

# PARTNERSHIP FOR LAND USE SCIENCE (FOREST-PLUS) PROGRAM

Report

Workshop on Emerging Issues in REDD+ October 23, 2013 Shimla, Himachal Pradesh

November 2013

This publication was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech ARD.

Partnership for Land Use Sci USAID Contract No. AID-386	ence (Forest-PLUS) Program is being implemented under 6-C-12-00002
Tetra Tech ARD Contacts:	
Total Tool / III Doniaols.	Gina Green, Senior Technical Advisor/Manager
	(gina.green@tetratech.com)
	Lucas Wolf, Project Manager (lucas.wolf@tetratech.com)

Tetra Tech ARD P.O. Box 1397

Burlington, VT 05402 Tel: 802-658-3890

## PARTNERSHIP FOR LAND USE SCIENCE (FOREST-PLUS) PROGRAM

#### Report

Workshop on Emerging Issues in REDD+ OCTOBER 23, 2013 Shimla, Himachal Pradesh

**NOVEMBER 2013** 

#### **DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

## **CONTENTS**

CONTENTS	I
ACRONYMS AND ABBREVIATIONS	III
REPORT	1
INTRODUCTION TO FOREST-PLUS PROGRAM	1
BACKGROUND OF THE CONSULTATION	1
PARTICIPANTS IN THE CONSULTATION	1
PROCEEDINGS OF THE CONSULTATION	1
OUTCOME OF THE CONSULTATION	7
ANNEXURE 1: AGENDA	10
ANNEXURE 2: LIST OF PARTICIPANTS	13

## **ACRONYMS AND ABBREVIATIONS**

APCCF Additional Principal Chief Conservator of Forests

DCF Deputy Conservator of Forests
Forest-PLUS Partnership for Land Use Science
GIS Geographic Information System
IISc Indian Institute of Science
KFD Karnataka Forest Department

MoEF Ministry of Environment and Forests MRV Monitoring, Reporting, and Verification

MSU Michigan State University
NRM Natural Resource Management

PCCF Principal Chief Conservator of Forests

REDD Reducing Emissions from Deforestation and Forest Degradation

USAID United States Agency for International Development

## **REPORT**

#### INTRODUCTION TO FOREST-PLUS PROGRAM

The Partnership for Land Use Science (Forest-PLUS) Technical Assistance Program is a five-year USAID-funded program to reduce emissions and enhance carbon sequestration through India's forests by taking REDD+ actions to scale. Working in close collaboration with MoEF and State Forest Departments, the Forest-PLUS Program will assist in developing and deploying scientific tools and methods for improved ecosystem management and carbon sequestration, forest carbon inventory and reference baselines; designing modalities/ programs for providing better incentives to forest dependent communities for promoting REDD+ activities; and enhancing human and institutional capacity.

#### BACKGROUND OF THE WORKSHOP

REDD+ is an evolving concept at the international level and several issues are presently under debate and discussion at both the international and national level. Given this evolving process, communication is more important than ever to instill transparency within the development of REDD+ related decisions and policies. It is important that the concerns of forest dwelling, forest fringe communities and other stakeholders are adequately addressed. There is also a need to channel information flows to the public and private sectors, donor and NGOs regarding REDD+, specifically its environmental, social, economic benefits. This dialogue is of critical importance as REDD+ and the prospect of a future carbon market, provokes many emotions – fear, opportunism and confusion. As part of this task, a workshop on Emerging issues in REDD+ was organized on October 23, 2013 in collaboration with Ministry of Environment and Forests, Government of India at Shimla.

The specific objectives of the workshop were:

- 1. facilitate dialogue and raise awareness about REDD+ issues among key stakeholders
- 2. share the current international and national thinking on REDD+ and related issues and seek feedback
- 3. solicit inputs for the proposed/planned national REDD+ strategy/architecture

#### PARTICIPANTS IN THE CONSULTATION

The participants of the consultation included representatives from the Himachal Pradesh Forest Department (MPFD), NGOs, Academic institutions, Media and the Forest-PLUS team including experts from InsPIRE Network for Environment, Iora Ecological Solutions (IORA) and representatives from USAID/India. Refer Annexure 2 for the list of participants, as documented in the registration sheet.

#### PROCEEDINGS OF THE CONSULTATION

Based on an agenda (Annexure 1) the proceedings of the workshop were carried out. The consultation featured an inaugural session followed by two technical sessions and a concluding session.

#### **Inaugural session**

Dr. Gina Green, Interim Chief of Party, Forest-PLUS Program, welcomed the chief guests, speakers and the delegates to the workshop and briefed them on the workshop and its objectives. se stated that climate change is a reality and all of us have to work to mitigate and adapt to this change. All sectors of economy including forestry sector have initiated efforts to address to climate change. She emphasized on current and projected impacts of climate change on the planet and role of the forest towards climate change mitigation and adaptation.

Mr. Varghese Paul, Senior Forestry Advisor, USAID, briefly explained the Forest PLUS Program. In September 2010, Partnership Agreement on Sustainable Forests and Climate Adaptation signed between Government of India and the United States of America gave rise to Five-year technical assistance program (Forest-PLUS) nested under this partnership agreement. With the objective of developing improved tools, methods and approaches developed and deployed for taking REDD+ actions to scale, Forest-PLUS will work closely with MoEF, State Forest Departments and communities to support REDD+ activities. He informed that Forest PLUS Program should be treated as an capacity enhancement program rather than field implementation program. He informed that objective of the developing various tools and techniques in this program was to strengthen Green India Mission initiative of Government of India. This program would feed into Green India Missions initiatives. Highlighting outcome of the program he told that tools and techniques developed as program deliverable would be piloted and scaled up in state and country.

Mr. Ishwar Singh, CCF, Regional office, MoEF, Chandigarh spoke on REDD+ in India. He highlighted the importance of forests in climate change mitigation. He informed audience that in Conferences of Parties (COP) widely debated issues were conservation of forest, emission level, and sustainable management of forest and enhancement of carbon stock. He explained how India took lead in framing broader guidelines for forest management and strengthening policy intuitional framework because it was already having mechanism like joint forest management, community forestry and forest policy. Measurement of carbon stock has now become central stage in various workshops and conferences organized by IPCCC or UNFCCC. MoEF is now looking forward to prepare a national level reference map for carbon stock and that will provide us bargaining/negotiating tools or strengthen India's position in qualifying for getting incentive from developed countries for forest and biodiversity conservation work. He stressed upon the need to develop mechanism for free and seamless flow of benefit to the main stakeholder. He also emphasized on dovetailing of all forestry development activities, all relevant data need to be clubbed together and presented at national level.

Dr. R.K. Gupta, Principal Chief Conservator of Forests and Head of Forest Force, Himachal Pradesh presented the key note address. He congratulated the organizers of the workshop for bringing Policy formulator, policy implementation wings of government, University/researchers, International donor agency and NGO at one platform to discuss a very challenging global issue i.e. climate change. He described this even as a rare occasion for the state. He described his association with three internationally funded projects in 19080, 1990s and 2000s. GIZ supported Changer project, World Bank supported Kandi project and DFID supported forest sector reform project. Comparing key objectives he told that there may be different outputs but goal all projects was to arrest forest degradation in the State. In all projects the objective was to reduce biomass losses due to forest degradation but climate change was not in the focus. In past decade HP has observed erratic rainfall, melting of glaciers, inconsistent snowfall. He insisted that for effective implementation of innovative project in forestry and natural resource sector we must have a policy framework/perspective to conserve forest and enhance carbon stock. He expressed confidence in Forest Plus Program that all the outputs would lead to improvement of forest management in the state and after withdrawal of the program it would remain sustainable. He concluded his address by advocating a strong policy to institutionalize the tools and techniques developed in the program to be an integral part of forest management.

Mr. Tarun Sridhar, Principal Secretary (Forests), Government of Himachal Pradesh presented the inaugural address. Explaining the basic concept of REDD+ he quoted one report from Economist that if there would be a third world war, then that would be for water. He cited example of China how that nation is building mega project for conservation of water. He cited a report that China has 20% of world population but it has only 7% of total water available in the world. Thus there is huge difference in supply and demand. He also said that the Prime Minister council for climate change has also come with a report and charted challenges before nation. Mr. Sridhar requested the Forest Plus team to address some of the challenges by developing relevant tools and techniques to address the environmental issues. Talking about is experience as policy maker he told that there is very little/meager information, knowledge available at various level and thus we need to aware all stakeholders about global challenges and issues like climate change. He also told that there are various programs and schemes in the country/states but all the running in isolation and that time has gone for general statements; we must start working on specific and tangible outputs. He insisted that Forest-Plus Program must show exemplary results which could be scaled up. We must come out of isolation and involve community in all development process.

Dr. V. Dakshinamurthy, Communications Specialist, Forest-PLUS Program proposed the vote of thanks at the end of the inaugural session.

#### **Technical session 1**

The first technical session was Chaired by Mr. A.K Singh APCCF, Madhya Pradesh Forest Department and Mr. Soumtri Das, Forestry Specialist, USAID made a presentation on introduction to Climate change and Forestry. In his presentation Mr. Das briefed the participants about the implication of climate change on forestry. He spoke about the change in forest scenario at world level in different parts of the globe. He raised his concern over the alarming figures of deforestation reported in Global Forest Resource Assessment, 2010. As per the report gross annual global deforestation is 13 million ha/yr and net loss/deforestation (2000-2010) is 5.2 million ha/. He explained the role played by the forest as sinks, sources and reservoir of carbon. He also raised his concern over the fact that the maximum carbon dioxide emission is through forest deforestation and degradation. He then briefed about the objectives and provisions of United Nations Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol. He remarked that these international conventions failed to address the concerns of forestry sector. He gave some light on the emergence of LULUCF and its issues. He also discussed the role of CDM, its potential and opportunity in Indian forestry sector. He highlighted the key features of Clean Development Mechanism (CDM), with a focus on Forestry CDM projects in India and the project cycle of CDM.

Mr. Varghese Paul, Senior Forestry Advisor, USAID made a presentation on Evolution of REDD+. In his presentation Mr. Varghese reported deforestation accounts for 18% of the GHG emissions which is greater than combined emissions from road, rail and ship transportation plus electricity/heat from commercial building. He raised his concern over the increasing rate of global deforestation. He briefed about the concept of REDD and REDD+ and its components. He raised his Concerns regarding inclusion of avoided deforestation in CDM. He highlighted to paragraph 1(b)(iii)] of Bali Action Plan(COP 13) which was later on changed in COP14 in Poznan, REDD became REDD+ in which besides Reducing emission from deforestation and degradation, conservation of forest carbon stocks sustainable management of forests and enhancement of forest carbon stocks were also integrated. He explained that the Cancun agreements (COP 16) require participating developing countries in REDD+ activities to develop:

- A national strategy or action plan
- A national forest reference level (Sub-national as an interim measure)
- A robust and transparent national forest monitoring system(NFMS)
- A system for providing information on safeguards (SIS) (Social and Environmental Safeguards (SES)

He also discussed about Doha and Durban negotiations. He also briefed about the support provided by World Bank UNDP, UNEP and FAO, governments of U.S., U.K., Norway, Australia, Germany and some private foundations for REDD+. He pointed out at some outstanding issues like definitions of key terms like forest degradation, sustainable management of forests, and conservation, further guidance on reference levels and monitoring systems MRV, modalities and guidance on different types of financing is required.

Mr. Swapan Mehra, CEO, Iora Ecological Services presented his views on the Carbon Markets. He addressed the carbon market as the largest market for ecosystem services worldwide, aiming to reduce GHG emissions and global warming. He also explained the different kinds of markets namely the regulatory and voluntary markets. The eligible project types for these markets include renewable energy, energy efficiency, industrial gas abatement and carbon sequestration. The basis of carbon market, cap and trade mechanism was explained. Maps on the existence of global carbon markets, the buyers and project types were presented. He also presented the changing trends in the carbon market and emphasized on the voluntary carbon market where the offset emissions are based in the absence of regulatory goals. The main drivers for voluntary targets will include the corporate environmental responsibility and precompliance, which will drive corporate energy efficiency agenda.

Mr. E. Vikram, Deputy Conservator of Forests, Green India Mission, Government of Himachal Pradesh, presented the vulnerability assessment of forested landscapes to climate change. Based on the broad geography the landscapes are classified into North Western Himalaya, Western Himalaya, Trans-Himalaya and the Shiwaliks. Also broadly on the watershed operational units are demarcated with an area of around 5000- 10000 Hectares in the landscapes. Also at level three, the landscapes are further mapped having 500 hectares and these areas are framed for investment where participative managed Forest areas involving JFM Committees for Soil and Water Conservation, plantations and other activities are carried out within the landscape. The landscapes are identified in two stages where eEffective use of available information for decision making through GIS is carried out and Validation through Expert appraisals and field visits. He also commented on the Landscape Importance Index. Though the assessment, the disturbance index, degree of fragmentation, scheduled areas, degradation status, per capita forest cover availability, decadal change and its percentage of scrub and open forests were presented. Based on these factors maps were presented showing highly, moderately and least vulnerable areas within the landscapes. On concluding the vulnerability assessment he also flagged important issues on the opportunity costs for conservation or avoiding Deforestation/Degradation, how Market based mechanisms can jeopardize the whole opportunity and the cost of carbon conserved Vs cost of carbon sequestered. He also raised his concerns on going beyond forests - opportunities outside the natural forest for REDD+ and the agro forestry options for carbon harvested wood.

#### **Technical session 2**

Dr. R.D Jakati Forestry and Natural Resource Management Technical Advisor, Forest-PLUS Program made a presentation on Forest Management & REDD+. He started his presentation briefly explaining REDD+ and emphasized the importance of forests in addressing the issues of climate change. He explained the need for active forest management at the optimum stocking level which is necessary for maximum carbon sequestration. He also explained the various mitigation and adaptation strategies to combat the changes in climate change relate issues. He raised his concern about the forecast given by Indian Institute of Tropical Meteorology at Pune about the impact of temperature rise in the Central India and other parts of the country. The assessment shows that 45% of the forested grids (of the country) are

vulnerable with higher concentration in upper Himalayan stretches, parts of central India, northern Western Ghats etc. He also quoted the NATCOM report suggests that sub-alpine and alpine forests, the Himalayan dry forests, and the Himalayan moist temperate forests are susceptible to the adverse effects of climate change. Test run studies on teak and sal trees have indicated that there would be a net increase in primary productivity with increase in temperature and rainfall but this would lead to a die-back with the induced stress to nutrient availability. He also presented the findings on the carbon content with specific reference to Kotgarh division, sub-tropical pine forests. From his studies, he commented that as per FSI report, ISFR 2011, 44.98% of the forest cover in HP is Montane moist temperate forest, while 22.27% forests is sub-tropical pine. Also in going from open to moderately dense category in case of Montane temperate moist forest the total carbon increases from 85.88 t/ha to 156.24 t/ha i.e. the gain is of 70.36 t / ha while the gain in going from moderately dense to very dense 156.24 to 176.42 is 20.18t/ha is only. He also explained a different situation in case of sub-tropical pine forests. The gain in going from open to moderately dense forest is (70.21 to 78.18 t / ha) 7.97 t /ha while the gain in going from moderately dense forest to very dense forest (78.18 to 155.76) is 77.58 t/ha. This indicates that from carbon/climate change perspective, as a strategy we first need to make efforts to restock our moderate dense forest of sub-tropical pine to become very dense forest, and then open forests of montane temperate moist forests to become moderately dense. This has direct linkage to GIM – maximizing carbon benefits with reference to investment.

Mr. A.K. Lal, Executive Director, Middle Himalayas Watershed Management Project shared his experiences with the Bio-carbon funded CDM Project in Himachal Pradesh. He explained that the bio-carbon project is the first of its kind in India involving government lands (forest /community) as well as private land integrating watershed development and livelihood. Also this is a first pilot to test community benefit sharing mechanism through Carbon Markets involving government agencies and local institution. He shared the milestone of the project starting from September 2006 to October 2013 highlighting the progress of the project intervention with reference to development and approval of PDD, Validation carbon stock sampling etc. The guiding principles for the Bio-carbon were to identify Native and local Species and involve communities in reforestation efforts. The carbon revenue from the project will go to communities as incentive to protect Forests/ Watersheds. He commented that simplification of PIN (Project Idea Note), proposal writing and approval of PDD is prime importance towards sustainability of the project. The need for building up in-house capacity is of utmost importance, because in their CDM process there was high degree of dependency of external consultants. He shared his concerns on the marketability of carbon stock, as the market is highly volatile. Sharing his experience on bottom to up approach, he shared common points in CDM and REDD+ challenges in implementation stage.

Dr. Sushil Saigal, Institutional Development and Governance Advisor, Forest-PLUS Program set the stage for discussion on the theme Opportunities and Challenges in REDD+.

In his presentation Dr. Saigal briefed about the basics and background of REDD+. REDD means Reducing reduction through Deforestation and Degradation and + implies to conservation of forest, sustainable management and enhancement of carbon stocks. He explained that 23% of tropical forests have the potential to address the climate change mitigation out of 25% of total type of forests in world. He discussed about the REDD+ activities with examples of Brazil and Indonesia. He remarked that REDD+

has put forestry and combating deforestation and forest degradation on the global agenda. He remarked that deforestation and degradation constitutes maximum amount of green house in the atmosphere. He said that in comparison to afforestation reducing deforestation is a low cost option and its impact is more effective than afforestation. He also discussed about some important global initiatives taken like forest carbon partnership facility, UN REDD, climate initiatives strategic fund, United States (e.g. Forest-PLUS), Norway's International Climate and Forest Initiative. He remarked that REDD+ has given recognition to the forestry sector as critical for achieving the goal of keeping global average temperature rise below 20 (450 ppm of CO2). He further said that opportunities in India are very much different from countries such as Brazil and Indonesia. He also lighted on the opportunities and implication of REDD+ in India. He further remarked that REDD+ has given more power to the community. In India the key challenges is increased livelihood dependence in the forest, nearly 854 million people still use fuelwood for cooking or heating; and 1/4th of them collect it from the forests. There is need to strengthen and establish the grass root institutions, JFM-panchayat linkages and harmonization of with other initiatives such as Forest Rights Act, MGNREGA and NRLM.

Open house discussion was chaired by Dr. Sanjeeva Pandey, APCCF, HP Forest Department and Dr. Jakati, Forest-PLUS. Discussions on suitable approach for forest management for HP was discussed. Mr. Ajay Kumar shared his concerns that while preparing working plans district wise strategy can be followed because community involvement will be mandatory. Working plan code needs to be modified or institutionalized by state. Once that approach is adopted forest department would able to mobilize fund from various sources. Dr. Lal Singh questioned how REDD+ will not interfere in demand delivery of resource and services. Also how reduction in subsidy in LGP would impact on fuel wood requirements, if that not going to increase burden on forest. Is quantifying everything would not lead to over exploitation of resources like timber, water, medicinal herbs. Dr Jakati explained that there is no compulsion in REDD+ to put any restriction, nationally appropriated Management strategies would be adopted to balance community requirement. There are already exemptions incorporated in to community for rights and privileges given to community like collection of fuelwood, fodder, NTFP collection. They can keep on doing. NAMAS are directive guidelines and these can be amended to suit local conditions.

There were discussions of carbon focuses approach on REDD+ and co benefits, Eligible activities under REDD+ and safeguard measures. The need for identifying financing source and creating pool of resources was discussed.

There was a question from one of the participant as how to address biodiversity, wild life, and livelihood issues in REDD+ because there is separate acts and statutory provisions. Since, FDA is already working with JFMC and by same way biodiversity management committee can work, there is need to explore mechanism to address in this issue. Mr. Paul Varghese, USAID, responded that REDD+ does advocate for creation of new institution and support existing institutions. Old and existing institution can be part of the REDD+ even gram sabha and panchayats can be part of the program. Answering to a question on close to nature forestry system, Dr. Jakati responded that close to nature system is old system originated in 1975. There are ample literatures on close to nature forestry system. It is also call near to nature forestry, Switzerland forest has mostly converted to this system. It is based on assumption that if forest is managed selectively then site factor goes down. In country this system has not been followed, HP or UK can take lead in to this system. Scientific evidence is required to prove outcomes. Research plots need to

be managed carefully for come with scientific data for FRI. REDD+ is big opportunity to bring scientific forestry in fore front along with community forestry.

HP need more research on scientific forestry to arrive that better system. Since cost of extraction has increased therefore felling is now become unsustainable in the many areas.

Mr. Soumitri Das, Forestry Specialist, USAID/India proposed the vote of thanks.

#### **OUTCOME OF THE CONSULTATION**

- The workshop created a platform towards facilitating dialogues at state level, establishing communication between the Government and the stakeholders on climate change and REDD+ issues.
- The workshop gave the participants a very detailed insight into the status of REDD+ and related issues from the national and international perspectives which will be of great help to build REDD+ initiatives in the state.
- Broader understanding on carbon centric forest management and increase in the level of awareness on climate change and REDD+ related issues
- Participation of more than 50 with an array of officers from Himachal Pradesh, Haryana Forest Department, Academic institutions, Research organizations, NGOs and Media.
- In general, participants appreciated the workshop as an effective means of building the knowledge gap and awareness on REDD+ and also remarked that the presentations were excellent.
- The need for convergence with various stakeholders and inter-sectoral participation was ensured.

## **ANNEXURE 1: AGENDA**





## Forest-PLUS Partnership for Land Use Science

#### State-level Workshop

on

## **Emerging issues in REDD+**

Venue: Hotel Holiday Home, Shimla

#### **AGENDA**

Time	Topic/Speaker	
9:30am – 10:00am	Registration	
10:00am – 10:05am	Welcome  Dr. Gina Green, Interim Chief of Party, Forest-PLUS	
10:05am – 10:15am	Introduction to Forest-PLUS Program  Mr. Varghese Paul, Senior Forestry Advisor, USAID	
10:15am – 10:25am	REDD+ in India  Mr. Ishwar Singh, Chief Conservator of Forests, Regional Office of MoEF, Chandigarh, Government of India	
10:25am – 10:40am	Keynote Address  Mr. R. K. Gupta, Principal Chief Conservator of Forests, Himachal Pradesh	
10:40am – 10:55am	Inaugural Address  Mr. Tarun Shridhar, Principal Secretary (Forests), Government of Himachal Pradesh	
10:55am – 11:00am	Vote of Thanks Dr. V. Dakshinamurthy, Communications Specialist, Forest-PLUS Program	

	Tea / Coffee	
	Technical session 1	
11:00am - 11:30am	Introduction to Climate Change & Forestry  Mr. Soumitri Das, Forestry Specialist, USAID	
11:30am – 12:00pm	Evolution of REDD+  Mr. Varghese Paul, Senior Forestry Advisor, USAID	
12:00am – 12:30pm	Carbon Markets  Mr. Swapan Mehra, CEO, Iora Ecological Solutions	
12:30am – 1:00pm	Climate Vulnerability Assessment of Forest landscapes in Himachal Pradesh Mr. E. Vikram, Deputy Conservator of Forests, Green India Mission, HP.	
1:00pm – 2:00pm	Lunch	
	Technical session 2	
2:00pm – 2:30 pm	Ecosystem Management and REDD+  Dr. R. D. Jakati, Forestry and Natural Resources Management Technical Advisor, Forest-PLUS Program	
2:30pm – 3:00 pm	Experiences with the Bio-carbon funded CDM Project in HP  Mr. A.K. Lal, Executive Director, Middle Himalayas Watershed Management Project	
3:00pm – 3:45pm		
3:00pm – 3:45pm 3:45pm – 4:15pm	Project  REDD+ Opportunities and Challenges  Dr. Sushil Saigal, Institutional Development and Governance Advisor, Forest-	
	Project  REDD+ Opportunities and Challenges  Dr. Sushil Saigal, Institutional Development and Governance Advisor, Forest-PLUS Program  Open House Discussions	

## **ANNEXURE 2: LIST OF PARTICIPANTS**

S. NO	Name	Organization
1	Dr. Hemant Gupta	State Council for Science and Technology, Shimla
2	Dr. Gina Green	Forest-PLUS
3	Ashish Raj	Forest PLUS
4	Varghese Paul	Sr. Forestry Advisor, USAID
5	Swapan Mehra	CEO, IORA
6.	Dr. RD Jakati	Forest PLUS
7.	Dr. Sandeep Gupta	Director of Animal Husbandry, Shimla
8.	Anish Sharma	Himachal Pradesh Forest Department
9.	Arvind Kumar, APCCF	Himachal Pradesh Forest Department
10.	Stephan Marchal, RD Consultant	Bio Diversity Tourism, Community Advancement, Banjar Kullu, HP
11.	Gopal Krishan, Director	Bio Diversity Tourism, Community Advancement, Banjar Kullu, HP
12.	M.P Vashisht, Community & Forestry Expert	Himachal Pradesh, Eco Dev Society, Palampur
13.	Dr. Lal Singh, Director	Himalyan Research, Umesh Bhavan, Chotta Shimla

14.	Dr. Sushil Kapta Sp. Secretary	HP Forest Department
15.	Dr. Prabal	Dev. Officer, DOH, Shimla
16.	Kishorilal FR	RFO Nedher, Ani Forest Division at Luhri
17.	Sanjeeva Pandey	HPFD, Mist Chamba, Khalini, Shimla
18.	Amit Rana	GIS Cell, H.PForest, Khalini
20.	Bikram Singh	I/C GIS Cell, Forest
21.	A.K Lal	HP Mid Himalaya Watershed Development, HP Forest Deptt
22.	Ajay Kumar, APCCF (FCA)	HP Forest Department
23.	S.S Negi	Director Environment Science & Technology
24.	Rajneesh Kumar	HP Forest Dept. GIS Cell
25.	Dr. Ompal Sharma	Forest, , Division ACF
26.	M.L Rajvanshi	Haryana Forest Deptt., C-18, Sector 6, Van Bhawan, Panchkula
27.	Amit Sharma, D.F.O	HP Forest Department
28.	Parveen Thakur, DFO	HP Forest Department
29.	E.Vikram, DCF	HP Forest Department
30.	Rajiv Kumar, CCF	HP Forest Department
31.	Ishwar Singh, CF	Ministry of Environment & Forest
32.	Chander Bhushan, ACF	HP Forest Department

33.	Arti Gupta, Coordinator	WWF India
34.	R.K Gupta, PCCF (HOF)	HP Forest Department
35.	C.B Pandey, CCF	HP Forest Department
36.	Dr. Lalit Mohan, PCCF(W)	HP Forest Department
37.	Brinder Kaur	Forest-PLUS
38.	Dr. N.Nanda, Addl. CCF (LR),	HP Forest Department
39.	Ravi Sharma, Sr. Scientific Astt.,	SCSTE, Shimla
40.	Surinder Kumar, APCCF	HP Forest Department
41.	Archana Sharma, CCF	HP Forest Department
42.	S.K Sharma ED	PSFDC, Shimla
43.	Dr. S.S Randhawa	State Centre on Climate Change (SCSTE)
44.	Manoj Thakur	State Centre on Climate Change (SCSTE)
45.	Sushil Saigal	IDGA, Forest PLUS Program
46.	Karamchand Azad	Dept. Of Horticulture, Shimla
47.	D.P Sinha, APCCF	HP Forest Dept., Talland, Shimla
48.	Dr. P. Kaushal, Director	University of Horticulture, Solan
49.	Dr. V.R.R Singh	Director HFRE, Shimla
50	L.R Harnot, ACF	HP Forest Department

51	Prashant Gautam, GIS Sr. Scientific Professional	GIS Cell, H.P Forest Dept.
52	Abhimanyu Pandey, Independent Research	Forest Colony, Khalini, Shimla
53	Sanjay Sood, CF	HP Forest Department
54	Dr. V. Dakshinamurthy,	Forest-PLUS

### U.S. Agency for International Development / India

American Embassy
Shantipath, Chanakyapuri
New Delhi 110 021

Tel: +91-11-2419-8000 Fax: +91-11-2419-8612 www.usaid.gov/in