



# Himachal Pradesh Forest Ecosystem Services (HP-FES) Project

Project demonstration sites factsheets

# The Forest Ecosystem Services Approach

Forests provide people with numerous services and goods like fuelwood, timber, fodder, fruits etc. They provide a lot of other services like regulation of water flow, air purity and micro climate which benefit people in many ways. These goods and services are together termed as 'Ecosystem Services'. The ecosystem services derived from forests are known as Forest Ecosystem Services (FES). The Himachal Pradesh Forest Ecosystem Services (HP-FES) Project is dealing with management of the following FES:



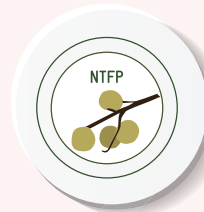
Water



Fodder



Fuelwood



Non Timber Forest Products



Eco-sensitive tourism

**‘The FES approach describes a forest management that aims at the sustainable provision of a set of prioritised ecosystem services based on stakeholder choices.’**

The FES approach includes the local and regional planning. This planning needs to inform the forest management planning about the demand it has. Forest managers have to check to which extent this can be fulfilled and have to handle trade-offs

## Himachal Pradesh Forest Ecosystem Services Project

### Project Background

Himachal Pradesh (H.P.) is one of the Western Himalayan mountain states of India which is rich in biodiversity and Forest Ecosystem Services (FES). Forests play a crucial role in the livelihoods of the communities as they provide numerous goods and services such as water, fodder, fuelwood, Non-Timber Forest Products (NTFPs) etc. The forests of the hill state also provide many other services like maintenance of biodiversity, soil protection, and spiritual inspiration.

For a long time, the forest management in H.P. was focused to manage forests for timber production. The New National Working Plan Code 2014 has triggered a paradigm shift in the state government to manage forests for the services they provide.

GIZ is implementing the HP-FES Project on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), in collaboration with the Himachal Pradesh Forest Department.

### Project Objective

To enable the Forest Department of H.P. to introduce the FES approach in the forest management systems of the state.

### Pillars of the HP-FES Project



**Micro plans:** Focus on forest management zones for priority FES



**Working Plan:** Including stakeholders in prioritising and planning for FES and their drivers



**Long Term Ecological Monitoring (LTEM):** Monitoring of biological diversity and ecosystem services as a base for decision making for the state of Himachal Pradesh



## Contribution of the HP-FES Project at:



**Local level:** The project has developed micro plans for all the 9 project's demonstration sites for zone-wise management of prioritised FES.

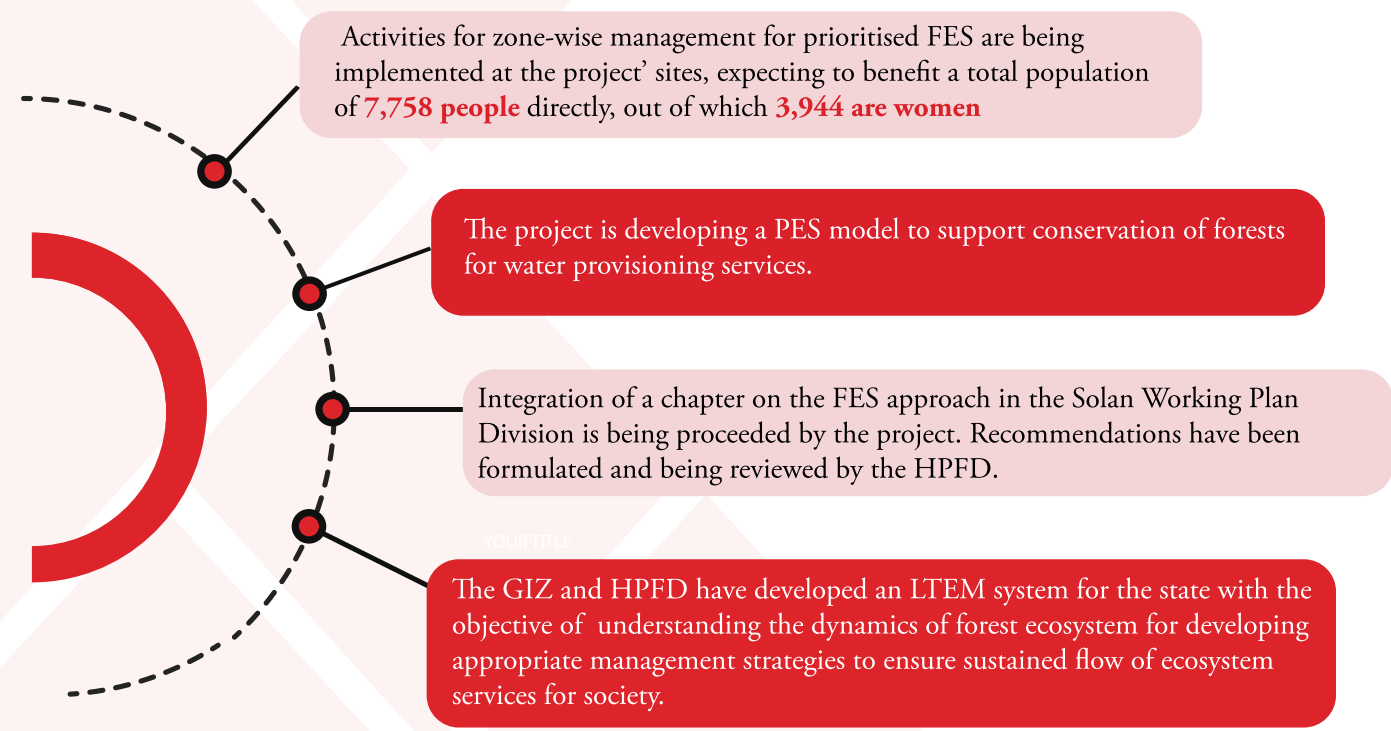


**National level:** One of the objectives of the New National Working Plan Code 2014 suggests focusing on management of forests for ecosystem services. The project is integrating the FES approach into the Solan Forest Divisional Working Plan of the state as per the National Working Plan Code 2014 .



**International level:** The project directly contributes to SDG 15: Life on Land. It promotes the sustainable management of forests (target 15.2), ensures the conservation of mountain ecosystems (target 15.4) and integrates ecosystem and biodiversity values into state and local planning, (target 15.9). The project also contributes to the Bonn Challenge for restoring deforested and degraded land areas.

## Results achieved

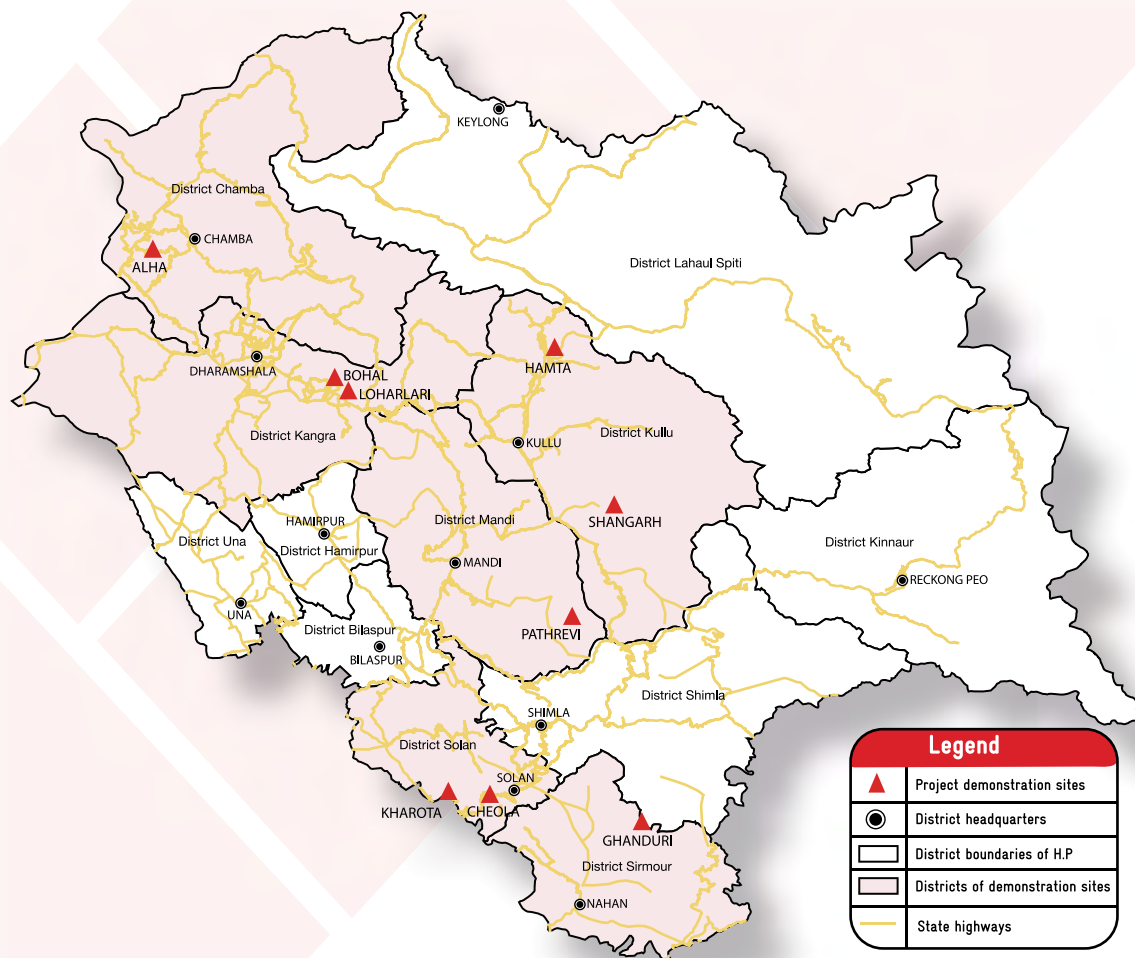


## The way forward

The micro plans for forests should be closely linked to the working plans while the FES approach is integrated at both levels, for sustaining the management of forests for FES in H.P.






H.P is ready to lead this process in the Himalayan region. The H.P. Government is preparing together with the Ministry of Environment, Forest and Climate Change (MoEFCC) and the Government of Uttarakhand and the GIZ, a follow up project to stimulate this process.

## HP-FES Project demonstration sites



## Zones for specific FES at each site

FES zones	FES zones distinguished at different demonstration sites								
	Alha	Bohal	Loharlari	Hamta	Shangarh	Pathrevi	Kharota	Cheola	Ghanduri

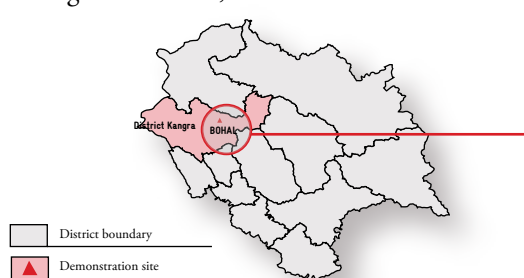
Symbols legend		
 Water	 Grazing	 Timber
 Fodder	 Eco sensitive tourism	



# Planning for FES at Bohal

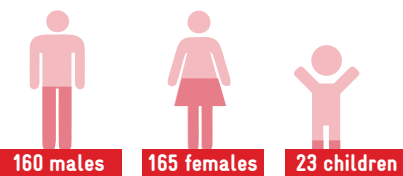
## Site description

The project site Bohal is situated about 7 Km to the North of Palampur town. It falls in the forest block, range and division of Palampur, in the forest circle of Dharamshala in District Kangra (Himachal Pradesh). The elevation range varies from 1600 m to 2100 m above mean sea level (amsl). The interventions carried out by the Himachal Pradesh Forest Ecosystem Services (HP-FES) Project at this site, aim for strengthening the existing Payment for Ecosystem Services (PES) model by improving the forest ecological structure, water and soil conservation, improvement in fodder and fuelwood availability.



LEGEND	
	Water
	Fodder and fuelwood
	Fuelwood
	Barbed wire fencing
	Nala plantation
	Check dam
	Check wall
	Contour trenches
	Activity area
	Soil conservation
	Streams
	Springs
	Compartment boundary
C1, C2	Compartment numbers
1	FES zone number

## Demography



Wage days generated for the communities: 355

## Forest

Area under intervention	37 hectares
Type	Moist Deodar forest, Upper or Himalayan Chir Pine forest and <i>Quercus leucotricophora</i> forest
Role in livelihood	Forests provide water, fuelwood, fodder, grazing, mushrooms, edible fruits and flowers, wood for agricultural implements and homestead constructions, pine needles for bedding for animals etc.

## Prioritised Forest Ecosystem Services

Interventions for the sustainable flow of prioritised forest ecosystem services (FES)

FES	Interventions
Water	Check dams, Dry masonry check walls, Bamboo along streams, Broad leaved species in contour trenches, No grazing
Soil conservation	Bamboo and other shrubs for soil conservation
Fodder and Fuelwood	Ban oak, Bauhinia, Robinia, Barbed wire fencing

## Capacity development

- During initial stages, participating community members were familiarized with the concept of FES to enable their active participation in the planning process
- For facilitating experience sharing amongst communities an exposure visit to Alha project site in Dalhousie was organised
- Community members learnt issues on institutional strengthening, soil and water conservation activities, forest-based livelihood options and conservation of biodiversity during an exposure visit to Uttarakhand
- Training on processing of forest based produce, especially Rhodendron flowers and Lingar (a fiddle headed fern) was organised for village communities by the project.

## Monitoring system

- Measurement of water flow in natural sources by bucket method at an interval of 15 days
- Physical assessment of soil and water conservation structures
- Assessment of survival of plantation areas after six months
- Assessment of erected fences after six months

## Results achieved

- **37 ha** of forest area undertaken for afforestation and soil and water conservation works
- A total of **160** direct beneficiaries benefitting from the project interventions for ecosystem service flow. **80** are direct women beneficiaries
- A total of **20** direct beneficiaries benefitting by earning wages. **18** are direct women beneficiaries
- Strengthening of water security and reduction in soil erosion in the forest, private lands and enhancement of fodder availability is expected.

## Contribution to state initiatives

The activities included in the micro plan are in line with state forest department's priorities, including afforestation and soil and water conservation activities. The PES initiative is one of the sole examples where communities protecting forests are being compensated for their conservation activities.



### Responsible

Ravindra Singh  
Indo-German Biodiversity Programme,  
GIZ India  
E: ravindra.singh@giz.de

Dr. Joachim Schmerbeck,  
GIZ Team Leader  
E: joachim.schmerbeck@giz.de

### Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Indo-German Biodiversity Programme  
A-2/18, Safdarjung Enclave,  
New Delhi-110029, India  
T: +91 11 4949 5353  
E: biodiv.india@giz.de  
W: www.giz.de/india

### Registered GIZ offices in Bonn and Eschborn:

Friedrich-Ebert-Allee 36 + 40  
53113 Bonn  
T: +49 228 44 60-0  
F: +49 228 4460-17 66  
Dag-Hammarskjöld-Weg 1-5  
65760 Eschborn  
T: +49 6196 79-0  
F: +49 6196 79-11 15  
I: www.giz.de

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Lead Executing Agency	Himachal Pradesh Forest Department
Lead Implementing Agency	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Duration	10/2015 – 12/2020
Budget	€ 5 Mio.
Website	www.indo-germanbiodiversity.com

QR Code Website What We Do – HP FES

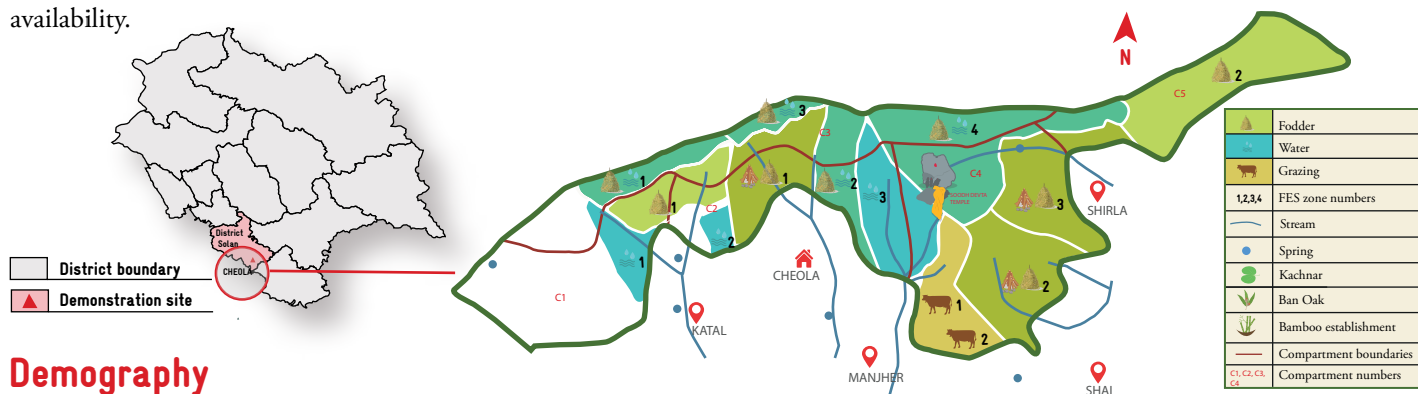




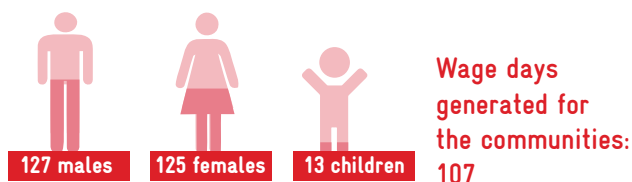
# Planning for FES at Cheola

## Site description

The project site Cheola is situated at about 5 kms from Jabli on Kalka Shimla Highway NH 22, Himachal Pradesh. It falls in the Gram Panchayats Garkhal Kasauli and Jabli of Dharampur Development Block, District Solan. The interventions carried out by the the Himachal Pradesh Forest Department (HPFD) and the Himachal Pradesh Forest Ecosystem Services Project (HP-FES) and at this site, aim for improvement in water flow for drinking water security and improvement in fodder as well as fuelwood availability.



## Demography



## Forest

Area under intervention	18 hectares
Type	Shiwalik chir pine, Northern dry mixed deciduous forest and sub-tropical scrubs
Role in livelihood	Forests provide drinking water, fuelwood for cooking and space heating in winters, fodder, grazing, agricultural implements and homestead constructions and pine needles for animal bedding etc.

## Prioritised Forest Ecosystem Services

Interventions for the sustainable flow of prioritised forest ecosystem services (FES)

FES	Interventions
Water	Ban oak and bamboo establishment, RCC post fence, Check dams, Contour trenches, Fire protection
Fodder and fuelwood	Fodder species, No grazing, Bamboo establishment, Contour trenches, Tall broad leaved plantation

## Capacity development

- During the initial stages the participating villagers were introduced to the concept of FES to enable them to participate in the planning process.
- An exposure visit to Sikkim was organised for the officials of the HPFD and community mobilizers to learn springfed management practices.
- Since the area lies under high fire zone, a training on forest fire risk reduction was organised for the front line staff of the HPFD and 20 community participants. A fire management plan for the site was also developed during the training.

## Monitoring system

- Measurement of water flow by bucket method and volume displacement method at an interval of 30 days
- Recording dates of rainfall
- Physical assessment of soil and water conservation structures at an interval of three months
- Assessment of broad leaved plantation areas for damages and survival

## Results achieved

- **18 ha** of forest area with interventions for afforestation and soil and water conservation works

- A total of **252** beneficiaries

**127** direct women beneficiaries



- Strengthening of water security and reduction in soil erosion in the forest and private lands is expected.

## Contribution to state initiatives

The activities included in the micro plan are in line with state forest department's priorities including afforestation and soil and water conservation activities. The training held under fire management lies under Forest Fire Management discipline of state under Green Skill development initiative, Government of India.



### Responsible

Ravindra Singh  
Indo-German Biodiversity Programme,  
GIZ India  
E: ravindra.singh@giz.de

Dr. Joachim Schmerbeck,  
GIZ Team Leader  
E: joachim.schmerbeck@giz.de

### Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Indo-German Biodiversity Programme  
A-2/18, Safdarjung Enclave,  
New Delhi-110029, India  
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E: biodiv.india@giz.de  
W: www.giz.de/india

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Friedrich-Ebert-Allee 36 + 40  
53113 Bonn  
T: +49 228 44 60-0  
F: +49 228 4460-17 66  
Dag-Hammarskjöld-Weg 1-5  
65760 Eschborn  
T: +49 6196 79-0  
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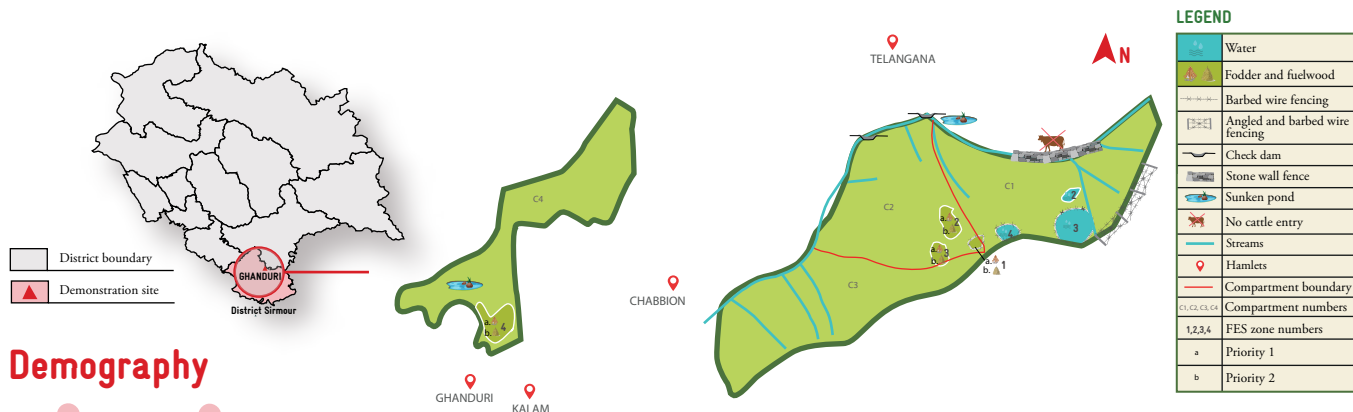




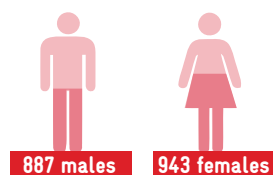
# Planning for FES at Ghanduri

## Site description

The project site Ghanduri is situated about 15 Km from Range office Nohradhar, on the northern side of Nohradhar-Haripur Dhar road. It falls in Charna beat of Nohradhar Forest Range in Renuka Forest Division in District Sirmour (Himachal Pradesh). The interventions carried out by the Himachal Pradesh Forest Ecosystem Services (HP-FES) Project at this site, aim for watershed protection, improvement in fuelwood and fodder availability and improvement in forest composition and structure.



## Demography



Wage days generated for the communities: 55

## Forest

Area under intervention	163.80 hectares
Type	Moru Oak and Fir/Spruce (41.60 hectares) Ban Oak with scattered Deodar (122.20 hectares)
Role in livelihood	Communities depend on forests to a great extent for regulatory services, compared to direct provisioning services. Forests provide them with fuelwood for cooking and space heating, fodder, grazing, mushrooms, edible fruits and flowers, wood for agricultural implements, homestead constructions and oak leaves for mulching their crops.

## Prioritised Forest Ecosystem Services

Interventions for the sustainable flow of prioritised forest ecosystem services (FES)

FES	Interventions
Watershed protection	Broad leaved species Barbed wire fencing Barbed wire fencing with wooden poles Angled, barbed wire fencing Conifer species Sunken ponds Stone wall fencing Check dams
a. Fuelwood and fodder	Conifer species Ban oak Hill bamboo in depressions Robinia Stone wall fencing No grazing Rotational fodder logging

## Capacity development

- During initial stages the participating villagers were introduced to the concept of FES to enable them to participate in the planning process
- Villagers learned about spring shed management practices during an exposure visit to Sikkim

## Monitoring system

- Measurement of water flow in natural sources by bucket method at an interval of 15 days
- Monthly physical assessment of soil and water conservation structures
- Monthly assessment of survival of plantation areas
- Monthly assessment of erected fences

## Contribution to state initiatives

The activities included in the micro plan are in line with state forest department's priorities including afforestation and soil and water conservation activities. The training held for fire management lies under Forest Fire Management discipline of the state under Green Skill development initiative.

## Results achieved

- **163.80 ha** of forest area undertaken for afforestation and soil and water conservation works
- A total of **1830** direct beneficiaries benefitting from the project interventions for ecosystem service flow. **943** are direct women beneficiaries
- A total of **32** direct beneficiaries benefitting by earning wages. **7** are direct women beneficiaries
- Strengthening of water security and reduction in soil erosion in the forest, private lands and enhancement of fodder availability is expected.



### Responsible

Ravindra Singh  
Indo-German Biodiversity Programme,  
GIZ India  
E: ravindra.singh@giz.de

Dr. Joachim Schmerbeck,  
GIZ Team Leader  
E: joachim.schmerbeck@giz.de

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A-2/18, Safdarjung Enclave,  
New Delhi-110029, India  
T: +91 11 4949 5353  
E: biodiv.india@giz.de  
W: www.giz.de/india

### Registered GIZ offices in Bonn and Eschborn:

Friedrich-Ebert-Allee 36 + 40  
53113 Bonn  
T: +49 228 44 60-0  
F: +49 228 4460-17 66  
Dag-Hammarskjöld-Weg 1-5  
65760 Eschborn  
T: +49 6196 79-0  
F: +49 6196 79-11 15  
I: www.giz.de

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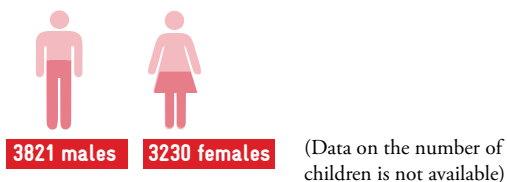
# Planning for FES at Alha

## Site description

The project site Alha Catchment is situated approximately 9 Km to the North East of Dalhousie town, in district Chamba (Himachal Pradesh). The elevation range varies from 2080 m to 2580 m above mean sea level (amsl). This site falls in the forest beat of Jandrihat in Dalhousie forest block, range and division. The interventions carried out by the Himachal Pradesh Forest Ecosystem Services (HP-FES) Project at this site, aim for implementing the Payment for Ecosystem Services (PES) model for the management of water provisioning services at the New Demarcated Protected Forest (NDPF) Alha Catchment, improving water and soil conservation.



## Demography



## Prioritised Forest Ecosystem Services

Interventions for the sustainable flow of prioritised forest ecosystem services (FES)

## Forest

Area under intervention	202 hectares
Forest type	The NDPF Alha Catchment Forest is largely a natural mixed coniferous forest with mature crop of the West Himalayan Fir ( <i>Abies pindrow</i> ) and West Himalayan Spruce ( <i>Picea smithiana</i> ) in predominance with sprinkles of Blue Pine ( <i>Pinus wallichiana</i> ) trees. Scattered saplings of isolated Kharsu oak ( <i>Quercus semicarpifolia</i> ), mature to over mature <i>Aesculus indica</i> trees and young aged trees of Ban oak ( <i>Quercus leucotricophora</i> ) and isolated Brah ( <i>Rhododendron arboreum</i> ) trees can also be seen.

FES	Interventions
Water and soil conservation	Plantation of deodar, ban oak, fir and spruce Dry stone check dam Dry stone check wall Cement masonry check wall Desilting of ponds



## PES concept in relation to payments for watershed services

The basic idea behind PES is that those who provide any ecosystem services should be paid for doing so. PES involves a series of payments to land or other natural resource managers for management actions likely to enhance the provision of the demanded FES. Payments are made by the beneficiaries of the services in question, for example, individuals, communities, business houses or government acting on behalf of various parties. The PES concept in relation to payments for watershed services is given in the figure on the right side.



Source: Payment for Ecosystem Services: A best practical guide by Department for Environment, Food and Rural Affairs (DEFRA)

## PES model for Alha Catchment Forest

The aim for setting up a PES model at Alha Catchment is enhancing and ensuring water flow, as there is a high demand by the tourist industry. The Alha Catchment Forest Management Society (ACFMS) was founded for this. It gets money from donations and fees and from this, measures are paid. Dalhousie was registered with local administration as the nodal institution, under the aegis of Himachal Pradesh Forest Department. ACFMS will be the custodian of a corpus created for the purpose of forest management activities in Alha forest. Contributions in the form of donations and membership fee will be sought from end users who are also the members of ACFMS. Grants from other donors, including HPFD and HP-FES will also contribute to the corpus.

The objectives of ACFMS are to create awareness on environmental issues, plan and monitor activities and raise funds to support implementation of activities enlisted in the microplan, etc.



## Contribution to state initiatives

The PES Policy of the state can use this example as a model, wherein different stakeholders come together to support conservation of forest for water provisioning services. It realises the PES policy on the ground. This micro plan includes the PES approach to partially finance the micro plan activities. The activities included in the micro plan are in line with state forest department's priorities, including afforestation and soil and water conservation activities.

### Responsible

Ravindra Singh  
Indo-German Biodiversity Programme,  
GIZ India  
E: ravindra.singh@giz.de

Dr. Joachim Schmerbeck,  
GIZ Team Leader  
E: joachim.schmerbeck@giz.de

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53113 Bonn  
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F: +49 228 4460-17 66  
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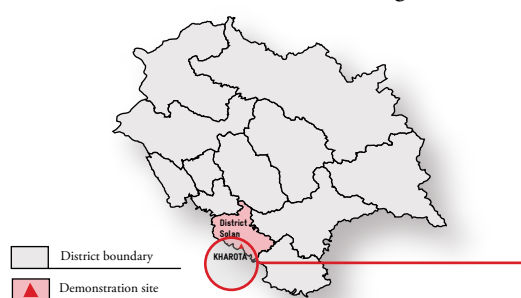
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# Planning for FES at Kharota

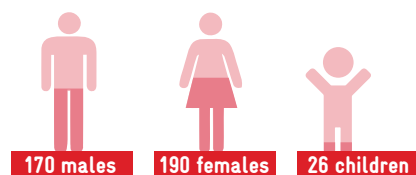
## Site description

The project site Kharota is situated at about 98 Km to the south of Kunihar Forest Division, in district Solan (Himachal Pradesh). The elevation range varies from 605 m to 910 m above mean sea level (amsl). The interventions carried out by the Himachal Pradesh Forest Ecosystem Services (HP-FES) Project at this site, aim for water and soil conservation, improvement in fodder and fuelwood availability and invoking the benefit sharing mechanism mentioned in the Himachal Pradesh Participatory Forest Management (PFM) rules which will benefit the marginalized community dependent on bamboo weaving for livelihood.



LEGEND	
	Water
	Fodder
	Fuelwood
	Barbed wire fencing
	Check dam
	Desilting of ponds
	Activity area for fodder plantation
	Activity area for bamboo plantation
	Hamlet
	Fire line maintenance
	Drainage
	FES zone numbers

## Demography



Wage days generated for the communities: 900

## Prioritised Forest Ecosystem Services

Interventions for the sustainable flow of prioritised forest ecosystem services (FES)

FES	Interventions
 Water	Check dams Desilting of ponds No open grazing Fire protection
 Fodder and fuelwood	Khair Kachnar Removal of lantana Barbed wire fencing
 Bamboo	Bamboo plantation Enumerate and record bamboo clumps Benefit sharing as per PFM rules
 Fire management	Removal of weeds Cutting shrubs Fire training and provision for tools

## Forest

Total planning area	33.2 hectares
Type	Northern dry mixed deciduous forest and dry deciduous forest with bamboo.
Role in livelihood	Forests provide firewood for cooking, fodder, bamboo and grazing area for livestock, edible fruits, materials for agricultural implements, homestead constructions and water, which generate direct usage value for the locals. These are dependent on forests for various inputs such as small timber for agricultural implements and leaf litter for manure and services such as soil water regulation.



## Capacity development

- During initial stages, villagers were familiarized with the concept of FES to enable their active participation in planning of the micro plan
- A participatory planning process was followed for deciding management of forest for water, bamboos and fodder
- An effort is being made to invoke the benefit sharing mechanism mentioned in the Himachal Pradesh PFM rules which will benefit the marginalized community that is dependent on bamboo weaving for livelihood
- A training on forest fire risk reduction was organised for a total of 25 participants which included the front-line staff of the HPFD and community participants

## Monitoring system

- Physical assessment of soil and water conservation structures
- Physical assessment of erected fences after every six months
- Assessment of survival of plantation after every six months

## Results achieved

- **3 ha** of forest area undertaken for afforestation of broad leaf fodder species and **1 ha** has been brought under bamboo plantation
- A total of **360** beneficiaries. **35** have benefitted directly by earning wage labour, **17** of them being women
- Strengthening of water security and succesful bamboo plantation with more natural regeneration is expected.

## Contribution to state initiatives

The activities included in the micro plan are in line with state forest department's priorities including afforestation and soil and water conservation activities. Fire management is an important activity and participation of local communities is sought every time there is a fire in the area.



### Responsible

Ravindra Singh  
Indo-German Biodiversity Programme,  
GIZ India  
E: [ravindra.singh@giz.de](mailto:ravindra.singh@giz.de)

Dr. Joachim Schmerbeck,  
GIZ Team Leader  
E: [joachim.schmerbeck@giz.de](mailto:joachim.schmerbeck@giz.de)

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New Delhi-110029, India  
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E: [biodiv.india@giz.de](mailto:biodiv.india@giz.de)  
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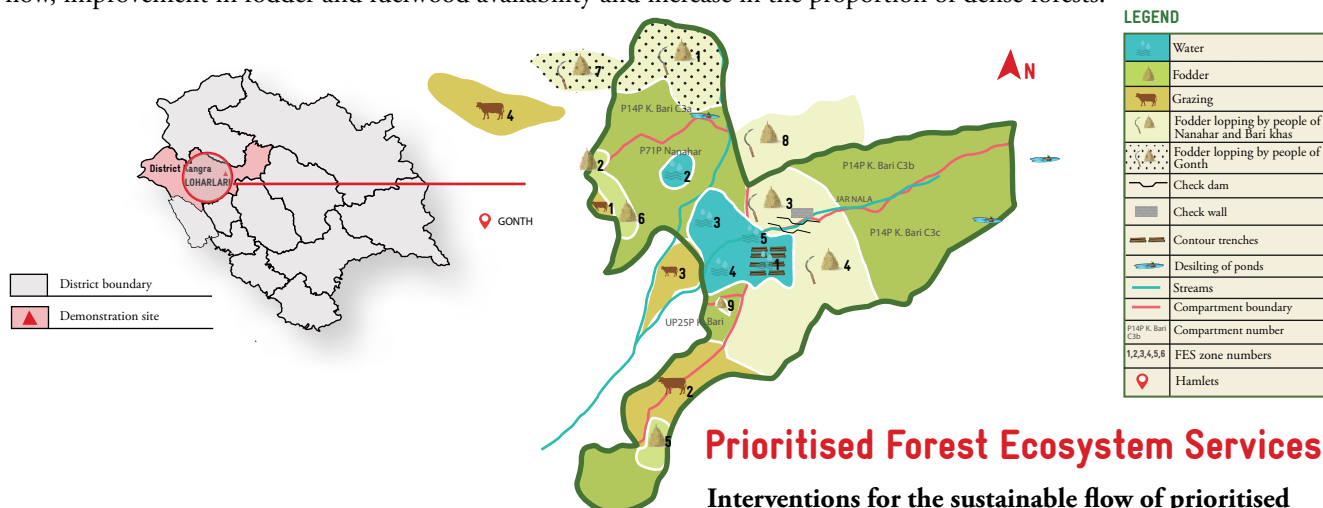




# Planning for FES at Loharlari

## Site description

The project site Loharlari is situated about 15 Km to the North East of Palampur town. It falls in the forest beat Kandbari of Palampur forest block, range and division in district Kangra (Himachal Pradesh). The elevation range varies from 1575 m to 2350 m above mean sea level (amsl). Bari Khas, Gonth and Nanhar are the nearby hamlets. The interventions carried out by the Himachal Pradesh Forest Ecosystem Services (HP-FES) Project at this site, aim for water and soil conservation, improvement in water flow, improvement in fodder and fuelwood availability and increase in the proportion of dense forests.



## Prioritised Forest Ecosystem Services

Interventions for the sustainable flow of prioritised forest ecosystem services (FES)

## Forest

Area under intervention	11.3 hectares
Type	Oak Scrub, Upper Himalayan Chir Pine and <i>Quercus galuca</i> / <i>Q. leucotrichophora</i>
Role in livelihood	According to discussions with Participatory Rural Appraisal (PRA) participants, fodder is lopped every year from the forest during winter season. As per the baseline survey, 26% of families collect fuelwood from the forest. However, forests in the project site are disturbed by fire, grazing and lopping.

FES	Interventions
Fodder	Ban oak Robinia Khirak Rotational fodder lopping Barbed wire fencing
Watershed protection	Broad leaved species Water infiltration measures Contour trenches Desilting of ponds Dry masonry check walls Check dams



## Capacity development

- During initial stages, participating community members were familiarized with the concept of FES to enable their active participation in the planning process
- For facilitating experience sharing amongst communities an exposure visit to Alha project site in Dalhousie was organised
- Community members learnt issues on institutional strengthening, soil and water conservation activities, forest-based livelihood options and conservation of biodiversity during an exposure visit to Uttarakhand
- A training on food processing of edible forest products like Rhododendron flowers, aonla, edible ferns etc. was given to more than 62 women residing in the project site

## Monitoring system

- Physical assessment of soil and water conservation structures
- Assessment of survival of plantation areas after six months
- Assessment of erected fences after six months

## Expected results

- **11.3 ha** of forest area undertaken for afforestation and fenced with RCC and wooden posts and barbed wire to prevent damage from grazing of cattle and livestock
- A total of **109** direct beneficiaries benefitting from the project interventions for ecosystem service flow. **84** are direct women beneficiaries  
A total of **42** direct beneficiaries benefitting by earning wages. **22** are direct women beneficiaries
- Strengthening of water security and reduction in soil erosion in the forest, private lands and enhancement of fodder availability is expected

## Contribution to state initiatives

The activities included in the micro plan are in line with state forest department's priorities including afforestation and soil and water conservation activities.



### Responsible

Ravindra Singh  
Indo-German Biodiversity Programme,  
GIZ India  
E: ravindra.singh@giz.de

Dr. Joachim Schmerbeck,  
GIZ Team Leader  
E: joachim.schmerbeck@giz.de

### Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Indo-German Biodiversity Programme  
A-2/18, Safdarjung Enclave,  
New Delhi-110029, India  
T: +91 11 4949 5353  
E: biodiv.india@giz.de  
W: www.giz.de/india

### Registered GIZ offices in Bonn and Eschborn:

Friedrich-Ebert-Allee 36 + 40  
53113 Bonn  
T: +49 228 44 60-0  
F: +49 228 4460-17 66  
Dag-Hammarskjöld-Weg 1-5  
65760 Eschborn  
T: +49 6196 79-0  
F: +49 6196 79-11 15  
I: www.giz.de

Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ).
Lead Executing Agency	Himachal Pradesh Forest Department
Lead Implementing Agency	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Duration	10/2015 – 12/2020
Budget	€ 5 Mio.
Website	www.indo-germanbiodiversity.com

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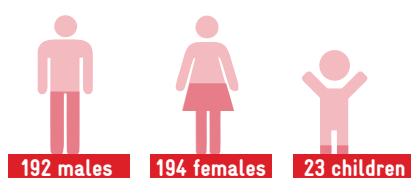
# Planning for FES at Pathrevi

## Site description

The project site Pathrevi is situated to the North-East of Karsog forest division, in district Mandi (Himachal Pradesh). The elevation range varies from 1700 m to 2280 m average mean sea level (amsl). The interventions carried out by the Himachal Pradesh Forest Ecosystem Services (HP-FES) Project at this site, aim for water and soil conservation, improvement in fodder and timber availability.



## Demography



Wage days generated for the communities: 4870

## Forest

Area under intervention	172 hectares
Type	Ban oak, blue pine and lower/ Shiwalik chir pine forest
Role in livelihood	Forests provide water, fuelwood for cooking and space heating, fodder, grazing, mushrooms, edible fruits and flowers, agricultural implements and homestead constructions, pine needles for bedding for animals etc.

## Prioritised Forest Ecosystem Services

Interventions for the sustainable flow of prioritised forest ecosystem services (FES)

FES	Interventions
Water and soil conservation	Check dams, Contour trenches, Fencing of water sources, Plantation for water regulation
Fodder	Rotational fodder lopping, Fodder yielding species
Timber	Deodar plantation, No grazing, Fire protection



## Capacity development

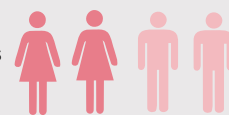
- During initial stages, villagers were familiarized with the concept of FES to enable their active participation in planning of the micro plan
- Exposure visits to other project demonstration sites (Bohal and Loharlari) were organised to facilitate experience sharing amongst communities
- Exposure visit to Uttarakhand was organised to facilitate learning on issues of institutional strengthening, soil and water conservation activities, forest-based livelihood options and conservation of biodiversity
- A pine needle artefact making training module to enhance forest-based livelihood options for 26 women was undertaken. The training module comprised of a basic and advance level course.
- Marketing information and support will be provided based on the outputs of consulting contract for marketing of pine needle artefacts.
- A nursery raising training was conducted for the field staff of HPFD and 14 local communities of the village.
- An exposure visit to Sikkim was organised for the front-line staff of HPFD and the Village Forest Development Society (VFDS) president to learn springshed management practices.

## Monitoring system

- Measurement of water flow by bucket method in natural sources at an interval of 15 days
- Physical assessment of soil and water conservation structures every month
- Assessment of deodar and oak plantation areas for erosion, damages and survival

## Results achieved

- **172 ha** of forest area undertaken for afforestation and soil and water conservation works
- A total of **106** beneficiaries  
**58** direct women beneficiaries
- Strengthening of water security and reduction in soil erosion in the forest and private lands is expected.



## Contribution to state initiatives

The activities included in the micro plan are in line with state forest department's priorities including afforestation and soil and water conservation activities.



### Responsible

Ravindra Singh  
Indo-German Biodiversity Programme,  
GIZ India  
E: ravindra.singh@giz.de

Dr. Joachim Schmerbeck,  
GIZ Team Leader  
E: joachim.schmerbeck@giz.de

### Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Indo-German Biodiversity Programme  
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New Delhi-110029, India  
T: +91 11 4949 5353  
E: biodiv.india@giz.de  
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Friedrich-Ebert-Allee 36 + 40  
53113 Bonn  
T: +49 228 44 60-0  
F: +49 228 4460-17 66  
Dag-Hammarskjöld-Weg 1-5  
65760 Eschborn  
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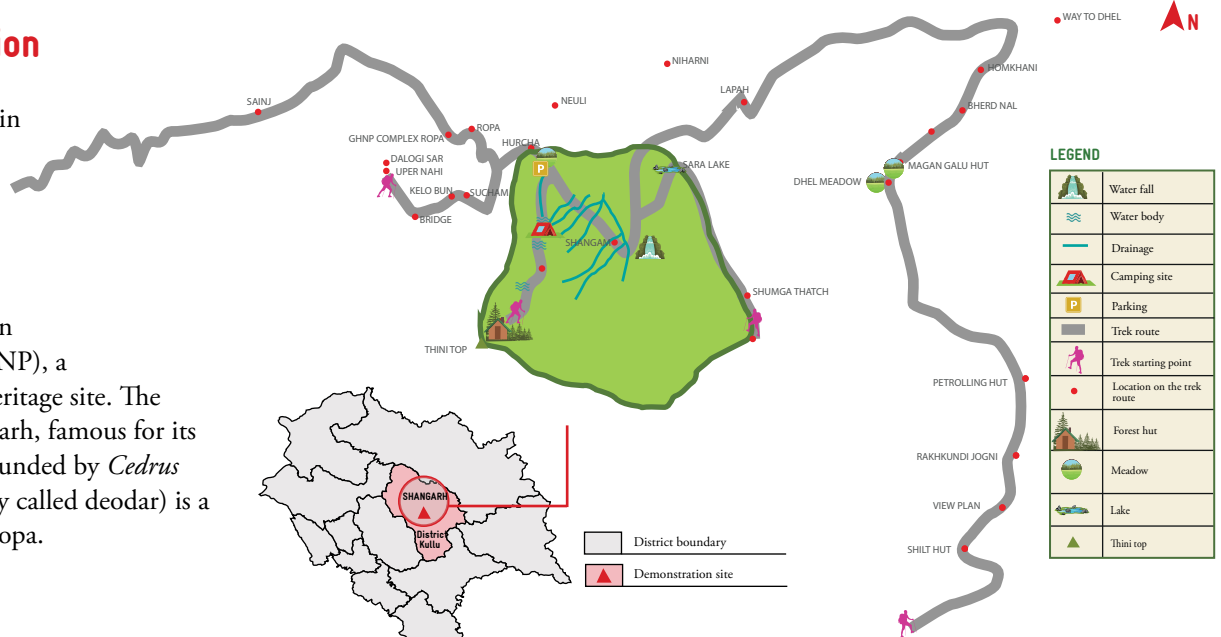
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# Planning for FES at Shangarh

## Site description

The project site Shangarh is located in Sainj Valley of District Kullu (Himachal Pradesh). It falls in the ecozone of the Great Himalayan National Park (GHNP), a UNESCO world heritage site. The planning site Shangarh, famous for its large meadow surrounded by *Cedrus deodara* trees (locally called deodar) is a short distance off Ropa.



## Demography



369 males



394 females







407 children

## Forest

Area for forest assessment	131.12 hectares area used for forest assessment
Type	Moist deodar and Western mixed coniferous forest
Role in livelihood	The data suggests that maximum households are still dependent on agriculture for their livelihood. Their land holding size is marginal leading to high dependency on direct use of forest resources for grazing and collection of medicinal plants for selling. The assessment shows that grazing pressure is still high, given the high cattle populations

## Eco-sensitive tourism potential

During micro planning, the important eco-sensitive tourism products identified were:

Type	Important attractions with examples
Super prime attractions	 Birdwatching: The area lies under GHNP and as per ebird.org (a people science initiative) boast around 146 bird species which could attract many birdwatchers in the area and could promote nature sensitive tourism
Symbiotic attractions	 Nature based soft adventure tourism products, homestays, camping, single day treks to Shangarh-Sara Lake and Shangarh – Lapah-Dhela- Shakti- Neuli
Other attractions	 Camping, yoga and meditation at thatches. Some of the thatches are Thini Sara thatch, Jagnau thatch and Shakti Khamaba thatch top
Ethnic cultural products	 Temples, Kullu handlooms, fairs, spiritual pilgrimage, cuisines, Shangchul Mahadev Devta ground, Shangchul Mahadev Boothnath temple is an important and famous temple



## Capacity development

- During initial stages, participating community members were familiarized with the concept of FES to enable their active participation in the planning process
- The VFDS president learnt some rural homestay-based ecotourism operation practices during an exposure visit to Sikkim
- Trainings on bird watching, trekking, camping operations and homestays planned under the eco-sensitive tourism operations will be organised for the village communities residing in Shangarh.

## Monitoring system

- Ecotourism flow in terms of foot fall
- Increase in local entrepreneurs in form of trained workforce, guides, operators, and women entrepreneurs handling trekking, homestays and dhabas
- Gain in economic return to trained workforce annually

## Expected results

- **2591 ha** of area under NRM will be brought under intervention for ecotourism operations
- A total of **140** expected direct beneficiaries benefitting from the project interventions for a sustainable eco-sensitive model of tourism  
**60** are direct women beneficiaries
- Community members realise ecotourism products such as birdwatching, nature trekking, camping, etc., as non consumptive source of livelihood and entrepreneurship. Guide groups for nature trails and birdwatching tours are identified, listed and registered

## Contribution to state initiatives

The activities included in the micro plan are in line with state forest department's priorities of eco-sensitive tourism activities. The trainings planned for eco-sensitive tourism operations fall under the Green Skill development initiative of the state as well as under National Skill India Mission.



### Responsible

Ravindra Singh  
Indo-German Biodiversity Programme,  
GIZ India  
E: ravindra.singh@giz.de

Dr. Joachim Schmerbeck,  
GIZ Team Leader  
E: joachim.schmerbeck@giz.de

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New Delhi-110029, India  
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E: biodiv.india@giz.de  
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Friedrich-Ebert-Allee 36 + 40  
53113 Bonn  
T: +49 228 44 60-0  
F: +49 228 4460-17 66  
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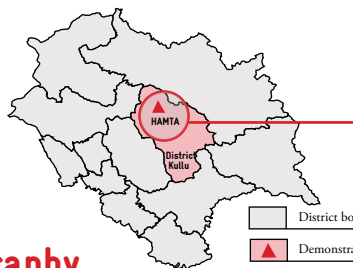
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# Planning for FES at Hamta

## Site description

The project site Hamta is located at about 4 km from Manali in district Kullu, Himachal Pradesh. The areas of selected villages Prini, Sethan, Hamta and the Inderkilla National Park territory lie under the Prini Panchayat. The interventions carried out by the Himachal Pradesh Forest Ecosystem Services (HP-FES) Project at this site, aim for empowering communities to manage sustainable eco-sensitive tourism.



## Demography



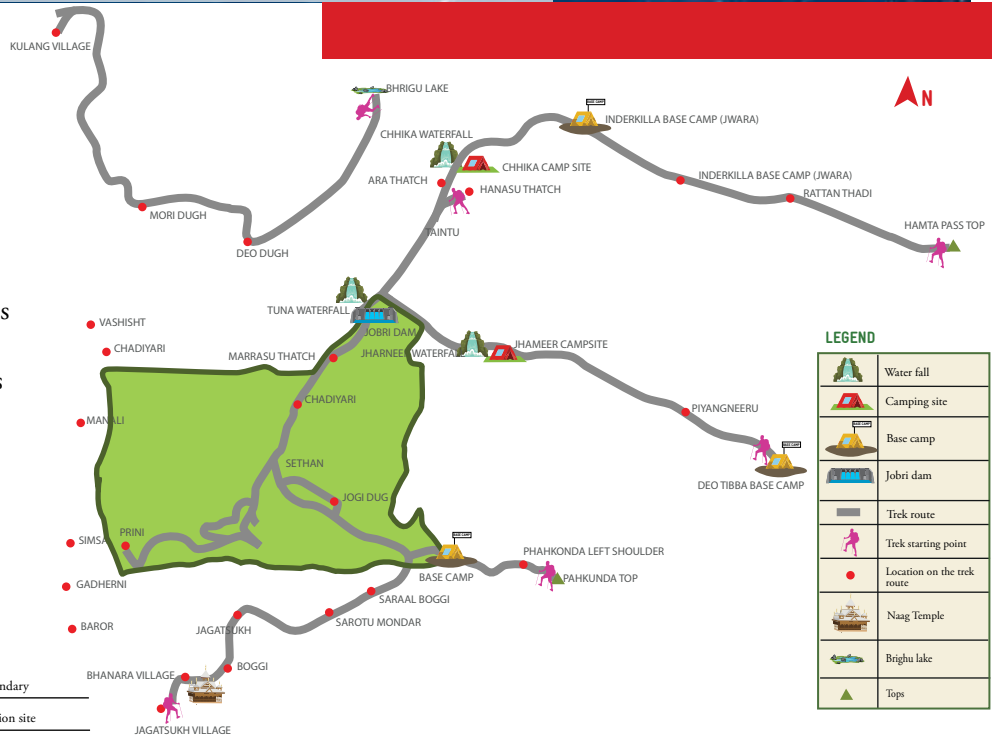
447 males

424 females

53 children

## Forest

Area for assessment	133 hectares area used for forest assessment
Type	Western mixed coniferous forest, West Himalayan Fir ( <i>Abies pindrow</i> ), and West Himalayan Spruce ( <i>Picea smithiana</i> ). Large parts of the project site (184 ha) are under intensively used pasture land.
Role in livelihood	The forest faces a huge human impact on forests due to trampling by livestock and hiking. Transhumance graziers pass via this area twice a year, along with their livestock and use this forest as a resting place during their transit. In addition, high footfall trekking groups operate in the area during summer season.



## Eco-sensitive tourism potential

During micro planning, the important eco-sensitive tourism products identified were:

Type	Important attractions
Prime attractions	Nature based soft adventure tourism products, mountaineering, camping, rappelling, heli-skiing, mountain biking
Other attractions	Camping, yoga and meditation at thatches
Sightseeing points	Waterfalls, sunrise points, excursion points, day tourists
Ethnic cultural products	Temples, Kullu handlooms, fairs, spiritual pilgrimage, cuisines



## Capacity development

- During initial stages, participating community members were familiarized with the concept of FES to enable their active participation in the planning process
- Trainings on trekking, mountaineering, camping operations, homestays and solid waste management planned under the eco-sensitive tourism operations will be organised for the village communities residing in Hamta.

## Monitoring system

- Eco-sensitive tourism flow in terms of foot fall
- Increase in local entrepreneurs in form of trained workforce, guides, operators, and women entrepreneurs handling trekking, homestays and dhabas
- Gain in economic return to trained workforce annually

## Expected results

- **1923 ha** of area under NRM will be brought under intervention for ecotourism operations
- A total of **160** expected direct beneficiaries benefitting from the project interventions for a sustainable eco-sensitive model of tourism  
**70** are direct women beneficiaries
- Women self help groups are made and engaged in alternative income generation activities highlighting the National Park (e.g. Embroidery on T Shirts with park logo)

## Contribution to state initiatives

The activities included in the micro plan are in line with state forest department's priorities of eco-sensitive tourism activities. The trainings planned for eco-sensitive tourism operations fall under the Green Skill development initiative of the state as well as under National Skill India Mission.



### Responsible

Ravindra Singh  
Indo-German Biodiversity Programme,  
GIZ India  
E: ravindra.singh@giz.de

Dr. Joachim Schmerbeck,  
GIZ Team Leader  
E: joachim.schmerbeck@giz.de

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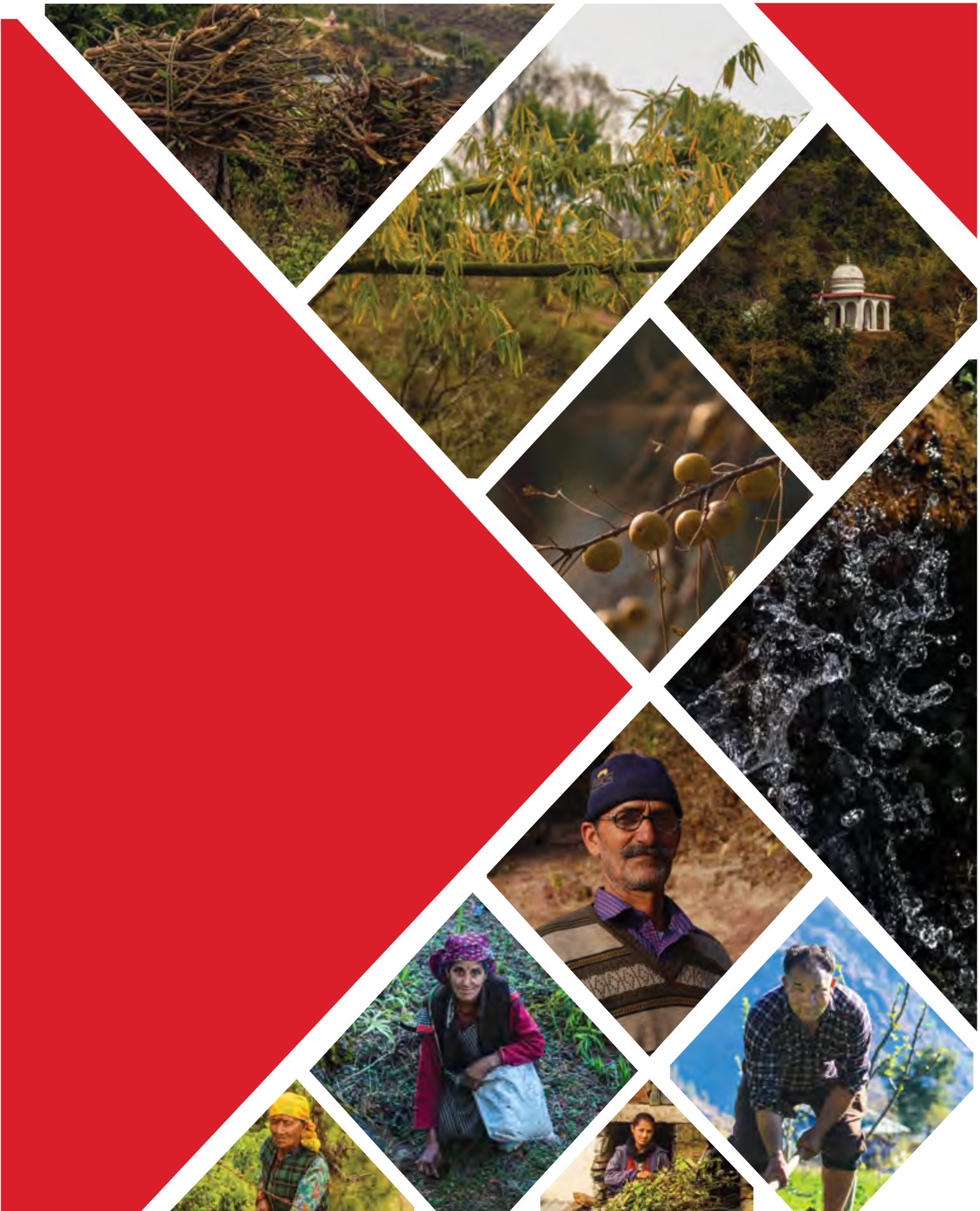
Friedrich-Ebert-Allee 36 + 40  
53113 Bonn  
T: +49 228 44 60-0  
F: +49 228 4460-17 66  
Dag-Hammarskjöld-Weg 1-5  
65760 Eschborn  
T: +49 6196 79-0  
F: +49 6196 79-11 15  
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Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH

For further Information  
Principal Chief Conservator of Forest, Forest Department,  
Himachal Pradesh, Taland, Shimla- 171001, India