

Himachal Pradesh Forest Ecosystem Services (HP-FES) Project









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Published by:

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices Bonn and Eschborn

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Programme/project description:

Indo-German Biodiversity Programme

Conservation and Sustainable Use of Biodiversity in India - Himachal Pradesh Forest Ecosystem Services Project (HP-FES)
The project aims to enable the Forest Department of Himachal Pradesh to introduce the Forest Ecosystem Services (FES) approach in the state's forest management system.
HP-FES

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German Federal Ministry for Economic Cooperation and Development (BMZ)

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Shimla, 2019

Micro Plan for Shangarh

Himachal Pradesh Forest Ecosystem Services

(HP-FES) Project

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List of Abbreviations

BMZ German Federal Ministry for Economic Cooperation and Development

CBD Convention on Biological Diversity
CBET Community Based Ecotourism
CHF Compartment History File
DBH Diameter at Breast Height

FD Forest Department

FES Forest Ecosystem Services

GHNP Great Himalayan National Park

GHNPCA Great Himalayan National Park Conservation Area

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

HH Household

HPFD Himachal Pradesh Forest Department

HP-FES Himachal Pradesh-Forest Ecosystem Services

JFM Joint Forest Management M&E Monitoring & Evaluation

mm millimeter

MoU Memorandum of Understanding

MT Metric Ton
NA Not Applicable

NGO Non-Governmental Organization
PES Payment for Ecosystem Services
PFM Participatory Forest Management

PO Post Office

PRA Participatory Rural Appraisal

PWGI Palampur Water Governance Initiative

SHG Self-help group

SWOC Strengths, Weaknesses, Opportunities and Challenges

UNESCO United Nations Educational, Scientific and Cultural Organization

VFDS Village Forest Development Society

VPO Village Post Office

1 Introduction

1.1 Forest Ecosystem Service (FES) Approach

The ecosystem approach, as defined by the Convention on Biological Diversity (CBD) in 2000, is the integrated management of ecosystems to promote conservation and sustainable use of the services and goods provisioned by these ecosystems to be enjoyed equitably by all sections of society. These services and goods are together termed as "Ecosystem Services".

The ecosystem services derived from forests came to be referred to as "Forest Ecosystem Services" or FES. The FES Approach may be defined as "Forest Management that aims at sustainable provision of a set of ecosystem services based on stakeholder choices". The FES Approach states that stakeholders prioritize ecosystem services based on their needs.

The forest management under FES Approach will be guided by the ecosystem service/s thus prioritized, with due importance given to the remaining goods and services.

1.2 Himachal Pradesh Forest Ecosystem Service (HP-FES) Project

1.2.1 Project Background

The German Federal Ministry for Economic Cooperation and Development (BMZ) commissioned Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to partner with the Himachal Pradesh Forest Department (HPFD) to integrate FES Approach in forest management. The project activities started from April 2016. Using the FES approach in a microplan can facilitate institutionalizing of the approach in management and planning processes of HPFD.

1.2.2 Project Objective

The overall objective of the HP-FES Project is to enable Himachal Pradesh Forest Department to introduce the ecosystem approach into its forest management.

Microplan for this site has been prepared after considering the prioritized FES by resident communities. The prioritised FES for Shangarh, lying in the ecozone of the Great Himalayan National Park (GHNP), are ecotourism (cultural ecotourism), water (regulating) and fodder (provisioning) services. This plan primarily focusses on linking conservation of nature through promotion of nature-based livelihoods such as ecotourism.

1.2.3 Role of Microplan in Management

National park management plans are written in a different approach than territorial forest working plans. Management plans in protected areas has its genesis in Wildlife Protection Act, 1972. While these plans are wildlife centric, efforts are drawn to address communities' need in ecozones (outside core areas). Similar to territorial plans, these plans lay stress on microlevel planning with communities using microplanning tools. However, the focus is to reduce direct dependence on forest provisioning services. Nevertheless, territorial microplans enable usufruct sharing in provisioning services. If reviewed carefully, there are other forest ecosystem services like water, fresh air, microclimate as regulating services, and cultural services like ecotourism which still can be addressed in ecozones of protected area management. Careful application of this principle enables the management plan in protected areas to take up the forest management on forest ecosystem services (FES) approach. The FES approach demands participatory forest management plans or microplans.

1.2.4 Objectives of the Microplan

The microplan must be drawn in consultation with local community. The participatory rural appraisal (PRA) highlighted few main ecosystem services like ecotourism, medicinal plants and water as potential focus of the participatory management. Such an approach will also derive benefits from conservation in the Great Himalayan National Park.

A PRA exercise established, ecotourism and water as the FES with highest potential and therefore prioritised. Since ecotourism needs dedicated and specialised efforts different from any physical treatment plan, the objective of this microplan is to incorporate ecotourism as the main focus of planning and management. This will concentrate on the GHNP area around ecozone in the Shangarh Panchayat forest of Sainj Valley, giving priority to community's economic benefit thereby ensuring conservation of the park's biodiversity.

1.2.5 Description of Subsequent Chapters of the Microplan

Chapter 2 describes the planning site with overview characteristics and data collected along with methodology and results of data collection. Chapter 3 provides the list of elected members of the VFDS Shangarh. Chapter 4 discusses the aims of forest management clearly spelling out the short-term management objectives that leads to mid-term forest management objectives, resulting in long-term objectives of forest management. Chapter 5 dwells into the details of activities undertaken for meeting the short-term forest management goals for the prioritized FESs. Chapter 6 discusses the Monitoring and Evaluation plan for activities undertaken to meet the short-term forest management objectives. This chapter will also enlist the indicators for ex-post assessment of the project and its long-term impacts. Chapter 7 is recommendations followed by Annexures that support the microplan.

2 Description of the Planning Site

Shangarh (Map 2.1) is located in the Sainj Valley of District Kullu of Himachal Pradesh and falls in the ecozone of the Great Himalayan National Park (GHNP), an UNESCO World Heritage Site. Sainj Valley starts from Aut. There is a 46-km road in Sainj valley that crosses the village of Ropa and ends at Neuli, about 5 kms ahead of Ropa. The planning site of Shangarh, famous for its large meadow surrounded by *Cedrus deodara* trees (locally called deodar) is a short distance off Ropa. The list of villages under Shangarh Panchayat is given in Table 2.1

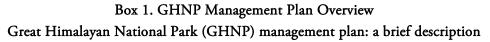
Ward Number	Ward Name	Villages
1	Madana	Madana. Birashangar, Kanha
2	Patara Katwali	Patwara, Katwali, Dhagara
3	Dhara Patara	Dhara Patara, Goshti
4	Dharali	Dharali, Barshangarh, Shengcha
5	Lapah	Dhara, Lapah

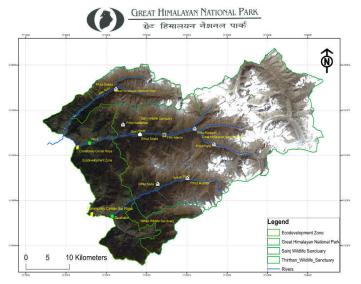
Table 2.1: List of Villages of Shangarh Panchayat

Since Shangarh Panchayat lies near the ecozone/buffer zone under the Great Himalayan National Park Conservation Area (GHNPCA), it is pertinent to see that the microplan management should become a contributing subset to overall management of GHNPCA. The GHNPCA was selected as one of the first protected areas in India to demonstrate the approach of linking biodiversity conservation with local social and economic development. The initial planning of the ecodevelopment program at GHNP was to be based on an 'indicative' plan by the Indian Institute of Public Administration. The coordinates of extreme points of Shangarh is given in Table 2.2.

Table 2.2: Coordinates of Shangarh

Direction	Latitude	Longitude
Northern-most Point	31º 45' 50" N	77º 52' 58" E
Southern-most Point	31°42′40″ N	77º 24' 05" E
Eastern -most Point	31º 44' 19" N	77º 22' 07" E
Western-most Point	31° 44′ 32″ N	77º 25' 14" E





The GHNPCA has a buffer zone along its south-western side which correspondences to the 26,560 ha ecozone, the area of greatest human population pressure.

The latest comprehensive Management Plan of Great Himalayan National Park for April 2010 to 2020 reflect on following priorities:

- Participation in biodiversity conservation for livelihood needs (especially of rural poor and women)
- Maintenance as well as enhancement in capacity and assets of the natural-resource-dependent community through improved natural resource management in buffer (ecozone) of the GHNP

2.1 Methodology

2.1.1 Environmental Data

The environmental data describes the salient features of the environment at the planning site. This data has been collected based on field measurement and other secondary data. The environment data of the planning site has been taken from the management plan of the GHNP and is listed in Table 2.4 in section 2.2.1 of this plan.

2.1.2 Demographic Data and User Rights

The demographic data displayed in Table 2.5 under section 2.2.2 is collected from various sources such as participatory rural appraisal (PRA), baseline survey report, and other secondary sources namely documents from the Gram Panchayats, Department of Animal Husbandry, Anganwaris (Department of Social Justice and Empowerment) and local Revenue Office. The data on forest user rights was gathered from the registered forest rights users list available with the forest department. The results are recorded in Table 2.6 under section 2.2.2.

The joint team comprising the forest department, an external ecotourism consultant, a professor from Government Degree College, Kullu and the GIZ team conducted a PRA (participatory rural appraisal) workshop in Shangarh panchayat with key stakeholders of cluster villages to inform about the HP-FES Project. During the workshop, efforts were also made to understand the ecosystem services as prioritised by the dependent community to generate resource as well as other relevant information. The PRA, modified into a specifically designed tool, collected information on existing and potential tourism products in the valley.

The workshop had a total of 102 participants. The participants included panchayat members, members of SHG (self-help groups) MM (Mahila Mandals), college students, unemployed youth and farmers.

2.1.3 Seasonality of Labour Distribution

Facilitation and matrix were the tools used to collect information on seasonality and labour availability. Materials used were charts and sketch pens. Seasonality of engagement in agriculture, horticulture, wage labour, migration, labour availability for project activities and rain and snowfall were recorded. The calendar was displayed in front of the PRA group and information of months of occurrence; type of work and its availability was gathered and indicated against the corresponding period or month. The above information was collected from a nine-member group comprising both women and men. Response for various variables were probed and recorded in the Table 2.7 under section 2.2.3. Analysis of the probable ecotourism activities that could be undertaken and its seasonality is presented in Table 2.9.

2.1.4 Stakeholder Mapping

Facilitation and stakeholder map were the tools used during stakeholder mapping. The PRA participants were briefed about the concept of stakeholder. A diagram (Figure 2.1) on a chart with four concentric circles and three lines or axes emerging from the centre (ecotourism based microplan was the theme at the centre) almost creating equal sections, was shared with PRA participants. Participants were asked to categorise the institutions under three broader categories namely civil society, private players and government departments, whom they considered as potential in influencing the Project. The participants provided information that was recorded on the map and translated into Table 2.10 under section 2.2.4.

The institutional and stakeholder maps were merged. Participants were then asked to map their perception of power of each organization to influence the project and the interrelation between institutions with respect to the project objective.

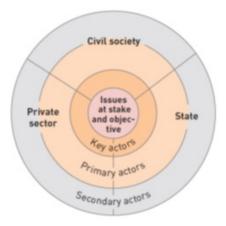


Figure 2.1: Stakeholder Diagram

2.1.5 Resource Mapping (for Ecotourism)

This microplan emphasises on resource mapping related to various ecotourism activities that could be undertaken in the valley. Firstly, the participants involved in the PRA was given a list of all symbiotic and nature-based activities which are of prime interest to tourists visiting Shangarh. An exercise on strengths, weaknesses, opportunities and challenges (SWOC) of the project site vis-à-vis ecotourism was undertaken to assess its business potential. The information thus gathered is provided in Table 2.11 under section 2.2.5.

2.1.6 Strengths, Weaknesses, Opportunities and Challenges (SWOC) Analysis

SWOC for strategic planning is also used to understand the external and internal factors that could affect the success of the project. The information thus gathered is provided in Table 2.12 under section 2.2.6.

2.1.7 Forest

Forest assessment was also carried out in selected forests such as Chaniyara Forest. It has four compartments (C1, C2, C3, C4 with a total area of 131.12 ha). Secondary information was also collected from documents of HPFD like the Divisional Working Plans, Compartment History Files (CHF). Data on forest rights was collected through PRA and Forest Settlement Records.

2.1.7.1 Forest Assessment during Baseline Survey

This section states in brief the methodology for forest assessment used in the baseline survey. The forest assessment served three objectives as given below:

- Knowing the regenerating tree species
- Knowing the human impacts on different forest types
- Information of the basal area for each forest type

The assessment was based on circular plots arranged on a transect. A forest type was represented by at least two transects. The transects were placed in a way that they represent the forest type. Stands or parts of the forest type that were significantly different from other parts were assessed separately.

Allocation of the Transect: The investigator chose a spot representative of the forest type at the beginning of the transect in the forest 10 m from the edge. The transect was oriented along the longest site of the forest type. The first plot was allocated 30m away from the starting point of the transect and all subsequent plots were placed at similar intervals. Holes, riverbeds and similar locations unrepresentative of the stand were skipped and plots installed 30 m further along the transect.

<u>Assessment of Regeneration:</u> Regenerating tree individuals of different sizes were assessed in circular plots of different sizes. Details are shown in Table 2.3. For analysis, the existing data were combined into two categories: seedlings and saplings.

Table 2.3: Plot Size and Data	Collected for Different	Sizes of Regeneration Trees
		O

Туре	Definition	Plot used for	Area of each	Data collected
1 ype	Definition	assessment	plot	(Same for all plots)
Seedling 1	Tree species >0-0.30 m	Circular plot	3.14 sq. m	Species Name
Securing 1	height	(r=1 m)	J.14 sq. III	Number of individuals
Seedling 2	Tree species >0.30 m-1.3 m	Circular plot	7.06 sq. m	
Seeding 2	height	(r=1.5 m)	/ .00 sq. m	

Sapling 1	Tree species >1.3 m height and DBH <3.18 cm	Circular plot (r=2.5 m)	19.62 sq. m	Number of individual grazed/burnt/cut/others
Sapling 2	Tree species DBH >3.18 cm <7 cm	Circular plot (r=4 m)	50.24 sq. m	 Number of coppiced individuals Photo number of species Herbarium sheet number

<u>Assessment of Human Impact</u>: Signs of human impact (trampling, fire, livestock dung, lopping, resin tapping) were assessed using ocular method within 12m radius and noted as present or absent.

Assessment of Basal Area: Basal area gives an insight about the number and size of trees in an area. The basal area was assessed with the Angle Count Method in seven locations in each forest type. This method calculates the basal area for one tree based on the distance between the tree and the investigator and the diameter at breast height (dbh). The investigator counts the trees that fall in a certain range of dbh (count factor 4 or 2) while turning 360°. The number of trees counted in this manner are multiplied by the chosen count factor to get the basal area for the stand. The figures of all locations were averaged to get the value for the forest type.

2.1.7.2 HPFD Documents like Divisional Working Plan and Compartment History Files

Documents of HPFD used in planning and forest management were also referred. The Compartment History File (CHF) and Divisional Working Plans were referred to study the management objectives used historically, as well as forest use rights and practices by local communities.

2.1.8 Assessment of Forest Ecosystem Services (FES)

The forest ecosystem services as found in the baseline survey was shared with the PRA participants. The PRA participants were also asked to list all the FES including cultural and spiritual services which could support ecotourism. The participants were asked to not only list the FES, but their seasonality, trends, drivers for change in trend etc., and finally rank them based on their dependence on these FESs for their lives and livelihoods. Information on the extent of FES usage (frequency and intensity household wise) was also collected and collated. The information thus collected is presented in Table 2.14 under section 2.2.8.

2.1.9 Human-Wildlife Conflict

Human-Wildlife conflicts often hamper the well-being of people and information on the same was collected during the PRA. Facilitation and matrix were the tools used in collecting this. Wild animals causing damage to crop were enlisted, and details of the type and extent of damage were discussed. The result of this exercise is given in Table 2.15 under section 2.2.9.

2.1.10 Conflict Management

Issue of prevalence of conflicts on the usage of FES was discussed with PRA participants. Facilitated focus group discussion and matrix were the tools used to gather data. Issues of conflict with parties were identified and recorded along with their intensity. The PRA group was asked to narrate the conflicts (apparent and latent) with respect to FES and has occurred in the past or are ongoing. The information is recorded under Table 2.16 under section 2.1.10.

2.2 Results

This chapter provides the results of the data collected as described under the section 2.1 and includes information generated in PRA, baseline survey, census data and forest records. It is reproduced in this section in the form of tables and figures, supported by text.

2.2.1 Environmental Data

The Shangarh demonstration site ranges from 1,600-2,100 meter in elevation. While heavy rainfall is recorded during monsoon season, snowfall is recorded as moderate. However, no data is available for snow-based precipitation. This suggest that no tourism activities can be taken up during monsoon and winter seasons (see Table 2.8). However, Shangarh remains a favourite destination during summer. The environmental data is presented in Table 2.4.

Features Value Source 1600-2100 Elevation Range (m) Field measurement Annual Average Precipitation 2125.6 (mm) As Rain (%) 100 Maximum Rainfall recorded (mm) 3341.7 in 1988 GHNP Working Plan, Minimum Rainfall recorded (mm) 1376.2 in 1991 (2010-11 to 2024-25) As Snow (%) NA for the period 1984-Dry Months (with precipitation 2010 April, October and November <50 mm) NA Number of days with frost NA Period of Frost - Monthly mean temp. range 10.3 -Working Plan GHNP 24.3°C with mean maximum temp. range Temperature (°C/No. of days) (2010-11 to 2024-25) of 15.3 -30.0°C and mean minimum for period of 1996-2010 temp. 5.3- 20.1°C Planning Area 36 • 9C1b Upper or Himalayan Chir Pine CH File & Google map Forest Type and Area (ha) Forest (16 ha) • Quercus leucotricophora Forest (20 ha)

Table 2.4: Environmental Characteristics of Shangarh

2.2.2 Demographic Data and User Rights

Demographic data (Table 2.5) suggest that the main occupation of the people in surrounding villages is agriculture, seconded by private job in tourism industry. Amongst the livestock, high number of cows indicates high grazing pressure. Data on landholding suggests that most of the farmers belong to marginal class.

Par	Numbe	Source		
	Female (y)	394	Ward	
Population (number)	Male (x)	369	Development Plan	
	Children (below 6 years)	407	2017(GHNP) for	

Table 2.5: Demographic Data of Shangarh

Parti	culars	Numbe	Source		
		r			
Gender ratio (adult > 14 years) (number)	x/y	2:1	Dharali, Goshti, Katwali, Lapah and Madana		
	Cow	800			
	Buffaloes	Nil			
Livestock (number)	Bullocks	370			
	Sheep & goat	2280	CLINID W. 1		
	Horses & mules	40	GHNP Ward Level		
	Government job	13	Development Plan		
Occupation	Private job	5	Development Flan		
Number of individuals	Self-employed (Shop)	15			
(Number of HH)	Agriculture/Horticulture	272			
	Wage Labour	268			
	Marginal	100	Based on Informal		
Land holding	Small	50	talks with		
(% of HH)	Medium	10	President and		
(/0 01 1111)	Large	5	Panchayat Secretary		
	Agriculture	38.4			
Land use (he)	Grassland				
Land use (ha)	Pasture	54.00	Development Plan		
	Non arable	43.29			

The data suggests that maximum households are marginal farmers which results in high forest dependency with direct use of its resources. The livestock data suggests high grazing pressure. However, it was clear that women were largely part of SHGs and were enterprising and therefore could be trained for alternative income initiatives namely homestays.

Forest user's rights were decided during the creation of the park. Since the project area lies in an ecozone, most of the basic forest user rights are available to villagers (Table 2.6).

Table 2.6: Forest User Rights of Communities in Shangarh

Village Name	Tin	nber	Fuelv	Fuelwood Grazing			Fodder	
	Ext.	Int.	Ext.	Int.	Ext.	Int.	Ext.	Int.
Dharali	✓	✓	✓	✓	✓	✓	✓	✓
Goshti	✓	✓	✓	✓	✓	✓	✓	✓
Madana	✓	✓	✓	✓	✓	✓	✓	✓
Lapah	✓	✓	✓	✓	✓	✓	✓	✓
Katwali	✓	✓	✓	✓	✓	✓	✓	✓

(Ext. = user right holders outside Shangarh; Int. = user right holders inside Shangarh; × = No; ✓ = Yes)

Source: Range Office Sainj: The above user rights (especially timber is based on the revenue papers of the permanent residents of Shangarh Panchayat attested by the Panchayat Pradhan, Beat Forest Guard and the Panchayat Secretary)

2.2.3 Seasonality of Labour Distribution

Seasonality of engagement in agriculture, horticulture, wage labour, migration and labour availability for project activities were recorded. Seasonality of rain and snowfall were also probed and recorded in chart as shown in 16

Table 2.7. Attempts to derive information, on the duration of winter, summer, snow and rainy seasons as well as peak tourist season, availability of work during the non-peak tourist season (in perspective of tourism activities), were made.

Table 2.7: Seasonality of Labour Distribution at Shangarh

C		Month										
Seasonal activity & climatic events	J	F	M	A	M	J	J	Α	S	О	N	D
Wage Labour												
Irrigation												
Agri/Horticulture												
Rains												
Snow/Winter Rains												
Birdwatching and Trekking Support												
Tourist Guides												
Festival and Fairs												
Collection of Fodder for Animals												
Firewood Collection												
Income Flow Season												
Expenditure Season												
Marriage												
Collection of Medicinal Herbs												

Information on seasonality of labour distribution is important for planning the implementation of activities. The key interpretation of seasonal calendar for scoping ecotourism potential as well as planning for training and capacity building related to ecotourism are given in Table 2.8.

Table 2.8: Planning Ecotourism Activities based on Seasonality

Title	Months	Key Interpretation for Implementation
Snow Tourism	December, January and February	The panchayat area remains covered with snow. So white Christmas and snow tourism can be planned.
Birdwatching and Trekking	February, March, April and May	Spring is the best season for birdwatching tours as it coincides with the breeding season. Trekking activities could be explored or promoted during October and November.
Trainings and Workshops	January, February and March	95% households are occupied with agriculture from April to November.
Physical Intervention: Labour Availability	April, July, August, November and December	Time to plan plantation, creating bridal paths for trekking, culvert, water structures etc.
Tourist Season	January, February, March, April, May, June, November and December	Mostly local tourists, with very low influx of tourists from outside.
Rainy Seasons	June, July and August	Season to avoid tourism operations due to poor road connectivity.

To understand other private affairs of rural life, other major events were understood from villagers (Table 2.9).

Table 2.9: Other Engagements for Villagers

Title	Months	Key Interpretation for Implementation		
Income Pattern	April	Harvesting and selling of agriculture crops.		
		Mostly expenditures on marriages and fairs in		
Expenditure Pattern	March and December	March; Additional expenditures in preparing for		
		long winters.		
Collection of	And Marray June	Village protection committee preventing to		
Medicinal Herbs	April, May and June	prevent illegal medicinal harvest.		
		Period with maximum working hours per day for		
Imication	A:1 M 1 I	villagers. Therefore, any interventions should be		
Irrigation	April, May and June	planned keeping in mind the availability of		
		villagers.		
		Period with maximum working hours per day for		
Mamiaga	March, April, October and	villagers. Therefore, any interventions should be		
Marriage	November	planned keeping in mind the availability of		
		villagers.		

2.2.4 Stakeholder Mapping

Local communities and HPFD are the key stakeholders in the area. Self Help Groups are effective in women's empowerment and FES use. The results from the stakeholder analysis has been presented Table 2.10.

Table 2.10: Stakeholders of Shangarh

Туре	Key	Primary	Secondary
	• VFMS	Panchayat	
Civil Society	 User groups of 	Navyuvak Mandal and	State Level Cooperatives
Civil Society	ecotourism activities	Women SHGs	State Level Cooperatives
	Van Vikas Samiti	Shangarh Temple Committee	
	Commentions of Nature	Homestay Owners	
Private	Cooperatives of Nature Guides	Trekking guides	Large tour operator groups
	Guides	• Dhabas	
	• HPFD	PWD	Deputy Commissioner's
State	Panchayat		Office
State			Tourism Department
			Bank for financial loans

2.2.5 Ecotourism Resource Mapping

The ecotourism landscaping helped the community to realize its potentials to develop social, cultural, natural and symbiotic products/activities that could be put on offer to tourists. Most of these activities are forest based. All the plausible tourism products (Table 2.11) were listed out based on the interest of the tourists coming to the area. This exercise was useful as it made people realize the importance of protecting, conserving and respecting nature if ecotourism is to be developed as an alternative source of income.

Table 2.11: Important Tourism Products at Shangarh

	Super Prime attractions	Symbiotic attractions	Other attractions	Ethnic culture products
Product type	Birdwatching	 Nature based soft adventure tourism products Homestays Camping Rock Climbing 	CampingYogaMeditation at Thatches	 Kullu Handlooms Fairs Spiritual pilgrimage Temples Cuisines
Examples	The area lies under Great Himalayan National Park and as per ebird.org (a people science initiative) boast around 146 bird species (as on 21 Nov 2018) which could attract many birdwatchers in the area and could promote nature sensitive tourism	Single day treks to: • Shangarh-Sara Lake • Shangarh – Lapah- Dhela- Shakti- Neuli	Thatches: Thini Sara Thatch Jagnau Thatch Shakti Khamaba Thach Top	 Shangchul Mahadev Devta Ground Temples- Shangchul Mahadev Boothnath Temple

2.2.6 Strengths, Weaknesses, Opportunities and Challenges (SWOC) Analysis

As a business strategy, SWOC analysis (Table 2.12) was done for Shangarh as an ecotourism destination. Villagers were worried about issues namely solid waste management, plastic waste disposal, dilution of cultural values, probability of the advent of land mafia leading to land alienation from locals and introduction of drugs through drug abuse among tourists.

Table 2.12: SWOC Analysis for Ecotourism Potential at Shangarh

Strengths	Strengths Weaknesses Opportunities		
• Pristine environment	• Bad road network and	• Rapid pace of	Increased pollution
with natural springs and	thereby connectivity	ecotourism	• Fear of possible increase
water falls	• Inadequate drinking	• Good production and	in drug addiction
• Rich flora and fauna	water availability	just price for local	• Apprehension about
including varied birds	• Lack of Parents Teachers	produce	possible corrosion of
namely Pheasants,	coordination in the	More livelihood options	local culture due to
Western Tragopan,	school – Uneducated		increased tourism
Monal etc.	Parents		• Increased investment
• 128 Bigha Sangchul	• Lack of health aid for		on land by outsiders
Mahadev Ground	both humans and		which could boost real
• Various Trekking Route	animals		estate business.
Options			

• Traditional Kath Kuni	• Dearth of qualified		
Architecture	community members		
Traditional Cuisine	Short supply of electricity		
• Various types of	during winters		
Handicrafts			

2.2.7 Forest

This exercise was done before the concept of ecotourism was brought into focus. Chaniyara forest with total four compartments and an area of 131.12 ha, was used for forest assessment. These compartments were adjacent to villages and could give a fair assessment of community's pressure on forest regeneration status in these areas. The larger area selected for ecotourism potential may slightly differ from this assessment.

The site consists basically of two forest types: Moist Deodar Forest and Western Mixed Coniferous Forest (Map 2.2). A total of five plots were laid in Moist Deodar Forest while a total of ten plots were laid Western Mixed Coniferous Forest for the assessment of the human disturbance, tree species regeneration and basal area.

2.2.7.1 Forest Assessment during Baseline Survey

Human disturbances in different forest types of Shangarh

Table 2.13 explains the effect of human impacts such as trampling, cattle grazing, illicit felling and cutting in moist deodar forest. The pressure in mixed forest is more for lopping trees for fodder and fuel while the pressure from grazing is relatively less.

Table 2.13: Percentage of Plots in which Signs of Human Interference were observed in Shangarh	Table 2.13: Percentage	of Plots in which	ch Signs of Human	Interference were	observed in Shangarh
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Forest Type	Fire	Cutting	Trampling	Lopping	Resin	Track	Dung
12/C1c Moist deodar Forest	0	80	100	0	20	80	80
12/C1d Western Mixed Coniferous Forest	0	100	80	20	0	60	70

Regeneration in different forest types of Shangarh (Figure 2.3)

- Regeneration in Moist deodar Forest: Regeneration till the seedling stage is remarkably high in Deodar (*Cedrus deodara*). However, very few individuals reach the sapling stage. This may be due to human pressure. Other species regenerate less abundantly. It was recorded that Blue pine (*Pinus wallichiana*) shows more regeneration than Spruce (*Picea smithiana*).
- Regeneration in Western Mixed Coniferous Forest: In the mixed forest, Deodar has shown good regeneration but their growth into sapling is poor. The regeneration of Blue Pine (*Pinus wallichiana*) seedlings is much poorer and no saplings of blue Pine were observed in sample plots.

➤ Basal Area in different forest types of Shangarh (Figure 2.3):

• Basal Area in Moist deodar Forest: Deodar (*Cedrus deodara*) is represented with the highest basal area in this forest type followed by Blue Pine (*Pinus wallichiana*). Interestingly, the regeneration study shows

that Ban Oak (*Quercus leucotricophora*) is seen regenerating in these stands, but they could not make it to being large individuals as seen in basal area results. This indicates negative pressure against growing seedlings of these two species. The participatory forest management committee needs to intervene to avoid losing oak species for future generations.

 Basal Area in Western Mixed Coniferous Forest: Similar pattern was found in this forest type as in Moist Deodar Forest. Cedrus deodara has the highest basal area followed by Pinus wallichiana.

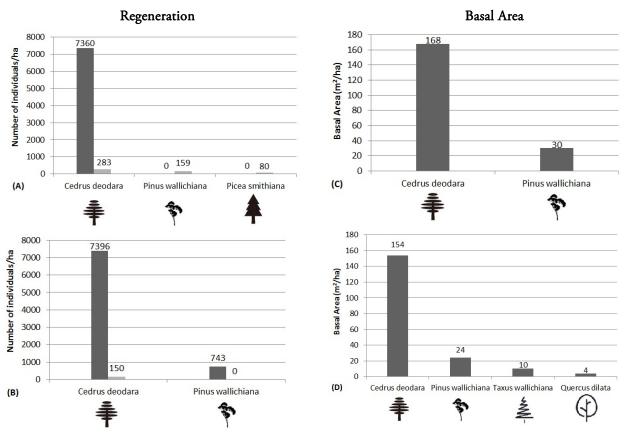


Figure 2.3: Regeneration and Basal area in different forest types of Shangarh [A: Regeneration in Moist Deodar Forest, B: Regeneration in Western Mixed Coniferous Forest, C: Basal area in Moist Deodar Forest, D: Basal area in Western Mixed Coniferous Forest]

2.2.8 Forest Ecosystem Service

In pre-assessment discussions, villagers have expressed interest in ecotourism-based plans. In the detailed exercise taken up during PRA, they are fully aware that ecotourism is an important forest ecosystem service, though their primary dependence is on irrigation-based agriculture, fuelwood and fodder. The villagers rank water and ecotourism as prime forest ecosystem services (Table 2.14). They perceive ecotourism, a non-extractive forest resource, as one of highest ranking in terms of its perceived economic returns.

Table 2.14: Forest Ecosystem Services, their Rank of Importance, Trends and Drivers in Shangarh

S. No.	Ecosystem Services	Rank	Availability	Status of Ecosystem Service (changes in last 10yrs)	Expected Advantage	Trend	Reason
a	Grass Fodder	2	\downarrow	\downarrow	\leftrightarrow	\rightarrow	Agriculture
Ь	Water	1	\	\rightarrow	\longleftrightarrow	\rightarrow	Lack of rainfall and deforestation
С	Fuelwood	4	\		\	\	Deforestation and increased agriculture
d	Leaves Fodder	3	\leftrightarrow	\leftrightarrow	\longleftrightarrow	\leftrightarrow	-
e	Medicinal Herbs	5	\	→	\	\rightarrow	No Restriction on outside labour
f	Food from forests	6	\downarrow	\rightarrow	\	\rightarrow	Less rain and snowfall
g	Land protection	8	\	\rightarrow	→	\rightarrow	Deforestation
h	Dev Van – Holy Forest	1	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	-
i	Ecotourism	1	\	\downarrow	\	\downarrow	Natural beauty and culture
j	Wood Construction	9	\downarrow	\downarrow	\downarrow	\downarrow	-

Note: Trend – Decreasing: ↓ Increasing: ↑ No change: ↔

2.2.9 Human-Wildlife Conflict

Shangarh, covered by forest on all sides, faces many challenges of human-wildlife conflict and most of the losses were met in agriculture lands. So far, no injury to human life is reported which could favour ecotourism products like nature trekking. Table 2.15 presents the results of discussion on human wildlife conflict in Shangarh during the PRA.

Table 2.15: Human-Wildlife Conflict in Shangarh

	Wild animals causing damage						
Damages to	Wild	Blue	Indian	Black	Monkey	Porcupine	Lagnard
	Boar	Bull	Hare	Bear	Wiolikey	rorcupine	Leopard
Wheat	Н	M	M	N	M	N	N
Maize	Н	N	N	M	M	M	N
Potato	Н	N	N	N	N	M	N
Colocasia/taro roots	Н	N	N	N	N	N	N
Barley	N	M	N	N	N	N	N
Killing of livestock	N	N	N	N	N	N	M

	Wild animals causing damage						
Damages to	Wild Boar	Blue Bull	Indian Hare	Black Bear	Monkey	Porcupine	Leopard
Injury to humans	N	N	N	L	N	N	L
Human casualities	N	N	N	N	N	N	N

Note: H = High, M= Medium, L= Low and N = Nil

2.2.10 Conflict Management

During conflict assessment (Table 2.16), no ecotourism conflict was reported, and this may be due to the nascent character of the sector. Increase in conflicts is usually witnessed when there is increased competition leading to stress on resources and inequitable distribution of some resources between adopters and non-adopters.

Table 2.16: Conflicts: Type, Involved Parties and Intensity

Type of Conflict (FES)	Conflict with	Intensity
Eco-tourism	Nil	Low

3 Village Forest Development Society (VFDS) Shangarh

The details of the members of VFDS Shangarh are given in Table 3.1.

Table 3.1: Details of Executive Members of VFDS Shangarh

S. No.	Name	Age	Additional role	Address	Post/ Occupation	Contact number	VFDS Role
1	Praveen Thakur S/o Sh. Gurdhyan Singh	27	President Yuvak Mandal and Social Worker	VPO Madana, Teh. Sainj, Distt. Kullu	Agriculture and shop keeping	809142732 7	President
2	Ravi Kumar S/o Sh. GhungarMal	23	Tourism Professional	Village Shasni, PO Madana, Sub Teh. Sainj, Distt. Kullu	Homestay Owner	780723731 0	Vice- President
3	Sh. Kanhiya Lal	48	Forest BO	BO Shangarh, Wildlife Range Sainj, PO Shangarh, Teh. Sainj, Distt. Kullu	Forest Department	941845583 7	Member Secretary
4	Ramesh Kumar S/o Sh. Girdhari Lal	23	Tourism Professional & Mountaineeri ng Institute Course	Village Barshangarh, PO Madana, Sub Teh. Sainj, Distt Kullu	Agriculture and driving	780750014 2	Joint Secretary
5	Manoj Kumar S/o Sh. Ramesh Kumar	27	Forest Guard	Village Forsh, PO Vhren, The. Bhunter, Distt Kullu	Forest Guard	945978266	Treasurer
6	Mrs. Naina Devi W/o Sh. Dole Singh	47	Executive Member Mahila Mandal	Village Bira Shangarh , PO Madana, Sub Teh. Sainj, Distt Kullu	Housewife	981608102 7 (Dhyan Singh)	Members
7	Dharam Veer S/o Tera Chand	31	Executive Member Yuvak Mandal	VPO Madana, Teh. Sainj, Distt. Kullu	Agriculturist	862681225 0	Members
8	Mrs. Krishna Devi W/o Sh. Vikram Singh	51	Executive Member SHG	Village Dhagara, PO Madana, Sub Teh. Sainj, Distt. Kullu	Housewife	980545943 0 (Vikram)	Members
9	Sh Baldev Singh S/o Sh. Thakur Das	32	Executive Officio Ward Panch	Village Katwali, PO Madana, Sub Teh. Sainj,Distt. Kullu	Agriculturist	867955950 0	Members

S. No.	Name	Age	Additional role	Address	Post/ Occupation	Contact number	VFDS Role
10	Ramesh Chand S/o Sh. Nand Ram	38	Ex-Officio Member Forest Committee	Village Bar Shangarh , PO Madana, Sub Teh. Sainj, Distt. Kullu	Contractor	981624888 1	Members
11	Kom Dutt S/o Vidya Singh	30	Ex-Officio Member VFDS	Village Lapah, PO Madana, Sub Teh. Sainj, Distt. Kullu	Shopkeeper at Lapah	898838492 7	Members
12	Sh. Tek Singh Palsra S/o Sh. Saevy Ram	50	Devta Committee President	Village Dharali, PO Madana, Sub Teh. Sainj, Distt. Kullu	Agriculturist	985723299 1	Members
13	Khem Raj S/o Sh. Karem Chand	32	Ex-Officio Shangri Yuvak Mandal	Village Goshti, PO Madana, Sub Teh. Sainj, Distt. Kullu	Unemployed Youth	809115861 9	Members

4 Aims of the Management Plan

The aims of the microplan for Shangarh is closely linked to the objectives of the GHNP. The GHNP management plan attempts to link biodiversity conservation to local livelihoods. Therefore, conservation strategies support sustainable local livelihoods that helps reduce direct dependence on natural resources (GHNP Management plan, 2010-2020).

The presented microplan for Shangarh has tried to incorporate management suggestions from GHNP ecozones as given in Table 4.1.

Table 4.1: Management Suggestions for Shangarh from GHNP Management Plan

Management Suggestions for GHNP Eco-Zone	Microplan of Shangarh: Highlights
Assess the strengths and assets of the natural-resource-	The community, especially youth who are well
dependent community members. This will help	acquainted with the region are taking ecotourism as a
establish links between the management plan activities	viable conservation-sensitive livelihood option.
and livelihood priorities of these people)	All tourism products base itself on the strength of the
	local community
Facilitate organizing of sustainable community-based	VFDS and user groups for homestays, nature trekking
organizations, users' group of rural poor and women,	guides for women, local youths will be formed and will
preferably with strong linkages to the local village	function in line with PRIs.
councils known as Panchayats.	
Establish the biodiversity conservation efforts at	Microplanning is the main instrument used in
Panchayat level through consultative processes of	consultative process for developing participatory
microplanning.	management options.
Develop a capacity building programme for the	Various capacity building programme has been
members of VFDS, SHGs, other user groups and field	planned for training of nature guides, fire
staff	management, homestays, rescue operation and
	monitoring system for community and field level staff.
Improve identification, appraisal, implementation and	Ecotourism products especially the non-consumptive,
evaluation of development programmes or income	ecological sensitive rural community tourism products
generation programmes to facilitate conservation of	that benefits the community and also helps in the
biodiversity in the GHNP.	conservation of the Park's biodiversity.
Resolving of human-animal conflict with emphasis on	Ecotourism could result in the reduction or stopping of
social and environmental justice for the poor people	poaching through establishing a participatory mode of
living close to the GHNP.	watch and guard.

Box 1: Community-based Ecotourism Plan at Shangarh

Community Based Ecotourism (CBET): An Effective Tool for Nature Conservation and Livelihoods

- The current microplan is synchronized with the livelihood-based nature conservation approach adopted by the GHNP, the current microplan attempts to ensure conservation objectives, meeting livelihood security of the community through tourism plans that are ecologically sensitive. It also attempts at participatory forest management through VFDS and hopes to widen its ambit to regulatory (water) and provisioning services (fodder, fuel). CBET could become an effective conservation tool, meeting livelihood objectives through the following:
 - CBET could provide incentives to reduce pressure on protected areas through non-consumptive options of income and employment
 - CBET could also be a deterrent to animal and plant poaching by increasing the presence of outsiders and nature guides and by educating that value of wildlife is more when alive and in natural settings.
- In ecozone area,
 - CBET offers a sustainable land use supporting broader goals of forest, agriculture, and open space preservation.
 - o Upgradation of local infrastructure to meet the needs of tourists, improved resource use practices of local communities, improved living standards especially with respect to public health, sanitation, energy, and waste management.
- The efforts through CBET and VFDS aims to bring the community to the center-stage with respect to protection and management of forest resources as well as regulation of unrestricted tourism activities detrimental to the natural resource base.
- Creating more awareness amongst youth about their cultural and natural heritage.
- The CBET could help in meeting long-term goal of conserving the rich cultural and ecological heritage of the Park, a natural world heritage.

The PRA exercise highlighted how community-based ecotourism can achieve management objectives mentioned in the GHNP plan such as:

- Assessing the strengths, assets and opportunities of community members to link management, conservation and livelihood priorities.
- Strengthening community-based organizations, users' group of rural poor and women, preferably with strong linkages to Panchayats.
- Assessing human-wildlife conflict with emphasis on social and environmental justice for the poor people living close to the GHNP. Prioritizing non-consumptive means of livelihood from natural resource base as well as meeting basic provisioning needs from forest area.

Table 4.2 shows how the community-based ecotourism initiatives can achieve multiple goals of conservation, developing entrepreneurs as well as community development on a long-term, mid-term, short-term period and during the project duration.

Table 4.2: Aims for Management Plan based on PRA at Shangarh

Time period	Conservation	Social Entrepreneurship	Community Development	Measures
Long Term (30 years) Long-term capacity building	 Forest of Sainj-Shangarh valley has shown positive forest regeneration trend (at least 15%) Community restore all degraded areas by plantations for ecotourism benefits Reported activities of illegal poaching, illicit felling reduced by 50% 	 Sainj valley is established as gateway to the GHNP and known as twin ecotourism destination like Teerthan valley. Nature based ecotourism has spread to nearby valleys and community sees cultural ecosystem services as an economic option 	Participatory approach of forest conservation is established through ecologically sensitive tourism model which is replicated in other adjacent areas.	 Community awareness Participatory forest management which aims at regeneration of forest and protection Capacity building on entrepreneurship
Mid Term (15 years)	 Forest regeneration in the Sainj - Shangarh valley shows positive regeneration trend by 10%. Community is aware about economic benefits of the diversity of the flora and fauna and the need to protect it against degradation. Community monitoring system is in place and reported cases of illicit felling of trees, unregulated grazing, poaching of wild animals, illicit harvest of medicinal plants and illicit fire has reduced by 20%, resultantly the flora and fauna conservation status has improved. 	Ecotourism based livelihood opportunities for local youth, community organizations like VFDS and PRI increases by 15%.	 VFDS plays a major role in participatory forest management planning, as well as regulating tourism activities barring detrimental activities. Forest department consider CBET as participatory forest management model in adjacent ecozone in GHNP. 	 VFDS ensure protection to regeneration in degraded areas. VFDS and FD establishes working participatory monitoring system to check illicit felling, poaching, illicit grazing and fire incidents. VFDS monitor tourism activities effectively and their impact on conservation and regulate it. VFDS replicate training capacity generated in the project, engaging more youth to take up ecotourism as livelihood options.

Time period	Conservation	Social Entrepreneurship	Community Development	Measures
Short Term (5 years)	 Community has a working monitoring system to check illicit felling of trees, unregulated grazing, poaching of wild animals, illicit harvest of medicinal plants and fire Areas of heavy ecotourism are regulated to reduce pressure on resources. Community is strongly aware about the carrying capacity of the site and negative impacts of excessive tourism in ecotourism model. 	 Ecotourism is established as viable economic and income generating activities among 15% community youth. Finance institutions are ready to invest in local entrepreneurs involved in homestays and nature-based tourism operations. Local cooperatives of ecotourism service providers are established. 	 At least one functional community-based tourism product is in place in each destination e.g. birdwatching or homestays Regulation in place for fostering community-based tourism products including home stay arrangements and traditional culture and crafts. Scoping work done for centres for solid waste management, firefighting, emergency response and first aid training and established Trainings given in case of forest fires as a priority issue in the management plan of GHNPCA. 	 Capacity building measures continues, and participatory monitoring system is working. VFDS is enabled to get funds from other donors /development agencies for financing trainings and entrepreneurs initiatives. VFDS takes additional sources for training for youth on ecotourism. Conflicts in usufruct sharing are resolved by VFDS. Additional resources are explored for establishing centres for solid waste management, firefighting, emergency responses etc.

Time period	Conservation	Social Entrepreneurship	Community Development	Measures
	Community has identified areas of	 Capacity building of 	VFDS has taken a participatory	Community identified user
	illicit felling and high grazing	community user groups is	role with forest department to	groups for homestays,
	pressure, and fire spots and made	achieved, and they are providing	spread nature-based ecotourism	established the do's and don'ts
	awareness negotiations with sections	ecotourism services and realizing	as non-consumptive livelihood	for homestays to promote rural,
	of community involved, motivated	economic benefits out of	option among forest ecosystem	cultural and nature-based
ear	them to be part of conservation.	ecotourism.	services and thus conserving	tourisms.
Project period (1.5 year)	Community has submitted	• They have started to realise that	forest for their livelihood.	
1 (1	additional proposal for regeneration	ecotourism products such as	VFDS has done a participatory	
riod	in degraded areas to the forest	birdwatching, nature trekking,	planning on conservation and	
pe	department under their annual plan	camping, etc., as non-	regulatory mechanism for	
ect	of operations.	consumptive source of	reducing negative tourism	
Proj	Community has set rules for	livelihood and	pressure on natural and cultural	
	tourism movements, the do's and	entrepreneurship.	resources.	
	don'ts for tour operators and key	 Guide groups for nature trails 		
	elements of CBET and have	and birdwatching tours are		
	installed regulatory systems to	identified, listed and registered.		
	reduce negative tourism pressure.			

5 The Plan (for 1.25 years)

FES: Increase of ecotourism as forest ecosystem service in Shangarh valley of GHNP. This will help villagers to realise the value of non-consumptive sustainable use of ecosystem surrounding them.

Target: Improvement of forest-based livelihood around ecotourism resulting in preserving the pristine forests of Shangarh.

5.1 Foreground Activities Taken During Microplan Preparation

Following are the activities taken during microplan preparation:

- 1. PRA conducted in panchayat villages informs about the project and enlist the preferred forest ecosystem services. This will help in arriving at an ecotourism resource information, which will in turn help understand key capacity needs.
- 2. Microplan was approved by HPFD, the Shangarh community and GIZ.
- 3. Formation of VFDS Shangarh Village Forest Development Society: Identification of active members, proposal of members and selection of VFDS executive members by a general body meeting.

5.2 Detailed Strategy of the Components

Overall Strategy: Key strategies for implementation of community-based ecotourism activities in Shangarh Panchayat include institutional building, skill development, training and marketing. These are detailed as follows:

- Implementation will be undertaken in the entire Shangarh Panchayat Area.
- Active role of women and their integration in the entire process of community-based tourism
 activities will be ensured by providing various skill development trainings as per the tourism products
 and interests.
- The entire intervention is planned around results from five activities, namely tourism resource that is mapped and photographed; stakeholders identified; identification of needs towards institution building and awareness generation; skill-based trainings on business development and site management, other marketing and physical interventions (Midterm outside the preview of GIZ project).
- Bird watching has been identified as one of the key tourism products along with homestays.
- All exposure visits would be conducted in consultation with experts especially to various Panchayats around National Parks which are already practising community-based eco-tourism.

Six level sub-strategies are identified which will lead to result areas and related activities:

- Strategy for tourism resource identification (For Result Area R0, mostly covered in PRA)
- Strategy for forming community-based societies., institutions and self- help groups and awareness generation about community-based tourism (For Result Area R1)
- Strategy for capacity building on ecologically sensitive, rural and culture-based nature tourism providing access to income generation activities (for Result Area R2)
- Strategy to develop mechanism for marketing (for Result Area R3)

- Strategy for Monitoring Framework (for Result Area R4)
- Strategy for additional future action as part of next management plan for GHNP (for Result Area R5)

5.3 Implementation Plan for Microplan during HP-FES Phase

Implementation Plan for Microplan during HPFES Phase (1.5 year) is given in Table 5.1, Table 5.2, Table 5.3, Table 5.4, and Table 5.5.

Table 5.1: Participatory Rural Appraisal, Resource Mapping and Microplan Development Activities

	Year One (2019)				
Result area R0 and R1: PRA, Resource Mapping and Activities towards the Development of Microplan	1st Qtr. (Jan to March)	2nd Qtr. (April to June)	3rd Qtr. (July to Sep)	4th Qtr. (Oct to Dec)	
GIS based maps generated					
Value Chain Analysis for key identified products like birdwatching and homestays					

Table 5.2: Activity Plan for Post VFDS Institutionalisation

Result Area R1: Activities (Post VFDS Institutionalisation)	1st Qtr. (Jan to March)	2nd Qtr. (April to June)	3rd Qtr. (July to September)	4th Qtr. (Oct to Dec)
VFDS takes centre stage with respect to planning;				
identifies and establishes self-help groups (SHGs)				
of user groups/stakeholders (both for training and				
for implementation) based on tourism products				
as well as forest services like water, fodder.				
Mass awareness programme undertaken to show				
all forest and wildlife crimes as detrimental to				
livelihood model of ecotourism				
Allocation of roles and responsibilities of user				
groups as watchers for reporting all forest wildlife				
crimes, fire incidences, illicit tourism activities,				
etc. Special emphasis laid on ecological sensitive				
model of rural tourisms with roles and				
responsibilities such as guarding against forest				
and wildlife crime, promoting sensitive practices				
of solid waste management and fire protection;				
Establishment of panchayat level marketing hubs				
for creation of websites and other marketing				
material, handling bookings, packages, quality				
control etc.				

Result Area R1: Activities (Post VFDS Institutionalisation)	1st Qtr. (Jan to March)	2nd Qtr. (April to June)	3rd Qtr. (July to September)	4th Qtr. (Oct to Dec)
For VFDS and user groups, trainings are organised for institutional training (management,				
marketing, accountancy, computerization,				
conflict resolution, team building etc for panchayat level institutions)				
Community develop a participatory monitoring				
and evaluation framework for smooth				
implementation of microplan				

Table 5.3: Activities Plan for Skill building

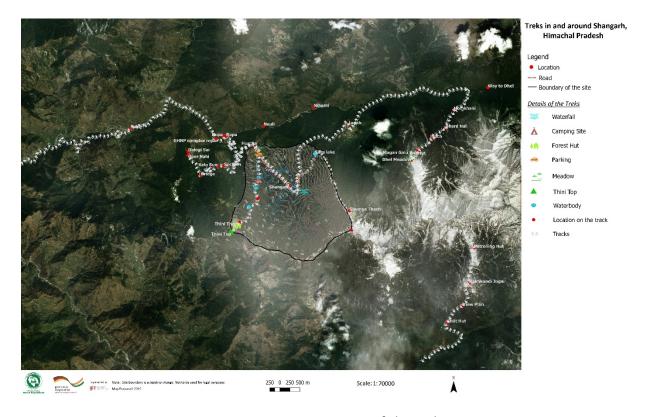
Result Area R2 Activities (Skill Building)	1st Qtr. (Jan to March)	2nd Qtr. (April to June)	3rd Qtr. (July to Sep)	4th Qtr. (Oct to Dec)	1st Qtr. (Jan to Mar)	2nd Qtr. (April to June)
Exposure visits of SHG's and user groups to						
ecotourism sites in nearby valleys						
Human capacity development would be taken						
up for products like nature-based trails,						
birdwatching, star-gazing, night camping, etc.						
coupled with rural homestays						
Trainings in basic and advanced level of						
homestays for selected homestays at panchayat						
level; certification process on eco-sensitive						
homestays generated						
Training on Guides for Trekking and Soft						
Adventure						
Training on safety and rescue management						
Training for selected women representatives.						
They will be provided culinary training; Menu						
will be made and tested						
Training on bird watching: birding trails will						
be defined, and packages made						
Communication and marketing training						
Training for regulation of carrying capacity and						
maintaining cleanliness; training on solid waste						
management						

Table 5.4: Activities on Marketing

Result Area R3 Activities: Marketing Activity: Skill Building	1st Qtr. (Jan to March)	2nd Qtr. (April to June)	3rd Qtr. (July to Sep)	4th Qtr. (Oct to Dec)	1st Qtr. (Jan to Mar)	2nd Qtr. (April to June)
Overall marketing strategy on elements of						
pricing, promotion, place and products						
mainly online based; Unique selling feature						
of the whole package "ecological sensitive						
nature and rural tourism plans"						
Brochure enlisting and showcasing all						
tourism products in the area						
Development of marketing hub to promote						
ecotourism with chosen tour operators,						
ecotourism consultants, and qualified SHG						
members and the VFDS members						
Creation of master website: hosting and						
maintenance of the same						
Maintenance and creation of blogs, Web 2						
Tools and Websites						
Online promotion through blogs, YouTube,						
podcasts, Facebook and all medium						
mentioned in the marketing strategy						
Production of brochures and other						
innovative print media with maps & contact						
information.						
Production of banners, displays to be used at						
entry level areas like Sainj						
Familiarisation Tours of Tour Operators						
Event II- Bird Counts for Birding Activity						

Table 5.5: Activities on M&E Framework and Additional Activities for Co-financing

Result Area R4 Activities: M&E Framework and Additional Actions for Co-financing from state Agencies	1st Qtr. (Jan to March)	2nd Qtr. (April to June)	3rd Qtr. (July to Sep)	4th Qtr. (Oct to Dec)	1st Qtr. (Jan to Mar)	2nd Qtr. (April to June)
Indicators includes reduction in reported						
cases of illicit felling of trees, reduction in						
degraded areas, regeneration and poaching,						
solid waste management, regulation of						
negative tourism pressure.						
Creation of infrastructure like Solid waste						
management centre						
Enrichment plantation at degraded areas,						
selected by community to meet provisioning						
(fodder) and regulating forest ecosystem						
services like water						
Creation of bridal paths on trekking trails,						
safety rails in risky areas.						



Map 5.1: Intervention map of Shangarh

5.4 Summary of Activities with Physical and Financial Projections

The summary of physical and financial projections under the financial agreement (direct transfer from GIZ to FD and VFDS for proposed activities are summarised in Table 5.6.

Table 5.6: Shangarh Activity Budget Line

S. No.	Activity	No.	₹
1	Institutional Training (management, marketing, accountancy, computerization, conflict resolution, team building etc., for panchayat level society	2	40,000
2	Mass awareness about tourism and its benefits among various stakeholders living in surrounding sites	1	80,000
3	Exposure visits to see community-based ecotourism for chosen members	2	1,00,000
4	Training on homestays for selected homestays at the cluster level	2	66,000
5	Three-day residential training on Trekking and Camping at cluster level x 2 Trainings (basic and advanced Levels for 20 persons)	2	85,000
6	Two-day non-residential training on solid waste management for 20 persons	1	20,000
7	Two-day non-residential Culinary Training for 20 persons X 2 Trainings (basic and advanced)	2	66,000
8	Five-day residential Static Campsite Management Training for 20 persons from identified SHG's on cluster level) X 2 trainings (basic and advanced)	2	1,00,000
9	Five-day residential cluster-level training on birdwatching for 20 Persons X2 Trainings (basic and advanced)	2	1,00,000
10	Three-day non-residential training on first aid and rescue for identified trekking guides	2	20,000
11	Training on fire fighting with equipments	1	1,00,000
12	Training for guides on communication and marketing, homestays and local tour operators	1	66,000
13	Other trainings suggested by forest department (SHG training for handicrafts, etc.,)	5	2,38,000
Capacity Building Total			10,81,000
14	FAM Tours of Tour Operators	1	
Events Total			
15	Digitalization of Tourism Resource Mapping of Shangarh Panchayat to identify and verify tourism resources and plan for participatory tourism interventions	1	-
16	Online Promotion through blog, YouTube, Instagram, Facebook and all things mentioned in the marketing strategy	1	-
17	Production of Brochures and other innovative print media with maps & contact information	1	-
18	Pictorial and Text Documentation of all tourism products in the area	1	-
19	Creation of Master Website as marketing hub with linkages	1	-
20	Maintenance of blogs, Web 2 Tools and Websites	2	-
Marketing Communication Media			
21	Binoculars and Books each set x 20 Sets	10	-

S. No.	Activity	No.	₹
22	Basic Mobile Camping Equipment - each 10 Sets of tents, rucksacks, kitchen	10	-
	equipment and sleeping bag		
Eco guide Equipment Total			
24	Office equipment and stationery		3,15,000
Office Total		3,15,000	
Hub coordinator/community mobiliser			
Grand total			13,96,000

6 Monitoring and Evaluation (M&E) Framework

For monitoring and evaluation (M&E) a participatory framework will be set up to monitor the activities and process of participation of stakeholders in the implementation of microplan. This plan will be used to monitor the activities, the impact of these activities on the flow of ecosystem service and related forest management goals. To effectively monitor the project impacts, baseline data corresponding to the activities needs to be collected.

The framework for monitoring of microplan will be segregated in two sections.

- 1. M&E undertaken by the HPFD: Inhouse monitoring of activities against physical and financial indicators as per a pre-defined timeline will be undertaken by the HPFD frontline staff. The work done will be subjected to monitoring framework used by the HPFD. This system will evaluate vegetation and other related ecosystem service flow over a period. Use of GIS based map of JFM areas, with clearly delineated village boundaries will be undertaken by HPFD.
- 2. Participatory Monitoring by VFDS: This will comprise group of individuals including a local forest guard of the beat, one member of VFDS nominated by the Executive Committee of VFDS and president of the local Mahila Mandal. This group will provide report against indicators after ground truthing for various activities undertaken in the field.

Every two years improvement in livelihood is assessed through socio-economic survey. The framework should clearly mention agreed protocol on rights and responsibilities of all stakeholder parties.

Baselines Data

A baseline will be set to measure the flow of existing FES in the project area. For this, quantitative data will be collected using socio-economic surveys, field exercises and observations along with the community. In addition to this, photo-documentation of works will be done at different stages of work.

Monitoring Plan

An elaborate monitoring plan will be prepared and appended to the microplan document once the plan is approved and its budget finalized. The plan will consist of activities, milestones, indicators for these milestones and the way to validate these indicators. Each activity and milestone will have responsible persons also indicated. The communities and frontline HPFD staff will be trained in monitoring under the microplan framework.

7 Recommendations

Additional studies will be taken up to decide on the carrying capacity of Shangarh valley with respect to ecotourism. A few additional studies are also proposed to understand the value chain analysis.

8 Annexures

Annexure I: Formation of the Society - Processes followed for the formation



Figure 8.1: Community Meeting on Electing Executive Members at Shangarh

Annexure II: Interview with the few Executive Members

Name: Praveen Thakur

Age: 26

Address: VPO Madana, Teh. Sainj, Distt. Kullu

Phone number: 8091427327

Email ID: NA

Aadhar Card Number: 882863772650 Qualification: Higher Secondary

Designation: President Occupation: Social Worker

Experience in Tourism: Developing trekking trails to Pundrik Temple and other minor temples of Shangarh for the past two and a half years. Currently in the process

of starting a homestay for tourists. Present Source of Income: Agriculture Vision for Ecotourism in Shangarh:

"Nature itself is the prime attraction in Shangarh; even the water here is pristine. Our meadow is blessed by the gods, flora and fauna freely co-exist; Shangarh is the gateway to the Great Himalayan National Park. I want to ensure the beauty of the meadows; rules of the Devta regarding fighting or drinking are followed. Cleanliness and hospitality here are welcoming. After all, taking care of our visitors will be our priority."

Name: Ravi Kumar

Age: 20

Address: Village Shasni, PO Madana, Sub Teh. Sainj, Distt. Kullu

Phone number: 7807237310 WhatsApp number: 7807237310 Email ID: ravi.kullu1998@gmail.com Aadhar Card Number: 256472335679 Qualification: Higher Secondary Designation: Vice-President

Occupation: Homestay Owner - Divine Land

Tourism Experience: Runs a homestay for the past two to three

years and was a tourist guide on multiple treks.

Present Profession: Student

Vision for Ecotourism in Shangarh:

"Personally, I want to see Shangarh grow in a different way from Manali, Kasol or Tirthan. Its peace and purity, its silence and natural beauty should be maintained and not spoiled because of commercialization of any kind. Shangarh is a place where you can see all sorts of beauty within a day and we only hope that ecotourism can ensure we don't lose that while opening our doors to visitors so that they too can experience what it's like to be in sync with nature."

Name: Kanhiya Lal

Age: 56

Address: BO Shangarh, Wildlife Range Sainj, PO

Shangarh, Teh. Sainj, Distt. Kullu Phone number: 9418455837 WhatsApp number: NA

Email ID:NA

Aadhar Card Number: 558513641702 Qualification: Higher Secondary Designation: Member Secretary

Occupation: Forest Officer, Wildlife Range Sainj

(GHNP Division)
Tourism Experience: NA

Present Source of Income: Government Service

Vision for Ecotourism in Shangarh:

"Shangarh is recognized for its Devta's blessed ground and presence. Eco-tourism is a good way to involve our locals and make ourselves visible to potential tourists. It will help practice responsible tourism which is the goal."

Name: Ramesh Kumar

Age: 22

Address: Village Barshangarh, PO Madana, Sub Teh. Sainj, Distt

Kullu

Phone number: 7807500421 WhatsApp number: 7807500421

Email ID: rinkuthakur98580@gmail.com Aadhar Card Number: 5592434677212

Qualification: BA (Tourism)
Designation: Joint Secretary
Occupation: Trekking Guide

Tourism Experience: Mountain training and trekking in GHNP

Present Source of Income: Guide for Trekking

Vision for Ecotourism in Shangarh:

"Adventure sports is a captivating experience in Shangarh, but I think most people come here for the Shangarh meadows. The NGO can market this place better than locals, tourists have to know about this place so that they can experience Shangarh – fixing roads will make it more accessible and that'll subsequently boost tourism"

Name: Manoj Kumar S/o Sh. Ramesh Kumar

Age: 25

Address: Village Foresh, PO Bharain, The. Bhunter,

Distt Kullu

Phone number: 8219770361 WhatsApp number: NA

Email ID:NA

Aadhar Card Number: 315567851731

Qualification:

Designation: Treasurer Occupation: Forest Guard Tourism Experience: NA

Present Source of Income: Government Service

Name: Dharam Veer

Age: 31

Address: VPO Madana, Teh. Sainj, Distt. Kullu

Phone number: 8626812250 WhatsApp number: NA

Email ID: NA

Aadhar Card Number: 643878207676 Qualification: Higher Secondary

Designation: Executive Member Yuvak Mandal

(Est. 2006 – 45 members – Yuvak Mandal takes care of the tree plantations in the forest region – keeping Shangarh clean and green – also takes initiative and encourage sports like volleyball, cricket)

Occupation: Agriculturist

Tourism Experience: Trekking guide to Thini, Tirthan, Raktisar,

GHNP etc.

Present Source of Income: Agriculture

Vision for Ecotourism in Shangarh: "Shangarh is a paradise on earth for us. My trekking guide job requires me to travel to lots of places, but I'll always love this place more than the spots I take tourists to. The lakes, waterfall and meadows here are untouched by outsiders. I want that through this NGO it remains unchanged."

Name: Mrs. Krishna Devi

Age: 50

Address: Village Dhagara, PO Madana, Sub Teh. Sainj,

Distt. Kullu

Phone number: 9805459430 (Vikram) WhatsApp number: 9805459430

Email ID:NA

Aadhar Card Number: 378219109538

Oualification:4th Std Pass

Designation: Executive Member SHG 1

(SHG called Sanchol Group Katwali – activities sustained through personal investment – work mainly with herbs and agriculture but have stopped growing and selling herbs since no funds given to them by the government – ghee, milk and dairy sold in markets at Aut, Sainj,, etc

and thishelps in earning income) Occupation: Housewife Tourism Experience: NA

Present Source of Income: Agriculture Vision for Ecotourism in Shangarh:

"Shangarh is clean and purified by the blessing of our Devta. It's no surprise that people fall in love with it the moment they set their foot here. I want that through ecotourism, we make Shangarh more known. Our SHG has always wished that our people want for nothing. We

Name: Mrs. Chandra Devi

Age: 32

Address: Village Hurcha, PO Madana, Sub Teh. Sainj, Distt. Kullu

Phone number: 9816969461 WhatsApp number: 9816969461

Email ID:NA

Aadhar Card Number: 877066769291

Qualification: Matriculation

Designation: Executive Member SHG 2

(SHG called Devta Shangri Dharali – est. 1998 – 10 women members – activities sustained through personal investment – work mainly with wool and agriculture and have stopped growing and selling herbs as there are no funds available to sustain that activity—woollen socks, sweater and caps, ghee, milk and dairy products sold in markets at Aut, Sainj, etc., and this helps in earning a bit of income)

Occupation: Housewife

Tourism Experience: help in running DivineLand Homestay

Present Source of Income: Agriculture Vision for Ecotourism in Shangarh:

"Main tourist attraction of Shangarh is its environs, There are visitors coming for one-day trips. I want more people to come here. It would help us in boosting tourism and if our SHG gets more attention or funds, then more can be done."

don't have a hospital or wide roads - making an NGO can help Shangarh be better. Name: Baldev Singh Name: Ramesh Chand Age: 32 Age: 38 Address: Village Katwali, PO Madana, Sub Teh. Address: Village Barshangarh, PO Madana, Sub Teh. Sainj, Distt. Sainj, Distt. Kullu Kullu Phone number: 8679559500 Phone number: 9816248881 WhatsApp number: 8679559500 WhatsApp number: 9816248881 Email ID:NA Email ID: NA Aadhar Card Number: 513586094416 Aadhar Card Number: 951121098034 Qualification: Higher Secondary Qualification: Higher Secondary Designation: Executive Officio Ward Panch Designation: Ex-Officio Member Forest Committee Occupation: Ward Member of Katwali Occupation: Contractor Tourism Experience: NA Tourism Experience: NA Present Source of Income: Agriculture & Government Present Source of Income: Agriculture & Job Vision for Ecotourism in Shangarh: "The people of Shangarh are looking forward to the ecotourism Vision for Ecotourism in Shangarh: initiative because we want to see more people coming to Shangarh, "I think developing utilities in Shangarh is the most important change needed for tourism, whether it is road experiencing the natural beauty it has to offer." connectivity, electricity or guest houses. That should be a priority, because only then will people come and stay here." Name: Khem Raj Name: Tek Singh Palsra Age: 32 Age: 48 Address: Village Goshti, PO Madana, Sub Teh. Sainj, Address: Village Dharali, PO Madana, Sub Teh. Saini, Distt. Kullu Phone number: 9857232991 Distt. Kullu Phone number: 8091158619 WhatsApp number: 9816717634 Email ID: shashijacker150@gmail.com WhatsApp number: 8091158619 Aadhar Card Number: 566197073899 Email ID:NA Aadhar Card Number: 861663231641 Oualification:6th Std Pass Qualification:Matriculation Designation: Ex-Officio Devta Committee President Designation: Ex-Officio Shangri Yuvak Mandal (Est. 2015 - the committee has a dozen members - takes decisions Occupation: Carpenter related to matters of the Devta - Tek Singh manages the Tourism Experience: BTCA I-card holder, trekking guide committee) for GHNP trek trails. Occupation: Agriculturist Present Source of Income: Carpentry & Trekking Tourism Experience: nothing yet but planning on starting a Vision for Ecotourism in Shangarh: homestay with 3-4 rooms in Dharali "There's an abundance of trekking trails here, the quiet Present Source of Income: Agriculture environment allows us to enjoy the natural beauty. As a Vision for Ecotourism in Shangarh: trekking guide, I have sometimes seen visitors struggling "We all want good things to come our way, whether it is respect for to reach Shangarh since the roads need to be developed. our traditions, appreciation for Shangarh's nature or just That's the main change we can bring about through this recognition by tourists. The ecotourism initiative can give us that." NGO." Name: Mrs. Naina Devi Age: 47

Sainj, Distt Kullu

Address: Village Birashangarh, PO Madana, Sub Teh.

Phone number: 9816081027 (Dhyan Singh)

WhatsApp number: NA

Email ID:NA

Aadhar Card Number: 280711262562

Qualification: Matriculation

Designation: Executive Member Mahila Mandal (Mahila Mandal is about 20 years old, and currently has 20 members – the women invest their own money every month, pool it together and then make pickles,

handicrafts and knit woollen clothes – used to sell herbs but don't do it any more since no funds are given to them by the government – the rest of the things sold in markets at Aut, Sainj, etc., which helps to earn a small

income)

Occupation: Housewife

Tourism Experience: Has a dhaba in Shangarh - "Thakur

Tent House" that's run by her son. Present Source of Income: Agriculture Vision for Ecotourism in Shangarh:

"All of us locals feel at peace at our Devta's grounds, we've been blessed here in Shangarh. Tourists who have come here have never left unhappy. Shangarh captures the heart of every visitor."

Annexure III: Society Registration Certificate



(समाएं पंजीकरण अधिनियम २००६ के अन्तर्गत पंजीकरण प्रमाण पत्र।)

संख्या 28

/पंग तिम

दिनांक 19-11-2018

प्रमाणित किया जाता है कि शांघड विलेज फोरेस्ट डेवलपमैन्ट सोसाईटी

गांच मदाना डाकघर शांघड उप तहसील रौन्ज जिला कुल्लू हि० प्र० को सभाए पजीकरण

अधिनियम २००६ को अर्न्तगत पंजीकृत किया गया है ।

आज दिनांक 19-11-20/8को मेरे हस्ताक्षर व कार्यालय मोहर द्वारा जारी

किया गया ।



Annexure IV: Memorandum of Understanding (MoU) or Memorandum of Agreement (MoA)

HIMACHAL PRADESH FOREST ECOSYSTEM SERVICES (HP-FES) PROJECT

Memorandum of Understanding

between

The Shanghar Village Forest Development Society

and the Himachal Pradesh Forest Department for Village Forest Management.

Whereas

1

The Shanghar Village Forest Development Society (hereinafter called "Society") has been constituted as per procedure described in the HP PFM Regulations notified by Govt. of HP vide No. No FFE-C (9). 112001 dated 23.8,2001, registered under the Himachal Pradesh Societies Registration Act, 2006 Registration number 28 (dated 19-11-2018) by the villagers of Shanghar Panchayatunder Forest Division ,Wild Life Range Sainj, Great Himalayan National Park in the districtKullu of Himachal Pradesh and has an elected Executive Committee (hereinafter called "EC") to implement the Micro Plan for Forest Management and Village Resource Development (hereinafter called "Plan") for protection, rehabilitation and management of the specified forest areas that has been prepared by the Society and theWild Life Range Sainj Forest Division; the Plan contains details of activities to be undertaken for management and development of forest areas using a Forest Ecosystem Services (FES) approach and also description of equitable distribution of products and services obtained from the allocated forest areas and public resources of the village; the Plan has been approved by the Officer in Charge of the Forest Division (hereinafter called "Forest Officer") on behalf of the Government of Himachal Pradesh;

Now herewith

The Wild Life Range Sainj Forest Division and the Society have mutually agreed on this MoU, and consequently, this MoU is executed with the following articles:

1. Purpose of the Memorandum of Understanding

This Memorandum of Understanding (hereinafter called "MoU") details the responsibilities of the Society regarding management and protection of forest area(s) and village(s) resource development, in the manner specified in the Plan and for equitable distribution of benefits amongst its members/ working groups in the manner specified in the Plan. It further entails payments and support to be provided by the project (HP-FES) and other associated conditions.

Page 1 of 5

2. Responsibilities of the Society

with regard to its Constitution, working, powers, duties and benefits, the Society agrees to act in separate with the HP Government Notification No. Fts. II (B) 15.10.87 dated 23.08.2001 and other relevant Government orders and instructions.

- 2.1 The Society agrees to provide all necessary assistance to the Forest Officer in selection of intervention area(s) to be allotted to it for forest management so that there is no dispute regarding areas of common use of nearby villages.
- 2.2 The Society, pursuant to the approval of Micro plan by the DFO agrees to develop a 6-month (Activity & Budget) Plan, get it approved by the General House of the Society, and submit to the Forest Officer for release of funds.
- 2.3 The Society agrees to carry out works laid out in the Plan for the forest area as per the approved schedule of rates of work and labor and in doing so, follow the principles of management of forest and wildlife specified therein, also taking into account the guidelines of the Government, prevalent legal provisions and technical principles. The Society will ensure that no existing acts' rules of forest' wildlife management are being violated.
- 2.4 The Society agrees to contribute to the cost of works proposed through a 10% cash kind contribution of total investment, to be collected by the VFDS from its members' User Groups and deposited in the SB Account held by it. The amount of contribution so deposited by the VFDS will be returned along with interest accrued to the VFDS at the end of the project period and the VFDS will be free to spend the amount as jointly decided by them. This community contribution is to be made within 6 (six) months of the commencement of the Plan.
- 2.5 The Society agrees, after completion of the related works, to protect the forest area from fire, grazing, illicit felling, illicit transport, illicit mining, encroachments and poaching and shall help the forest department in this regard.
- 2.6 The Society agrees to pass the information regarding person(s) engaged in harming the wild animals and forests or those engaged in illegal activities on to the Forest Department. The Society agrees to help forest employees in apprehending such person(s) and provide all possible assistance in protecting any seized produce etc.
- 2.7 The Society agrees to rectify any shortcomings found during review of its works by the Forest Officer/ Monitoring Agency.
- 2.8 The Society agrees to keep accounts of income and expenditure of the funds from various sources, present it to the Forest Officer or his representative when required, and to get regular annual audits done by the agency assigned by the Forest Officer.
- 2.9 The Society agrees to maintain the records specified by the Forest Officer regularly and in prescribed formats.
- 2.10 The Society agrees that the distribution of products and services generated as a result of implementation of the Plan among its members/User Groups is done in an equitable

Page 2 of 5

manner. If the Forest Officer points out any mismanagement or irregularity in the equitable distribution of such products and services, then the Society agrees to implement the necessary corrections/improvements suggested by the Forest Officer.

2.11 The society agrees to ensure that there is no misuse of funds allocated from the Forest Department for implementation of the activities under this project.

3. Responsibilities of the Forest Department

- 3.1 The Forest Department will provide to the Society the related input materials required to carry out the works specified in the Plan, such as saplings, fencing materials, etc. in a timely manner.
- 3.2 The Forest Department will provide the funds specified in the Pfan to the Society for implementation of works carried out in the forest area on the basis of the Pfan in a timely manner Subsequent to approval of the Pfan, a 6-month (Activity & Budget) Pfan will be developed by the VFDS and got approved by the General House After acceptance of this 6-month pfan, the DFO will transfer the budgeted amount into the general account of the VFDS prior to commencement of works.
- 3.3 Funds from other department's schemes as the Panchayat may be able to converge/garner, may also be used for activities that help meet the project's objectives.
- 3.4 The Forest Department shall provide the necessary advice and guidance to the Society for implementation of works carried out in the forest area on the basis of the Plan.
- 3.5 The Forest Department shall NOT be responsible for any loss in any of the works related to implementation of the Plan and no claim of any sort can be presented against Forest Department
- 3.6 In the event of any misutilization of the funds at the level of the VFMS, the Forest Department shall initiate proper legal action against the former

4. Support by the Project

- 4.1 The Project (HP-FES) will provide to the DFO the funds (after signing the Financing Agreement with GIZ) for specified activities in the approved Plan for implementation of works carried out in the forest area (s). These funds will be disbursed by the DFO to the Society considering the 6-month plan submitted by the Society.
- 4.2 The Project (HP-FES) will provide training and other capacity building measures to the Society members, as well as support for income generating activities as specified in the approved Plan.
- 4.3 The funds earmarked for plantations, fencing etc. (mentioned in the approved Plan) will be credited into the general bank account with the VFDS as per accepted 6-month plans derived from the Plan.
- 4.4 Payment and receipt of funds will be strictly by means of cheques or bank transfers to the account of the Society. All disbursals by the Society to VFDS members will also be

Page 3 of 5

executed through bank transfers.

- 5. Rights and Benefit Sharing 5.1 The Rights of right holders as admitted in the Forest Settlement will remain unaffected due to constitution of the Society and will continue to be exercised as such
 - 5.2 The Benefits which the Society members and their User Groups will be entitled to after closure of plots/ patches in the forest for various project interventions are as follows:
 - 5.2.1 Group members responsible for protection and maintenance of different closed patches will harvest and share among themselves grass and fodder from those patches;
 - 5.2.2 Group members responsible for nurturing and protecting fodder/ firewood lots raised by them will be entitled to collect fodder/ firewood from these lots and share it amongst themselves equitably;
 - 5.2.3 Grass and hay production areas will be harvested and shared amongst the groups/ villagers as decided by the EC or in rotation;
 - 5.3 The Society will be entitled to sale proceeds of all intermediate and final harvest of NTFPs, as laid out in the PFM Regulations of HP, 2001.

6. Monitoring & Evaluation

- 6.1 Monitoring and Evaluation of project activities will be done at different levels, including by the EC, a monitoring committee, the Forest Officer or his representative, and an independent third party.
- 6.2 The EC or any of its members will monitor progress and quality of work during execution of various works. The Member Secretary will record the date, places and names of EC members who checked the work(s) and whether works were satisfactory and any instructions given.
- 6.3 A participatory monitoring committee made up of members of the Society, a member from Panchayat as well as a representative from the Forest Department (e.g. Deputy Range Officer) will on quarterly basis review objectives, inputs and work progress and report to the whole Society. Their reports will then be sent to the Forest Officer for
- 6.4 Where Society groups have carried out or are responsible for activities like fencing. plantations and maintenance of plantations (all the works according to the Plan), annual monitoring will be carried out by Project-approved monitors (Third Party) and the results of this monitoring will determine the quantum of release of incentive payments as per the norms/scheme agreed upon in the approved Saving Book Approach
- 6.5 Settlement of Disputes: Settlement of disputes and conflict resolution will be governed as laid out on the settlement of disputes and conflict resolution will be governed. as laid out under section 49 & 50 of the Bye Laws of Society.

1 Memorandum of Understanding 1. Memorando.

1. Mem we are aware that the available to the Society only when it discharges its duties, responsibilities and apprending the setisfactory manner and this is certified by the Forest Officer every transfer to the setisfactory manner and this is certified by the Forest Officer every transfer to the setisfactory manner and this is certified by the Forest Officer every transfer to the setisfactory manner and this is certified by the Forest Officer every transfer to the setisfactory manner and this is certified by the Forest Officer every transfer to the setisfactory manner and this is certified by the Forest Officer every transfer to the setisfactory manner and this is certified by the Forest Officer every transfer to the setisfactory manner and this is certified by the Forest Officer every transfer to the setisfactory manner and this is certified by the Forest Officer every transfer to the setisfactory manner and this is certified by the Forest Officer every transfer to the setisfactory manner and this is certified by the forest Officer every transfer to the setisfactory manner and the s remement shall be sha officer fails to fulfill conditions mentioned in para 3 and 4 of this agreement and there is a forth Onlice and agreement and there is a green the Committee not able to discharge its responsibilities and works, the same will be kept it mind while evaluating the works of the Committee every year.

Thakur s/o Sh. Gurdhayn Singh VPO Madana , Shanghar Panchayat , Sainj , heident, Village Forest Management Society, declare on behalf of the Society, that Iam committed m follow all the conditions mentioned in this MoU and am signing this memo after realing understanding all conditions mentioned herein, literally and in their original meaning.

Name, Seal and Signature of the President, VFDS

SHARVEEN HUMAR 11 thalf of VFDS SHANGHAR

Divisional Forest Officer, Great Himalayan National Park, Kullul undertake, on Great Himalayan National Park , Shamshi , Kullu , to implement all thirs/responsibilities of the Forest Department mentioned in thismemorandum.

Great Himalayan National Perk

Shamshi, Kullu (H.P.)-175125

Name, Seal and Signature of the Divisional Forest Officer) On behalf ofForest Department

Witness.

cat Officer Wild Life Range

SHITET SIMCH FRIED W. L. SHINT.

E. O. TAGUZ HAMIS STUBBHAB HB :

G.H.M.R. SHAMSHI.

50

Annexure V: Photo-documentation of PRA



Shangarh Community in Front of PRA Chart



PRA Participants at Shangarh



PRA Reconfirmation Meeting with Facilitator



Pre-PRA Meeting to Understand Theme of Forest Management



Youth Discussing their Issues at PRA



Famous Shanghchul Devta Diety Fair at Shangarh

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Matsubara Building, Village Sargheen (Near HFRI), Shimla - 171013 Himachal Pradesh (India)

For further Information

Principal Chief Conservator of Forest, Forest Department, Himachal Pradesh, Talland, Shimla- 171001, India