## Linking SDGs by UN to the projects granted under NMHS Scheme

S. No.	SDG No.	SDG targets	Relevant NMHS Thematic areas
1.	1.	End poverty in all its forms everywhere  1.b Create sound policy frameworks at the national, regional and international levels, based on pro poor and gender sensitive development strategies, to support accelerated investment in poverty eradication actions.	Sustainable/Supplementary Livelihood Options Projects:  • Enhancing livelihood of Himalayan communities through action research and transforming wild produces into high value products  • Collection, evaluation and conservation of native crops germplasm form Uttarakhand hills and prebreeding through community participation.  • Sustainable use of Sikkim Himalayan Biodiversity for socioeconomic development of mountain villages with special reference to Ophiocordycepssinensis, Hippophaesalicifolia, Docynia indica and Rhuschinensis: Technology development, alternative livelihood and conservation
2.	2.	End hunger, achieve food security and improved nutrition and promote sustainable agriculture  2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.	Conservation and Sustainable Use of Biodiversity Projects:  Collection, evaluation and conservation of native crops germplasm form Uttarakhand hills and prebreeding through community participation.  Sustainable/Supplementary Livelihood options Project: A Sustainable Approach for livelihood improvement by Integrated Natural Resource Management in the central Himalaya Sustainable use of Sikkim Himalayan Biodiversity for socioeconomic development of mountain
3.	6.	Ensure availability and sustainable management of water and sanitation for all 6.4 By 2030, substantially increase water use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.	Sustainable Management of Land and Water Resources Project:  Rejuvenation of Springs and Spring-fed Streams in Mid-Himalayan Basins using Spring Sanctuary Concept  Sustainable Infrastructure and Energy Security Project:  Drinking Water Security for Rural Areas in Uttarakhand Himalayas by Riverbank Filtration, Robust Disinfection Systems and Community Participation
4.	8.	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all 8.3 Promote development oriented policies that support productive activities, decent job creation,	Sustainable/Supplementary Livelihood Options  Projects:  Sustainable use of Sikkim Himalayan Biodiversity for socioeconomic development of mountain villages with special reference to Ophiocordycepssinensis, Hippophaesalicifolia, Docynia indica and Rhuschinensis: Technology

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NO.	NO.	entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro, small and medium sized enterprises, including through access to financial services	development, alternative livelihood and conservation  • A Sustainable Approach for livelihood improvement by Integrated Natural Resource Management in the central Himalaya
5.	9.	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.  9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.  9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human wellbeing, with a focus on affordable and equitable access for all.  9.3 Increase the access of small scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.  9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	Environmental Assessment and Management Project:  • Environmentally Sustainable Smart Synthesis of Carbon Nano material along with the production of High Value Added Fuel and Additives for the Concrete Mixture from Waste Plastic, Hazardous Waste Around the Himalayan Region
6.	11.	Make cities and human settlements inclusive, safe, resilient and sustainable.  11.a. Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.	<ul> <li>Environmental Assessment and Management Project:</li> <li>Environmentally Sustainable Smart Synthesis of Carbon Nano material along with the production of High Value Added Fuel and Additives for the Concrete Mixture from Waste Plastic, Hazardous Waste Around the Himalayan Region</li> </ul>

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7.	12.	Ensure sustainable consumption and production patterns 12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.	Conservation and Sustainable Use of Biodiversity Projects:  Collection, evaluation and conservation of native crops germplasm form Uttarakhand hills and prebreeding through community participation.
8.	13.	Take urgent action to combat climate change and its impacts 13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries.	<ul> <li>Environmental Assessment and Management         Project:         <ul> <li>Dynamics of Himalayan Ecosystem and its Impact under Changing Climate Scenario</li> </ul> </li> <li>Sustainable Management of Land and Water Resources         <ul> <li>Project:</li> <li>Geomorphic characterization of flash floods and mass wasting in upper Ganga terrain of Garhwal Himalaya: role of climate - tectonic interaction in gradation processes"</li> </ul> </li> </ul>
		13.2 Integrate climate change measures into national policies, strategies and planning.	Awareness and Capacity Building Project:  Coping with Uncertainty: Building Community Resilience and Ecosystem Based Adaptation to Climate Change in the Indian Himalayan Region  Environmental Assessment and Management Project:  Dynamics of Himalayan Ecosystem and its Impact under Changing Climate Scenario  Environmental monitoring and assessment of climate change of tourism affected Himalayan sub regions of Shimla and Chamba (Himachal Pradesh)  Vegetation heterogeneity and impacts of changing climatic and land use patterns on two contrasting timberline ecotones of Upper Chenab catchment, J & K and conservation strategies thereof  Sustainable Management of Land and Water Resources Project:  Geomorphic characterization of flash floods and mass wasting in upper Ganga terrain of Garhwal Himalaya: role of climate - tectonic interaction in gradation processes"
		13.3 Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.	Environmental Assessment and Management  Project:  • Environmentally Sustainable Smart Synthesis of Carbon Nano material along with the production of High Value Added Fuel and Additives for the Concrete Mixture from Waste Plastic, Hazardous Waste Around the Himalayan Region

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	1101		Environmental monitoring and assessment of climate change of tourism affected Himalayan sub regions of Shimla and Chamba (Himachal Pradesh)
9.	15.	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss  15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.	Conservation and Sustainable Use of Biodiversity Projects:  Establishment of Gene Pool, Propagation and Ex- Situ Conservation of selected sensitive high altitude Medicinal and Aromatic plant species and Nature Interpretation Site (NIS) for creating Awareness among the various stakeholders  Multidisciplinary studies in Floristic assessment, ecological analysis, ecosystem services, conservation and sustainable management of selected National Parks in Western Himalaya
			<ul> <li>Environmental Assessment and Management</li> <li>Project:</li> <li>Vegetation heterogeneity and impacts of changing climatic and land use patterns on two contrasting timberline ecotones of Upper Chenab catchment, J&amp;K and conservation strategies thereof</li> </ul>
		15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase of forestation and reforestation globally	Conservation and Sustainable Use of Biodiversity Project:  • Understanding the degradation and loss of primary forest in the Teesta valley of the Sikkim Himalaya: a framework for recovery and management of biodiversity and bioresources
		15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.	<ul> <li>Environmental Assessment and Management Projects:         <ul> <li>Timberline and Altitudinal Gradient Ecology of Himalayas, and Human Use Sustenance in a Warming Climate</li> <li>Biodiversity Assessment through Long-term Monitoring Plots in Indian Himalayan Landscape</li> <li>Technology Development, Management, and Long-Term Monitoring of Shifting Cultivation and Coal Mining in North-Eastern India</li> <li>Identification, assessment and enhancement of soil carbon and nitrogen sequestration potential of different ecosystems in the central Himalayan through a participatory approach</li> <li>Vegetation heterogeneity and impacts of changing climatic and land use patterns on two contrasting timberline ecotones of Upper Chenab catchment, J&amp;K and conservation strategies thereof</li> </ul> </li> </ul>
			Conservation and Sustainable Use of Biodiversity  Project:  Multidisciplinary studies in Floristic assessment, ecological analysis, ecosystem services,

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			<ul> <li>conservation and sustainable management of selected National Parks in Western Himalaya</li> <li>Survey and Mapping of Medicinal and Aromatic Plants (MAPS) and other RET/NTFPs on alpine regions of Uttarakhnad and developing Uttarakhand-Alpine Information System (UK-AIS)</li> <li>Conservation strategies for <i>Taxuswallichiana</i> and <i>Ulmuswallichiana</i> by DNA markers and geospatial technology</li> <li>Ecological monitoring and status of fish fauna in hydropower affected Alaknanda-Bhagirathi-Ganga rivers</li> <li>Fish Faunal Diversity, Habitat Ecology and their Conservation strategies of the Kameng River system in Arunachal Pradesh</li> <li>Understanding the degradation and loss of primary forest in the Teesta valley of the Sikkim Himalaya: a framework for recovery and management of biodiversity and bioresources</li> <li>Population dynamics and Biogeography of Himalayan Mouse-Hare Ochotona roylei in relation to their impact on the medicinal flora of Western Himalaya</li> <li>Development of psychrophilic earthworms for bio-waste conversion in Guraj and Tulail valleys of Jammu &amp; Kashmir</li> <li>Post-Fire Management in the Pine Fortes of Indian Himalayan Region by studying, conserving and distributing cultivable microbial biota to increase ecological succession and to revive forest productivity</li> </ul>
		15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.	<ul> <li>Environmental Assessment and Management</li> <li>Project:</li> <li>Human-Wildlife Conflict Resolution Mechanism in Indian Himalayan Region: Risk Assessment,</li> <li>Prediction, and Management Through Research and Community Engagement</li> </ul>