 1992	February 21, 1994
Agreement on the Network of Aquaculture Centers in Asia and the Pacific, 1988	January 4,1990
Convention on Wetlands of International Importance Especially as Waterfowl Habitat, 1971	April 17, 1988
Convention for the Protection of the World Cultural and Natural Heritage, 1972	September 20, 1978
Convention on International Trade in Endangered Species of Wild Fauna and Flora, 1973	September 16, 1975
Plant Protection Agreement for Southeast Asia and the Pacific (as amended), 1956	August 12, 1965
International Treaty on Plant Genetic Resources for Food and Agriculture, 2004	October 19, 2009
World Trade Organization, 1995	April 23, 2004

ANNEX H: SUMMARY MATRIX OF THREATS, ACTIONS, EXTENT TO WHICH USAID ADDRESSES THREATS & RECOMMENDATIONS

Threats to Forests and Actions Needed

SN	Threats	Actions Needed
1	**Threats in Terai and Churia hills**	
1.1	Loss of forest lands or conversion of forests to other purposes both by government decisions and also by unlawful methods (e.g., encroachment)	Strictly enforce the forest strategy to make forest land unavailable for other purposes Enforce the policy to maintain 40% forest in the country with action plan
1.2	Degradation of forest quality/health	Make the scientific management of forests based on horizontal and vertical space management in all the ecozones
1.3	Frequent forest fires	Assess the loss by forest fire every year and find out the trend Make an action plan and implement it to control forest fire
1.4	Over-grazing and unlawful animal sheds inside the forest areas	Regulate the animal grazing Remove animal sheds from forest areas
1.5	Illegal poaching of timber and forest products	Enhance good governance in the DOF & CFUG
1.6	Weak protection measures and lack of management of forests particularly in Terai and Churia hills outside the protected areas	Enhance good governance in the DOF & CFUG Conserve the Churia hill forests based on upstream-downstream linkage from perspective of environmental services
1.7	Denied access of far-distant users in Terai and Churia hills forest resources	Adopt the Collaborative Forest Management in big chunk of forests in Terai and Churia hills with access to far-distant users with prescribed roles and responsibilities
1.8	Massive sand and gravel extraction from forest areas and Churia hills	Allow the extraction of sand and gravel based on EIA study with strong monitoring system
1.9	Rapid loss of riverine forests due to flash flooding and siltation	Manage the watersheds to recover and promote the riverian forests along river banks

SN	Threats	Actions Needed
2	**Threats in Midhills**	
2.1	Shifting cultivation	Stabilize the shifting cultivation areas by applying the technologies developed by the Leasehold Forestry and Livestock Program with action plans and result-based indicators
2.2	Excess extraction of timber and other forest products from accessible forests	Enhance good governance in the DOF & CFUG
2.3	Excessive extraction of resin from pine trees	Enhance good governance in the DOF & CFUG
2.4	Frequent forest fires	Assess the loss by forest fire every year and find out the trend Make an action plan and implement it to control forest fire
2.5	Loss of riverine forests	Manage the watersheds to recover and promote the riverine forests along river banks
3	**Threats to forests in High Mountains**	
3.1	Slash and burn cultivation	Stabilize the shifting cultivation areas by applying the technologies developed by the Leasehold Forestry and Livestock Program with action plans and result-based indicators
3.2	Frequent forest fires	Assess the loss by forest fire every year and find out the trend Make an action plan and implement it to control forest fires
3.3	Lack of forest management	Manage the forests based on horizontal and vertical space management with dense undergrowth
4	**Miscellaneous**	
4.1	Poor internal governance system including poor enforcement of laws and policy	Improve the internal governance with result-based indicators
4.2	Poor accountability system	Study the "accountability system" in forestry and improve it with result-based indicators
4.3	Long political transition period	

Threats to Biodiversity and Actions Needed

SN	Threats	Actions Needed
1	**Genetic Biodiversity**	
1.1	Lack of information on genetic resources of aquatic species and terrestrial species found in Nepal in all sectors including agriculture, livestock, wildlife, forest tree species and high value NTFP/MAPs species, native agriculture varieties/breeds	Conduct in-depth research/study on genetic resources of selective high value species of wildlife, tree, NTFPs/MAPs, aquatic species, native agriculture varieties/breeds Make a national profile of the selected high value species Make short- and long-term plans and plans of action for the in-situ and ex-situ conservation of such selected species
1.2	Loss of local landraces	Map the local landraces and come up with its conservation action plan and long-term plans
1.3	Loss of genetic variability	Conduct in-depth research/study on genetic variability of selective high value species of wildlife, tree, NTFPs/MAPs, aquatic species, native agriculture varieties/breeds Make a national profile of genetic variability of the selected high value species Make short- and long-term plans and plans of action for the in-situ and ex-situ conservation of such selected species
1.4	Increased vulnerability to pest and diseases	Establish a well-equipped laboratory with trained human resources for entomology to study the pests and diseases, at least for the high value crops in the forestry sectors Conduct a study on vulnerability of pests and diseases of selected high value species Collaborate with international agencies to take actions to control pests and diseases
1.5	Lack of institutional capacity on genetic resources identification, research, conservation and management	Develop institutional capacity on genetic resources identification, research and conservation, and management in the forestry sector Collaborate with Gene Bank for Nepal Agricultural Research Center (NARC) to conserve high value forest and NTFP/MAP species for long-term seed conservation
1.6	Replacement of local breeds with exotic varieties/breeds in the name of productive varieties	Provide incentive to conserve native varieties/breeds with Action Plans and result-based indicators

SN	Threats	Actions Needed
2	**Species Biodiversity**	
2.1	**Habitat loss**	
2.1.1	Conversion of wetlands into agriculture lands, industrial development, road and dam constructions, siltation and encroachment	Make an action plan for with result-based indicators to conserve important wetlands which are at great risk and threats, particularly of Ramsar sites
2.1.2	Attack of invasive species in habitat areas	Conduct research on invasive species (e.g., *Mikenia* species), collaborating with international agencies to control invasive species in protected areas and/or make use of it for different purposes Collaborate with local communities and private sectors to clean wetlands from invasive species (e.g., water hyacinth) and other species
2.1.3	Conversion of forests for other purposes by both legal and illegal methods	Strictly enforce the forest policy "no use of forest areas for other purposes" and maintain at least 40% forest as per forest policy Strictly enforce the forest laws to remove the illegal encroachers from the forests whether they are new or old encroachers
2.1.4	Degradation of forest resources	Enhance the forest condition by using horizontal and vertical space management with varieties of native species
2.1.5	Construction of high dams without considering habitat of aquatic animals	Follow the EIA with result-based indicators in the high dam construction.
2.1.6	Habitat loss of aquatic animals and birds by polluting, industrial wastes and excess uses of pesticides and insecticides in agriculture	Follow the EIA with result-based indicators in the industrial wastes disposal
2.1.7	Loss of riverian species due to high flash flood	Manage the watershed
2.1.8	Human-wildlife conflict	Immediate actions for compensations to affected people or households who are affected by the wildlife Work with local community to reduce the human-wildlife conflict
2.1.9	Excess fishing in rivers and wetlands by using trapping nets, explosives, electrification	Strictly enforce the illegal fishing laws, which affect aquatic animals of the protected areas or outside protected areas

SN	Threats	Actions Needed
2.1.10	Forest fires	Assess the loss by forest fire every year and find out the trend Make an action plan and implement it to control forest fires
2.1.11	Overgrazing in the forests	Regulate animal grazing Declare "no go zone for grazing" in PA and strictly enforce it
2.1.12	Replacement of local species/variety by hybrid varieties/breeds	Provide incentive to conserve native varieties/breeds with action plans and result-based indicators
2.2	**Over-harvesting and immature harvesting of NTFPs/MAPs from the natural habitats**	Develop and enforce the monitoring mechanism while issuing collection of NTFP/MAPs
2.3	**Illegal poaching and illegal trade of mega wildlife hides and high value NTFPs/MAPs**	Collaborate with security organizations to curb illegal poaching and trade of wildlife hides and high value NTFPs/MAPs Devise incentive-based mechanism to curb illegal hunting and illegal trade
3	**Ecosystem Biodiversity**	
3.1	Climate Change	Adopt ecosystem-based and community-based adaptation mechanism
3.1.1	GLOF	Identify the vulnerable GLOF in collaboration with other concerned organizations Come up with action plan to reduce the risks of GLOF with result-based indicators in selected areas with participation of local communities Regularly monitor the GLOF by establishing monitoring centers and warning systems
3.2	Lack of ecosystem-based conservation and management forests outside protected areas	Identify the rich ecosystem outside the protected areas and come up with action plan with result-based indicators for its conservation and management
3.2.1	Lack of conservation and management of Churia hills corridor outside protected areas	Churia is a highly fragile and only once continued corridor from east-west and highly threatened by human intervention Come up with a long- and short-term policy, strategy and action plan with result-based indicators for its conservation and management outside PAs

SN	Threats	Actions Needed
3.3	Increased human pressure on ecosystems to fulfill their basic needs and additional incomes	Reduce the human pressure on important ecosystem areas with the involvement of the local community providing them alternatives such as alternative fuels and incentive-based programs with result-based indicators
3.4	Construction of rural roads, irrigation canals and other infrastructures without considering soil conservation measures and value of ecosystems	Strictly follow the EIA with indicators and its close monitoring in the construction of infrastructures
3.5	Faulty agriculture system that causes loss of soils and landslides from hills and mountains to Terai, directly and indirectly affecting riverian ecosystem, aquatic ecosystems and Terai ecosystems	Follow the SALT (Sloping Agriculture Land Technology) in the agriculture sector with result-based indicators in important ecosystem areas
3.6	Lack of awareness on value of ecosystems	Launch massive awareness campaign on value of ecosystems and its benefits both in upstream and downstream communities

ANNEX I: CLIMATE CHANGE STAKEHOLDERS, ACTIVITIES, AND MAJOR EVENTS

SN	Organizations	Projects	Donors/Partners	Project details
1	Ministry of Environment, Science and Technology	National Adaptation Programme of Action to Climate Change	Embassy of Denmark, DFID, GEF, UNDP	Completed, NAPA document as an outcome
		Pilot Programme for Climate Resilience (PPCR)	CIF–Multi-donor trust fund managed by World Bank	Ongoing
		Nepal Climate Change Support program (NCCSP)–Local Adaptation Program of Action (LAPA)–a national framework	DFID and EU	Ongoing strengthening of 13 DDC–upgrading the district level Environment and Energy Unit in Climate Change, Energy and Environment Section (CCEES) that works under District Development Committee Three NGOs are providing technical support and DDCs are implementing the project
2	Ministry of Forest and Soil Conservation	Readiness Preparation Proposal	WB-Forest Carbon Partnership Facility (other donors commitment–DFID, USAID, Finnish Embassy–from already committed fund/existing programmes such as Hariyo Ban and multi-stakeholder forestry project	MRV–Monitoring, reporting and verification Measure of carbon-reference and methodology, REDD strategy options–reducing deforestation and emission, development of implementation framework
3	ICIMOD, ANSAB and FECOFUN	Pilot Project on REDD beneficiating in community forestry	NORAD, Twenty University	Measurement of carbon in CF, development of mechanism for funding Pilot Forest-Carbon trust fund. Networking of CF in watershed, 100,000 USD trust fund contributed by NORAD
4	RECOFTC/ FECOFUN/ HIMAWANTI	Grassroots Capacity Development on REDD	NORAD	Awareness, training (ToT), community awareness

SN	Organizations	Projects	Donors/Partners	Project details
5	National Federation of Indigenous Nationalities	• Research and publication in climate change • Awareness raising, media mobilization, lobbying and advocacy • REDD strategy for inclusion of indigenous people	Tebteba, Evirea-Germany World Bank	
6	CARE, WWF, NTNC, FECOFUN	Hariyo Ban Program (Green Forest Program)	USAID	Biodiversity, carbon and adaptation
7	ForestAction-Nepal	• Community-Based Adaptation • REDD in Community Forestry	Asia Pacific Network for Global change, Portland University	
8	Practical Action	• Building the resilience of poor rural communities to come with impacts of climate change • Sustainable rehabilitation of livelihoods of flood affected communities in Nepal • Integrated water resource management for climate change adaptation • Flood early warning	Glacier Trust, UK EU	

SN	Organizations	Projects	Donors/Partners	Project details
9	Institute for Social and Environmental Transition (ISET-Nepal)	• Urban Agriculture Climate Change Assessment • Understanding the cross-scale implications of forest and water management for adaptation and food security in Nepal Himalaya		• Analysis of relationship between urban agriculture and climate change, Kathmandu • Mustang, Myagdi, Kaski, Arghaslanchi, Palpa, Kapilvastu • To increase understanding of climate change and systemic interaction among agriculture, forestry, water management and other components of the livelihood system and explore the implications such interaction have for food production and its security at local level
10	Integrated Development Society (IDS)-Nepal	Nepal's Strategic Engagement with the United Nations Framework Convention on Climate Change (UNFCCC)	Climate and Development Knowledge Network (CDKN)-UK	Support to the Ministry of Environment
11	Oxfam Nepal	• Climate change advocacy and adaptation project • Strengthening the roles of Non-State Actors in climate change policy formulation in South Asia and enhancing their capacities to influence global climate change negotiations		

SN	Organizations	Projects	Donors/Partners	Project details
12	LIBIRD (Local Initiatives for Biodiversity, Research and Development)	• CSO capacity development on climate change, adaptation and policy issues • Capacity strengthening of LDCs for adaptation to climate change • Climate-change oriented participatory action research for High Mountain Agri-Business for Livelihood Improvement (HIMALI) • Linking innovations and experimentations for climate change adaptation (Cambodia, Nepal and India) • Climate diary • CBM and resilience • Livestock, Livelihoods and Climate Change Interaction	Development Fund-Norway IIED Fellowship ICIMOD (ADB fund) Miserere (Germany) Development Fund, Norway FAO Arizona State University	Piloting adaptation technology, participatory action research, capacity building of NGO Network on Climate Change–110 member NGOs Watershed management LIBIRD districted dairy to farmers and student groups in Kaski and Parbat district and asked them to maintain the observation of climate extremes such as temperature, rainfall, wind flow, etc. Collaborative research
13	Climate Change Network Nepal (CCNN)	Research, advocacy and lobbying		Advocacy campaign
14	Clean Energy Nepal (CEN)	Promotion of Climate Change Network Nepal		Capacity development of network
15	ICIMOD	Establishment of regional flood information system in the Hindu-Kush Himalaya	Government of Finland	Enhance technical capacity of the countries in Hindu Kush Himalaya
16	UNDP,IUCN	Nepal Ecosystem-based Adaptation Program (EbA-N)	German Federal Ministry of Environment, Nature Conservation and Nuclear Safety	Capacity development to strengthen ecosystem resilience for promoting ecosystem based options
17	Ministry of Agriculture Development	Climate change adaptation in value chain promotion as part of Raising Income for Small and Medium Farmers Project	ADB	Capacity development on climate change adaptation
18	IDE, Rupantaran, RIMS, WWF	Initiatives for Climate Change Adaptation Program (ICCAP)	USAID	Capacity development to adapt the adverse impact of climate change

SN	Organizations	Projects	Donors/Partners	Project details
19	Care Nepal, Nyayik Sansar, Agriculture Development Bank and National Agriculture Research Council	Livestock and Climate Change: Seed Grant for capacity building	Louisiana State University	Strengthening of livestock production systems while adapting to climate change in Nepal
20	Helen Keller and MoAD	Livestock and Climate Change: Seed Grant, for past and future climate assessments of livestock vulnerability in Nepal	Utha State University	Climate analyses in livestock management and feeding practices
21	ICIMOD and UNEP	Regional program on Glacial Lake Outburst Flooding in the Hindu-Kush Himalaya	European Union	Support government, researchers and partner organizations to share knowledge and best practices
22	UNDP Nepal	Community based Flood and Glacial Lake Outburst Risk Reduction	GEF	Support two of the 9 priority profiles under NAPA

Climate Change Major Events

Date	Event
1992	• Signed the United Nations Framework Convention on Climate Change (UNFCCC) in June 12, 1992
1994	• Nepal accepted as party to United Nations Framework Convention on Climate Change (UNFCCC)
1996	• Ministry of Population and Environment established
2004	• First national communication report of Nepal, submitted to the COP of UNFCCC
2009	• Cabinet Meeting held at Kalapatthar, near the base camp of Mount Everest, and issued the "Kalapatthar Declaration" • The government established the Ministry of Environment to focus on the work of environment and climate change
2010	• NAPA 2010 prepared • PPCR 2010
2011	• Climate Change Policy 2011 • National Framework for Local Adaptation Plan of Action (LAPA)
2012	• Ministry of Environment organized national level three days workshop for the formation of "Gender and Climate Change Strategy" with the help of IUCN–February 7-9, 2012 • Nepal organized the International Conference of Mountainous Countries on Climate Change–April 5-6, 2012 • Ministry of Environment was merged into Ministry of Environment, Science and Technology on May 5, 2012
	• Nepal selected as the coordinator, for the year 2013-14, of Least Developed Countries (LDC) Coordination Group

ANNEX J: CAPACITY TOOLS, TECHNIQUES, AND INDICATORS

Tools and techniques of capacity development used at district level

At the community level, diverse tools of capacity assessment and development are being used in USAID's project areas, such as Hariyo Ban, to enhance the organizational capacity of local community. Participatory Governance Assessment (PGA) and Participatory Well-Being Ranking are widely used to assess the institutional governance of the community organizations and to identify the poorest of the poor to focus programs effectively. Community Learning and Action Centers (CLAC) provide a common platform for the poor and marginalized people to come together and raise their voices for their rights to development. FECOFUN, COFSUN and some other NGOs are also using the PGA tools for governance improvements. Some of USAID's partner NGOs are using assessment tools, such as Organizational Capacity Assessment Tool (OCAT), to identify the strength and gaps of the organizations. Some NGOs are using PGAs to reflect on their strength and gaps in order to improve their institutional capacity.

Based on the observations in the field and in consultations with stakeholders, the following criteria can be used to promote the effectiveness of Nepali organizations in the conservation sector based on the following functions of an organization:

Table 1: Criteria to measure organizational effectiveness

Functions of an organization	Indicators
Structural functions	• Governing system (nature of board and its activeness, periodic election, annual assembly) • The level of differentiated roles of board and management committee • Frequency of meetings of board and staff • Transparency of decision-making process and compliance to decisions made by the board (dissemination of decisions to its members and constituencies) • Publicity strategy–brochure of the organization, programs' brochures, dissemination of reports, project outcomes and annual audit report • Development of strategic plan of the organization • Conflict management and grievance procedures • Performance evaluation procedures of staff and board members • Procedures for avoiding conflict of interests • Stakeholder relations–relations with various governmental and non-governmental stakeholders, capacity to work with multi-stakeholder mechanisms, linkages to community with whom the organizations work • Organizational sustainability vision

Functions of an organization	Indicators

Administrative functions	• Financial administration
	  ○ Development of financial policies and regulations and their compliance
	  ○ Internal control system–delegation of authority, operation of account and handling of funds (application of basic accounting principles–accounting system, cash policy, assets inventory, purchasing)
	  ○ Zero tolerance policy for corruption
	  ○ Suspected fraud management procedure
	  ○ Application of principle of check and balance
	  ○ Analysis of overall income trends (both external and internal)
	• Office administration
	  ○ Procedures of day-to-day work, filing and record keeping, communication procedures among staff and between staff and board and with stakeholders, retrieving the files and records, managing supplies, managing meetings
	  ○ Documentation procedures

Program functions	• Human resource development and mobilization policies and strategies (forestry, biodiversity, climate change, natural resource management and livelihoods) • Procedure adopted for program planning • Management of technical knowledge and skills • Development of service delivery systems • Nature and diversity of human resource availability • Monitoring and evaluation mechanism and feedback system

Sources: The table above is prepared from: 1) the consultations with different stakeholders including NGOs, 2) Association of International NGOs' (AIN) partnership guidelines as references to draw the criteria, 3) WWF-Nepal's Guidelines for selecting NGO partners for Hariyo Ban Program, 4) tools used for assessing NGOs capacity by some projects such as Sathsath, and 5) Participatory Governance Assessment Tools being used at local level to enhance the capacity of local institutions such as CFUGs by Hariyo Ban team. Please also see USAID- Recent Practices in Monitoring and Evaluation, 2000; European Commission-Institutional Assessment and Capacity Development, 2005; USAID- Performance Monitoring and Evaluation TIPS: Measuring Institutional Capacity, 2011.

ANNEX K: STRENGTH, GAPS AND POTENTIAL ACTIONS– CAPACITY DEVELOPMENT (BASED ON FIELD INTERACTIONS AND STAKEHOLDERS CONSULTATIONS)

Strengths	Gaps	Potential actions
National level		

• A number of policies, programs and action plans on forest, biodiversity and climate chasnge are developed and are in implementation
• National level institutional mechanisms are set up with a provision of focal division/point on biodiversity, environment, climate change, and gender and inclusion
• Trained human resources available on forest and biodiversity
• Community-based conservation programs have been adopted by government as national programs such as community forestry
• A number of NGOs and federations are working in forest and biodiversity management and a range of capacity, skills and knowledge are available with civil society organizations
	• Lack of policy coordination
	  ○ Duplications in policies
	  ○ Lack of cooperation between the ministries and departments
	  ○ Lack of ownership of policies and programs
	• Lack of accountability to policy and program implementation (there are a number of good policies, but often not implemented)
	• Lack of knowledge, skills and awareness on emerging issues such as climate change, REDD, carbon sequestration, inclusion
	• Lack of capacity of focal divisions or focal points related to biodiversity, climate change and gender and inclusion at ministries (limited resources are allocated to the activities under the focal divisions- both financial and human resources)
	• Ineffectiveness of the training institutions and training course (the government training institutions appear to be not updated to the changing context to address the
		• Support policy coordination at ministries level
		• Support creation of an umbrella body at National Planning Commission level to harmonize polices in forestry, biodiversity, climate change, agriculture and other natural resource management
		• Support to government to increase ownership/accountability to policies and programs
		• Support to concerned ministries and civil society organizations at national level to enhance their skills and knowledge on emerging issues (climate change, REDD, low carbon path, gender and social inclusion)
		• Provide support to enhance the capacity of the focal divisions in the ministries (the focal divisions or points mostly remained at ministries level and have not reached district and village levels)
		• Support to restructuring and updating the training institutions and course content
		• Establish a functional relationship with government agencies by entering with funding support contract to

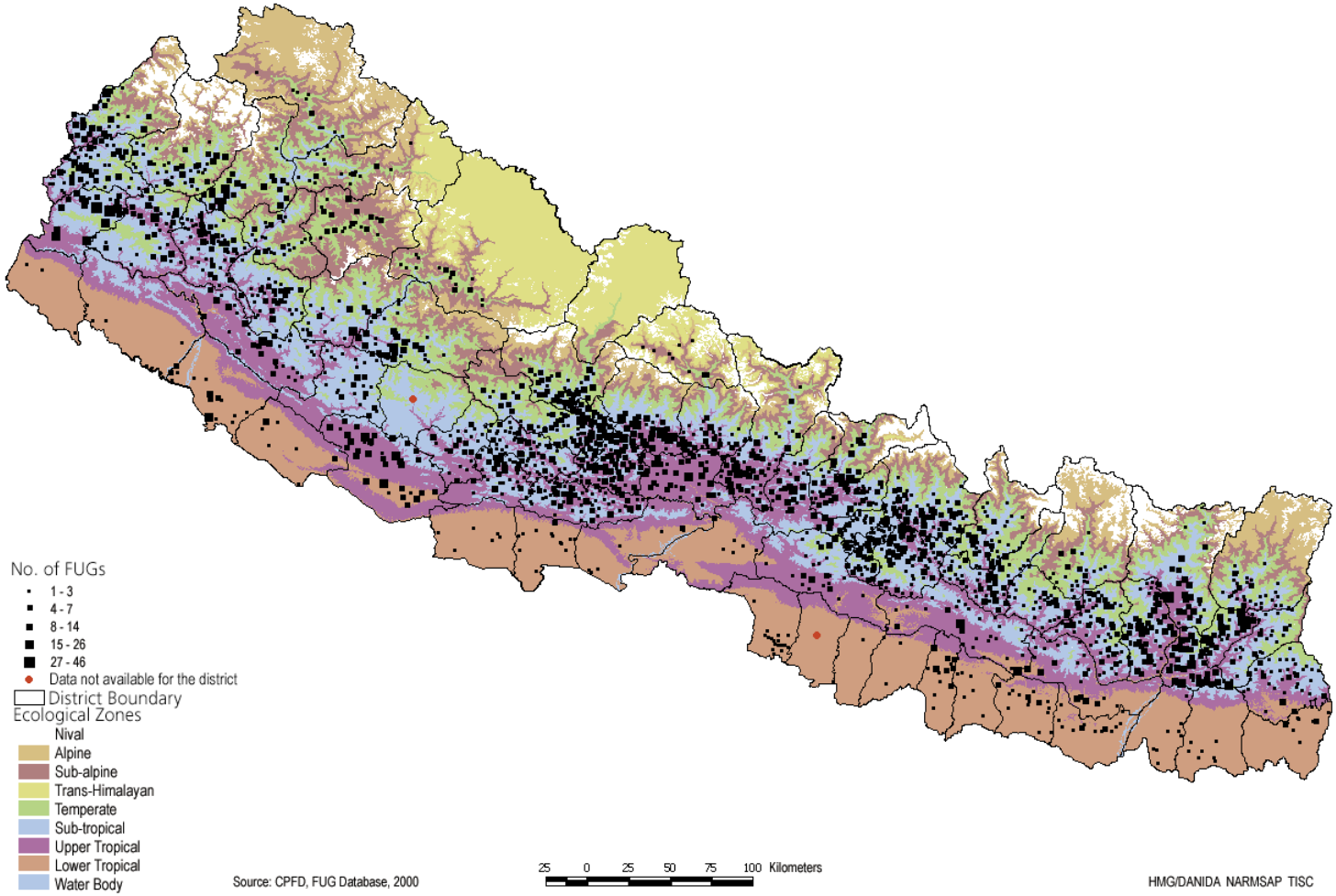
	emerging issues-climate change, changing demography, urbanizations etc) • Lack of ownership of government to donor funded projects	support the government activities
NGOs at national level		
• A number of NGOs work at national level with varying capacities	• Lack of data base on national level NGOs working in forestry, biodiversity, climate change and disaster risk reduction • Limited NGOs have capacity to implement projects at larger scale	• Take stock of national level NGOs working in the field of forestry, biodiversity, climate change, DRR • Conduct capacity assessment of the identified NGOs (parameters of capacity assessments are recommended in annex) • Support to the capacity development of NGOs/ • Support to NGOs to develop their monitoring role (watchdog) for implementation of government policies and programs (enhancing network organizations' capacity to be more vigilant in this role would help in putting pressure to put the policies and programs in implementation)
District level		
• Nepal government has a policy of decentralization of development • A number of programs and projects are being implemented at district level in forestry, agriculture, biodiversity and climate change • A number of NGOs, networks and federations are working at district level; hence human resources are available	• The intent and vision of policies and program at national level is not properly translated to district level • Lack of coordination at district level • Lack of knowledge on emerging issues (climate change, social inclusion, etc.) • The organizational development of NGOs at district level is emerging to expanding categories based	• Support to develop capacity of district level stakeholders (both government and non-government) to grasp the national level polices and program and to put them into practice • Strengthened the coordination mechanism at district level • Engage district development committees (DDC) in the coordination process as DDC has mandate to coordinate both government and non-government development

	on the analysis using OCAT	agencies in the district • Support to enhance the knowledge and skills to address the emerging issues in forestry and biodiversity • Support the district level organizations to improve their organizational capacity-leadership development, financial and human resource management and knowledge and skills on delivering the services
Community level		
• Community-based approaches of conservation have been widely accepted and owned by local community • Local level human resources on forests and biodiversity such as Local Resource Persons (LRPs) are at community level • Lessons on institutional strengthening through governance improvement for forest and biodiversity management have been generated through a number of projects implemented by government, INGOs and NGOs, and networks	• In some communities, the organizational development is emerging and expanding (CFUGs institutionalizing the systems of good governance) and in some community it is in nascent stage • Lack of awareness on the importance of species diversities and lack of skills and knowledge on their management • Lack of sufficient local level human resources to facilitate the community for forest management and biodiversity conservation (LRPs are available in limited areas) • Lack of linkages and coordination of user groups to VDCs and other agencies at VDC level	• Support the expanding community organizations to link with wider stakeholders at local level including Village Development Committees (VDCs) • Scale up and scale out the lessons coming from Community Action and Learning Centres (CALCs)–an approach for empowering community and improving their governance being practice at field level by Hariyo Ban project • Scale up and scale out the approach of governance improvement using participatory governance assessment tools • Support to awareness-raising programs on the importance of species biodiversity and their management practices • Build on the existing practices of development of Local Resource Persons (LRPs) through which capacity development of local institutions can be enhanced (for both the technical and organizational support) • Support the user groups to link

		to VDC and other government and non-government agencies to get services for the protection and promotion of forest and biodiversity

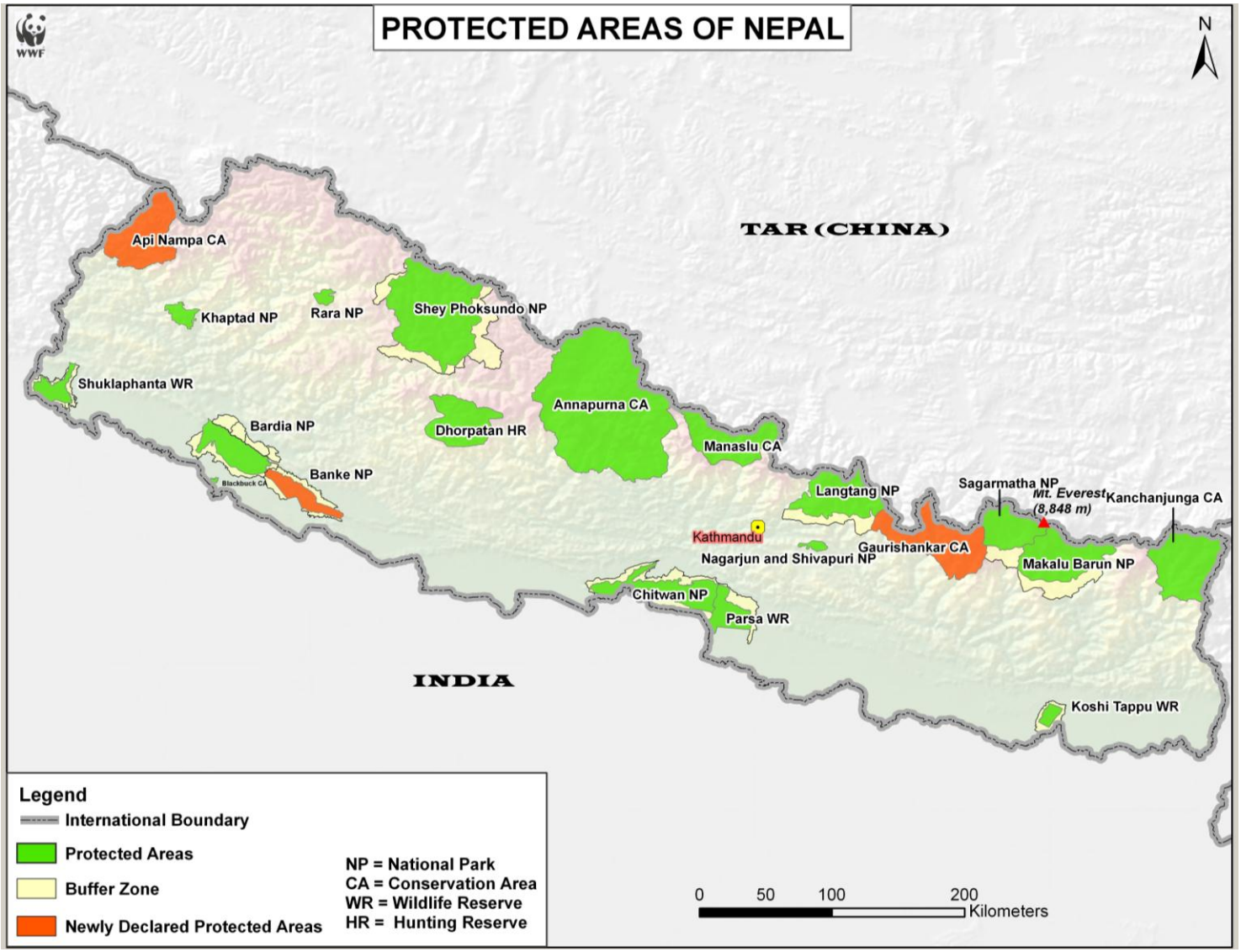
ANNEX L: MAPS

Map 1: Forest User Groups (FUGS) with Ecological Zones



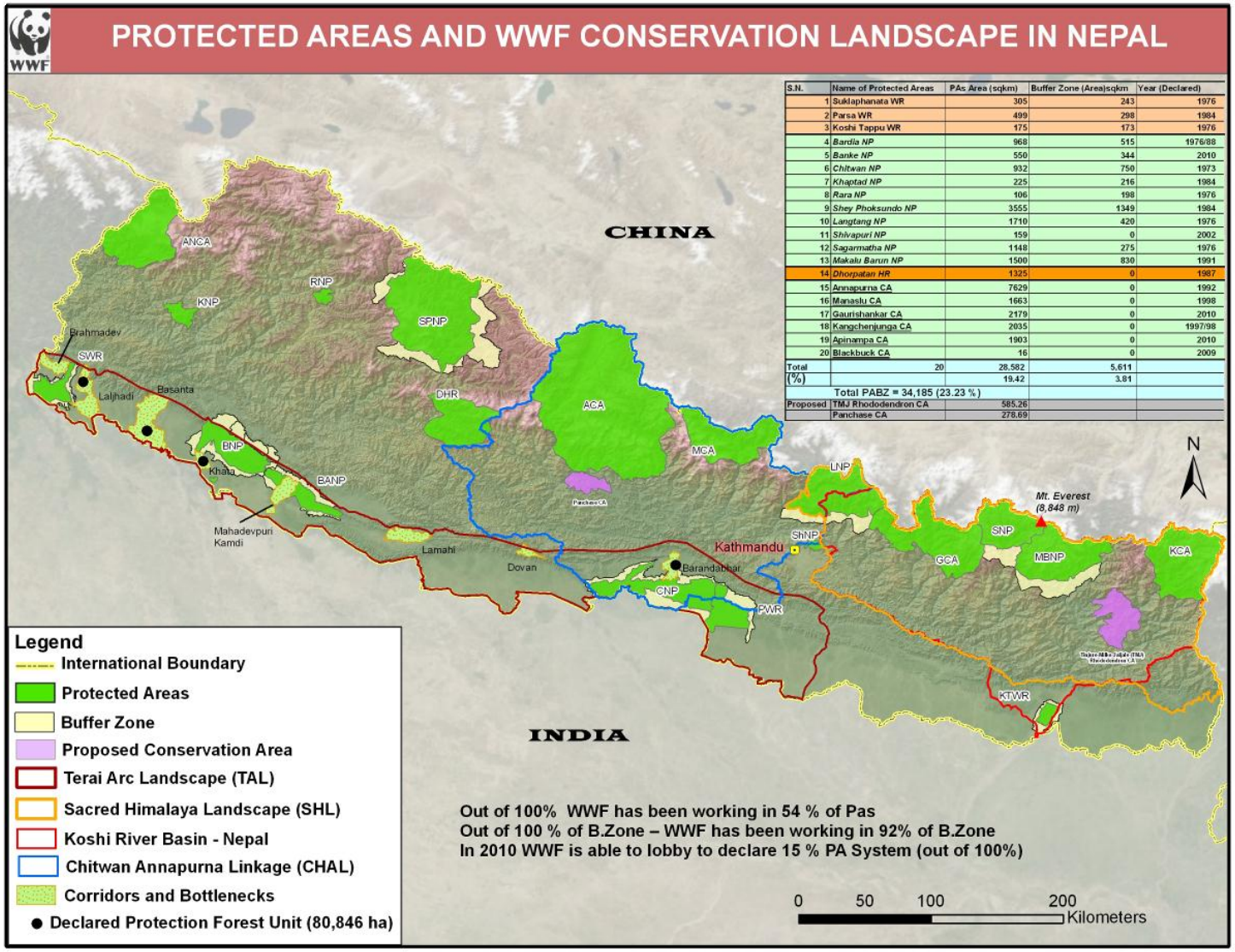
Source: Jens-Peter Barnekow Lillesø, Tirtha B. Shrestha, Lokendra P. Dhakal, Ratna P. Nayaju and Rabin Shrestha. *The Map of Potential Vegetation of Nepal - a forestry/agro-ecological/biodiversity classification system*. Development and Environment No. 2, 2005.

Map 2: Nepal Protected Areas



Source: WWF-Nepal. Nepal Protected Areas, Hairyo Ban Project, Kathmandu, 2012.

Map 3: Protected Areas and WWF Conservation Landscape in Nepal



S.N.	Name of Protected Areas	PAs Area (sqkm)	Buffer Zone (Area)sqkm	Year (Declared)
1	Suklaphanata WR	305	243	1976
2	Parsa WR	499	298	1984
3	Koshi Tappu WR	175	173	1976
4	*Bardia NP*	968	515	1976/88
5	*Banke NP*	550	344	2010
6	*Chitwan NP*	932	750	1973
7	*Khaptad NP*	225	216	1984
8	*Rara NP*	106	198	1976
9	*Shey Phoksundo NP*	3555	1349	1984
10	*Langtang NP*	1710	420	1976
11	*Shivapuri NP*	159	0	2002
12	*Sagarmatha NP*	1148	275	1976
13	*Makalu Barun NP*	1500	830	1991
14	*Dhorpatan HR*	1325	0	1987
15	Annapurna CA	7629	0	1992
16	Manaslu CA	1663	0	1998
17	Gaurishankar CA	2179	0	2010
18	Kangchenjunga CA	2035	0	1997/98
19	Apinampa CA	1903	0	2010
20	Blackbuck CA	16	0	2009
Total	20	28.582	5.611	
(%)		19.42	3.81	
Total PABZ = 34,185 (23.23 %)				
Proposed	TMJ Rhododendron CA	585.26		
	Panchase CA	278.69		

Source: WWF-Nepal. Protected Areas and WWF Conservation Landscape in Nepal, Hairyo Ban Project, Kathmandu, 2012.