

National Mission on Himalayan Studies (NMHS)

HIMALAYAN RESEARCH FELLOWSHIP

(FORMAT FOR THE HALF YEARLY PROGRESS REPORT)

[Reporting Period: from August to December]

Name of the Institution/ University:	Doon University, Motharawala Road, Kedarpur, PO. Ajabpur, Dehradun-248001
No. of Himalayan Research/Project Associate:	Research Associate: 03
No. of Himalayan Junior Research/Project Fellows:	Junior Research Fellows: 10

Himalayan Research/Associate

H-RAs Profile Description:

S. No.	Name of RA	Date of Joining	Name of the PI	Qualification
1.	Dr. Tripti Mishra	2/9/2016	Dr. Ujjwal Kumar/Dr. Vijay Shridhar	Ph.D. (Environment)
2.	Dr. Vivek Joshi	2/8/2016	Prof. Kusum Arunachalam	Ph.D. (Botany)
3.	Dr. Bhawana Kapkoti	2/8/2016	Prof. Harsh Dobhal/Dr. Ujjwal Kumar	Ph.D. (Forestry)

Progress Report: To be filled for each HRA in separate row.

RA No.	Research Objectives	Achievements	Addressed Deliverables	Location of Field Site with Details, if any
1.	<ul style="list-style-type: none">Energy efficiency study in 13 districts of stateExtent of application of new policies and best practices	<ul style="list-style-type: none">Project concept note has been preparedThe present scenario and the potentials of small hydropower are analysed by site visit at uttarkashi and lachiwala	<ul style="list-style-type: none">Literature review has been doneVisited Government Institutions and NGO of Uttarakhand Energy SectorThe present scenario and the potentials of small hydropower (gharat) are analysed by site visit at uttarkashi and lachiwala dehradun	13 districts of Uttarakhand state

2	<ul style="list-style-type: none"> • Survey, Inventory and Assessment of traditional natural resources management practices in the context of Climate change • Development of adaptation strategies 	<ul style="list-style-type: none"> • Survey of nine villages completed. • Assessment of natural water resources in 4 villages completed. • Catchment area treatment plan of 4 villages developed. • Planning of Gharat revival completed. • Linkage of community with micro irrigation department at tadikhet block Almora in progress. • Communities at 4 villages have agreed in written to contribute Rs.216,500 for use of water resources for irrigation through renewable energy. • Three villages have been identified for initial phase of natural water resource management at village level. • Assessment of minimum annual consumption of fuel wood per village in 	<ul style="list-style-type: none"> • Participatory conservation plan is being developed for revival of Gharat for electricity generation in one locations. • Electricity will be used to run an submersible water pump to facilitate irrigation of abandoned agriculture field for cultivation of medicinal and aromatic plants at village level. • Local water resources will be conserved in process and community has agreed in written for treatment of local catchment up hill. • Non fossil fuel pumps such as RAM Pumps and eclectic pumps will be used getting electricity from Gharat through use of alternaters. • Participatory approach has been prioritized for the plan by financial as well as labor based involvement of community in implementation of plan to get self reliance on irrigation through RAM , electric pumps dependent on Gharat and gravity to generated energy. • Cultivation of aromatic plants in agriculture fields of 138 farmers has been completed to support the village community members financially. • All the farmers have been linked with buyers so that the part of income could be used in 	<p>Tadikhet Block District Almora</p> <p>Identified/ surveyed villages</p> <ul style="list-style-type: none"> • Nawli • Uni • Sukhola • Dwarab • Jaune <p>Salt District Almora</p> <p>Identified/ surveyed villages</p> <ul style="list-style-type: none"> • Thalla • Kane <p>District Dehradun</p> <ul style="list-style-type: none"> • Akhandwani. <p>District Tehri</p> <ul style="list-style-type: none"> • Satyaun

		<p>nine villages is completed.</p> <ul style="list-style-type: none"> • Community has agreed for adaptation of advance wood stove to reduce wood consumption by at least 50%. Each family has agreed to pay the required amount declared by UREDA for acquiring such advance stoves. • Community organizations have agreed to link them with NABARD and other financial sources for conservation / utilization of water resources for irrigation at village level. 	<p>implementation of irrigation plan through use of RAM and Gharat based submersible water pumps.</p> <ul style="list-style-type: none"> • Village community in four villages has been mobilized to map there natural resources. • Community has been sensitized for reducing fuel wood collection from village forest and more than 70% of total families are ready to adapt advance wood burning stoves which will reduce the fuel consumption by at least 50% per family per year. • Adaptation strategy planning for climate fluctuations and its mitigations at micro level has been agreed by village community members and work is under progress. 	
3.	<ul style="list-style-type: none"> • Study of outmigration pattern in the State • Study the factors responsible and solutions 	<ul style="list-style-type: none"> • Project concept note has been prepared • Study area has been finalized • Questionnaire has been prepared 	<ul style="list-style-type: none"> • Literature Review • Project concept note has been prepared • Based on literature review study sites has been finalized • Prepared a Questionnaire and checked the questionnaire at study area • Corrections were done in Questionnaire • Rechecked the Questionnaire at field • Final Questionnaire has been prepared 	Uttarakhand Himalaya (Based on literature review study sites will be in Kumaun-Almora and in Garhwal region - Pauri Garhwal)

Note: Data, table and figures may be attached as separate source file (.docx, .xls, jpg, .jpeg, .png, .shp, etc.).

Himalayan Junior Research/Project Fellows

H-JRFs Profile Description:

S. No.	Name of JRF	Date of Joining	Name of the PI	Qualification
1.	Parmendar Singh	1/12/2016	Dr. Vijay Shridhar/Dr. Archana Sharma	M.tech (Environmental technology)
2	Rashi Srivastava	1/12/2016	Dr. Achlesh Daverey /Dr. Archana Sharma	M.tech (Environmental technology)
3.	Priyanka Kumari	1/12/2016	Prof. K. Arunachalam/Dr. Vijay Shridhar/Dr. Archana Sharma	M.Sc.(Environment Management)
4.	Ina Bahuguna	1/8/2016	Prof. Harsh Dobhal/Prof. Kusum Arunahchalam	M.A. (Economics)
5.	Kailash Chandra	1/12/2016	Dr. Vijay Shridhar/Prof. K. Arunachalam	M.Sc. (Zoology)
6.	Shikha Arora	1/8/2016	Dr. Achlesh Daverey	M.Sc. (Forestry)
7.	Yudhishter dutt	1/12/2016	Dr. Ujjwal Kumar/Dr. Vijay Shridhar/Dr. Archana Sharma	M.Sc.(Environment Management)
8.	Vivek Kushwaha	1/8/2016	Prof. Harsh Dobhal/Prof. H. c. Purohit/Prof. Kusum Arunachalam	M.Sc. (Forestry, Wildlife & Environment Science)
9.	Priyanka Sharma	1/12/2016	Dr. Ujjwal Kumar/Prof. Kusum Arunachalam /Dr. Achlesh Daverey	M.Sc (Environmental Science)
10.	Devanshi Singh	5/12/2016	Dr. Ujjwal Kumar/Prof. Kusum Arunachalam/Dr. Achlesh Daverey	M.Sc. (Biotechnology)

Progress Report: To be filled for each JRF in separate row.

JRF No.	Research Objectives	Achievements	Addressed Deliverable	Location of Demonstration/ Study Site with Details
1.	<ul style="list-style-type: none"> • Issues for sustainable tourism including eco-tourism • Changing patterns of tourism 	-	<ul style="list-style-type: none"> • Literature review ongoing. • Presented and discussed the plan of action with NMHS supervisors committee. • Developing a methodology for impact assessment of tourist at Rajaji and Jim Corbett national park. 	Corbet and Rajaji NP Uttarakhand
2.	<ul style="list-style-type: none"> • Waste management, including management of hazardous substances: • Innovative approaches developed (No) and implemented/Quantity of waste treated/ managed 	-	<ul style="list-style-type: none"> • Literature Review ongoing. • Presented and discussed the plan of action with NMHS supervisors committee • Planning and preparing concept note for field visit surveys which will be conducted in different municipalities of Haridwar city. 	Haridwar district Uttarakhand
3.	<ul style="list-style-type: none"> • Issues concerning development in sensitive areas 	-	<ul style="list-style-type: none"> • Literature Review ongoing. • Presented and discussed the plan of action with NMHS supervisors committee. • Preparing a concept note for Identification and assessment of key issues concerning development in Uttarkashi. 	Uttarkashi District Uttarakhand
4.	<ul style="list-style-type: none"> • Testing options for human capacity building including promotion of micro-enterprises and green technologies 	<ul style="list-style-type: none"> • Project concept note has been prepared • Key Sectors of micro enterprises 	<ul style="list-style-type: none"> • Literature Review. • Project concept note has been prepared. • Prepared a Survey format. • Checked the survey 	13 districts of Uttarakhand state

		<p>identified</p> <ul style="list-style-type: none"> Final Survey format has been prepared 	<p>format at study area.</p> <ul style="list-style-type: none"> Corrections were done in Survey format. Rechecked the survey format. Final Survey format has been prepared. 	
5.	<ul style="list-style-type: none"> Conservation of genetic resources of rare, endemic, threatened and globally significant flora and fauna including agro-biodiversity 	-	<ul style="list-style-type: none"> Literature Review ongoing. Presented and discussed the plan of action with NMHS supervisors committee. Discussion on study design with peer group, wildlife experts in Wildlife Institute of India. Field survey formats are being developed for different methods of surveying flora and fauna of Askot wild life sanctuary. Liaisoning with D.F.O office at Pithoragarh district on going. 	Askot wildlife sanctuary
6.	<ul style="list-style-type: none"> Use of alien plants extracts for bio-preservation of wood 	<ul style="list-style-type: none"> Based on the secondary data sources, a database of the alien plants has been prepared 	<ul style="list-style-type: none"> Detailed literature review has been conducted. Concept note has been prepared explaining the materials and methods to be carried out. Database of the alien plants has been prepared. Counter checking of these alien plants is being carried out by visiting the herbarium of Botanical Survey of India (BSI), Dehradun and Forest Research Institute (FRI), Dehradun. Selection of the species will be carried out based on their chemical composition. 	Uttarakhand Himalaya
7.	<ul style="list-style-type: none"> Appraisal to plant diversity and restoration of degraded lands in Pithoragarh district 	-	<ul style="list-style-type: none"> Literature review ongoing. Discussion on study design on going with NMHS supervisors committee, 	Pithoragarh Uttarakhand

			<p>external experts on going.</p> <ul style="list-style-type: none"> • Field Survey formats being developed. • Presented and discussed the plan of action with NMHS supervisors committee. 	
8.	<ul style="list-style-type: none"> • Supplementary livelihood options for local communities and other rural population • Study the market linkages 	<ul style="list-style-type: none"> • Farmers have been motivated for cultivation of medicinal plants in Kimotha, Kanbua and Haiya village in Kalsi block in Dehradun district. • Arranged a meeting between Farmers and Buyer. 	<ul style="list-style-type: none"> • Literature review has been done. • Visited various institute and NGO working for supplementary rural livelihood in Uttarakhand. • Visited Kimotha and Kanbua villages in Kalsi block of Dehradun and observed their current livelihood practices and Information was gathered concerning the dependency of villagers on agriculture and other activities depend on natural resources in each village, and household's source of income, family size, and landholding. • Village level meetings, group discussions, and personal interviews were conducted among each household to collect information. • Arranged meeting with Farmers on Medicinal and Aromatic plant cultivation in kimotha, Kanbua and Haiya villages in Kalsi block and maldewta village in Rajpur block in Dehradun district 	Dehradun: Kalsi Block (Haiya, Kimotha and Kanbua)
9.	<ul style="list-style-type: none"> • Effect of forest fires on nutrient dynamics in the soil. 	-	<ul style="list-style-type: none"> • Literature review ongoing. • Presented and discussed the plan of action with NMHS supervisors committee • Area identification under progress based on secondary data available. • Discussion on study 	Uttarakhand Himalaya

			design on going with NMHS supervisors committee, external experts on going.	
10.	<ul style="list-style-type: none"> Effect of forest fires on soil microbial biomass and diversity. 		<ul style="list-style-type: none"> Literature review ongoing. Presented and discussed the plan of action with NMHS supervisors committee Identification process of field area under process. Discussion on study design on going with NMHS supervisors committee, external experts on going. 	Uttarakhand Himalaya

Note: Data, table and figures may be attached as separate source file(.docx, .xls, jpg, .jpeg, .png, .shp, etc.).

(Signature of Registrar/ Head of Department)

Report (hard copy) should be submitted to:

The Nodal Officer, NMHS-PMU
G.B. Pant National Institute of Himalayan Environment and Sustainable Development (GBPNIHESD)
Kosi-Katarmal 263 643, Almora, Uttarakhand

Report (soft copy) should be submitted to:

E-mail: nmhspmu2016@gmail.com