

PARTNERSHIP FOR LAND USE SCIENCE (Forest-PLUS) PROGRAM

Report

Training program on Climate Change, Greenhouse Gas Inventories, Vulnerability, Mitigation and Adaptation analysis

September 24-25, 2013

Itarsi, Madhya Pradesh



September 2013

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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.

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ACRONYMS AND ABBREVIATIONS

DCF	Deputy Conservator of Forests
Forest-PLUS	Partnership for Land Use Science
GCC	Global Climate Change
GHG	Greenhouse Gas
JFMC	Joint Forest Management Committees
MPFD	Madhya Pradesh Forest Department
NTFP	Non-Timber Forest Produces
REDD	Reducing Emission from Deforestation and forest Degradation
USAID	United States Agency for International Development
VFC	Village Forest Committee

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REPORT

1. 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 in India's forests by developing and testing effective ways to take REDD+ actions to scale. Working in close collaboration with MoEF and State Forest Departments, Forest-PLUS 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 to create better incentives for forest dependent communities to participate in REDD+ activities, and enhancing individual and institutional REDD+ capacity.

2. BACKGROUND OF THE TRAINING PROGRAM

This was the second basic course on 'Climate Change, Greenhouse Gas Inventories, Vulnerability, Mitigation and Adaptation' organized for frontline officials of Hoshangabad circle of Madhya Pradesh Forest Department. This two-day training program was conducted on September 24-25th, 2013 at Platinum Resort & Garden, Itarsi, Madhya Pradesh. Forest-PLUS designed the course mainly for Deputy Range Officers, Foresters, and Forest Guards of Madhya Pradesh Forest Department. Presentations were prepared to be relevant in the Madhya Pradesh context. This training program is an output of and contributes to Forest-PLUS Activity 2.3.2, which is focused on building capacity on climate change issues, in this case within the State Forestry Departments of Forest-PLUS' pilot landscape states.

3. PARTICIPANTS IN THE TRAINING PROGRAM

A summary of the participants (see Annex 2 for details) who attended this two days training program are as follows:

Sr No	Particular	Female	Male	Total
1.	Range Forest Officer	0	2	2
2.	Deputy Range Forest Officer	0	6	6
3.	Forest Guard	3	35	38
4.	Senior officials	0	1	1
5.	Total	3	44	47

4. PROCEEDINGS OF THE TRAINING PROGRAM

Day 1, September 24th, 2013

4.1. Inaugural session

The training program started with a general welcome to participants. Mr. Sandeep Khanwalkar, Forest-PLUS Training Coordinator, briefed participants about Forest-PLUS and the objectives of the training program. Dr. Ajay Shankar, Chief Conservator of Forests and special guest to the inaugural function, then spoke about climate change, how the Madhya Pradesh Forest Department is addressing it, and how the Department is collaborating with Forest-PLUS to build the capacity of the Department's field functionaries to understand and address climate change issues. Mr. Krishna Murthy, Chief Conservator of Forests, Hoshangabad circle, then formally inaugurated the training program. He also welcomed all resource persons and the Forest-PLUS team. He explained briefly about Forest-PLUS and the Department's expectations for the training program. He expressed the hope that such types of training programs should be organized for field staff on regular basis so that their knowledge can be enhanced. Mr. Soumitri Das, Forestry Specialist, United States Agency for International Development (USAID), India office spoke about the objectives of Forest-PLUS and elaborated the activities it will carry out.



Photo 1: Inaugural speech by Mr Krishna Murthy, CCF, Hoshangabad Circle

4.2. What is Forest-PLUS- an overview

The objective of this session, facilitated by Mr. Soumitri Das of USAID, was to build awareness among participants about Forest-PLUS and the basic concepts of REDD and REDD+ that Forest-PLUS is promoting in India. By the end of this session participants were familiar with Forest-PLUS, the potential importance of REDD+ in mitigating GHG emissions, and its application in the Indian context. Mr. Das paid particular attention to clarifying the importance and significance of the "+" part of "REDD+" in the Forest-PLUS program.



Photo 2: Mr Soumitri Das presenting REDD+ concepts and Forest-PLUS

4.3. Module 1: We and our environment

Session One: Understanding environment and its components

Mr. Rishu Garg, Senior Program Officer, Inspire Network for Environment, New Delhi, facilitated this session, which covered the basic components and dynamics of our environment. He used an interactive adult learning approach that made the session lively, with much participation from his listeners. Mr. Garg used local examples to make his points in a way that was easy for his audience to understand.

4.4. Module 2: Global Climate Change

Session One:

This session covered the following topics:

- Our changing environment natural causes
- Our changing environment role of humans
- Basic concepts and facts about Global Climate Change

Prof. Bhaskar Sinha of Indian Institute of Forest Management, Bhopal facilitated the session. His presentation explained the basic concepts of climate change and gave data that showed the various effects of climate change across the globe. Prof. Sinha was particularly careful to clarify the difference between weather and climate. The session generated much interest and clearly helped the participants understand the extent of the climate change that has already occurred and its natural and human causes.

Session 2:

This session was a screening of a short film on Global Climate Change in English named 'Our Beautiful Planet' and 'Watch This Before You Vote'.

Session 3: Open discussion:

This session gave participants an opportunity to pose questions freely and get answers on climate change issues and concerns. The result was another lively interactive session that helped participants to learn more about the subject.

4.5. Group work

Session 1: Group work

This session was shifted from day two to day one because one critical resource person was unavoidably delayed in joining the training. Module three was shifted to the next day. In the group work session participants were separated into smaller groups and asked to discuss and answer four questions with reference to their area of operation. Each group was asked to prepare a presentation for a plenary session based on their discussions.

The questions were as follows:

- 1. How do you think climate change is affecting life in your working area?
- 2. What are the changes you see in the livelihoods of forest dependent communities due to changes in forest quality/degradation?
- 3. Who are most affected by climate change or forest degradation in your working area and how can we help or assist them?
- 4. What are your suggestions to address climate change issues, reduce forest degradation and deforestation, and change the patterns of forest land use degrading forest quality?

Group work presentations:

Group one: The group discussed current changes in their area and presented specific points for each question.

Question 1:

- Increases in both day and night temperatures have changed people's life styles. Earlier natural air or hand fans were sufficient in summer but now people need electric fans, coolers, and air conditioners in summer.
- Changes in temperature have also changed cropping practices. Earlier farmers used to grow a variety
 of crops like cotton, pigeon pea, sorghum, pearl millets etc. Now farmers only grow wheat in large
 areas as single winter crop.
- Earlier there were perennial rivers and drinking water was not an issue. Now rivers are seasonal, ground water levels are down and most of the area is facing problems with safe drinking water.
- Earlier most farmers used compost in their fields. Farmers maintained many animals, which gave them good quantitates of compost. Applying compost in fields was an employment opportunity for poor people.



Photo 3: Group work presentation by participant

Question 2:

- Reduction in forest area has reduced employment opportunities in forest dependent communities. Production of forest produces like bamboo, mahua, gum, amla and other NTFP are now drastically reduced. People who were earlier dependent on NTFP collection and sale are now forced to look elsewhere for work that is not easily available locally.
- The availability of fuel wood from forests is reduced.
- The ultimate result is emigration from the area.

Question 3:

- Local people are most affected.
- Self-employment livelihoods, like fisheries and sericulture, needs to be promoted.

Question 4:

- More and more plantations in the region
- Ban on illegal felling
- Increase water table
- Promote organic farming
- Increase awareness about forest
- Reduce political pressure
- Control population growth

Dr. Ajay Shankar closed Day 1 with a summary of the day's training sessions and a discussion with participants of what they learnt.



Photo: 4 Dr. Ajay Shankar discussing with participants the day's training

Day Two: July 10, 2013

4.6. Recap of day one

Day 2 started with recap of the first day of training. Participants were asked to answer two questions:

- What had they learnt on Day 1 about Climate Change?
- What topics need more clarity?

Participants' summary of Day 1 learning:

- 1. The difference between climate and weather.
- 2. The extent of the earth's increase in temperature.
- 3. Clarity about natural and human drivers of climate change.
- 4. Appreciation of how climate change is adversely affecting the environment.
- 5. How much oxygen we get from trees in daytime and how much carbon dioxide it absorbs from the atmosphere.
- 6. Causes of climate change and what we have to do to reduce its impact in future.
- 7. How deforestation is related to climate change and what we need to do for that.
- 8. The relationship between climate change and extreme weather event in the world.
- 9. How greenhouse gas emissions are warming the earth and their impact in our life and environment.

Summary of about what participants wanted more clarity:

- 1. How we can control the rise in global temperature.
- 2. How we can conserve our environment at local level.
- 3. How to keep balance between environment and human requirements.
- 4. What else is required to control climate change other than forest conservation?

Most of the participants wanted to learn more about climate change adaptation and mitigation in their local context. One conclusion is a need to prepare local action plans to involve communities and other local stakeholders.

Group work presentations (continued from Day 1):

Group two:

Question 1:

- Global temperature is increasing and affecting our daily routine
- Availability of safe drinking water is reduced.
- Reduction in NTFPs is directly affecting incomes of forest dependent communities
- Increase in seasonal diseases
- Reduction in fodder availability increases the cost of animal rearing and reduces income
- Quality of agriculture produce adversely affected, its area and productivity also reduced. As a result overall income from agriculture also reduced.
- Reduced income from agriculture and forest leading to increased emigration from villages to urban area. This has created problems of slums and crowding in urban areas and people are forced to live inhuman life.

Question 2:

- Timber, fuel wood, and bamboo production reduced therefore employment opportunities of forest dependent communities is also reduced
- NTFPs like Tendu leafs, harrah (*Terminalia chebula*), bahera (*Terminalia bellirica*), amla (*emblic myrobalan*), kullu, and dhawada gum production reduced locally and this has reduced income of NTFP collecting community.
- Production from medicinal plants is also reduced.

Question 3:

- Provide loan to local people for self-employment through Joint Forest Management committees
- Promote employment activities like basket making, rope making, bamboo crafts, silk production, leaf plate making, and also provide proper training through JFMC
- Proper implementation of government programs and schemes



Photo: 5 Group work in progress

Group three:

Question 1:

- Irregular rainfall reduced overall agriculture production in the area.
- Increase in overall temperature causes most of our water sources to dry up early and water levels also are down. This also increases occurrence of diseases in the animals and humans.

Question 2:

- Collection of Non-Timber Forest Produces (NTFP) reduced drastically due to forest degradation
- Crop production and individual estovers has been reduced at alarming rate

Question 3:

By adopting the following practices people can adapt to climate change:

- Providing employment opportunities to rural population with help of joint forest committees
- Developing volunteer association to help in generating employment opportunities like small scale bamboo crafts, cane furniture,
- Promoting various government schemes among the common people and helping to implement the schemes like Helping in getting the Farmer Credit card,

Question 4:

- By executing soil water conservation interventions
- Planting trees on degraded forest areas and taking good care of them and keeping them alive
- Planting medicinal plants
- Constructing check dams to protect soil erosion
- Conserving the soil (fertility) and level of ground water by constructing trenches.
- With the help of afforestation and reforestation

Group four:

Question 1: Following are the Climate Change impacts on human life:

- Natural disaster: because of flood: damage to crops because of heavy rainfall
- Loss of human, animal, wild life, economic losses, increase in death rate because of untimely death, decrease in low life span in humans, low productivity

Question 2:

- Decrease in minor forest products: amla (*emblic myrobalan*), mahua (*madhuka indica*) pickle, gum, tendu leaves collection
- Damage to crops by Deer, Spotted Deer, Pig
- Damage to human lives by wildlife: In our forest area, wildlife animals like Bear attack and cause injuries to human, because of this there is a decrease in the working capabilities and being the head of the family it has weakened their economic condition.

Question 3:

- By making them aware
- Small scale industry by providing employment opportunities
- Engaging them in forest activities to improve their economic condition
- Motivating to use organic compost as much as possible
- In our area baber grass is accumulated at one place and with the help of machines ropes are prepared which is used by Forest Department for the cutting of and it is send to different places as per the demand.
- Some of above mentioned activities forest dependent communities can be economically benefitted.

Question 4:

- Creating awareness among individual/community to develop interest towards forest protection and taking complete care of plants which are grown naturally
- Strict control on illegal grazing, harvesting, hunting, and mining
- Saving forest from fire
- Controlling industries based on forest and construction of houses using forest resources.

4.7. Module 3: Greenhouse Gases and their role in Global Climate Change

Session 1:

Mr. Rishu Garg facilitated this module. In its first session, he helped participants understand greenhouse gases, how they function, and what changes they bring to the environment if they stay long in the atmosphere. He explained the greenhouse gas effect with simple examples. Mr. Garg also covered the topic of GHG inventories.

Session 2:

A short film in English was shown to participants on greenhouse gas effect. The film was instrumental in bringing clarity about concept of greenhouse effect after the session.

Session 3:

The session was very helpful in clarifying question after presentation. Participants were concerned about how it is affecting their daily life and what they should do to address this issue. The session could generate fruitful discussion amongst the participants.



Photo 6: Participants in training program

4.8. Module 4: Forests and Climate Change

Session 1: Role of forests in Global Climate Change

Mr. Sandeep Khanwalkar, Training Coordinator, Forest-PLUS Program, New Delhi led this session. He discussed forests, their roles climate, what ecosystem services are, and how forest ecosystem services are important in our life. Specifically, Mr. Khanwalkar covered following issues in detail:

- What is an ecosystem and their various types
- Forest ecosystem services
- Forests in India: their status and trends
- Causes of forest degradation and its impacts on ecosystem services

Session 2:

The objective of this session was to generate a discussion about the importance of trees. and Dr. Ajay Shankar facilitated. Participants were able to raise questions on issues linked with their work in their operational area. Resource persons answered their questions in an open discussion.

4.9. Module 5: Addressing Global Climate Change - vulnerability, mitigation and adaptation

Session 1: Global Climate Change and our life and livelihoods–vulnerability at global, national and local scales

This was a crucial session in helping to understanding the link between climate change and livelihoods. This session was facilitated by Ms. Rajita Kurup from GIZ, Bhopal. During her presentation she discussed with participants climate change vulnerability and its various factors. Ms. Kurup covered the following subtopics in detail:

- Climate change and livelihood
- What is vulnerability and its factors
- Adaptive capacity to climate change

Session 2: Understanding Mitigation and Adaptation, International and national initiatives to address Global Climate Change, India's National Action Plan on Climate Change and eight missions, and Green India Mission

After establishing clarity on the conceptual issues of climate change in first four modules, this last session focused on how to address climate change issue at global, national, and state levels. Mr. Saransh Bajpayee from EPCO, Bhopal facilitated the session. In his presentation Mr. Bajpayee covered the following points:

- International Climate Change Policy Framework
- Intergovernmental Panel on Climate Change (IPCC)
- United Nations Framework Convention on Climate Change (UNFCCC)
- India's National Action Plan on Climate Change
- Eight National Mission on Climate Change
- Climate Change and Madhya Pradesh
- State Action plan on Climate Change

This session helped participants understand how to address climate change issues through what actions and how governments at national and state levels are planning to address climate change.



Photo 7: Mr. Saransh Bajpayee facilitating session

5. FEEDBACK SESSION:

The training program was well received by the participants. They acknowledged that it was the first training program for them on this issue. Conducting sessions in Hindi language greatly helped them understanding the technical concepts of global climate change, greenhouse gas emissions, and how these are related to everyday livelihoods and personal actions.

All participants were given a feedback form to record their assessment of the training. It was a bi-lingual feedback form so that participants not comfortable in English could give their feedback in Hindi. An analysis of the participants' feedback is given in the Annex 1.

6. VALEDICTORY SESSION

Two days of participatory interaction helped build bridges of common understanding with the trainees. The presence of two senior officials from Bhopal helped to strengthen the training environment and underscored the importance the Madhya Pradesh Forestry Department gives to training its frontline officers on climate change. The participation of Dr. Ajay Shankar greatly enriched the training event.

In his valedictory remarks, Dr. Shankar said such training events are very useful in building the capacity of our field functionaries and this will help to implement interventions to address

Suggestions from participants:

- More presentations in Hindi
- More discussion on Greenhouse Gas Emissions
- Increase number of such training events for field officials
- Organize such training events in every district
- Organize such training events for Joint Forest Management committee members
- Increase duration of training event and provide more reading material in simple language
- Organize follow up events for the same participants

climate change issues. With the help of Forest-PLUS, the Forest Department will build the capacity of its field team to implement activities under the Green India Mission. Mr. Rajeev Saxena, Technical Officer, Madhya Pradesh Forest Department, Bhopal said such training events brings much needed clarity at the field functionary level and such training events should be organized on regular basis in the future.

Mr. Sandeep Khanwalkar, Forest-PLUS Training Coordinator, expressed his gratitude to Mr. G. Krishanmurthy, CCF Hoshangabad, Dr. Ajai Sahnkar, CCF who were present throughout and to Ms. Rajeev Saxena and her office staff for their support and cooperation in making training program successful. Mr. Khanwalkar also thanked Mr. Soumitri Das of USAID who was present both days all resource persons who made this training event a successful. Finally, Mr. Khanwalkar acknowledged the support and cooperation from Forest-PLUS office staff.



Photo 8: Group Photo with participants and resource persons

ANNEX 1: AGENDA







Training program on

"Global Climate Change, Greenhouse Gas Inventories, Vulnerability, Mitigation and Adaptation" For frontline State Forest Department Officials

Program Schedule

Date : September 24-25, 2013

Time: 9:00 AM – 05:30 PM

Venue : Platinum Resort & Garden, Itarsi

Day One- September 24, 2013			
Time			
9:00 AM to 10:00 AM	Registration of participants		
10.00 AM to 10.15 AM	Introduction to the training course	Training coordinator	
10.15 AM to 10.25 AM	Inaugural address	Mr. G. Krishna Murthy	
		Chief Conservator of Forests,	
		Hoshangabad	
10.25 AM to 10.30 AM	Vote of thanks	Training coordinator	
10.30 AM to 11.30 AM	What is Forest-PLUS Program – an	Mr. Soumitri Das	
	overview	Forestry Specialist,	
		U.S. Agency for International	
		Development, New Delhi	
11.30 AM to 12.00 Noon	Tea break		
Module 1. We and our envir	onment		
12.00 AM to 01.00 AM	Session 1: Understanding environment	Mr. Rishu Garg	
	and its components	Senior Program Officer,	
		Inspire Network for	
		Environment, New Delhi	
1.00 PM to 2.00 PM	Lunch break		
Module 2. Global Climate C	0		
2.00 PM to 2.45 PM	Session 1:	Dr. Bhaskar Sinha	
	Our changing environment – natural	Assistant Professor,	
	causes	Indian Institute of Forest	
	Our changing environment – role of	Management, Bhopal	
	humans		
	Basic concepts and facts about global		
	climate change	4	
2.45 PM to 3.15 PM	Session 2: Screening of a short film on		
	Global Climate Change	-	
3.15 PM to 3.30 PM	Session 3: Open discussions		
3.30 PM to 4.00 PM	Tea break		

Day One- September 24, 2013			
Time	Session	Resource person	
Module 3. Greenhouse Gase	s and their role in Global Climate Change		
4.00 PM to 4.45 PM	Session 1:	Mr. Rishu Garg	
	Greenhouse effect, Greenhouse Gases and	Senior Program Officer,	
	their role in Global Climate Change,	Inspire Network for	
	Greenhouse Gas inventories	Environment, New Delhi	
4.45 PM to 5.15 PM	Session 2: Interactive exercise		
5.15 PM to 5.30 PM	Session 3: Open discussions		
	Day Two – September 25, 2013		
Time	Session	Resource person	
9.30 AM to 10.15 AM	Recap - Interactive session on	Training coordinator	
	recapitulation of key points from Day 1		
Module 4. Forests and Clim			
10.15 AM to 11.00 AM	Session 1: Role of forests in Global	Mr. Sandeep Khanwalkar	
	Climate Change	Training Coordinator	
11.00 AM to 11.30 AM	Tea break	Forest-PLUS Program	
11.30 AM to 12.15 PM	Session 2: Interactive group work	New Delhi	
12.15 PM to 12.45 PM	Session 3: Screening of short film on links		
	between forests and Global Climate		
	Change		
12.45 PM to 1.00 PM	Session 4: Open discussions		
1.00 PM to 2.00 PM	Lunch break		
	al Climate Change - vulnerability, mitigation		
2.00 PM to 2.45 PM	Session 1: Global Climate Change and our	Ms. Rajita Kurup	
	life and livelihoods-vulnerability at	GIZ, Bhopal	
	global, national and local scales		
2.45 PM to 3.15 PM	Session 2: Screening of a short film on		
	vulnerability to climate change	-	
3.15 PM to 3.30 PM	Session 3: Open discussions		
3.30 PM to 4.00 PM	Tea break		
4.00 PM to 4.45 PM	Session 4:	Mr. Saransh Bajpai	
	Understanding Mitigation and Adaptation	EPCO, Bhopal	
	International and national initiatives to		
	address Global Climate Change		
	India's National Action Plan on Climate		
	Change and eight missions		
	Green India Mission		
4.45 PM to 5.00 PM	Feedback session	Training coordinator	
5.00 PM to 5.30 PM	Valedictory session		

ANNEX 2: EVALUATION ANALYSIS

Session	Excellent	Very Good	Good	Average	Poor	Total
Module 1. We and our environment						
Session 1: Understanding environment and its components	17	23	2	0	0	42
Module 2. Global Climate Change	•					
Session 1:						
§ Our changing environment – natural causes	15	21	4	0	0	40
§ Our changing environment – role of humans	17	19	3	0	1	40
§ Basic concepts and facts about Global Climate Change	13	18	5	0	1	37
Session 2 : Screening of a short film on Global Climate Change	6	20	12	3	0	41
Module 3. Greenhouse Gases and their role	in Global Clir	nate Cha	nge			
Session 1:						
§ Greenhouse effect, Greenhouse Gases and their role in Global Climate Change	17	18	4	1	1	41
§ Greenhouse Gases Inventories	10	15	2	1	1	29
Session 2: Screening of Short Film	4	8	12	4	0	28
Module 4. Forests and Climate Change						
Session 1 : Role of forests in Global Climate Change	26	10	1	0	0	37
Session 2: Interactive group work	10	18	6	0	0	34
Session 3 : Screening of short film on links between forests and Global Climate Change	10	18	10	2	0	40
Module 5. Addressing Global Climate Change - vulnerability, mitigation and adaptation						
Session 1 : Global Climate Change and our life and livelihoods–vulnerability at global, national and local scales	14	20	3	2	2	41
Session 2 : Screening of a short film on vulnerability to climate change	6	17	10	4	0	37
Session 4:						
§ India's National Action Plan on Climate Change and eight missions	16	11	4	1	0	32

ANNEX 3: LIST OF PARTICIPANTS

Sr.	Name	Designation	Organization & Address	
No.				
1.	Senior officials from Forest Department			
2.	5		Madhya Pradesh Forest	
		Forests (JFM. FDA)	Department, Bhopal	
3.	Mr. Krishna Murthy	Chief Conservator of Forest	Hoshangabad	
4.	Mr. Rajiv Saxena	Technical Officer, Madhya	Madhya Pradesh Forest	
т.		Pradesh Forests	Department, Bhopal	
5.	Mr. S. S. Mehta	Assistant Conservator of	Hoshangabad Forest Circle,	
5.		Forests	Hoshangabad	
USA	ID & Forest-PLUS Program 7	Team		
6.	Mr. Soumitri Das	Forestry Specialist	USAID, New Delhi	
7.	Mr. Sandeep Khanwalkar	Training Coordinator	Forest PLUS Program, New	
			Delhi	
	Resource Person			
8.	Mr. Rishu Garg	Senior Program Officer	Inspire Network for Environment, New Delhi	
9.	Dr. Bhaskar Sinha	Asst. Professor	Indian Institute of Forest	
9.			Management, Bhopal	
10.	Mr. Shashidhar K.J	Subject Expert	Indian Institute of Forest	
10.			Management, Bhopal	
Parti	cipants			
Hosh	angabad Division			
11.	Mr. Harikaran Patel	Forest Range Officer	Sukhtava Range, Hoshangabad	
12.	Mr. Gyan Singh Rathore	Deputy Range Officer	Banapura Range	
13.	Mr. Keshav Prasad Tiwari	Deputy Range Officer	Forest Range Seoni,	
15.			Hoshangabad	
14.	Mr. Premlal Dhurve	Deputy Range Officer	Forest Range Itarsi,	
			Hoshangabad	
15.	Mr. Dhirendra Singh Thakur	Forest Gurad	Forest Range Hoshangabad	
16.	Mr. Rakesh Kumar Pradhan	Forest Guard	Forest Range Hoshangabad	
17.	Mr. Anil Kumar Malviya	Forest Guard	Forest Range Sohagpur	
18.	Mr. Mohit Sahu	Forest Guard,	Forest Range Sohagpur	
19.	Mr. Shyam Sundar	Forest Guard	Forest Range Sohagpur,	
	Srivasatava			
20.	Mr. Brijesh Pagare	Forest Gurad	Forest Range Beat Geetkheda,	
			Hoshangabad	
21.	Mr. Neeraj Srivas	Forest Guard- Sukhtava	Forest Range Hoshangabd	
<i>2</i> 1.		Range		
22.	Mr. Ram Gopal Verma	Forest Guard- Sukhtava	Forest Range Hoshangabad	
<i>LL</i> .		Range		

23.	Mr. O. P. Yadav	Forest Guard -Sukhtava Range	Forest Range Hoshangabad
24.	Mr. Chanderbhan Sharma	Forest Guard -Sukhtava Range	
25.	Mr. Munnalal Kaushal	Forest Guard – Tawa Buffer	Forest Range Hoshangabd
26.	Mr. Vijender Singh Raghuvanshi	Forest Guard	Forest Range Hoshangabd
27.	Mr. Amin Ahmed Qureshi	Forest Guard	Forest Range Seoni Malwa
28.	Mr. Bhurelal Mehar	Forest Guard	Forest Range Itarsi, Hoshangabad
29.	Ms. Jayshree Varte	Forest Guard	Forest Range Itarsi, Hoshangabad
30.	Ms. Suman Babaria	Forest Guard	Forest Range Itarsi, Hoshangabad
31.	Ms. Sunita Kadole	Forest Guard	Forest Range Itarsi, Hoshangabad
32.	Mr. R. R. Deewakar	Forest Guard	Tawa Buffer,
	Harda Division		
33.	Mr. Kamal Singh Thakur	Deputy Range Officer	Varepani, Regular Forest Division, Harda
34.	Mr. Ganesh Das Devda	Deputy Range Officer	Forest Division Harda -regular
35.	Mr. Santram Kalme	Forest Guard	Forest Range Temagao, Harda
36.	Mr. Hemant Kori	Forest Gurad	Forest Range Handia, Harda
37.	Mr. K. L. Mandlekar	Forest Guard	Forest Range Handia, Harda
38.	Mr. Vinod Kumar Kashiv	Forest Guard	Varepani, Regular Forest Division, Harda
39.	Mr. Vela Singh Mehta	Forest Guard	Forest Range, Rahatgaon, Harda
40.	Mr. Hari Om Jaganvar	Forest Guard	Forest Range, Rahatgaon, Harda
41.	Mr. Sabulal Dhurve	Forest Guard	Forest Division Harda -regular
42.	Mr. Narendra Kumar Barkut	Forest Guard	Forest Range Temagao, Harda Division
	Betul circle		
43.	Mr. Sunil Kumar Aslok	Forest Range Officer	Forest School, Betul
44.	Mr. Sunil Kumar Uike	Deputy Range Officer	South Betul, Forest Division Betul
45.	Mr. Narayan Chadhokar	Forest Guard	Forest Range Shahpur, Betul Division
46.	Mr. Rajesh Kumar Sirothia	Forest Guard	Bhaura Range, North Betul, Forest Division Betul
47.	Mr. Gulab Raj Goyane	Forest Guard	Bhaura Range, North Betul, Forest Division Betul
48.	Mr. Brijvasi Prasad	Forest Guard	Shahpur Forest Range, North

			Betul	
49.	Mr. Arjun Singh Barkhade	Forest Guard	South Betul Forest Division	
50.	Mr. Santosh Kumar	Forest Guard	Forest Range Chicholi, Forest	
	Deshmukh		Division Betul - West	
51.	Mr. T. R. Kori	Forest Guard	Vanapura Forest Range	
52.	Mr. Vikas Chaudhary	Forest Guard	Vanapura Forest Range	
	Satpura Tiger reserve			
53.	Mr. Rakesh Soni	Forest Guard,	Satpura, Tiger Reserve	
54.	Mr. Chanderpal Dhurve	Forest Guard	Satpura, Tiger Reserve	
			Hoshangabad	
55.	Mr. Dinesh Kumar Singh	Forest Guard	Satpura Tiger Reserve,	
			Hoshangabad	
56.	Mr. Amit Gupta	Forest Guard	Bahapura	

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