<u>Template/Pro forma for Submission</u>

NMHS-Himalayan Institutional Project Grant

NMHS-FINAL TECHNICAL REPORT (FTR)

Demand-Driven Action Research and Demonstrations

NMHS Reference No.:	NMHS/2017-18/MG21/05

Date of Submission:	1	2	1	2	2	0	2	2
	d	d	m	m	y	y	y	y

PROJECT TITLE (IN CAPITAL)

DEVELOPING LIVELIHOOD OPTIONS AND EXPLORE EMPLOYMENT GENERATION BY CREATING SUSTAINABLE ECOTOURISM OPPORTUNITIES INVOLVING YOUTH AND WOMEN IN THE MOUNTAIN ECOSYSTEM OF UTTARAKHAND AND HIMACHAL PRADESH OF INDIA

Project Duration: *from* (**22.12.2017**) *to* (**30.06.2021)**

***Submitted to*:**
Er. Kireet Kumar
Scientist 'G' and Nodal Officer, NMHS-PMU
National Mission on Himalayan Studies, GBP NIHE HQs
Ministry of Environment, Forest & Climate Change (MoEF&CC), New Delhi
E-mail: nmhspmu2016@gmail.com; kireet@gbpihed.nic.in; kodali.rk@gov.in

***Submitted by*:**
Gitika Goswami
Associate Vice President, Development Alternatives
B-32, Tara Crescent, Qutub Institutional Area, New Delhi - 110016
+91 9910543351
ggoswami@devalt.org

GENERAL INSTRUCTIONS:

1. The Final Technical Report (FTR) has to commence from the date of start of the Project (as per the Sanction Order issued at the start of the project) till its completion. Each detail has to comply with the NMHS Sanction Order.

2. The FTR should be neatly typed (in Arial with font size 11 with 1.5 spacing between the lines) with all details as per the enclosed format for direct reproduction by photo-offset process. Colored Photographs (4-5 good action photographs), tables and graphs should be accommodated within the report or should be annexed with captions. Sketches and diagrammatic illustrations may also be given giving step-by-step details about the methodology followed in technology development/modulation, transfer and training. Any correction or rewriting should be avoided. Please give information under each head in serial order.

3. Training/ Capacity Building Manuals (with details contents of training programme technical details and techniques involved) or any such display material related to project activities along with slides, charts, photographs should be brought at the venue of the Annual Monitoring & Evaluation (M&E) Workshop and sent at the NMHS-PMU, GBP NIHE HQs, Kosi-Katarmal, Almora 263643, Uttarakhand. In all Knowledge Products, the Grant/ Fund support of the NMHS should be duly acknowledged.

4. The FTR Format is in sync with many other essential requirements and norms desired by the Govt. of India time to time, so each section of the NMHS-FTR needs to duly filled by the proponent and verified by the Head of the Lead Implementing Organization/ Institution/ University.

5. Five (5) bound hard copies of the Project Final Technical Report (FTR) and a soft copy should be submitted to the **Nodal Officer, NMHS-PMU, GBP NIHE HQs, Kosi-Katarmal, Almora, Uttarakhand**.

The FTR is to be submitted into following two parts:

Part A – Project Summary Report

Part B – Project Detailed Report

Following Financial and other necessary documents/certificates need to be submitted along with Final Technical Report (FTR):

Annexure I **Consolidated and Audited Utilization Certificate (UC) & Statement of Expenditure (SE)**, including interest earned for the last Fiscal year including the duly filled GFR-19A (with year-wise break-up)

Annexure II **Consolidated Interest Earned Certificate**

Annexure III	**Consolidated Assets Certificate** showing the cost of the equipment in Foreign and Indian currency, Date of Purchase, etc. (with break-up as per the NMHS Sanction Order and year wise).
Annexure IV	**List of all the equipment, assets and peripherals** purchased through the NMHS grant with current status of use including location of deployment.
Annexure V	Letter of Head of Institution/Department confirming Transfer of Equipment Purchased under the Project to the Institution/Department
Annexure VI	**Details, Declaration and Refund of any Unspent Balance transferred through Real-Time Gross System (RTGS) in favor of NMHS GIA General**

Demand-Driven Action Research Project

2	2	1	2	2	0	1	7
d	d	m	m	y	y	y	y

DSL: Date of Sanction Letter

3	0	0	6	2	0	2	1
d	d	m	m	y	y	y	y

DPC: Date of Project Completion

Part A: Project Summary Report

1. **Project Description**

i.	Project Reference No.	NMHS/2017-18/MG21/05
ii.	Type of Project	Small Grant ☐ Medium Grant 🟩 Large Grant ☐
iii.	Project Title	Developing livelihood options and explore employment generation by creating sustainable ecotourism opportunities involving youth and women in the mountain ecosystem of Uttarakhand and Himachal Pradesh of India
iv.	State under which Project is Sanctioned	**Himachal Pradesh and Uttarakhand**
v.	Project Sites (IHR States covered) (Maps to be attached)	Mandi (Himachal Pradesh)- Thatta, Lagshal, Bhanuthi & Shikari, Kalang Uttarkashi (Uttarakhand)- Kamad and Thandi
vi.	Scale of Project Operation	Local ☐ 🟩 Regional ☐ Pan-Himalayan ☐
vii.	Total Budget/ Outlay of the Project	Rs. 2,17,72,000/- (Rupees Two crore seventeen lakh seventy two thousand only)
viii.	Lead Agency	Development Alternatives
	Principal Investigator (PI)	Gitika Goswami
	Co-Principal Investigator (Co-PI)	
ix.	Project Implementing Partners	Centre for Sustainable Development HESCO

Key Persons / Point of Contacts with Contact Details, Ph. No, E-mail	Tanya Issar +91-9871518198 tissar@devalt.org

2. Project Outcomes

2.1. Abstract (not more than 500 words) [it should include background of the study, aim, objectives, methodology, approach, results, conclusion and recommendations).

With the ever-increasing vulnerability of the Himalayan ecosystems owing to climate change and other social factors, there is a pressing need to augment the resilience of the Himalayan people through sustainable livelihoods. The aim of the project was to develop an ecotourism model, demonstrate a model of ecotourism and document and communicate the indigenous knowledge of the region. The said objectives have been achieved through five multi-fold layer approach based on research and assessment, capacity building and awareness generation, demonstrating environmentally responsible mountain tourism, creating institutional model, knowledge documentation and dissemination. Based on these, we designed the sustainable construction system looking at the disaster resilience infrastructure using the sustainable technologies using low cost, low carbon locally available material. We also demonstrated and refurbished 15 homestays in Himachal Pradesh for creating eco-tourism opportunities in these two states. Additionally, we also have undertaken several capacity building training programmes for the communities to continue the practice as well as set up small enterprises to continue the practices. The potential for sustainable livelihood opportunities addresses the dual challenge of green economic recovery and boosting the local economy. However, at present, it remains untapped due to the various systemic issues with regard to policy & regulatory, financial, business and behavioral. There is strong need to build a cohesive ecosystem to promote sustainable livelihood opportunities in the Indian Himalayan Region.

2.2. Objective-wise Major Achievements

S. No.	Objectives	Major achievements (in bullets points)
1	Develop model for enhanced income generation for communities through rural Eco-tourism	2 ecotourism packages and 3 livelihood packages have been developed. Ecotourism Packages have been developed in terms of mapping and identifying experiences/activities around villages for each cluster: 1. Heritage Walk 2. Culinary & Agricultural Tour 3. Long Treks 4. Short Treks 5. A Day with Ringal Artisans 6. A Day with The Devta's 7. Spiritual Temple Trail 8. Star Gazing **Homestays**- Establishment of 7 functional homestays in Mandi and 4 in Uttarkashi. The base room price for each Homestay has been decided in consultation with community and respective state partners. A total number of 11 pilots done across 6 homestays in Mandi (7) and Uttarkashi (4). **Trek/Nature/Heritage Guiding**- GIS maps of 3 trek routes have been developed from each village in Mandi to Parashar Lake. For Uttarkashi 2 long treks to Kush Kalyan and Sahastratal have been identified. A training on basic trek guiding skills has been conducted. **Ringal Artisans and Farmers**- Diverse range of ringal products developed through support from capacity building workshop. The products were sold at Mandi International Shivratri Fair in Feb 2020. At the GEC Mela, Ringal products were used as a souvenir for the speakers. The products were procured from Mandi community villages and also provided an exposure visit to 2 artisans at GEC Mela held in DA Headquarters. **Culinary and Agri**- The Agri products were sold at Mandi International Shivratri Fair in Feb 2020. The farmers and their products have been connected and listed on NotOnMart web portal.

| 2 | Demonstrate environmentally responsible mountain tourism | - 7 Homestays setup in Mandi and 4 in Uttarkashi
- 15 Training programmes on 4 different skills (hospitality, trek guiding, basic entrepreneurship, ringal products)
- Institutional linkages established with govt., businesses and CSOs. An Ecotourism Society has been formed and registered with the HP Govt. for Mandi community villages to run the initiative. For Uttarkashi, a CIG will run the initiative and coordinate with BTDT. |
| 3 | Document and promote Himalayan Indigenous Knowledge through rural Eco-tourism | - Instagram and Facebook pages developed (**Parashar Ecotourism, ThandiKamadEcotourism** and **Back On Trek** to promote the model & indigenous knowledge
- Mandi and Uttarkashi Guidebook
- Mandi Project brochure developed for travellers
- Ringal product tags and Responsible Tourism badges developed for International Shivratri Fair
- Trek brochure developed for Parashar Lake village cluster
- Uttarkashi brochures on themes like- Nature, Heritage and and Bird Watching trail
- 7 pilots conducted in the Mandi cluster and 4 in Uttarkashi.
- A study tour for NIRMA university students was organised in June 2022 to Uttarkashi cluster.
- MoU signed with NotOnMap and Been There Doon That for handholding of the Ecotourism model developed |

2.3. Outputs in terms of Quantifiable Deliverables*

S. No.	Quantifiable Deliverables*	Monitoring Indicators*	Quantified Output/ Outcome achieved	Deviations made, if any, & Reason thereof:
1	Two (2) value chain models in Himachal and Uttarakhand states and demonstrated in two districts in each state	● No. of New Database/ Datasets generated on the identified dynamics (No.) ● No. of New Value-Chain	● 2 value-chain model developed, one each in Himachal Pradesh and Uttarakhand cluster ● 1 baseline survey performed in Himachal Pradesh and Uttarakhand to identify the cluster	

		Models developed ● No. of Baseline surveys performed	● A detailed survey was again performed in Mandi cluster to deepen the understanding of natural, cultural, heritage assets of the region.	

2	Capacity development of the 500 local youth and women on different alternative livelihoods activities	Capacity Building and Development (No. of Youth, No. of Women and Total Beneficiaries)	● Total No. of beneficiaries trained: 490
			 ● Total No. of women trained: 100+
			 ● All the trained people belong to the age group 20-35 years.
			 ● Break-up of the trainings:
			    ○ Structured capacity building workshops - **300 (100+ women)**
			    ○ Capacity building through awareness programmes and activities - **190 direct participation; 4,404 indirect awareness building**	

3	6 livelihood models for women on specific skills viz., cooking of local food, demonstration of local culture (music & dance)	No. of Livelihood Models developed and implemented along with No. of Stakeholders benefitted	● 2 ecotourism packages and 3 livelihood packages have been developed. Ecotourism Packages have been developed in terms of mapping and identifying experiences/activities around villages for each cluster:
			    ○ Heritage Walk
			    ○ Culinary & Agricultural Tour
			    ○ Long Treks
			    ○ Short Treks
			    ○ A Day with Ringal Artisans
			    ○ A Day with The Devta's
			    ○ Spiritual Temple Trail
			    ○ Star Gazing
			 ● No. of stakeholders benefitted: 170 with income generation
			
			    ○ Homestay owners- 11
			    ○ Homestay labour- 60
			    ○ Agri farmers- 12	

			○ Ringal artisans- 8 ○ Trek enterprise- 5 ○ Developing Signages for the villages to guide travellers- 10 ○ Cleaning and Installing Upcycled dustbins- 54 ○ Working on drainage for Kalang village- 10	
4	Creation of Nature trail in two districts of Himachal Pradesh and Uttarakhand for nature walk/ mountaineering activities/ bird watching activities	No. of Nature Trails created	● Mandi (3): GIS maps of 3 trek routes have been developed from each village in Mandi to Parashar Lake. ● Uttarkashi (5): 2 long treks to Kush Kalyan and Sahastratal have been identified. A training on basic trek guiding skills has been conducted. 3 Nature trails in Uttarkashi have been developed on bird-watching, heritage and nature walk. Community has been trained on delivery of the walk and local traditional knowledge. ● An advanced training has also been conducted for 5 Uttarkashi community members to enhance their skills. ● A trek enterprise has been registered by 5 Uttarkashi community members who will be leading a trek end of August with a well-known travel influencer. The trek enterprise will provide services like long treks to Kush Kalyan and Sahastratal Lake and short treks like nature and heritage trail to Kumarkot and Hadala.	

(*) As stated in the Sanction Letter issued by the NMHS-PMU.

2.4. Strategic Steps with respect to Outcomes (in bullets)

S. No.	Particulars	Number/ Brief Details	Remarks/ Attachment
1.	New Methodology developed	NA	
2.	New Models/ Process/ Strategy developed		
3.	New Species identified	NA	
4.	New Database established	• Total No. of database established: 3 • Baseline survey of Mandi and Uttarkashi • Detailed assessment of Mandi village cluster	
5.	New Patent, if any	NA	
	I. Filed (Indian/ International)		
	II. Granted (Indian/ International)		
	III. Technology Transfer(if any)		
6.	Others (if any)	NA	

3. Technological Intervention

S. No.	Type of Intervention	Brief Narration on the interventions	Unit Details (No. of villagers benefited / Area Developed)
1.	Development and deployment of indigenous technology	NA	
2.	Diffusion of High-end Technology in the region	NA	
3.	Induction of New Technology in the region	NA	
4.	Publication of Technological / Process Manuals	2 Guidebooks published for Mandi and Uttarkashi cluster which has details of indigenous knowledge of the cluster	
	Others (if any)	NA	

4. New Data Generated over the Baseline Data

S. No.	New Data Details	Status of Existing Baseline	Additionality and Utilisation New data
1	Baseline data of Mandi		Data used to identify village
2	Baseline of Uttarkashi		cluster

S. No.	Type of Activities	Details with number	Activity Intended for	Participants/Trained			
				SC	**ST**	**Woman**	**Total**
3	Detailed assessment of Mandi village cluster			Data used to deepen the understanding of Mandi village cluster to prepare the various type of experiential activities for customers			

5. Demonstrative Skill Development and Capacity Building/ Manpower Trained

S. No.	Type of Activities	Details with number	Activity Intended for	Participants/Trained			
				SC	**ST**	**Woman**	**Total**
1.	Workshops	15 formal capacity building programmes organised. More details below-					
2.	On Field Trainings	• Entrepreneurship skills- Mandi (22), Uttarkashi (35) • Hospitality and Ecotourism Development- Mandi (25), Uttarkashi (14) • Basic Trek Guiding skills- Mandi (21), Uttarkashi (10) • Advanced Trek Guiding skills- Uttarkashi (5) • Ringal handicraft- Mandi (6), Uttarkashi (10) • Exposure visit to PSI community-based tourism model in Madhuganga valley- Uttarkashi (6) • Exposure visit to GEC Enterprise Mela- Mandi (2) • Exposure visit to International Shivratri Fair- Mandi (6) and Uttarkashi (1) • Exposure visit to NotOnMap Chamba Homestay properties- Mandi (10) • Solid Waste Management (TraVival)- Mandi (45)					

S. No.							
3.	Skill Development	• Entrepreneurship skills • Hospitality and Ecotourism • Trek guiding • Ringal handicraft • Solid waste management • Ecotourism Society management- Mandi (12)- virtual • Hygiene and Covid training- Mandi (20) and Uttarkashi (20)- virtual • Short workshop on landscape photography- Mandi (15) and Uttarkashi (15)- virtual					
4.	Academic Supports	NA					
	Others (if any)						

6. Linkages with Regional & National Priorities (SDGs, INDC, etc)/ Collaborations

S. No.	Linkages /collaborations	Details	No. of Publications/ Events Held	Beneficiaries
1.	Sustainable Development Goal (SDG)	Ensuring conservation of biodiversity and forests and creating sustainable livelihoods for rural communities in mountain ecosystem to achieve larger goal of SDG 15		
2.	Climate Change/INDC targets			
3.	International Commitments			
4.	Bilateral engagements			
5.	National Policies	National Tourism Policy and Ecotourism Policy of Himachal Pradesh and Uttarakhand		
6.	Others collaborations			

7. Project Stakeholders/ Beneficiaries and Impacts

S. No.	Stakeholders	Support Activities	Impacts
1.	Gram Panchayats		

S. No.			
2.	Govt Departments (Agriculture/ Forest)	Tourism and Forest Department of Himachal Pradesh and Uttarakhand involved	o Received appreciation/ recommendation letter from Himachal Pradesh Forest Department o Received certificate signed by Tourism Department Uttarkashi, Uttarakhand o Inauguration of Mandi Ecotourism film by Tourism Department, Himachal Pradesh
3.	Villagers	2 village clusters involved	490 trained on various Ecotourism services
4.	SC Community		
5.	ST Community		
6.	Women Group		100+ women trained
	Others (if any)		

8. Financial Summary (Cumulative)

S. No.	Financial Position/Budget Head	Funds Received	Expenditure/ Utilized	% of Total cost
I.	Salaries/Manpower cost	5,04,6000	50,73,652	101%
II.	Travel	6,59,467	144,589	22%
III.	Expendables &Consumables			
IV.	Contingencies	3,21,097	51,972	16%
V.	Activities & Other Project cost	1,02,12,959	9,413,586	92%
VI.	Institutional Charges	3,15,900	59,774	19%
VII.	Equipments	40,26,783	1,178,185	29%
	Total	**20,582,206**	**15,921,758**	
	Grand Total	**20,582,206**		

* Please attach the consolidated and audited Utilization Certificate (UC) and Year wise Statement of Expenditure (SE) separately, *ref*. **Annexure I.**

9. Major Equipment/ Peripherals Procured under the Project** (if any)

S. No.	Name of Equipments	Cost (INR)	Utilisation of the Equipment after project
1.	All details given on Annexure IV		
2.			

3.			
4.			
5.			

Details should be provided in details (*ref* **Annexure III &IV).

10. Quantification of Overall Project Progress

S. No.	Parameters	Total (Numeric)	Remarks/ Attachments/ Soft copies of documents
1.	IHR States Covered	2	Himachal Pradesh and Uttarakhand – the project is being implemented in two clusters, one in each of the mentioned states.
2.	Project Site/ Field Stations Developed	11 homestays, 5 treks, 1 trek enterprise, 11 farmers 8 artisans	1. 11 homestays (Mandi- 7 and Uttarkashi- 4) 2. 5 treks documented and mapped (Mandi- 3; Uttarkashi- 2) 3. 1 trek enterprise Back On Trek comprising of 5 Uttarkashi community members 4. 11 famers connected with Not On Mart 5. 8 Ringal artisans directly employed through procurement of items developed by them like dustbins, lamps, etc.
3.	New Methods/ Modeling Developed	NA	
4.	No. of Trainings arranged	15	
5.	No of beneficiaries attended trainings	490	
6.	Scientific Manpower Developed (Phd/M.Sc./JRF/SRF/ RA):	NA	
7.	SC stakeholders benefited		
8.	ST stakeholders benefited		
9.	Women Empowered	100	
10.	No of Workshops Arranged along with level of participation		
11.	On field Demonstration Models initiated	.... (attach maps about location & photos)	
12.	Livelihood Options promoted	3	
13.	Technical/ Training Manuals prepared	2	Homestay Toolkit Hospitality and Ecotourism Manual

14.	Processing Units established	NA	
15.	No of Species Collected	NA	
16.	New Species identified	NA	
17.	New Database generated (Types):	3 surveys	Baseline survey for Mandi and Uttarkashi (2) Detailed assessment of Mandi village cluster (1)
	Others (if any)		

11. Knowledge Products and Publications:

S. No.	Publication/ Knowledge Products	Number		Total Impact Factor	Remarks/ Enclosures
		National	International		
1.	Journal Research Articles/ Special Issue:	Development Alternatives newsletter (October 2020) (attached)	GEC article		
2.	Book Chapter(s)/ Books:				
3.	Technical Reports				
4.	Training Manual (Skill Development/ Capacity Building)	2			
5.	Papers presented in Conferences/Seminars				
6.	Policy Drafts/Papers				
7.	Others:	2 Guidebooks 3 Brochures of Heritage, Nature and Culture			

* Please append the list of KPs/ publications (with impact factor and further details) with due Acknowledgement to NMHS.

12. Recommendation on Utility of Project Findings, Replicability and Exit Strategy

Particulars	Recommendations
Utility of the Project Findings	

Replicability of Project	
Exit Strategy	Please describe the Exit Strategy of the project, self-sustaining and benefitting the stakeholders and local community:

Gitika Goswami

(**PROJECT PROPONENT/ COORDINATOR**)

(**Signed and Stamped**)

(**HEAD OF THE INSTITUTION**)

(**Signed and Stamped**)

Place: New Delhi, Development Alternatives

Date: 12/ 11 / 2022

PART B: PROJECT DETAILED REPORT

The Detailed report should include an Executive Summary and it should have separate chapters on (i) Introduction (ii) Methodologies, Strategy and Approach (iii) Key Findings and Results (iv) Overall Achievements (v) Project's Impacts in IHR (vi) Exit Strategy and Sustainability (vii) References and (viii) Acknowledgement (It should have a mention of financial grant from the NMHS, MoEF&CC)

Further, description of Technical Activities, List of Trainings/ Workshops/ Seminars with details of trained resources, list of New Products developed under the project, Manual of Standard Operating Procedures (SOPs) developed, Technology developed/Transferred etc should be enclosed as Appendix.

1 EXECUTIVE SUMMARY

The Executive Summary of the project should not be more than 3–5 pages, covering all essential features in a precise and concise manner as stated in Part A (Project Summary Report) and Part B (Comprehensive Report).

Eco tourism has gained widespread acceptance in the tourism industry all over the country and mountain tourism has been identified as one of the fastest growing sectors in the recent past. The states of Himachal Pradesh and Uttarakhand have recognised Ecotourism having highest potential for economic development of the region and have initiated different ecotourism activities for livelihood creation as well as conservation and protection of the fragile ecosystem of the Himalayan region. The project explored opportunities for sustainable livelihood options for the local inhabitants of the mountainous states of Uttarakhand and Himachal Pradesh and also drove the state government's initiatives of promoting 'Ecotourism' to garner employment generation especially for women and youth in the region.

Mountains are among the most fragile and sustainable on earth and thus experiencing an increased frequency of extreme events. This is increasing risk to lives and livelihoods of the communities in the region. In order to cater to the growing footfall of touristsmulti-hazard vulnerable mountain states like Uttarakhand and Himachal Pradesh are seeing intensive construction activity in the region. . Most of this construction uses energy and resource intensive brick and RCC (reinforced cement concrete) based technologies, leaving behind the rich heritage of vernacular architecture which the region has. These new construction technologies already have had negative impacts on the ecology of the area. Keeping this in mind, the project focused on creating an ecosystem of home stays which not only curbed the growing migration trend in these states in search of livelihoods but also created ecologically responsible built infrastructure for the tourists and at the same time created livelihood for the local community. The alternative construction systems for home stays was not only affordable but was also

low on energy since high dependency on raw materials also demonstrated to be hazard prone with significant damages to life and property in the earthquakes, flash floods and landslides etc. being faced by the region.

Creation of whole ecosystem for ecologically responsible tourism requiredto build capacities of local youth and women on different alternative livelihoods activities which included green skilling viz., creation of para-botanist/ para zoologists, eco guides for nature walk and camping, bird watching, awareness generation among the tourists on the importance of biodiversity in the region. This initiative also promoted the local culture and culinary practices amongst the tourists and thereby, enhanced the local economy of the states.

2   INTRODUCTION

2.1   Background of the Project (max. 500 words)

The National Mission on Himalayan Studies envisages to work towards a set of linked and complementary goals which include-

a) Fostering conservation and sustainable management of natural resources,

b) Enhancing supplementary and/or alternative livelihoods for IHR peoples and overall economic and ecological well-being of the region,

c) Controlling and preventing pollution in the region,

d) Fostering increased/augmented human and institutional capacities and the knowledge and policy environments in the region and

e) Strengthening, greening, and fostering development of climate-resilient core infrastructure and basic services assets.

To address these concerns the project tried to contribute to the overall goal of NMHS. The issues in the Himalayan mountain region were many which are described in the following section:

Climate change hit mountain ecosystem: Need for resource planning

The Indian Himalayan Region (IHR) is the section of the Himalayas within India, with a breadth of 250-300 Km and a stretch of over 2500 Km from Jammu and Kashmir in the west to Arunachal Pradesh in the east. IHR represents 16.2% of the total area and 3.86% of the total population of India. The region is responsible for providing water to a large part of the Indian subcontinent and known for its unique centers of cultural and biological diversity. Himalayan mountain ecosystems are susceptible to population pressure, global climate change, natural hazards and rapid loss of habitat and genetic diversity. On the human side, there is widespread poverty among mountain inhabitants and loss of indigenous knowledge. Therefore, Chapter 13 of the United Nations Agenda 21 specifically recognizes the value of mountain systems. In order to fulfill India's vision of sustainable development in the context of climate change, a National Action Plan on Climate Change was launched in 2008. This National Action Plan includes eight specific objectives, including a "National

Mission for Sustaining the Himalayan Eco-systems" and a "National Mission on Strategic Knowledge for Climate Change". Due to the above-mentioned uniqueness of the Indian Himalayan region (IHR), the proposed project ensured that the interventions are climate proof in order to restore ecological health. According to the World Tourism Organization (WTO), 'tourism that involves traveling to relatively undisturbed natural areas with the specified object of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural aspects (both of the past and present) found in these areas is Ecotourism.

Ecotourism helps in community development by providing an alternate source of livelihood to the local community which is more sustainable. Sustainable development through ecotourism is a concerning issue today. It may be caused by Ecotourism and regional development simultaneously in an area. Dimensions of ecotourism development refer to the environmental, economic, and social aspects of tourism development, and a suitable balance between these dimensions must be established to maintain its long-term sustainability. Strengthening local communications for integrated development of an eco-fragile area, the local community should be involved and economic development of the area ensured. Development has to be based on an in-depth know-how of local resources, social and economic factors and other characteristics.

Local Community plays a vital role in organizing ecotourism activities and conservation of environment. In this case, youth and women groups are seen as spearheads. They can serve as tour guides, local staff, entrepreneurs of handicrafts, culinary traditions, agricultural produce and as hosts. This in turn will help them social economically. The purpose of eco-tourism would be defeated if the local community was not involved and benefited from its activities. Local communities are a source of first-hand information of the area, natural environment and how it has evolved over the years.

2.2 Overview of the Major Issues to be Addressed (max. 1000 words)

The project recognized five major issues in identified locations which are as follows- -

- **Footfall:** Managing dynamic growth, in the light of a forecasted doubling of international tourist arrivals by 2020.
- **Migration:** Severe migration for search of better livelihood opportunities is seen in mountain states
- **Climate change:** Consequences for future tourism contributing to global warming through pollution from transport emissions and the environmental impact of physical infrastructure.
- **Livelihood:** Poverty alleviation in rural areas where tourism can provide only a small number of development options. Most of the rural population in these locations are heavily dependent on agriculture.
- **Resource:** Rapid depletion of resources either due to poaching of rare marine and wildlife in these states or due to uncontrolled expansion of infrastructure. In order to accommodate tourists, availability of natural resources are critical and of utmost importance

2.3   Baseline Data and Project Scope (max. 1000 words)

Explained in 3.4 section

2.4   Project Objectives and Target Deliverables (as per the NMHS Sanction Order)

The project aimed towards addressing the following challenges in the fragile ecosystem-

- Creating livelihood opportunities in the mountain region by different Ecotourism activities and will reduce migration in search of alternative livelihoods.
- Ensure conservation of forests and biodiversity in the region
- Reduce impact of commercial tourism by promoting nature based building, homestays, skill development of the local communities and awareness generation among all stakeholders regarding negative impacts on environment and mountain ecosystem.

The project successfully achieved the following target deliverables as mentioned below-

- Creation of chain of home stays both in Himachal and Uttarakhand states and demonstrated in two districts in each state
- Establishment of alternative technologies for multi-hazard resistance homes using nature based materials
- Establishment of eco-development Committee/s consisting of local youth and local Women who are continuing the project activities after the project period
- Capacity development of the local youth and women on different alternative livelihoods activities (green skilling viz., creation of para-botanist/ para zoologists, eco guides for Nature work and camping, bird watching)
- Creation of women specific skills viz., cooking of local food, demonstration of local culture (music & dance)
- Creation of Nature trail in two districts of Himachal Pradesh and Uttarakhand for nature walk/ mountaineering activities/ bird watching activities
- Creation of meditation center having tie up with the local ashrams one in each state
- Creation of Interpretation center one in each state

Aim

To create sustainable livelihoods for rural communities in mountain states through Rural Eco-tourism centric avenues

Objectives

- To establish a model for enhanced income generation for rural communities through

an integrated network of rural Eco-tourism related services and facilities, which include rural homestays in retrofitted and disaster safe traditional homes, rural food systems and local ecology appreciation

- To demonstrate how mountain ecosystems can be conserved and nurtured through environmentally responsible tourism while providing diversified and enhanced incomes for local communities
- To document Himalayan Indigenous Knowledge and promote its practice through rural Eco-tourism services

Goals

Ensuring conservation of biodiversity and forests and creating sustainable livelihoods for rural communities in mountain ecosystem to achieve larger goal of SDG 15

3 METHODOLOGIES, STRATEGY AND APPROACH

3.1 Methodologies used for the study/Contribution from other sources (max. 1000 words)

The housing and habitat team at Development Alternatives has previously worked in Uttarkashi district of Uttarakhand through its current project: "Disaster resistant eco-friendly construction technologies for kamad cluster, Uttarkashi district of Uttarakhand" Under the TIME-LEARN programme of the Department of Science and Technology, SEED Division.

The project has undertaken research and assessment of traditional construction materials and technologies. The initial research led to identification of potential tourism through the concept of homestays as a lot of houses were abandoned due to migration and lot of potential is in conserving building materials extracted from natural resource by retrofitting the existing houses. For this purpose, technology adaptation is undertaken to explore the possibility of adapting available technologies for village level enterprise solutions. In addition to this, typical three rural community

building designs are developed with due stakeholder consultation integrating appropriate construction technologies and disaster resilient features. Or this purpose artisans are trained on the eco-friendly, disaster resistant technologies. The project scientifically assesses prevalent habitat technologies on pre-defined parameters like hazard resistance, energy and resource use, impact on environment, quality of construction, thermal comfort, skill requirement and availability, etc.

The proposed project aims to intervene the identified locations where the project will leverage on this initiative through design and demonstration of livelihood models with rural eco-tourism packages, capacity building local communities and pilot demonstration of homestays.

3.2 Preparatory Actions and Agencies Involved (max. 1000 words)

Since its statehood in 2000, Uttarakhand has seen many policy level positive initiatives to promote tourism in the state. The state enacted a **State Tourism Policy** document and institutionalized the

vision by setting up **"Uttarakhand Tourism Development Board (UTDT)"** – a state body headed by senior bureaucrats to oversee tourism development initiatives in the state. UTDT prepared a new umbrella **State Homestay Act** merging older Sarai Act, Paying Guest rule and also homestay policy and made mandatory for all such facilities (existing or new) to get registered themselves under this new act. To promote rural tourism in the state, all registered homestays have been exempted from any taxation net in the state.

State government in the last decade has focused on establishing better communication networks, especially linking remote areas of the state with all weather road networks and developing amenities and facilities in far flung villages. The state has also developed many schemes and programmes to support local tourism initiatives such as "Veer Chandra Singh Garwali Yojna" for providing soft loans to individuals/groups or institutions for developing tourism infrastructure. Despite all such good initiatives and also developing and promoting tourism circuits in the state (both new and well-established tourist circuits including Char Dham Yatra circuit), rural tourism is still lacking required push in the state mainly due to lack of awareness among local communities and also lack of coordinated efforts on ground. Through this proposed initiative, attention was paid to create community based rural Ecotourism initiatives in the proposed areas. The key objective of this initiative was to develop eco-friendly sustainable tourism models for alternate income generation for local communities.

During the Phase 1 of the study, solely focused on understanding the socio-economic context of the clusters, building a rapport with the communities and partnerships with potential institutions/organisations who could own the initiative in the long run. This was done through stakeholder consultations, individual meetings with government officials and academicians, group discussions and meeting with the communities, making thematic notes on their cultural and ecological richness, doing baseline surveys and bringing all the knowledge together. Following is the list of agencies involved in the study:

1. **Himalayan Environmental Studies and Conservation Organisation (HESCO):**
   o Baseline study to identify specific clusters for eco-tourism
   o Identifying livelihood packages for rural communities linked to eco-tourism services
   o Liaison with Government Bodies for guidance/ input/ feedback to the project activities; facilitation for information retrieval; ensuring validation and acceptability of our work
   o Liaison with Media for communication: frequent press releases to highlight our work, extend to DA information and invitations of related events for benefit
   o Hindi translation of questionnaire/ forms/ templates. workshop finalized by DA
   o Facilitation and logistics for field work, field visits and workshop organisation by project team

2. **Centre for Sustainable Development**
   o Baseline study to identify specific clusters for eco-tourism
   o Identifying livelihood packages for rural communities linked to eco-tourism services
   o Liaison with Government Bodies for guidance/ input/ feedback to the project activities; facilitation for information retrieval; ensuring validation and acceptability of our work
   o Liaison with Media for communication: frequent press releases to highlight our work, extend to DA information and invitations of related events for benefit
   o Hindi translation of questionnaire/ forms/ templates. workshop finalized by DA.
   o Facilitation and logistics for field work, field visits and workshop organisation by project team

3. **Been There Doon That**
   o Identification, interpretation and creation of Heritage Trails/walks (visits, detailed study of specific sources, interaction with local people and photographic documentation to develop heritage walks, nature and birding trails and food/culture walks for each cluster) to support ecotourism activities in the cluster
   o Documentation of traditional and indigenous knowledge in the cluster – to include recording of information, and publishing of detailed notes and communication materials on important thematic areas such as – Biodiversity and ecology, medicinal plants and healthcare, agriculture and animal husbandry, cuisine, arts and culture, and any others if relevant
   o Videographic documentation of the area (introductory - with an ecotourism perspective), and the process of documentation and mobilization

4. **NotOnMap**
   o Updation of business model based on their learning in other clusters in India and for handholding
   o Comprehensive Resource mapping (Digital Knowledge Register) of the village
   o Well defined SOPs (for 10-20 programs)
   o Create an integrated team of trained stakeholders
   o Create Village Rule Book
   o Create "Exit strategy plan" post 6 months of task
   o Creation of a webpage dedicated to Parashar village cluster on NOM website

5. **Forest Department, Mandi**
   o Forest Department of Mandi provides continuous support in conducting our Ecotourism initiatives and outreach support thereby overlapping state's agenda of promoting Ecotourism in the region.
   o Endorsing DA's work in field of Ecotourism and Rural Development through a recommendation letter
   o DFO of Mandi has been assigned a position of Ex-officiating chairman of the registered Society
   o Keynote address by Mr. Surendra Kashyap, DFO of Mandi at virtual inception meeting of Ecotourism Society Mandi

- o Attended 2 trainings and distributed certificates and conducted 1 cleanliness drive at Parashar Lake in collaboration with DA
- o Connected us to KVK for hosting training there

6. **Tourism Department, Uttarkashi district, Uttarakhand**
   - o The Tourism Department extended support in organizing Trek Guiding skills training by being a signatory on the certificate. A discussion has been initiated on providing support for setting up Homestays and conducting advanced training programme on Trek Guiding skills.

7. **Green Economic Coalition**
   - o Green Economic Coalition (GEC) is a 7-country platform for strengthening green enterprises and connecting local community to markets. GEC Global Annual Summit was hosted by Development Alternatives in New Delhi from 4-6th February 2020. 2 artisans from Mandi village cluster were invited to attended the (GEC) event. Both of them were allocated a stall at Enterprise Mela (exhibition) through which they were able to showcase diverse range of Ringal products to about 300+ people from various countries and sectors.

8. **Alaknanda Ghaati Shilpi (AAGAAS) Federation:**
   - o AAGAAS Federation, a local organization based in Chamoli, collaborated with DA as the training partner. 16 young men were trained on basic techniques of wire making, ringal dyeing, use of sand papers, making of product base, varnishing and finishing of the product.
   - o 8 Ringal machines have also been procured through AAGAAS to support the artisans in making Ringal products.

9. **Himalayan Vaganbond**
   - o Conducted training on trek guiding at Himalayan Vagabond training centre

10. **People Science Institute**
    - o An exposure visit was conducted for 6 beneficiaries from Uttarkashi village cluster to PSI's community-based tourism model in Madhuganga valley for hands on practical training.

11. **Hidden Paths Himalayas**
    - o Partnered with a local green tour operator for conducting 2 training programmes designed with the objective to make the participants responsible and aware guides.
    - o Assisted us on registration of a Trek Enterprise "Back On Trek" comprising of 5 people trained through Hidden Path Himalayas.
    - o Connected 1 potential participant (Keshar Singh) with clients who got a business opportunity after completion of the training.

3.3 Details of Scientific data collected and Equipments Used (max 500 words)

No scientific data collected

3.4 Primary Data Collected (max 500 words)

The team faced a few overarching challenges in reaching out to the entire village community and informing them about the initiative. Such challenges posed limitations to our reach and communication. These majorly included agricultural occupation and the consequent lack of time, ineffective coordination and communication by the local team, migrated population and locked houses, households with no young male members, and the vast geographical spread of houses across hamlets in Thandi (Sem and Dugdu).

We conducted a short introductory session with the people, about 40-50 of them, from Kamad and Thaandi. The project was introduced to the audience which involved a seasoned trek guide in the Gangotri region, a local social activist, and others who have been actively involved in organizing cultural celebrations in the village. Thandi village has also constituted a 'Paryatan Committee' (Tourism Committee) recently which shall be focusing on issues such as cleanliness, coordinating with any projects running in the area and any possible government interventions.

Following are few observations from field evident in both the states:
- **Utility of flat roofs construction systems**
  - Flat slabs are valued for drying and household work
  - Unsafe attachment of flat slabs to sloping roofs
- **Abandoned houses and material resources**
  - Fear of earthquake/ experience of cracks/ damage, thus unwillingness to maintain
  - Non-availability of replacement materials
  - Locked-in high quality material resources
- **Unsafe use of new materials**
  - Traditional material availability is stressed
  - New materials such as concrete block are convenient but have no standardized quality
  - RCC frame is practiced because of perception of strength: lacks structural continuity and anchorage
  - Potential for adaptation of traditional spatial design using new materials and building elements
- **Challenges: sanitation system**
  - Cost of toilet construction being shared
  - Safe and hygienic treatment of waste water remains a big problem

3.5 Details of Field Survey arranged (max 500 words)

Two major tools were deployed for obtaining relevant information to contribute to the above mentioned project activities.

1. Paper based communication tools and photographs

2. Questionnaire for baseline survey in the region (attached as Annex 1)

One of these was a set of paper-based, interactive presentations for communication of the project initiative to the community. The objective here was to introduce the community to the perils of conventional mass tourism and how that concentrates benefits away from the local communities. The intention was to present the vision for a prosperous, clean and 'apurv' village.

This was conveyed by focusing on the basics of ecotourism, which would be aspects like sustained livelihoods, better societal conditions, women and youth empowerment, environmental conservation, preservation of traditional knowledge and better communication of these to the world.

The entire exercise was facilitated by displaying charts and circulating photographs of already developed and running ecotourism sites and homestays in other Himalayan spots.

The survey questionnaire was developed to understand the most significant aspects and behaviors of the cluster, with a focus on themes such as basic amenities (infrastructure, electricity, water, sanitation etc.), livelihoods, skills, cuisine, and heritage. This was instrumental in giving us deep insights into our intervention area. Another major purpose for carrying out the survey was to identify potential homestays for our ecotourism initiative in the area. Traditional skills that the people possess and those that can be monetized to generate livelihoods were also an important focus of the exercise.

3.6 Strategic Planning for each Activities (max. 1000 words)

The mentioned cluster was selected based on our discussions in a stakeholders' consultation workshop held in Dehradun, and with an aim to overlap and augment the impact our work in the area with another project granted by the Department of Science and Technology.

The stakeholders' consultation witnessed participation from the PCCF (Ecotourism) Sh. G S Pande, Zoological Survey of India, Botanical Survey of India, Forest Research Institute, Wildlife Institute of India, and CSOs like Jaadi and AAGAAS Federation.

HESCO (Himalayan Environmental Studies & Conservation Organization) is our implementation partner in the state who is actively supporting us in building our rapport and work in Kamad.
The project progress is also being communicated to relevant government officials at the district and state levels to build on any possible overlaps. Details of the initiative were recently shared with the District Forest Officer, Uttarkashi who could help us in enrolling our homestay owners for a training in Hospitality and Hygiene conducted by the State Forest Department annually.

A broad summary of the design of work would be as follows:
- Identification of the intervention cluster

- Discussions and rapport building with a few local representatives in the cluster
- Recce visits to identify the ecological and cultural assets, heritage, social issues and general socio-economic understanding of the setting
- Preparation of a questionnaire to obtain baseline information on the following themes: suitability for developing homestays in the cluster, biodiversity, cuisine, culture, livelihood options, skills etc.
- Introductory discussions and presentations to the community on exploring livelihoods through ecotourism
- Household level surveys and introduction to the initiative
- Analysis of the information and learnings from the findings to shape further course of work for the project

1. **Baseline study to identify specific clusters for Ecotourism in the given project locations**
   Methodology
   - A detailed secondary research was conducted for the selected project locations- which mapped existing rural Ecotourism initiatives and policy incentives by the government, bio-resources and cultural capital of the locations which were capitalized through rural Ecotourism and livelihood profiles in the region.
   - Two inception workshops were held (1 each in Uttarakhand and Himachal Pradesh). The objective of the workshop was to understand potential and possibilities of rural Ecotourism development in the selected districts and to identify possible synergies with state-level rural Ecotourism policies. The participants of the workshop included representatives from Department of Rural Development and Panchayati Raj, State Forest Department, Department of Tourism, Conservation experts, NGOs/ CBOs working in the area, local community groups such as forest development committees/ Mahila Mandal/ Yuvak Mandal.
   - Field visits were conducted to hold discussions with the village community to understand in detail the issues/challenges and preferences of the communities with regards to implementing and managing proposed Rural Eco-tourism activities. The objective of these visits was to ensure community acceptance of proposed Ecotourism work and to prepare a first shortlist of possible clusters where rural Ecotourism was being implemented.

2. **Designing various categories of Ecotourism packages and developing a business model addressing economic-environmental-social impact**
   Methodology
   - In consultation with village-level stakeholders in the proposed Ecotourism business, different types of Ecotourism packages were designed. This involved working out various aspects like

typical itinerary, activities that were being offered to the tourist, types of accommodation (homestays/ outdoors), number of jobs/livelihoods connected to the package, etc.

- These different packages were designed with specific client groups in mind. Possibilities of hands-on participation in local culture through on-farm and off-farm activities was one of the highlighting features of all packages. The following types of packages were developed –
  - o For an urban family (focusing on metros/ large urban centers) looking for a rural/ traditional experience
  - o For Corporate Groups/ Development Sector Organizations who were looking for a official/ Leisure retreat,
  - o Student groups from institutions of Architecture/ Built Environment/ Conservation/ Social Sciences/ Physical Sciences (Botany, Agriculture) – both national and international institutions were addressed
  - o Young international traveler looking for an experience combining Indian mountain traditions, wilderness and adventure sports
- An environmental impact assessment of each Ecotourism package was carried out in terms of natural resources consumed, energy costs, solid waste generated and strategies were outlined to neutralize/ minimize each impact. The packages were designed to conform to National norms of environmental responsibility or, if need be International norms, wherever applicable.
- A business model wasdeveloped for each Ecotourism package including a detailed costing of initial investment for setting up infrastructure, running cost in terms of manpower, material resources, marketing, etc. cost of environmental mitigation and projecting ultimate profitability.

3. **Identifying livelihood packages for rural communities linked to eco-tourism services**
   Methodology
- Based on eco-tourism itineraries developed in the previous phase, a list of activities and services needed to implement them will be made.
- Based on socio-economic profile, region specific bio-resources and tourism activities and services at project locations – livelihood packages for the rural community will be shortlisted. Indicatively, these packages will be based on services connected to disaster safe and eco-friendly construction of home-stays using local artisans that will be a combination of retrofitted traditional homes and new appropriate technology for the regions. In addition, livelihood packages will be developed for mountaineering and trekking guides/porters, traditional handicrafts, hospitality, traditional cuisine (such as Gharbhoj in Uttarakhand and Dham in Himachal) Bird-watching, Traditional medicine, Organic farming, Yoga/meditation, ecological appreciation etc. The livelihood package will essentially include job description, quality standards of service, training modules and tools/ accessories needed to practice the livelihood.

3.7   Activity wise Time frame followed [using Gantt/ PERT Chart (max. 1000 words)]

Activities	Year 1							Year 2							Year 3						
	M2	M4	M6	M7	M8	M10	M12	M2	M4	M6	M7	M8	M10	M12	M2	M4	M6	M7	M8	M10	M12
1. Baseline study to identify specific clusters for eco-tourism in the given project locations																					
1.1. Mapping existing rural eco-tourism initiatives and resources	▓																				
1.2. Conducting inception workshop to synergise with state rural eco-tourism initiatives		▓																			
1.3. Visiting fields to engage with community to shortlist possible clusters for implementation		▓	▓																		
Output: A baseline documentation of Rural Eco-tourism potential and identification of 2 clusters in each state			▓																		
2. Designing various categories of eco-tourism packages and developing a business model																					
2.1. Proposing eco-tourism business plan with village level stakeholders				▓	▓																
2.2. Developing different type of eco-tourism packages designed for specific client groups					▓	▓	▓														
2.3. Assessing environmental impact of each Eco-tourism packages							▓														
2.4. Developing detailed business model for each eco-tourism package							▓	▓	▓												
Output: Detailed Project Report of each type of eco-tourism package										▓	▓										

Activities	Year 1							Year 2							Year 3						
	M2	M4	M6	M7	M8	M10	M12	M2	M4	M6	M7	M8	M10	M12	M2	M4	M6	M7	M8	M10	M12

3. Identifying livelihood packages for rural communities linked to eco-tourism services

Activity	Timeline (Gantt)
3.1. Preparing list of activities and services required based on suggested eco-tourism itineraries	▓▓
3.2. Shortlisting of livelihood packages based on region specific bio resources and tourism activities	▓▓
3.3. Detailed livelihood packages including training module, quality standard guideline etc.	▓▓▓▓
Output: 10-12 livelihood packages will be prepared pertaining to the trade/ services requirements of the region specific eco-tourism plans.	▓

4. Developing an institutional model for implementation and management of Eco-tourism in the selected clusters

Activity	Timeline (Gantt)
4.1. Local institutions will be created/ strengthened at three levels – District level, Cluster Level and Village Level	▓
4.2. Institutional models developed detailing out the composition and responsibilities	▓
4.3. Synergising with Eco-tourism initiatives of the state government and building partnership with the Private Sector for strengthening the Eco-tourism business model	▓▓▓▓▓▓
Output: Demonstrate 2 models of Public-Private partnership in Eco-tourism business	▓

Activities	Year 1							Year 2							Year 3						
	M2	M4	M6	M7	M8	M10	M12	M2	M4	M6	M7	M8	M10	M12	M2	M4	M6	M7	M8	M10	M12
5. Creating the physical infrastructure for Eco-tourism																					
5.1. Design of built environment and services with dedicated Design Cell. Formed as part of project team										▓											
5.2. Conducting participatory design workshops with local artisans and craft person to evolve designs of the built infrastructure											▓	▓									
5.3. Detailing of type of infrastructure created/												▓	▓	▓							

Activities	M2	M4	M6	M7	M8	M10	M12	M2	M4	M6	M7	M8	M10	M12	M2	M4	M6	M7	M8	M10	M12
adapted like homestays, nature interpretation centres, outdoor infrastructure, solid waste management											▓	▓	▓								
Output: Architecture design and details of homestays, nature interpretation centres, outdoor infrastructure													▓								
6. Training of community groups in various eco-tourism and management services																					
6.1. Organising livelihood camps to in each cluster to showcase various livelihood packages developed in order to enrol community members for training programmes								▓	▓												
6.2. Conducting on-site training programmes in villages like construction/ building craft related training													▓	▓	▓	▓					
6.3. Conducting off site training programmes like hospitality, mountaineering, trekking guide, IT services										▓	▓	▓	▓								
6.4. Training of women from the villages including traditional/ continental cuisine, housekeeping, craft												▓	▓								
6.5. Further training of a team of skilled personnel among the trained community members for quality monitoring of services												▓	▓								

Activities	Year 1							Year 2							Year 3						
	M2	M4	M6	M7	M8	M10	M12	M2	M4	M6	M7	M8	M10	M12	M2	M4	M6	M7	M8	M10	M12
7. Developing a communication and marketing strategy for sustainability of the eco-tourism business																					
7.1. Developing series of communication materials for use at various								▓	▓	▓											

Activity																									
homestays/ Information centres								▓	▓	▓															
7.2. Creating a website featuring the Eco-tourism packages offered in the 4 clusters													▓	▓											
7.3. Developing advertising/ marketing campaign for the Eco-tourism initiatives featuring on social media									▓	▓	▓	▓	▓	▓		▓	▓	▓	▓	▓	▓	▓	▓	
7.4. Training in each cluster on IT services and marketing									▓	▓	▓														
7.5. Synergising activities, particularly Zero-Waste policy and initiatives with popular public campaigns like the Swachh Bharat Mission								▓	▓	▓															
Output: Detailed communication plan and strategies implemented through print and electronic media for Ecotourism business								▓						▓											
8. Documentation of Himalayan Indigenous Knowledge and integrating the knowledge resource as part of eco-tourism services								▓	▓	▓	▓	▓	▓											
9. Pilot commencement of at least 2 eco-tourism packages														▓	▓	▓	▓	▓	▓	▓	▓				

4   KEY FINDINGS AND RESULTS

- Restored and onboarded 16 different types of homestays from these identified cluster
- Preserved the rich Pahadi architecture in these homestays through proper restoration and development.
- Conducted 20+ training sessions and workshops with the village locals, focusing on community development activities.
- 300+ local people have been impacted and benefited, through our combined efforts and intervention through training programmes and workshops.
- More than 100 girls, women and children have been empowered through our training programmes.

- Around 15 individuals have been identified as local champions and guides from the village communities.
- 50+ artisans and farmers have been impacted and supported through our efforts.
- Creating employment opportunities within the villages for the youth and taking steps towards self-sufficiency.
- Installed 100+ dustbins made from reused tin dabbas outside every household and at regular intervals in all the villages.
- Around 5 cleanliness drives actively initiated by the village locals like kids, youths, women, etc.
- Creating a proper & systematic drainage system and soak pits system in the village.
- Creation of 100+ posters & signages focusing on unique local experiences, occupations, talents & sustainability mechanisms, to add to the village identity & bind the people together.
- Created 1 Interpretation Centre in Uttarkashi village cluster at the DST co-funded community building

5 OVERALL ACHIEVEMENTS

Explained in the above section

6 PROJECT'S IMPACTS IN IHR

6.1 Socio-Economic Development (max. 500 words, in bullet points)

The project was able to fulfill the requirement of the livelihoods needs of the local youth and women by creating new and sustainable opportunities. The current employment situation of Uttarakhand and Himachal is quite poor and the migration percentage of the states are 38% and 36% respectively which is more than India's overall migration percentage(17%).

Therefore the project provided the required skills and knowledge to the local youth and women helping to boost the local rural economy. At present there is a lot of dependence on the plains and other States for basic requirements. Imparting skills to produce items of daily use not only made people self-reliant but it also helped them in reducing uncertainties which arose when routes were cut off thereby affecting the supplies.

The other strategy was to provide them skills which provided them better job opportunities in the destination of migration. Therefore, in short the project contributed towards:

- Government's initiatives on ecotourism
- Carving out new opportunities in the target areas on employment generation
- Boosting of the rural economy of the region
- Conservation and protection of the ecology and biodiversity of the mountain
- region
- Promotion of local culture, heritage and food

6.2   Scientific Management of Natural Resources In IHR (max. 500 words, in bullet points)

NA

6.3   Conservation of Biodiversity in IHR (max. 500 words, in bullet points)

Developed nature walks and bird-watching tours for the promotion and conservation of local flora and fauna. All of these activities have been documented in the brochures and booklets prepared for both the clusters.

6.4   Protection of Environment (max. 500 words, in bullet points)

Conducted several campaigns on waste management for protection of environment of the region.

6.5   Developing Mountain Infrastructures (max. 500 words, in bullet points)

- Installed 100+ dustbins made from reused tin dabbas outside every household and at regular intervals in all the villages.
- Creating a proper & systematic drainage system and soak pits system in the village.
- Creation of 100+ posters & signages focusing on unique local experiences, occupations, talents & sustainability mechanisms, to add to the village identity & bind the people together.
- Created 1 Interpretation Centre in Uttarkashi village cluster at the DST co-funded community building
- Installation of 6 solar water heater appropriate for mountain region

6.6   Strengthening Networking in IHR (max. 700 words, in bullet points)

The project strived towards synergy with both on-going Ecotourism initiatives of the state government and collaborations with the Private Sector for strengthening the Eco-tourism business model. Some of the partnerships which the project will pursue include-

- Liaison with government departments concerned with the promotion of Ecotourism in the state and with emerging niche private travel businesses for integrating the Ecotourism packages developed under the project with state level Ecotourism promotional efforts.
- Enter into agreements with craft based village industries/ micro-enterprises and Farmer Producer Groups for procurement of different products/ agricultural produce/ consumables for running the Ecotourism business
- Invite Private sector companies operating in the region such as Cement Industry, Large Hotel Groups, Pharmaceutical companies etc. to financially support specific components of the Ecotourism business as part of their Corporate Social Responsibility.
- Set up an on-line fundraising campaign for private donations.

7 EXIT STRATEGY AND SUSTAINABILITY

7.1 How effectively the project findings could be utilized for the sustainable development of IHR (max. 1000 words)

The project findings can be amplified by creating an Ecotourism Coalition or a Network of Responsible Tourism which will have participation from key government authorities, private players, industry and association, travel agency, artisans, academicians. This platform will enable them to discuss the issues with a wider range of audience.

7.2 Efficient ways to replicate the outcomes of the project in other parts of IHR (Max 1000 words)

Creating partnerships with private players is important for replication but at the same time assessing the performance of private player's work on ground with the cluster is also crucial.

7.3 Identify other important areas not covered under this study needs further attention (max 1000 words)

Enterprise Development

- Facilitate access to local market
- Local to global –> Facilitate access to global markets for LGEs
- Enhancing access to finance for LGEs
- Organizing the unorganized sector

Skill & Capacity Building

- Continuous training and engagement required with the community to see impact
- Awareness & behavioral change required at both end- Local Community and Traveler especially for waste management

Circular Economy

- Addressing solid waste management, waste water Transforming organic & non organic waste flows into income/revenue flows
- Business model based on repair & reuse & renovate waste, clothes, infra, etc.
- Sharing good case examples with local communities on waste and C&D

Ecotourism Coalition / Network for Responsible Tourism

- Creating a platform for advocacy and knowledge sharing - bureaucrats, CSOs, businesses, practitioners, researchers could be members
- Certification and benchmarking

New models of Tourism

- Ecosystem synergy based approach- governance, nature, culture etc.
- Activity based travel- volunteer tourism, immersion activity, long stays v/s short stays, biodiversity tours, etc

7.4 **Major recommendations for sustaining the outcome of the projects in future (500 words in bullets)**

- Assessing the performance of private players after exit as they have been held responsible for continuous business and capacity building
- More research is required on assessing the natural capital ecosystem as well as the finance requirements for starting ecotourism bases enterprises

8 REFERENCES/BIBLIOGRAPHY

NA

9 ACKNOWLEDGEMENT

This project has benefitted immensely from the kind guidance of experts from the NMHS, GB Pant and, MOEFCC. We thank them and the other stakeholders in the select geographies who were actively involved at different stages of the project and have contributed to the final outcome. Last but not the least, we are grateful to the NMHS for funding the project, without which, this exercise would not have materialized.

APPENDICES

Appendix 1 – Details of Technical Activities

Appendix 2 – Copies of Publications duly Acknowledging the Grant/ Fund Support of NMHS

Appendix 3 – List of Trainings/ Workshops/ Seminars with details of trained resources and dissemination material and Proceedings

Appendix 4 – List of New Products (utilizing the local produce like NTFPs, wild edibles, bamboo, etc.)

Appendix 5 – Copies of the Manual of Standard Operating Procedures (SOPs) developed

Appendix 6 – Details of Technology Developed/ Patents filled

Appendix 7 – Any other (specify)

******

Consolidated and Audited
Utilization Certificate (UC) and Statement of Expenditure (SE)

For the Period: 1st Jan 2018 to 30th June 2021

1.	Title of the project/Scheme/Programme:	Developing livelihood options and explore employment generation by creating sustainable ecotourism opportunities involving youth and women in the mountain ecosystem of Uttarakhand and Himachal Pradesh of India
2.	Name of the Principle Investigator & Organization:	PI: Ms. Gitika Goswami Organization: Development Alternatives
3.	NMHS-PMU, G.B. Pant National Institute of Himalayan Environment, Kosi-Katarmal, Almora, Uttarakhand Letter No. and Sanction Date of the Project:	Ref. No.: NMHS-2017/MG-05/481 Date: 22-12-2017
4.	Amount received from NMHS-PMU, G.B. Pant National Institute of Himalayan Environment, Kosi-Katarmal, Almora, Uttarakhand during the project period (Please give number and dates of Sanction Letter showing the amount paid): **Sanction letter and Date-** **NMHS/2017-18/MG-05/481 and 22.12.2017** | Years	Amount | |---|---| | Year-1 | 4,85,7000 | | Year-2 | 9,15,7000* | | Year-3 | 6,56,8206 |	**2,05,82,206**
5.	Total amount that was available for expenditure (Including commitments) incurred during the project period:	**2,05,82,206**
6.	Actual expenditure (excluding commitments) incurred during the project period:	**1,59,21,758**
7.	Unspent Balance amount refunded, if any (Please give details of Cheque no. etc.):	**0**
8.	Balance amount available at the end of the project:	**4,66,0448**
9.	Balance Amount:	**4,66,0448**
10.	Accrued bank Interest: From 01.04.2019 to 31.12.2021(with Extension Period)	**3,64,234**

*- Amount sanctioned (As per sanctioned letter dated 19.09.2019) for 2nd installment is Rs. 91,57,000 but actual amount transfer Rs. 89,85,815 after adjusting interest amount Rs. 1,71,185 earned up to March 19.

Certified that the expenditure of **Rs. 1,59,21,758 (Rupees One Crore Fifty Nine Lakh Twenty One Thousand Seven Hundred Fifty Eight Only)** mentioned against Sr. No. 6 was actually incurred on the project/scheme for the purpose it was sanctioned.

Date:29/03/2022

Gitika Goswami   Vinod Nair   **Shrashtant Patara**

(Signature of   (Signature of Registrar/   (Signature of Head
Principal Investigator)   Finance Officer)   of the Institution)

OUR REF. No.

**For & on Behalf of -
S.Sahoo & Co .**
Chartared accountants
FRN No.322952E
CA Subhajit Sahoo , FCA, LLB Partner

MM No.057426
Signature & Seal
of Chartered Accountant

ACCEPTED AND COUNTERSIGNED

Date:

COMPETENT AUTHORITY
NATIONAL MISSION ON HIMALAYAN STUDIES (GBP NIHE)

Statement of Consolidated Expenditure

[Development Alternatives]

Statement showing the expenditure of the period from
Sanction No. and Date   :

1. Total outlay of the project   : Rs. 2,17,72,000/-

2. Date of Start of the Project   : 01.1.2018

3. Duration   : 3 years (project extended for 6 months i.e till June 2021)

4. Date of Completion   : 30.06.2021

a) Amount received during the project period   : **2,05,82,021**

b) Total amount available for Expenditure   : **2,05,82,021**

S. No.	Budget head	Amount Allocated /Sanctioned	Expenditure	Amount Balance/ excess expenditure
1	Salaries	5,04,6000	50,73,652	(27,652)
2	Travel	6,59,467	1,44,589	5,14,878
3	Contingency	3,21,097	51,972	2,69,125
4	Activity and Other project costs	1,02,12,959	94,13,586	7,99,373
5	Institutional /Overhead charges	3,15,900	59,774	2,56,126
6	Permanent Equipment Purchased	40,26,783	11,78,185	28,48,598
7	**Total**	**2,05,82,206**	**1,59,21,758**	**46,60,448**

Certified that the expenditure of **Rs. 1,59,21,758 (Rupees: One Crore Fifty Nine Lakh Twenty One Thousand Seven Hundred Fifty Eight Only)** mentioned against Sr. No.7 was actually incurred on the project/ scheme for the purpose it was sanctioned.

Date:29/03/2022

(Signature of   (Signature of Registrar/   (Signature of Head
Principal Investigator)   Finance Officer)   of the Institution)

OUR REF. No.

ACCEPTED AND COUNTERSIGNED

Date:

COMPETENT AUTHORITY
NATIONAL MISSION ON HIMALYAN STUDIES (GBP NIHE)

Consolidated Interest Earned Certificate

Please provide the detailed interest earned certificate on the letterhead of the grantee/ Institution and duly signed.

Interest on Savings
Ledger Account
1-Jan-2018 to 31-Dec-2021

Date		Particulars	Credit
31-03-2018	Dr	Interest Received	42,882
30-06-2018	Dr	Interest Received	45,561
30-09-2018	Dr	Interest Received	37,033
08-02-2019	Dr	Interest Received	28,806
31-03-2019	Dr	Interest Received	16,903
		Total Interest earned till 31st Mar 2019 is adjusted through Sanctioned Letter dated: 19.09.2019	**1,71,185**
31-07-2019	Dr	Interest Received	10,072
01-10-2019	Dr	Interest Received	11,878
01-01-2020	Dr	Interest Received	64,672
31-03-2020	Dr	Interest Received	49,741
01-07-2020	Dr	Interest Received	42,182
01-08-2020	Dr	Interest Received	12,347
30-09-2020	Dr	Interest Received	10,424
22-10-2020	Dr	Interest Received	26,387
31-10-2020	Dr	Interest Received	12,055
31-03-2021	Dr	Interest Received	19,128
31-03-2021	Dr	Interest Received	1,756
26-07-2021	Dr	Interest Received	13,634
30-09-2021	Dr	Interest Received	46,466
31-12-2021	Dr	Interest Received	43,492
		Total Interest earned for the period Apr-19 to Dec 2021	**3,64,234**

Consolidated Assets Certificate

Assets Acquired wholly/ Substantially out of Government Grants

(Register to be maintained by Grantee Institution)

Name of the Sanctioning Authority: National Mission on Himalayan Studies (NMHS)

1. Sl. No. _____

2. Name of Grantee Institution: Society for Development Alternatives

3. No. & Date of sanction order: Ref. No.: NMHS-2017/MG-05/481 & Date: 22-12-2017

4. Amount of the Sanctioned Grant: Rs. 2,17,72,000/- (Rupees Two crore seventeen lakh seventy two thousand only)

5. Brief Purpose of the Grant: Developing livelihood options and explore employment generation by creating sustainable ecotourism opportunities involving youth and women in the mountain ecosystem of Uttarakhand and Himachal Pradesh of India

6. Whether any condition regarding the right of ownership of Govt. in the property or other assets acquired out of the grant was incorporated in the grant-in-aid Sanction Order: Yes

7. Particulars of assets actually credited Annexure IV or acquired_____

8. Value of the assets as on : Annexure IV

9. Purpose for which utilised at present: Community equipment's, Furniture and Fittings are utilized for the Project Implementation and Office Equipment for office Support.

10. Encumbered or not: Not

11. Reasons, if encumbered _____

12. Disposed of or not : Not

13. Reasons and authority, if any, for disposal_____

14. Amount realised on disposal _____

Any Other Remarks: _____
_____

(PROJECT INVESTIGATOR)   **(FINANCE OFFICER)**

(Signed and Stamped)   **(Signed and Stamped)**

(HEAD OF THE INSTITUTION)

(Signed and Stamped)

List or Inventory of Assets/ Equipment/ Peripherals

S. No.	Name of Equipment	Quantity	Sanctioned Cost	Actual Purchased Cost	Purchase Details
I.	Audio, Video and Digital Support System				
1	Lenovo Laptop, Audio recorder	1 Each		51750	Purchased for the Team Member
2	Digital camera, pendrive, webcam, tripod	1 Each		58400	For capturing the glimpes of homestays by project team
3	Laptop battery	1 Nos		1700	Purchased for Team Member
II.	Project Implementation- Eco Tourism Homestay				
4	Retrofitting	1 Nos		10000	Duni Chand home stay upgradation
5	Retrofitting	1 Nos		20000	Jhabe Ram home stay upgradation
6	Retrofitting	1 Nos		40855	Jhabe Ram home stay upgradation
7	Retrofitting	1 Nos		17355	Duni Chand home stay upgradation
8	Retrofitting	1 Nos		10000	Lal Singh home stay upgradation
9	Retrofitting	1 Nos		43000	Rajendra Singh home stay upgradation
10	Retrofitting	1 Nos	4026783	15050	Lal Singh home stay upgradation
11	Retrofitting	1 Nos		20480	Dharam Singh home stay upgradation
12	Retrofitting	1 Nos		5500	Bhuvneshwar Prasad home stay upgradation
13	Retrofitting	1 Nos		10700	Yashveer Singh home stay upgradation
14	Retrofitting	1 Nos		11300	Abal Singh home stay upgradation
15	Retrofitting	1 Nos		6600	Yashveer Singh Rana home stay upgradation
16	Retrofitting	1 Nos		10000	Bhuvaneshwar Prasad home stay upgradation
17	Retrofitting	1 Nos		132200	Pawan Kumar-Modification in the Home stay
18	Retrofitting	1 Nos		45500	Kuram Dev-Modification in the Home stay
19	Retrofitting	1 Nos		22000	Gajendra Singh Rana-Modification in the Home stay
20	Retrofitting	1 Nos		50000	Kuram chan-Modification in the Home stay
21	Retrofitting	1 Nos		21600	For homestay (Solar torch and electric kettle)

23	Retrofitting	1 Nos		5800	For homestay from Kamal Soni Electronics (Electronics Items)
24	Retrofitting	1 Nos		41300	For homestay (Community boards)
25	Retrofitting	1 Nos		155700	For homestay from Sharma Associates (Solar Light)
26	Retrofitting	1 Nos		23420	For homestay (Kitchen materials)
27	Retrofitting	1 Nos		22400	For homestay (Kitchen Item)
28	Retrofitting	1 Nos		24000	For homestay
29	Retrofitting	1 Nos		7400	Uday Singh Bisht-For homestay
30	Retrofitting	1 Nos		10028	For homestay
32	Retrofitting	1 Nos		28120	Pawan Kumar-For homestay
33	Retrofitting	1 Nos		12500	Hemraj-For Homestay (Lamp set)
34	Retrofitting	1 Nos		12500	Chandra Lal- For Homestay
35	Retrofitting	1 Nos		26500	Raj pal Singh Rana-For Homestay
36	Retrofitting	1 Nos		14600	Nikhil-For Homestay (Led Bulbs)
37	Retrofitting	1 Nos		12050	Uday Singh Bisht-For Homestay (Banner Printing)
39	Retrofitting	1 Nos		71896	For homestay (Electric item)
40	Retrofitting	1 Nos		53456	For homestay (Transportation to Site and Board fitting)
Others					
22	Solar Water Heating System	2 Nos		12700	For homestay
31	Solar Water Heating System	4 Nos		25000	For homestay
38	Solid Waste collection	Many		14825	Nikhil-For Homestay (Dustbins installed)
	Total		**4026783**	**1178185**	

(PROJECT INVESTIGATOR)

(Signed and Stamped)

(FINANCE OFFICER)

(Signed and Stamped)

Letter of Head of Institution/Department confirming Transfer of Equipment Purchased under the Project to the Institution/Department

To,
  The Convener, Mountain Division
  Ministry of Environment, Forest & Climate Change (MoEF&CC)
  Indira Paryavaran Bhawan
  Jor Bagh, New Delhi-110003

Sub.: Transfer of Permanent Equipment purchased under Research Project titled "Developing livelihood options and explore employment generation by creating sustainable ecotourism opportunities involving youth and women in the mountain ecosystem of Uttarakhand and Himachal Pradesh of India" funded under the NMHS Scheme of MoEF&CC – reg.

Sir/ Madam,

This is hereby certified that the following permanent equipment purchased under the aforesaid project have been transferred to the Implementing Organization/ Nodal Institute after completion of the project:

1. **Audio, Video and Digital Support System** – Used by the project team
   I. Lenovo Laptop
   II. Audio recorder
   III. Pen drive
   IV. Webcam
   V. Tripod
   VI. Laptop battery
   VII. * **Digital camera** (Lost during the field visit to Mandi for capturing Homestay pictures – FIR is attached as proof document)
2. **Eco Tourism Homestay Retrofitting, Solar Water Heating System and Solid Waste collection (Dustbins)** – Equipment were purchased for Project Implementation of Homestays in Himachal Pradesh and Uttarakhand are owed by the Homestay owners. (Letter of ownership and contract is attached for the reference).

Head of Implementing Organization:
Name of the Implementing Organization:
Stamp/ Seal:
Date:

Copy to:
1. The Nodal Officer, NMHS-PMU, National Mission on Himalayan Studies (NMHS), G.B. Pant National Institute of Himalayan Environment (NIHE), Kosi-Katarmal, Almora, Uttarakhand-263643

Details, Declaration and Refund of Any Unspent Balance

Please provide the details of refund of any unspent balance and transfer the balance amount through RTGS (Real-Time Gross System) in favor of **NMHS GIA General** and declaration on the official letterhead duly signed by the Head of the Institution.

Kindly note the further Bank A/c Details as follows:

Name of NMHS A/c: NMHS GIA General
Bank Name & Branch: Central Bank of India (CBI), Kosi Bazar, Almora, Uttarakhand 263643
IFSC Code: CBIN0281528
Account No.: 3530505520 (Saving A/c)

In case of any queries/ clarifications, please contact the NMHS-PMU at e-mail: nmhspmu2016@gmail.com

Fund Reconciliation

As on 30th June 2022

Total Outlay of the project   **: Rs. 2,17,72,000/-**

Actual Amount Received till 30th June 2021	: Rs. 2,04,11,021/-
Add: Interest Earned for the period Jan 18 to Mar 19	: Rs. 1,71,185/-
Add: Interest Earned for the period Apr 19 to Dec 21	: Rs. 3,64,234/-
Add: Interest earned for the period Jan 21 to June 22	: Rs. 45,724/-
Total Available Fund	**: Rs. 2,09,92,164/-**
Less; Actual expenditure till 30th June 2021	: Rs. 1,59,21,758/-
Balance Available as on 30th June 2022	**: Rs. 50,70,406/-**
Bank Balance As on 30th June 2022	: Rs. 50,70,406/-
Difference	**: NIL**