

1GP

Quarterly Progress Report cum PO's ReportQuarter: (Tick) 1/ 2/ **3**/ 4

Project: India High Range Mountain Landscape

Date: 15-10-2020

1. Project Progress

Expected Project Outputs and Indicators including Annual Targets	Planned Activities (List all activities including M&E during the year)	Activity Progress in Quarter – Comments by PO	Quarter X (Highlight the completed quarter)				Comments by PO on the activity progress	Targeted Expenditure for the year	Actual Expenditure in Quarter 1	Reasons for Under Expenditure in Quarter X, if any
			Q 1	Q 2	Q 3	Q 4				
Outcome 1 : Strengthened capacities for community based sustainable use and management of natural resources										
Outcome 1: Outputs 1.1 Capacities of Local Self Governments and community organizations developed to plan for sustainable resource use	<i>1.1.1 Workshops/meetings and consultations/discussions with relevant stakeholders on project related activities – (Government officials, Panchayat functionaries, elected representatives and community members)</i>					Socio-Economic Assessment Based on the rapid socio-economic assessment undertaken during last quarter to understand the impact of Covid 19 and the complete lockdown in the IHRML project landscape discussions were held with various stakeholders to device various interventions for supporting livelihood for the communities. Conducted meetings and workshops in tribal settlements at various GPs for discussing the aspects such as conservation-based agriculture methods, conservation of indigenous seeds, millets cultivation and importance of food crops cultivation. Waste Management Consultation meeting was held with Munnar Grama Panchayat secretary and Sub Collector to discuss about the implementation of comprehensive waste management mechanism. The focus areas of discussion were bio-mining of existing waste, Munnar beautification and green Munnar initiatives. Sustainable Tourism				

					<p>Consultative meetings with relevant stake holders in Kuttampuzha and Mankulam panchayats on tourism sustainability plan</p> <p>Organic Mankulam 13 orientation trainings were conducted in Mankulam Panchayat during this quarter. Over 225 farmers attended the orientation trainings. The topics covered were – organic farming fundamentals, steps for achieving certifications, challenges etc</p> <p>Agroforestry Consultation meetings with Adimali, Vattavada and Kuttampuzha Grama panchayats on agro forestry were held during this quarter</p> <p>Passionfruit value chain Consultation meetings with farmers and farmer collectives were held during the month of September.</p> <p>Conservation of Orchids Consultative meeting at Munnar was held with representatives from forest dept in September</p> <p>Lemongrass value chain Consultative meetings at were held with tribal community members and forest dept officials during the month of September</p> <p>Chilla Market automation Consultative meetings at were held with forest department officials and Kerala Startup Mission team during the month of August for the project implementation</p> <p>State Level Meetings Review meeting held by Chief Secretary on project activities and Annual Work Plan for 2020-22. Review meeting held by Chief Minister on project activities and Annual Work Plan for 2020-22.</p>			
	1.1.2 Develop IEC products on project related activities				<p>Developed an Activity Report for the project for circulation at the State Level.</p> <p>Developed a draft Communications Plan for the project. Video Documentation-Munnar GP - Three video documentaries were prepared for analyzing the existing water pollution, solid and comprehensive waste management issues in Munnar</p>			

	<p>1.1.3 Training relevant stakeholders for mainstreaming BD considerations – (for Government officials, Panchayat functionaries elected representatives and community members)</p>				<p>Green Appraisal Tool Green Appraisal Tool along with guidelines were developed to evaluate impact of panchayath plan/ project on Biodiversity conservation, sustainable livelihoods and disaster management. Field level consultations and online consultations were held with Panchayath representatives and other govt. department officials. Prepared Terms of Reference for State Biodiversity Strategies and Action Plan.</p> <p>Capacity Need Assessment using UNDP Capacity Building Scorecard Preliminary stakeholder mapping has been completed. Incorporated 4 new sub- indicators for Capacity Building Score card for Capacity Need Assessment on 5-year plan development, annual plan development, Local Action plan for Climate Change and requirement for Capacity Building Based on the Capacity Building score card and new sub indicators a baseline assessment will be carried out in Q3. Capacity Needs Assessment report submitted on 8th September 2020. Baselines derived from the report are as follows; Capacities for engagement is 40%; Capacities to Generate, Access and Use Information and Knowledge is 21%; Capacities for Strategy, Policy and Legislation development is 7%; Capacities for Management and Implementation is 7%; Capacities to monitor and evaluate is 18%; Capacity development and training is 32% There are 18 Local Self Government Institutions including 11 annual plans of the GPs are expected to incorporate biodiversity Grama Panchayaths in the landscape. The 2021-22 friendly practices through trainings, workshops and participatory sessions proposed to be conducted using the envisaged Capacity Development (CD) modules developed by KILA. Workshops for Plans incorporating multi-use management concepts for 2021-2022 will be completed by Q4*. KILA submitted the revised work plan in the prevailing COVID-19 situation with virtual platforms as means for trainings and workshops. The same has been approved. Measures and check-list developed for effective virtual consultations, trainings and workshop sessions adaptive to the prevailing COVID-19. The baseline assessment with green plans appraisal and stakeholder engagement submitted on 8th September 2020. A total of 122 stakeholders are identified under three categories (62 key stakeholders 29 primary stakeholders and 31 secondary</p>			
--	---	--	--	--	--	--	--	--

						stakeholders). A stakeholder engagement plan developed for 11 GPs for conducting next phase of training. *(Quarters according to calendar year)			
	1.1.4 Exposure visit of select stakeholders to other landscape approach-based conservation models								
	1.1.5 Technical studies to establish baseline, assess impacts of current resource use practices in the landscape					<p>KILA Draft report on the Creation of Socio-Economic Data Base for Concurrent Evaluation for the project landscape was submitted during this quarter and same was circulated among the stakeholders</p> <p>Draft report on Consultative workshop on Social Changes Among Tribes - Trajectory of Development - Focus on Edamalakkudy was submitted during this quarter and same was circulated among the stakeholders</p> <p>CWRDM CWRDM submitted draft final report on 'Hydrological investigations in HRML' to UNDP CO highlighting detailed water balance study with scientific modelling of available surface water, ground water, water demand, water balance and water quality analysis, review of state and national level water policies along with appropriate suggestions for HRML. An inventory of water use (brief), water resources (brief) has been developed. Water quality analysis for 17 parameters from 597 source locations completed.</p> <p>SACON SACON has submitted the final draft report on the study. The report provides recommendations for protecting the identified nesting sites of 4 hornbill species in the landscape. It was also suggested that enrichment of hornbill foraging habitats be done by planting native trees having fleshy fruits, including figs, through peoples' participation. Nurseries for these species may be developed and the same may be planted at different locations. It is also suggested to study the ecological requirement of Grizzled giant squirrels for addressing the declining population.</p>			

<p>Output 1.2: Sustainable resource use practices demonstrated for improved quality of life</p>	<p><i>Waste Management outside forest areas</i> 1.2.1 Implementation of “Green Munnar” Project for (Dumpsite clearance, treatment of bio & non-bio waste, campaigns for waste reduction, Septage treatment and Nallathanni river rejuvenation)</p>				<p>Munnar Consultation meeting chaired by Dr. TN Seema was held on 23rd September 2020 to discuss the problems related to Waste Management in Munnar. The following activities have been decided to be carried out:</p> <ul style="list-style-type: none"> - Legacy waste clearance has been initiated with co-finance from Munnar Panchayath using biomining process - UNDP will assist in technical monitoring through the formation of a local level monitoring committee and a state level monitoring committee - UNDP will work with the Munnar Grama Panchayath and the Devikulam Block Panchayath in establishing a Material Recovery Facility for non-bio waste generated in the region - UNDP will develop a decentralized waste management system for bio waste through an action research project - UNDP will assist the Panchayath in waste reduction, segregation, and collection related activities - UNDP may assist the Panchayath in the technical evaluation of the DPR being prepared by the Panchayath for Septage Waste 			
	<p><i>1.2.2 Waste Management interventions in Athirappilly and other GPs in the landscape</i></p>				<p>Athirappilly</p> <ul style="list-style-type: none"> - UNDP assisted the panchayath in creating a waste management system in the panchayath which includes a door to door collection system through the formation of Haritha Karma Sena or Green Technicians, creation of storage & segregation points for non-bio waste and establishing a forward linkage for segregated non-bio waste - Door to door campaign has also been started for source level segregation of bio-waste and waste reduction - 7 nodes have been identified in Athirappilly Panchayath where interaction of tourists and the landscape is high. These seven nodes are being developed as points where tourists and local communities will be educated about the value of 3 R principles of Reduce-Reuse-Recycle. These 7 nodes will lead to the formation of an eco-corridor in Athirappilly - Detailed estimate has been developed for 1 node in the Panchayath. This node is being planned as a green literacy center which will capture the themes of Reduce-Reuse-Recycle 			

						<p>principle for solid waste, reuse of water resources through a rainwater harvesting structure, construction of a Material Collection Facility for non-bio waste</p> <p>Kuttampuzha</p> <ul style="list-style-type: none"> - UNDP has assisted the panchayath in creating a waste management system in the panchayath which includes a door to door collection system through the formation of Haritha Karma Sena or Green Technicians, creation of storage & segregation points for non-bio waste and establishing a forward linkage for segregated non-bio waste - As part of the efforts the Panchayath has got a recognition from state govt – that of Suchitwa Padhavi or Clean Status <p>Adimali</p> <ul style="list-style-type: none"> - UNDP has assisted in the Panchayath in door to door collection of non-bio waste through the training and handholding of Haritha Karma Sena members or Green Technicians - As part of the efforts the Panchayath has got a recognition from state govt – that of Suchitwa Padhavi or Clean Status - An AI powered high resolution digital camera with night vision has been installed near a waste dumping point in Adimali Panchayath for automatic detection of dumping instances <p>Mankulam</p> <ul style="list-style-type: none"> - UNDP has assisted the panchayath in creating a waste management system in the panchayath which includes a door to door collection system through the formation of Haritha Karma Sena or Green Technicians, creation of storage & segregation points for non-bio waste and establishing a forward linkage for segregated non-bio waste - Several meetings were organized in the Panchayath - Training provided to Haritha Karma Sena members in collection and segregation - Household campaign done for promoting source level composting of bio waste and source level segregation of non-bio waste - Waste reduction campaign held in the panchayath 			
--	--	--	--	--	--	--	--	--	--

						<ul style="list-style-type: none"> - Closing of waste dump yards done in the panchayath - As part of the efforts the Panchayath has got a recognition from state govt – that of Suchitwa Padhavi or Clean Status - Suchitwa Padhavi declaration meeting held in Panchayath by Dr. TN Seema on Sep 30th 2020 <p>Chinnakanal</p> <ul style="list-style-type: none"> - UNDP has assisted the panchayath in creating a waste management system in the panchayath which includes a door to door collection system through the formation of Haritha Karma Sena or Green Technicians, creation of storage & segregation points for non-bio waste and establishing a forward linkage for segregated non-bio waste - Door to door campaign has also been started for source level segregation of bio-waste and waste reduction <p>Marayoor</p> <ul style="list-style-type: none"> - UNDP has assisted the panchayath in creating a waste management system in the panchayath which includes a door to door collection system through the formation of Haritha Karma Sena or Green Technicians, creation of storage & segregation points for non-bio waste and establishing a forward linkage for segregated non-bio waste - Closing of waste dump yards done in the panchayath - As part of the efforts the Panchayath has got a recognition from state govt – that of Suchitwa Padhavi or Clean Status <p>Kanthalloor</p> <ul style="list-style-type: none"> - UNDP has assisted the panchayath in creating a waste management system in the panchayath which includes a door to door collection system through the formation of Haritha Karma Sena or Green Technicians, creation of storage & segregation points for non-bio waste and establishing a forward linkage for segregated non-bio waste 			
--	--	--	--	--	--	---	--	--	--

						<ul style="list-style-type: none"> - Closing of waste dump yards done in the panchayath - As part of the efforts the Panchayath has got a recognition from state govt – that of Suchitwa Padhavi or Clean Status <p>Vattavada</p> <ul style="list-style-type: none"> - UNDP has assisted in the Panchayath in door to door collection of non-bio waste through the training and handholding of Haritha Karma Sena members or Green Technicians <p>Devikulam</p> <ul style="list-style-type: none"> - Held discussions with the panchayath officials regarding creation of a waste management system in the panchayath <p>Edamalakkudy</p> <ul style="list-style-type: none"> - Held discussions with the panchayath officials regarding creation of a waste management system in the panchayath - - 			
	<p><i>Water Resource Management</i></p> <p><i>1.2.3 Demonstration of measures for better water harvesting in the landscape based on the Integrated Watershed Management Plans prepared for 11 Gram Panchayats in consultation with all relevant stakeholders</i></p>					<p>CWRDM refunded the unspent budget to UNDP CO due to limitations in field visits and further implementation. Therefore, the activity on ‘Demonstration of measures to enhance efficiency and utility of existing water conservation structures and other natural sources for better water harvesting’ is put on hold</p>			
	<p><i>Carbon-neutral Panchayat</i></p> <p><i>1.2.4 Action based project to make Mankulam a carbon neutral Panchayat</i></p>					<p>Terms of Reference prepared, and preliminary consultations held for developing a consortium of scientific and community experts for implementation</p>			
<p>Output 1.3: <i>Enhanced products/services value chains developed for providing ecologically sustainable</i></p>	<p><i>1.3.1 Sustainable livelihood practices for Tribal communities NTFP (including branding & marketing of Vamasree shops & products), Bamboo & Reed Agri and allied sectors</i></p> <p><input checked="" type="checkbox"/> <i>Enhancement of reservoir fish production and creation of livelihood opportunities for the tribal community in Munnar Landscape through development of aquaculture practices of native species,</i></p>					<p>Following studies are in progress:</p> <ul style="list-style-type: none"> • Building roadmap and assessment of bamboo/ reed in Project landscape <p>A concept note on “A Build Back Better with bamboo” Utilizing the Potential in Bamboo for Landslide Mitigation in Idukki district was prepared and discussion regarding the same was carried out during the last quarter. In month of September, a virtual meeting was held with Haritha Kerala Mission team regarding the same</p> <p>First progress report for the Project for baseline data generation and developing suitable strategies and action</p>			

<p><i>livelihoods options</i></p>	<p>☑ <i>Lemongrass value chain intervention,</i> ☑ <i>Sustainable Farming, Value addition and Market linkage of Tribal community at Athirappilly</i> ☑ <i>Medicinal plant-based value chain approach</i></p>				<p>plan for the overall development of the bamboo sector in the landscape was shared. Following were the actionable</p> <ul style="list-style-type: none"> - Initiating an immediate but integrated pilot programme for bamboo-based land restoration and climate change mitigation in select landslide-affected areas and identified landslide-prone areas in Idukki district. - Integrating bamboo components in agroforestry schemes and kick-starting different pilot models in home-gardens in 3 agroclimatic zones in HRML project area. - Implementing a participatory assessment and mapping of Ecosystem Services in community forest rights (CFR) lands in the project area. - Organizing an international webinar to discuss best practices in the bamboo sector in land restoration and climate change mitigation. <ul style="list-style-type: none"> • Study on Market Mapping & Value Chain analysis of Vegetables <p>Major findings include water availability and Grandis cultivation, area under grandis exceeds that under agriculture in both Kanthalloor and Vattavada, there exists considerable room for improvement in all areas of production including soil health, seed quality, technical knowledge of farmers, quality of inputs, post-harvest handling and storage, extension activities are inadequate and there exists considerable room for improvement and scope for better coordination between Govt agencies. Based on the gaps identified, eleven intervention strategies have been suggested. Major intervention strategies are end-to-end intervention in the entire value chain of horticultural production, blend of modern and traditional systems of production, thrust on Good Agricultural Practice and Safe to Eat production, branding and private-public partnership in marketing, rationalisation of crops and subsidies, tight monitoring and control systems to maximise the impact of intervention etc</p> <p>Preliminary consultations were carried out with agricultural department for exploring the possibilities</p> <ul style="list-style-type: none"> • Building strategy and roadmap for NTFP Value addition <p>Study suggests that NTFP sector in the region has tremendous potential both in terms of conservation and ensuring sustainable livelihoods to the tribal and forest dependent communities. However, there is much scope for being better organized in terms of collection, trading, setting market price and marketing. Human resource</p>			
-----------------------------------	--	--	--	--	--	--	--	--

						<p>management provisions are visible in areas where the various VSS groups and the corresponding Vanasree units are active. Much of the “primary activities”, an essential component of the “value-chain framework”, are also visible in these areas, however, requires more streamlining and clarity. Under the circumstances there is much scope for strengthening the marketing channels through Vanasree.</p> <p>Discussion on strengthening community organization - Vana Samrakshana Samithies (VSS) under Malayattoor forest division was carried out with forest department officials. Following areas are planned</p> <ul style="list-style-type: none"> • Financial management: Basic bookkeeping, financial analysis • Operations: operational excellence • Business development: Business management • HR: Communications and leadership development • Micro plans: Developing micro plans at grassroot level <p>Medicinal Plants for livelihood generation</p> <p>Under the project for developing medicinal plants for livelihood generation & biodiversity conservation among women self -help groups and marginal farmers, the commercial cultivation of selected medicinal plants which has demand in Ayurveda started at Marayoor and Kanthalloor Grama panchayat covering 40 farmers during this quarter.</p> <p>Lemongrass value chain</p> <p>Consultative meetings were held with tribal community members and forest dept officials during the month of September. Tribal settlements where interventions are planned were identified and preliminary discussions with the community members were carried out in this quarter</p>			
	<p><i>1.3.2 Sustainable livelihood practices around biodiversity</i></p> <p>☑ <i>Revival, Conservation and propagation plan for traditional practices and seed varieties among communities</i></p> <p>☑ <i>Preparation of spatial crop plan based on the assessments of anomalous cropping practices, recommendations for sustainable cropping patterns and its pilot implementation</i></p>					<p>Propagation of traditional agriculture practices and seed conservation activities</p> <p>Based on the propagation plan, propagation of traditional agriculture practices and seed conservation activities were continued in six Grama Panchayats reaching out to 1160 community members covering 345 acres of cultivation.</p> <p>Support in terms of access to traditional rice and finger millet (ragi) seeds and technical assistance were provided to forest dependent and small & marginal farmers. The activities were undertaken in convergence with various stakeholders - Agriculture Department, Excise Department,</p>			

	<p>☑ <i>Access and Benefit Sharing - Documentation and developing models</i></p> <p>☑ <i>Promotion of organic/ safe to eat agriculture practices</i></p> <p>☑ <i>Agroforestry, floriculture, beekeeping</i></p>				<p>Grama Panchayat, Irrigation Department, MGNREGS (Mahatma Gandhi National Rural employment Scheme) etc.</p> <p>Revival of the cultivation of traditional food crops after a period of 15-20 years is a significant achievement. The traditional paddy varieties include nadan kuruva, kunju kunju etc., which were in use earlier.</p> <p>Capacity building trainings were carried out to farmers in good agricultural practices.</p> <p>Anamudi FDA has identified and collected traditional seed varieties such as finger millet (30), kodo millets (2), little millet (2), fox tail millet (2) maze (2), rice (13), beans (19), spinach (5) and one variety of mustard. Propagation of these varieties were made by planting the saplings. An EDC has been formed for conserving these traditional seed varieties.</p> <p>In three selected Grama Panchayats (Vattavada, Marayoor and Adimali) the history of agriculture was mapped by comparing the satellite images for the period 1980, 1990, 2000 and 2015 in GIS platform. This is to understand the land conversion occurred because of agriculture. There is no field work happened because of pandemic Covid 19. The technical agency has submitted first progress report.</p>			
	<p><i>1.3.3 Sustainable livelihood practices for farming community and supporting institutions</i></p> <p>☑ <i>Passion fruit value chain interventions</i></p> <p>☑ <i>Study and implementation on Market Mapping & Value Chain analysis of Veg and fruits</i></p> <p>☑ <i>Strengthening Farmer/ tribal institution for increasing their impact</i></p>				<p>Organic Mankulam Project</p> <p>In continuation of the baseline survey covering 1876 families in Mankulam Grama Panchayat, 13 orientation training were conducted in Mankulam Panchayat during this quarter. Over 225 farmers attended the orientation trainings. The topics covered were – organic farming fundamentals, steps for achieving certifications, challenges etc. It is planned to conduct two-day training in Organic farming to the farmers during the next quarter</p> <p>Passion fruit value chain intervention</p> <p>Passion fruit value chain activities was initiated with community mobilization and production side activities. Over 7500 passion fruit saplings were distributed to over 500 community members across Adimali, Mankulam, Kuttanpuzha, Munnar and Athirappilly grama Panchayats</p>			

	<p>1.3.4 Innovation and enterprise support around ecologically sustainable livelihoods options</p> <ul style="list-style-type: none"> ☑ Green Innovation Fund ☑ Developing a farm tourism model around fruit cultivation ☑ Intervention in Jaggery value chain 					<p>Green Innovation Fund (GIF) A partnership with Kerala Startup Mission (KSUM) through the establishment of a Green Innovation Fund (GIF) is initiated. GIF is strategically positioned as a Start-up risk capital for entrepreneurs and will focus on solutions for key emerging Social Entrepreneurships addressing the problems identified from the selected IHRML project landscape areas. GIF logo was unveiled on September 19,2020 and a Talk Series (GIF Talk) is planned on social entrepreneurship and SDGs in the next quarter</p> <p>Athirappilly Tribal Valley Agricultural Project (ATVAP) In convergence with the agriculture department for Athirappilly Tribal Valley Agricultural Project (Rs 100 Mn project over three years) the activity envisages to improve the livelihood of tribal farmers through the adoption of better farming practices, better output from unit farm area, Organic and rainforest certified products, value addition of farm products and exploring the tribal farm tourism potential of the location. Discussion with technology partners were carried out for digital mapping of farm lands in the project areas during the quarter</p> <p>Campaign for Vanasree under Malayattoor Forest Division An e-commerce portal was launched for online sale of Vanasree product under Malayattoor forest division. Forest produce were procured by Vana Samaraksana Samitis from the villages such as Variyam, Vellaramkuth, Thalavachapara and Thera in Kuttampuzha GP. A campaign was launched during this quarter to address the challenges due to lockdown. Around 160 kgs were sold in this quarter through this campaign</p>			
<p>Output 1.4: Community-based models developed for sustainable access and use of forest resources by local communities</p>	<p>1.4.1 Developing a comprehensive strategy based on evaluation of socio-economic study of Edamalakudy</p>					<p>Draft report on the Social Changes Among Tribes - Trajectory of Development - Focus on Edamalakkudy was submitted and shared with stakeholders.</p>			

	1.4.2 Implementation based on the comprehensive strategy for Edamalakudy								
	1.4.3 Facilitation in implementation of Community Forest Right in project landscape.								
	1.4.4 Technical Experts/Consultants extended to MoEFCC, Haritha Kerala Mission and State Forest Department (Salaries)								
Outcome 2: Multiple use landscape management is applied to secure the ecological integrity of the High Range landscape									
Output 2.1: Capacities of conservation and production sector personnel developed for applying landscape approaches in to sectoral planning and operations	2.1.1 Geospatial mapping of the landscape using high resolution satellite imagery and ground information (different sector & ecological attributes) Inventorizing high value biodiversity areas & assessment of flora and fauna of selected sholas inside tea estate					SACON submitted the inception report on 'Mapping of Spatial distribution of sectors with underlying attributes in HRML' to UNDP CO. Draft landcover mapping using high resolution data; Time series analysis (2000 and 2010) using Landsat ETM - without validation; DEM analysis of the landscape; Digitization of Survey of India Toposheet (1:25000 and 1:50000 scale); Validation of time series analysis is in progress. Draft First Progress report submitted on 29th September 2020 highlighting the time-series analysis from 2000-2010 of 11 GPs, Digital Elevation Model Analysis of 11GPs and spatial mapping of Land Use Land Cover. Inventory on decadal Land Use Land Cover change is documented. Ground truthing of the spatial mapping will be completed in Q4			
	2.1.2 Develop & validate state of sector documents for mainstreaming into the policies and practices of sectoral stakeholders (Tea, Coffee, Cardamom, Oil, Forest plantations and Tourism sectors)					State of Sector document with sectoral biodiversity plans is been developed for an acreage of approx. 40,000 hectares falling under Tea, Coffee, Cardamom, Oil palm and Forest plantation. First Progress Report on Framework of State of Sector document submitted on 31st August 2020 IIPM submitted revised work plan on 'State of Sector document – Tea, Coffee, Cardamom, Oil palm and forest plantations' due to the prevailing COVID-19 situation First Progress Report highlights current and historical practices and framework of state of sector document; Questionnaires for digital data collection (Ecologist, NGOs, Growers, Policy makers, Scientist); Data collection through questionnaires; drafting of second progress report in			

						<p>progress. Data collection on impacts in Tea, coffee, cardamom in progress</p> <p>State of Sector document - tourism – Draft final report was shared with PMU for comments. Final report in progress incorporating comments from the PMU. The study report suggests policy level interventions. Recommendations emphasis the role of Panchayati Raj Rights for the implementation of sustainable and responsible tourism in the landscape.</p>			
<p>Output 2.2: Mainstreaming of bio-diversity concerns in key production sectors demonstrated</p>	<p>2.2.1 Demonstration of developed potential strategies in plantation sector (tea, cardamom, coffee, forest plantations)</p>					<p>Energy Audit For establishing the baseline, an Investment Grade Energy Audit (IGEA) is being carried out in two factories viz a viz orthodox and CTC facilities in the landscape. The output of the IGEA will be to develop a strategy towards reducing energy usage in tea factories. The draft IGEA report is developed highlighting the baseline of electrical and thermal energy consumption of two tea factories in the landscape. The draft report provides energy conservation measures and recommendations in withering, drying and grading processes as well as in electrical and lighting systems. The draft second progress report on preliminary assessment report submitted on 1st September 2020. A technical review meeting on the findings was organized on 9th September 2020 for quality check. The report will be published in Q3* *(Quarters according to calendar year)</p>			
	<p>2.2.2 Demonstration of developed potential strategies in Tourism sector in the landscape</p>					<p>Sustainable Tourism Initiatives</p> <ul style="list-style-type: none"> - High value low impact tourism models at Kuttampuzha and Mankulam Panchayaths <p>KABANI completed data collection for the preparation of tourism sustainability plan. Resource mapping and stake holder consultations progressing in Kuttampuzha and Mankulam Panchayaths</p> <p>Online launching of a unique and innovative tourism programme ‘Walking Kuttampuzha’ was jointly organized by Kuttampuzha Grama Panchayat, Haritha Keralam Mission, Kerala Forest department, UNDP and Kabani Community Tourism & Services, on 12 th September 2020</p> <p>Mr. Antony John, MLA, Kothamangalam Assembly Constituency inaugurated the event. The online inaugural ceremony took place in the Kuttampuzha Grama Panchayat premises under strict Covid protocol guidelines in which 32 participants attended online. A short video on Walking Kuttampuzha, which is produced by Kabani, under UNDP</p>			

						<p>support was shared during the programme. Dr.T N Seema also released an e-brochure on 'Eetta' (Reed), a rich natural resource of Kuttampuzha, which would serve as an innovative marketing tool for sustainable community tourism.</p> <p>Capacity building programmes for service providers in progress.</p> <p>- Responsible Protocol Development and Demonstration</p> <p>Responsible Tourism Mission submitted the assessment report on responsible tourism activities in the landscape.</p> <p>To understand the sustainable or responsible tourism practices prevailing at the tourism destinations in the project area, assessment was done by interviewing tourism entrepreneurs, local community members and administrative authorities. Not much sustainable/responsible tourism practices are followed at the developed destinations especially Munnar. Local community also is not much benefitted from tourism. LSGs in the project area have also expressed their dissent in the existing development pattern and are aware of the need for responsible tourism practices activities in their area.</p> <p>Responsible tourism protocol preparation is progressing. Special Tourism Grama Sabhas will be conducted by the LSGs in association with Responsible Tourism Mission to discuss and plan RT initiatives. RT Mission will facilitate the resource mapping and prepare a resource directory to document the tourism potential of the area.</p>			
	<p><i>2.2.3 Removal of invasive and exotic species and Eco-restoration of degraded locations outside forest areas</i></p>					<p>Green Islands</p> <p>Green islands aim at developing biodiversity demonstration plots and ensure community participation for biodiversity conservation. It is done in convergence with the MGNREGS workforce and the works are initiated in Marayoor, Athirappilly and Kuttampuzha Grama Panchayats. The planting is not undertaken as a one-time activity. Three years of maintenance and follow up tasks will be undertaken through MGNREGS (Mahatma Gandhi National Rural Employment Scheme), which can ensure in assigning more result-oriented conservation activities at the local level on a continuous basis. Technical assistance in the selection of plants and locations, setting the land etc. is provided. Saplings are sourced from Central Nursery by Forest Department, MGNREGS nursery and Social Forestry Nursery. Around 1220 saplings, including medicinal plants</p>			

					<p>varieties and native fruit trees, were procured for three Grama Panchayats and the planting is in progress.</p> <p>Overall, 12 plots across 7 Panchayaths have been identified – Marayoor, Kanthalloor, Chinnakanal, Mankulam, Adimali, Kuttampuzha and Athirappilly</p> <p>DPRs were prepared for development of the plots</p> <p>Maintenance was done for the plants</p> <p>Kuttampuzha and Athirappilly GPs awarded for the green islands works by the state government.</p> <p>Planting of Vetiver for soil stabilization and conservation in three locations such as Adichilthottil, Perumbara and Arekkappu tribal settlements is initiated. Around 5000 Vetiver plant species (Ramacham) has been planted as a step towards soil stabilization. It is done as part of the Athirappilly Tribal Valley Agricultural Project and MGNREGS.</p>			
	<p><i>2.2.4 Adopting Soil stabilization measures outside forest, especially at identified landslide prone areas in Devikulam block such as along the National High Way from Munnar to Chinnakanal by planting vetiver, shola species and other deep rooted species along the synforms.</i></p>							
<p>Output 2.3: Best practices documented and disseminated for improving decision making on sustainable resource management and use</p>	<p><i>2.3.1 Updation of State biodiversity strategies and action plan</i></p>				<p>Terms of Reference prepared for approval and preliminary consultations held for developing a participatory approach for demonstrating financial solutions in biodiversity conservation</p>			
	<p><i>2.3.2 Develop key policies and management framework/ decisions adopted at local and</i></p>							

<i>strengthened at appropriate levels for planning and reviewing sustainable resource use</i>									
	<i>Eco tourism destination management: Visitor management and disaster risk reduction in eco- tourism destinations</i>								
	<i>Local Action Plan for Climate Change in 8 FDAs (106 VSS & EDCs</i>					Plan for conducting consultation meetings with VSS and EDCs prepared. Meetings scheduled for December			
	<i>Advanced community research improvement: census techniques & habitat monitoring protocol by giving training and involving tribal communities</i>								
	<i>3.2.2 Community based bird conservation at Thattekad and adjoining areas Conducting certified course on ornithology and birding for tribal youth Publishing book on bird in local language Developing Salim Ali sathram as heritage building</i>					Basic equipment for birding course purchased Course material reviewed by experts, suggestions incorporated, and revised material prepared. Translation to local language ongoing			
	<i>3.2.3 Strengthening of Chilla market through automation of existing market system- Establishing goods transportation facilities for tribal NTFPs and Agriculture produces from tribal settlements</i>					Agreement with Kerala Start up Mission made. Potential technical agencies for automation of Chilla Market shortlisted. Selection to be done			
	<i>3.2.4. Strengthening of RRT (Marayoor, Munnar & Malayattoor) in the landscape by providing improved facilities & establishing tool rooms</i>								
	<i>3.2.5 Establishing decision support system in the form of centralised digital database management of existing geospatial maps, studies, surveys, research publications and so on.</i>								
	<i>3.2.6 Upgradation of eco-tourism destination and interpretation</i>								

	<i>centre to address the special needs and make them differently abled friendly at Athirappally and Thattekad including development of eco-tourism website for differently abled</i>								
	<i>3.2.7 Developing green building code with energy efficient facilities & piloting the same in the landscape (Divisional Office, Forest Station IB and Check post – one each)</i>								
	<i>3.2.8 Establishment of live museum at Marayoor</i>								
	<i>3.2.9 Facilitating landscape level multi stakeholder forum for sustainable landscape management</i>								
	Enhancing management effectiveness of HVBA								
Output 3.3: <i>Management effectiveness of designated biodiversity rich ecosystems are strengthened to address existing and emerging challenges to ecosystem conservation and services</i>	<i>3.3.1. Establishment of cyber wildlife crime control cell at Forest Head Quarters</i>								
	<i>3.3.2. Review of Management Plan guidelines; Review of State Forest Policy Review and validation of METT and MEE scores of PAs within the project landscape to identify gaps</i>					<p>The management Plans of two Protected Areas and Working plan of One Territorial Forest Division has been completed and drafted the new Management Plan and Working Plan (with National Working Plan Code) in a landscape approach. The review and drafting of Management Plan of Chinnar Wildlife Sanctuary and Marayoor Sandal Forest Divison is in progress.</p> <p>The species specific plan for managing the exotic invasive species in the landscape is prepared and has been incorporated in the Management and Working Plans of the respective Forest/Wildlife Division.</p> <p>The METT scores for the six PAs (Eravikulam National Park, Anamudishola National Park, Pambadumshola National Park, Chinnar Wildlife Sanctuary, Kurinjimala Sanctuary and</p>			

						<p>Thattekkad Bird Sanctuary) has been calculated and baseline established</p> <p>Completed review and validation of METT scores in all PAs in the project landscape and identified the gaps.</p> <p>The latest Management Effectiveness Evaluation (MEE) scores identify 3 of the PAs, Chinnar (84.17%), Pambadum Shola (70.83%) and Anaimudi Shola (66.67%) in the landscape, in the 'very good', 'good', and 'good' category respectively.</p> <p>Management Effectiveness Tracking Tool (METT) scores for 6 PAs has been generated and baseline established as below</p> <p>Eravikulam National Park - 85 Chinnar Wildlife Sanctuary - 81 Pampadumshola National Park - 81 Anaimudi Shola National Park - 80 Kurinjalimala Sanctuary - 79 Thattekkad Bird Sanctuary - 78 Re-established baseline - 484 out of 594</p>			
	<p>3.3.3 Developing eco-compatible habitat monitoring cell inside Eravikulam National Park</p> <p>Establishment of habitat and wildlife health monitoring cell at Thattekkad</p>					<p>Initial consultation done with Chief Wildlife Warden on the site selected for establishing eco-compatible habitat monitoring cell at Eravikulam National Park. Due to south west monsoon and extensive rainfall, the FDA was not able to do this activity in field.</p>			
	<p>3.3.4. Development of detailed project report - Centralized Hospital for Elephants at Vadakkanchery & State level</p> <p>Digital Forensic Lab at Forest Head Quarters</p>								
	<p>Habitat Improvement – Strategies and Implementation</p>					<p>Road kills, exotic invasion, forest fire and biotic pressure are the major identified threats inside the forested areas. Different consultations meetings were conducted at ground level forests staffs for identifying the threats. Expert consultations were made to address these threats.</p> <p>To address the road kills of arboreal animals tree ladders/canopy bridges were developed inside Chinnar Wildlife Sanctuary.</p> <p>Monitoring of road kill incidents inside the Sanctuary is continuing.</p> <p>Mapped the locations of issues like wildlife cross, waste dumping, landslide areas inside the Chinnar Wildlife Sanctuary for anchoring the signages</p> <p>Developed guidelines and strategy for standardizing the signages.</p>			

						<p>Drafted various signages and awareness boards along the road passing through the Chinnar Wildlife Sanctuary.</p> <p>Integrated Fire management Plan (draft) has been developed to reduce the forest fire incidents.</p>			
	<p>3.3.5 Removal of plantations (Wattle and Eucalyptus), Eradication of alien weeds, from PAs and outside PAs, Removal of alien species from the high altitude montane grassland (inside and outside the PAs), Restoration of identified vulnerable and degraded forest areas (including shola/ grasslands segments within PAs and other degraded areas including improvement of Nilgiri Tahr habitat in Meesappulimala (Removal of exotics and restoration of grasslands) & designing a long term sustainability plan for Nilgiri Tahr</p>					<p>Total extent of exotic invaded areas in Pampadumshola, Anamudishola, Kurinjimala Sanctuary and inside the ranges of Munnar Forest Division has been assessed. The total extent of degraded areas is 1604 ha. Removal of exotic trees from 118 ha has been initiated.</p> <p>The restoration includes planting of shola species, <i>Strobilanthes kunthiana</i> (Neelakurinji) and high-altitude grass species.</p> <p>The strategies for restoration of riparian species were prepared by expert consultation.</p>			
	<p>3.3.6 Bamboo ecosystems - mapping of species, age and developing conservation measures (such as measures to prevent exotic invasion and forest fire) at Thattekkad Bird Sanctuary</p>								
	<p>3.3.7 Conservation of special habitat like Hornbill and Vayal ecosystems based on the recommendation from the study titled 'Ecosystem requirements of Hornbill' 2019-2020</p>								
	<p>3.3.8 Reviving of aquatic ecosystems at Thattekkad Bird Sanctuary and establishing sustainable monitoring systems for improving the migratory bird habitat</p>								
	<p>3.3.9 Rejuvenation of flood affected Riparian vegetation (Stabilization of Riverbanks by</p>					<p>The strategies for restoration of riparian species were prepared by expert consultation.</p> <p>Nursery for riparian species established at Vazhachal</p>			

	<i>geotextiles and other environment friendly techniques, planting of suitable riparian saplings) – Chalakkudy River & tributaries of Periyar River</i>							
	<i>3.3.10 Scientific video documentation of unique features in the landscape such as elephant congregation at Anakkulam and best practices of the Project such as Chilla Market, tree ladder etc in the form of documentaries, coffee table books, short films and IEC materials</i>							
	<i>3.3.11 Study on home ranges - Nilgiri Tahr, Nilgiri Martin, Frogmouth and other key species</i>							
	<i>3.3.12 Demonstrating measures to conserve the soil and water resources inside and outside the Protected Areas by improving the existing water retaining facilities and checking gully formation in the high-altitude grasslands.</i>					Planting of Vetiver plant for soil stabilization and conservation in three locations such as Adichilthottil, Perumbara and Arekkappu tribal settlements is initiated. Around 5000 Vetiver plant species (Ramacham) has been planted as a step towards soil stabilization. It is done as part of the Athirappilly Tribal Valley Agricultural Project and MGNREGS		
	<i>Human Wildlife Interface management</i>							
	<i>3.3.13 Management of human-wildlife interface (identification and mapping of corridors, development of early warning systems and other short term and long-term strategies with potentials of co-financing)</i>					<p>The local movement paths/ elephant corridor and elephant crossing areas across the National Highway has been mapped for developing the conservation strategy. Kerala Forests and Wildlife Department is in the process of developing proposal for submitting the same to National Highway Authority for developing alternates like constructions of ramps/sloppy structures.</p> <p>Assessment of the intensity of human wildlife conflict is an ongoing activity.</p> <p>The sites for establishing sensor for alerting elephant entry into settlement area has been identified. Consultation were made with few agencies to demonstrate the sensor techniques.</p> <p>Mapping of the Human wildlife interface areas using GPS in Marayoor and Munnar Forest Divisions has been initiated.</p>		
	<i>3.3.14 Facilitating the preparation of comprehensive plan for protecting the Anayirangal elephant ecosystems in Chinnakkanal</i>					<p>The local movement paths and elephant corridor has been mapped for developing the conservation strategy.</p> <p>The revised proposal has been submitted to the Kerala Forests and Wildlife Department, incorporating suggestions from Chief Conservator of Forest, High Range Circle</p>		
	<i>3.3.15 Establishment of Veterinary Care unit - rescue and</i>							

