

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

20 May 2019 and updated 12 August 2019

**Strengthening Climate Resilience for Subsistence Farmers and
Agricultural Plantation Communities residing in the vulnerable river
basins, watershed areas and downstream of the Knuckles Mountain
Range Catchment of Sri Lanka**

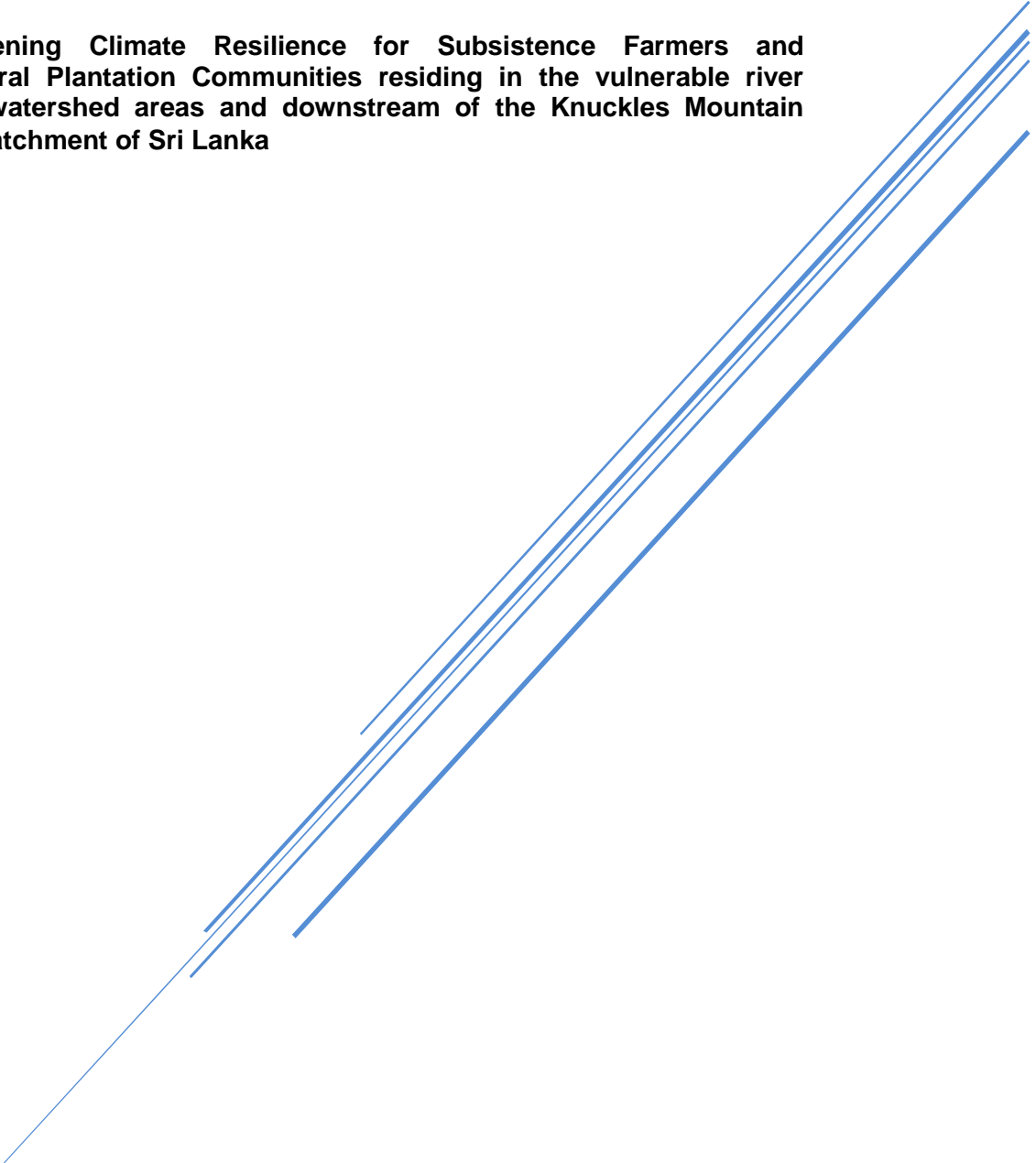


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1. Executive summary

This document presents the Environmental and Social Management Framework for the proposed GCF project. The project was designed to support small holder farmers who are living in the climate vulnerable highlands where requires integrated approach to make climate adaptation in the key environmental sectors like Forestry, water and social sectors like plantation, agriculture especially engaging low income communities. The ESMF will provide the platform during the initial and implementation stages of the project to effectively and efficiently manage Environmental and Social issues related to the project and project area. Prior identification of Environmental and Social Risks and measures to mitigate those risks will provide safeguard to the environment, society and the investments of the project.

In preparing the ESMF, the project team has identified the relevant policies global and local that will be related to the potential risks and proposed measures to mitigate risks. While the project overall is expected to contribute to the proper environmental and social management practices this Environmental and Social Management Framework (ESMF) has been developed as the specific sites for field interventions will only be decided during the project and as such can the interventions (in the following referred to as sub-projects) be developed in detail. The ESMF will serve as guidance for ensuring that the sub-projects will be appropriately assessed on potential environmental and social impacts and, where risks have been identified, that impacts are avoided by design changes or measures have been put in place, in consultations with affected groups, for reducing or mitigating impacts.

The ESMF provides a preliminary Risk Management Plan to address potential environmental and social risks that were identified based on generic project activities that are known at this stage. It further delineates the concrete procedures and steps for screening, risks assessment and monitoring as well as the respective organizational responsibilities and arrangements for implementing these procedures. It also outlines relevant requirements and tools to be adhered with to ensure compliance with the four IUCN ESMS Standards; and established provisions for stakeholder consultation, disclosure and for addressing grievances.

2. Project description and rationale for ESMF

2.1 Objectives and components of the project

The aim of the project is to generate resilient livelihoods by increasing the capacity needed to adapt to climate induced change in critical upstream and downstream rural communities of the Knuckles mountain range areas in Sri Lanka including protection of the ecosystem service flows that connect them. The project includes activities around land management for irrigation agriculture, plantations and forest reserves (Component 1), promotion of sustainable/green value chains and payment for ecosystem services (Component 2) and strengthening institutional capacity for land management (component 3).

As part of Component 1 the project will undertake direct land use interventions with farmers and other land users. These include vegetation management to control run-off and enhance infiltration along roads, rehabilitation of village ponds for water harvesting, climate smart farming techniques for rice production, increasing efficiency of irrigation, fertilizer and integrated pest control, promoting agroforestry, home gardens and analogue forest through a menu of services including crop diversity, access to germplasm, nurseries, cultivation practices; restoration and sustainable intensification of plantations through conversion of under-performing crops into food gardens, agroforestry practices including intercropping with high-value short-rotation horticultural crops.

Under Component 2, the project will support upgrading of value chains by strengthening the capacity of farmers and collective groups as enterprises through advice and training in areas such as agri-processing, product development, branding and certification.

Component 3 aims to promote inclusive and evidence-based land use planning processes. The project will strengthen institutions through developing governance mechanisms that reconcile non-congruent

hydrological and administrative boundaries as well as establishing the information systems and climate-responsive rural advisory services required to enable land users to adapt to change.

2.2 Project proponent, the executing agency and other project partners

The project has been developed by the Government of Sri Lanka with support from the International Union for Conservation of Nature as the GCF Accredited Entity (AE).

The lead Executing Entity (EE) of the project is the Ministry of Mahaweli Development and Environment of the Government of Sri Lanka. The **International Centre for Research in Agroforestry (ICRAF)** and **International Union for Conservation of Nature (IUCN)** are the other two EE's for the project. There are multiple Government Technical Agencies, Universities and Non-Governmental Agencies (NGOs) will be working in the project as partners.

Ministry of Mahaweli Development and Environment (MMDE): The project will be led/hosted by the Ministry of Mahaweli Development and Environment and MMDE will also serve as an Executing Agency (EA). MMDE will chair the Project Steering Committee (PSC). The Ministry is the National Designated Authority for GCF and GEF and comprised of key divisions covering Rio Conventions and other environment management related agencies such as Central Environment Authority (CEA) on pollution control and management, Coast Conservation and Coastal Resources Management on integrated coastal zone management, Marine Environment Pollution Authority (MEPA) on environment governance related to coastal and marine pollution. These organizations are very much experience in planning, coordination and delivery of development projects.

International Centre for Research in Agroforestry (ICRAF) – ICRAF is a Centre of scientific excellence that harnesses the benefits of trees for people and the environment, has been requested by the Government of Sri Lanka to assist in the development of the GCF Proposal and during the implementation of the project

International Union for Conservation of Nature (IUCN): As an Accredited Entity, IUCN will oversee the project implementation and be accountable to GCF. IUCN will be responsible for ensuring that appropriate standards are adhered to, including procurement, finance, reporting and monitoring, and environmental and social safeguards.

2.3 Project area of influence

The project area covers the upper watershed and downstream areas of the Knuckles Mountain Range. This ecosystem is critical for the sustainability of the country, which is unfortunately impacted by climate change in multiple ways.

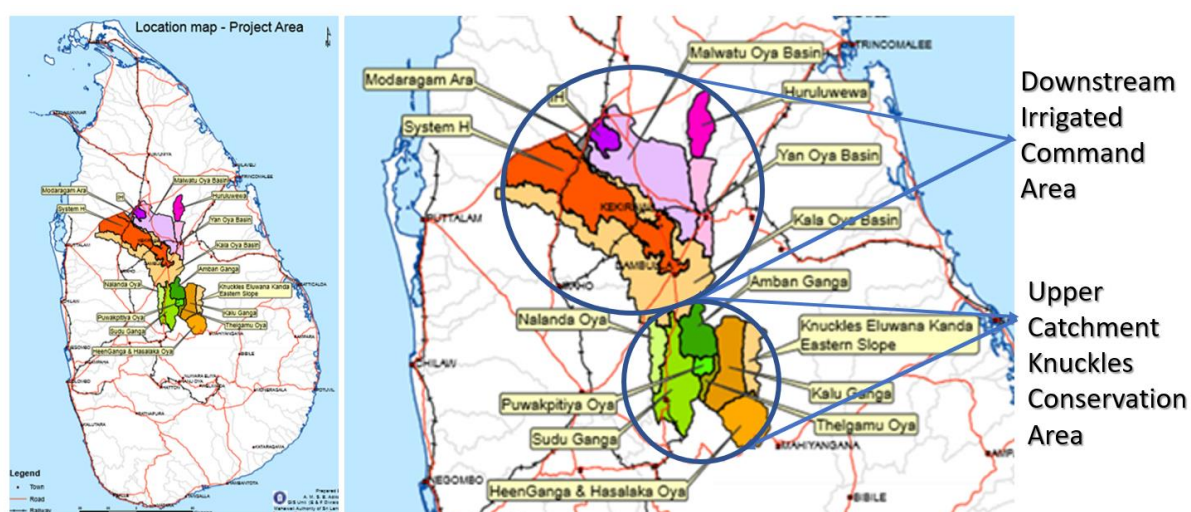


Figure 1: Project Area Map

For management purpose and easy reference the project area has been divided into two physically separated management areas, namely the Upstream (catchment) area and Downstream (irrigated) area. Therefore, the project area links a critical climate sensitive upstream catchment (refer to collectively as the Knuckles area) with the highly climate vulnerable downstream command area to which it supplies irrigation water.

Upstream and Downstream Project Areas

The project area, for technical and administrative purposes, is divided into two main areas; namely the Knuckles upstream area, which is the rain catching area, and the downstream irrigated area. The upstream catchment covers about 166,250-ha and is the primary source of irrigation water for agriculture and livelihoods in the downstream command area comprising of 506,260 ha, out of which 122,150 ha are covered with irrigated rice. The total project area has an extent of about 672,500 ha.

Sub-Watersheds

Figure 2 illustrates the division of the lower and upper catchment area into 15 sub-watersheds (or sub-

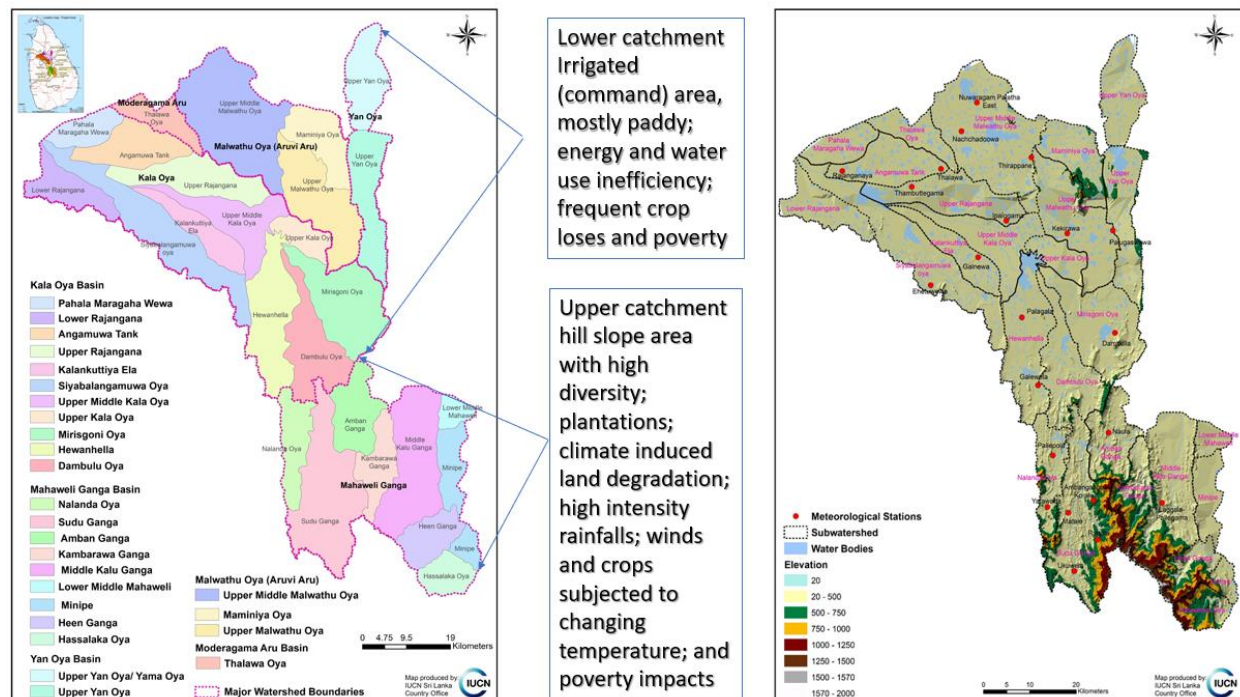


Figure 2: Sub-Watersheds in the Project Area

catchments). These 15 key sub-catchment areas are the following:

1. Amban Ganga
2. Knuckles Eluwana Kanda Eastern Slope
3. Kalu Ganga
4. Telgamu Oya
5. Heenganga and Hasalaka Oya
6. Sudu Ganga
7. Puwakpitiya Oya
8. Nalanda Oya
9. Kala Oya basin
10. Yan Oya basin
11. Huruluwewa
12. Malwathu Oya
13. Mahaweli Program system 1H area
14. Modaragam Ara and
15. Mahaweli Program system H area

These sub-catchments happen to overlap with administrative areas identified as Provinces, Districts and Divisional Secretariat Division (DSD) areas. The DSD areas are further sub-divided into Grama Niladhari Divisions (GND) or village units.

2.4 Project beneficiaries

The project beneficiary groups are shown below distinguishing primary and secondary beneficiaries.

Primary Groups

- Farmers including more subsistence/small holder farmers
- Plantation workers who represent a marginalised community in the current socio-economic context
- Community Based Organizations on Forest Conservation
- Forest adjacent communities

Secondary Groups

- Government officials including field level extension officers who will benefit from the system improvements
- The youth and students who will be benefited from the project long term impacts

People in the upstream catchment is estimated as 200,331 female and 183,759 male, Population downstream is estimated as 489,684 female and 469,442 male – totalling 1,343,216 people. The breakdown per beneficiary groups will be done during the inception phase.

2.5 Rationale of ESMF

The IUCN ESMS screening report (see Annex 10.1) concluded on the need to develop an Environmental and Social Management Framework (ESMF) as the specific sites for field interventions for achieving improved land and water management, enhanced primary production and upgraded value chains will only be decided during the project. Only when the sites are identified can the interventions (in the following referred to as sub-projects) be developed in detail together with the relevant local-level stakeholders identified for each of the site/activity.

The purpose of the ESMF is to serve as guidance for ensuring that the sub-projects – once defined - will be appropriately assessed on potential environmental and social impacts and, where risks have been identified, that impacts are avoided by design changes or measures have been put in place, in consultations with affected groups, for reducing or mitigating impacts.

The ESMF will provide an analysis of the relevant policy and regulatory framework in Sri Lanka and identify implications for the project to ensure compliance on environmental and social matters. It further identifies potential environmental and social risk issues at a high level, based on the generic project activities that are already known at this stage, including recommendations for avoiding or mitigating identified risks. It also delineates the concrete procedures and steps to be taken for screening, risks assessment and monitoring as well as the respective organizational responsibilities and arrangements for implementing these procedures. It will also explain relevant provisions and tools to be adhered with to ensure compliance with the four IUCN ESMS Standards.

2.6 ESMF preparation process

The ESMF was prepared based on the results of the ESMS Screening. The list of the high-level project activities was assessed against the E&S standards and the activities that could potentially trigger ESMS standards were identified. In consultation with the experts and following IUCN ESMF guidelines, mitigating measures were designed..

Procedure for addressing environmental and social impacts from sub-projects were established (including mechanism for grievance and provisions for disclosure of the relevant document) and implementation arrangement including budget for the procedures agreed.

The ESMF and a non-technical summary of the ESMF translated into Sinhala and Tamil will be disclosed via electronic links in the website of Accredited Entity (IUCN) and the three Executing Entities, the Ministry of Mahaweli Development and Environment (MMD&E), the International Centre for Research in Agroforestry (ICRAF) and IUCN. It will also be made public via electronic link in the GCF website, at least 30 days prior to submission of the funding proposal to the GCF Board. The non-technical summary of the ESMF translated into Sinhala and Tamil will be distributed at the Knuckles Conservation Forum, the local offices of the Road Development Authority and the Divisional Secretariat Divisions (DSD) Offices in the project area in order to be accessible by affected peoples.

3. Policy, legal and institutional framework

3.1 Description of the policy, legal and institutional framework for social and environmental matters

Environmental Governance in the country is facilitated by the National Environmental Act, No. 47 of 1980 with the last amendment as Act. No. 53 of 2000. The National Environment Policy was developed in 2003. The policy and institutional framework for social and environmental issues are linked to the national level frameworks outline in Table 1.

Table 1: Policy Analysis

Policy/ law/ regulation	Provisions for environmental and social management	Relevance to the project	Institutions responsible for implementation
National Policy on Climate Change 2012	Provides directions for key investments to be made on climate mitigation and adaptation. The development projects can seek the opinion of an expert group towards climate resilience.	The project is based on adaptation approaches prescribed in the policy to minimize the threats due to climate induced challenges to subsistence farmers. The project addresses adaptation capacity related to water security.	Climate Change Secretariat of the MMD&E
National Adaptation Plan (NAP) for Climate Change Impacts in Sri Lanka (2016-2015)	Identifying adaptation options, actions and performance indicators for each vulnerable sector, including food security, water resources, ecosystems and biodiversity, and export development. Performance indicators cover environment and social aspects as well.	Project implements sections of the NAP by improving adaptive capacity of vulnerable groups while developing institutional capacity of the Govt. agencies to implement NAP.	Climate Change Secretariat of the MMD&E
Sri Lanka's National REDD+ Investment Framework and Action Plan (NRIFAP, 2017)	Proposed to work with forest and watershed restoration, sustainable natural resource management and governance, enhancement of land productivity and improvement of agroforestry modelsthat contain environment and social safeguards and ecosystem benefit sharing.	Project is based on the Drivers of Deforestation and Forest Degradation identified in the NRIFAP and pilot best practices (forest enhancement, soil conservation etc.) that can be upscaled further through the NRIFAP approach.	Climate Change Secretariat of the MMD&E
National Policy on the Protection and Conservation of Water Sources, their Catchments and Reservations in Sri Lanka (gazette no.1894/3-Dec.2014 by Land Ministry)	Land use policy planning unit is empowered to adopt best practices to protect the catchments and adopt environment and social aspects. The policy is monitored by a national steering committee comprised of multiple agencies and academia.	The project uses a catchment protection approach and is very much in line with the National Policy on the Protection and Conservation of Water Sources and their Catchment. Land Degradation Surveillance Framework (LDSF) will be established in each sub-basin implementation unit. The LDSF is being applied for assessments of land degradation processes, soil health and ecosystem health in over 40 countries in the global tropics as part of the Ecosystem Health Surveillance Framework (EcoHSS) that will strengthen the catchment protection.	LUPPD as the Secretariat for coordination; Irrigation Department on protection of river banks and flow and sediment monitoring; National Water Supply and Drainage Board (WSDB) in developing and institutionalizing
National Biodiversity Strategy and Action plan (NBSAP)	Address/advocate biodiversity conservation strategies and interventions covering 19 Aichi targets that also include promotion of Payments for Ecosystem Services (PES).	The project uses, and pilot tests the PES concept. Project interventions are in line with NBSAP recommendations to the ecosystems prevailing in central hills and intermediate slopes.	Biodiversity Secretariat of the MMD&E
National Wetlands Policy of 2004	Covers environment services and regulatory functions of wetlands.	The project, although based in central hills uses a number of directives and technical aspects of wetland management in the areas of improving drainage and streamside stabilizations.	Sri Lanka Land Reclamation and Development Corporation (SLLRC)
Water Resources Board Act No. 29 of 1964 (as amended as Act 42 of 1999)	Prevention of water pollution and attempting to reverse habitat loss.	The project addresses water pollution from sedimentation, weak water sanitation issues plus introduce green practices that limits water pollution	Water Resources Board of Sri Lanka

National Biosafety Policy of 2005	Provides the overall framework in which adequate safety measures are introduced to minimize possible risks to human health and the environment while extracting maximum benefits from any potential that modern bio technology may offer.	Project supports to understand the plant genetic characteristics and value addition options by way of research and development.	Department of Agriculture
National Policy on Elephant Conservation and Management of 2006	Ensure the long-term survival of the elephant in the wild in Sri Lanka through the mitigation of the human-elephant conflict.	The project work on land use, plans to minimize the Human Elephant Conflicts.	Department of Wildlife Conservation
National Land Use Policy of 2007 using the National Action Programme for Combating Land Degradation in Sri Lanka (2015-2024)	Ensure proper land use, food security, economic development and the maintenance of the productivity of the land at a higher level. It also provides a path for the protection, conservation and sustainable use of the land resource of the country and offers an appropriate and ideal framework that will best meet the needs of the present generation while safeguarding the land resource for the future generation as well.	Project extensively work on changing the land use patterns and landscape improvements to ensure food safety, economic development of subsistence farmers while ensuring the sustainability of ecosystem services. The project promotes sustainable systems such as System of Rice Intensification (SRI) practices to increase rice production with minimal artificial inputs. The introduction of new tools incorporating GIS technology and other biophysical data and socioeconomic data and facilitating decision making processes to take place at smaller scales in the project.	Ministry of Mahaweli Development and Environment (Land Use division)
Soil Conservation Act No. 25 of 195 Last Amendment: Act No. 24 of 1996	Soil erosion damages water ways that become sedimented, thus degrading aquatic habitats. This act, therefore, indirectly supports biodiversity by preventing habitat degradation.	The project supports minimization of streamside erosion, land-based erosion and sediment loads from road infrastructure. The project also promotes holistic farming practices such as Analog forestry which produce both food crops, tree products and environmental services are another novel practice which would be introduced to the area with the intention of reclaiming marginal farmlands. Land degradation hotspots (e.g. soil erosion and compaction) and soil health variables (e.g. soil organic carbon) will be mapped at high spatial resolution (10 to 30m), by combining data collected from the LDSF sites with data from the global database. These assessments will build on national level assessments of erosion and SOC done during project preparation at moderate spatial resolution that were developed using MODIS satellite imagery to assess changes in these indicators over time.	Natural Resource Management Center of Dept. of Agriculture
Mines and Minerals Act No. 33 of 1992. Last Amendment: Act No. 66 of 2009	This act ensures minimizing the degradation of habitats and culturally and naturally important sites due to mining through sustainable harvesting of mineral resources.	The project improves the coordination of agencies responsible for mining land and natural resources by enhancing the knowledge on soil-water-climate interactions and the effect of mining on climate change adaptation.	Geological Surveys and Mines Bureau
Control of Pesticides Act No. 33 of 1980 (as amended). Last Amendment: Act No. 31 of 2011	Ensures the human and environmental safety in pesticide use by controlling the imports, distribution and use of pesticides.	The project supports enhancing awareness and education on low input farming including pesticide use.	Registrar of Pesticides (control of pesticides act)

Fauna and Flora Protection Ordinance, No. 02 of 1937 Last amendment: Act No. 22 of 2009	This policy ensures biodiversity conservation through protection of habitats and species.	The project promotes species conservation, traditional knowledge and monitor the biodiversity enhancements as a result of project activities. Restoration of landscapes and wildlife corridors in plantations will also add value to biodiversity conservation by the project.	Department of Wildlife Conservation (DWC)
Forest Ordinance, No 16 of 1907, with last amendment: Act No.65 of 2009.	Directly protects forests and species within forests. From REDD+ document: Section 5(4)© and Section 37(2)(g)(ii) of the Forest Ordinance Action No. 65 of 2009 both have provisions for community participation in forest management.	The project aims to restore degraded forests within protected areas and fragmented forests. Forest rehabilitation activities would be further practiced with the intention of protecting watersheds. A Forest Landscape Restoration (FLR) approach would be taken where an inclusive and devolved natural resource management regime would be practiced.	Forest Department
National Forest Policy (1995)	Provides directions for safeguarding natural forests of the country to conserve biodiversity, soil and water resources. The forests under the jurisdiction of the FD have been reclassified and placed under four management systems ranging from protection, non-extractive use, management of multiple use forests for sustainable production of wood and management of forests with community participation.	The project promotes Forest Landscape Restoration (FLR) that also engages local communities. Land use planning activities of FLR programmes are conducted through multi-sectoral and multi-level governance mechanisms with a focus on ecosystem service delivery while integrating diversity of restoration technologies across the landscape to optimise livelihood and environmental outcomes. Grassland restoration activities would also be attempted by this programme (which is a conservation measure which has not been successfully conducted in Sri Lanka).	Forest Department
National Wildlife Policy of 2000	The policy deals with government mechanisms to conserve wildlife resources through promoting conservation, maintaining ecological processes and life sustaining systems, managing genetic diversity and ensuring sustainable utilization and sharing of equitable benefits arising from biodiversity. It emphasizes the need for effective protected area management with the participation of local communities.	The project supports stabilization of wildlife corridors and habitats in the upstream catchment area and prevention of wildlife related conflicts from land uses in downstream areas.	Dept. of Wildlife Conservation
The National Environmental Policy of 2003	The policy promotes sound management of the environment while balancing social and economic development needs. It aims to manage the environment by linking together the activities, interests and perspectives of different stakeholders with equitable sharing of benefits and costs. The policy supports securing land tenure rights including user rights on state land and long-term tenure for chena farmers. It is open to alternative mechanisms and policy tools to provide incentives while minimizing compliance costs to benefit the environment, the society and the economy. It emphasizes participation, transparency and public accountability in the management of natural resources.	The project activities improve land tenure and best practices adopted for landscapes and land uses. Also, the project uses a Sub-Basin Management strategy that will bring multiple stakeholder entities in improving the environmental management with proper monitoring, capacity building and enforcement. The project supported databases, knowledge products and engagement tools are expected to ensure the sustainability of environment management in the areas of interventions including the green practices, introduced during the project. Rural Advisory Services (RAS) and multi-stakeholder platforms—which would facilitate inter-institutional and intra-institutional collaboration—would further support this policy	Ministry of Mahaweli Development and Environment (Planning Division)

The National Heritage Wilderness areas Act, No 03 of 1988	Directly protects habitats.	The project area also includes Knuckles Heritage area. The community engagement and the capacity building efforts by the project will help to reduce encroachments and degradation practices in the Heritage area.	MMD&E
The National Environmental Act, No.47 of 1980 Last amendment: Act. No. 53 of 2000	Supports biodiversity conservation by controlling pollution and requiring mitigatory measures for development projects through mandatory EIAs.	The project supports many elements to promote and adopt elements in the environment act. The project supports Small and Medium Industries and Export Oriented business to adopt low-input, green processing and storage methods minimizing the industrial pollution.	Central Environment Authority
Plant Protection Act No. 35 of 1999	The Central Environmental Authority (CEA) is responsible for the enforcement of the provisions of this Act. Ensures control and management of Invasive Alien Species (IAS)	The project supports awareness and education on IAS and help the programmes by Sub-Basin teams to mainstream the eradication of IAS while focusing on FLR efforts.	Biodiversity Secretariat
Felling of Trees (Control) Act No. 9 of 1951 Last amendment.: Act No 1 of 2000	Support protection of threatened tree species.	The landscape planning in plantations, home gardens and other areas supported by the project will carry the knowledge on the tree species to be protected and build the capacity of Govt. officers to ensure the protection of the same.	Forest Department
Urban Development Authority Law 1978 Last Amendment: Act No. 41 of 1988	Ensures the protection of habitats and promote conservation in urban environments and areas under the jurisdiction of the Urban Development Authority.	The project may not work directly in urban settings; however, the project supports activities such as road side improvements, streamside restorations, conservation of landscapes will help to develop several pilot measures that the Urban Development may use while creating Urban-Rural synergy. The project supports nurseries and other small businesses can support urban related conservation.	Urban Development Authority
Frameworks implementing host country's obligations under international law			
International Plant Protection Convention (1951) Ratified in 1952	Convention provides for the protection of local floral biodiversity from pests and invasive species.	The project supported awareness and education activities will enhance the knowledge of the beneficiaries and strengthen the Sub-basin Management teams and innovative platforms in the project on management and control of IAS.	Seed Certification and Plant Protection Centre, Department of Agriculture
Convention on Wetlands (Ramsar Convention) (1971) Ratified in 1970	Conserves wetland and wetland associated species by encouraging the conservation of wetland habitats.	The project supported Forest Landscape Restoration (FLR) activities aimed promoting several land use and landscape management practices to better conserve wetland habitats. The knowledge based, and environment monitoring will add value to wetland related conservation by the project.	Department of Wildlife Conservation
United Nations Convention Concerning the Protection of the World Cultural and Natural Heritage (1972) Ratified: 1980	Promotes the conservation of biodiversity in natural heritage sites by promoting the conservation of such sites.	The project includes Knuckles Heritage and Conservation area. The eco-tourism promotion and other conservation practices aimed to minimize the pressure on the Knuckles environment and its ecosystems.	Sri Lanka UNESCO National Commission, Ministry of Education

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1973) Ratified: 1979	Protects species from being over harvested and traded on international markets.	The project supported Human-Elephant-Conflict minimization and education and awareness through Sub-Basin teams, will help to enhance the need and usefulness of CITES objectives.	Department for Wildlife Conservation
Convention on the Conservation of Migratory Species (also known as CMS or Bonn Convention) (1979) Ratified in 1990	Protects migratory species.	Bird watching is a popular tourist activity, especially as the relevant authorities plan to introduce nature trails.	Department of Wildlife Conservation
United Nations Convention on Biological Diversity (CBD) (1992) ratified in 1994	Promotes conservation and sustainable use of biodiversity.	The project activities on Catchment protection, Forest Landscape Restorations and conservation of wildlife corridors and promotion of eco-tourism will help to improve biodiversity conservation in the area. The improved environment monitoring and controls in the long-term ensure the sustainability of biodiversity resources.	MMD&E
United Nations Framework Convention on Climate Change (UNFCCC) (1992) Ratified in 1993	There is a sector action plan on biodiversity and ecosystems as well as the coastal and marine sector in the NCCAS (2015).	The project promotes both mitigation and adaptation components of UNFCCC by ensuring green practices and restoring landscapes and improving the coping capacities of vulnerable in terms of adaptation (this is the primary objective of the project too).	MMD&E
Cartagena Protocol on Bio Safety (2000) Ratified in 2004	Safeguards biodiversity from living modified organisms resulting from modern biotechnology.	The project supported research and development will ensure safeguards to biodiversity while engaging students, communities and officials on this new subject.	MMD&E
ILO International Labour Organization's (ILO) Declaration on the Fundamental Principles and Rights at Work	Including: (i) Freedom of association and the effective recognition of the right to collective bargaining; (ii) The elimination of discrimination, in respect of employment and occupation; (iii) The prevention of child labour; and (iv) The elimination of all forms of forced or compulsory labour.	The project work with the plantation sector that contracts labour force and it will be important that regulations are in place that respects and protects the fundamental rights of workers.	Ministry of Plantations

3.2 Gap assessment

The table below provides a comparison of Government policies and regulations related to environmental and social safeguards against the GCF safeguards and IUCN's Environmental and Social Management System (ESMS)¹. It further provides recommendations how the project will fill any gaps.

The ESMS is guided by eight overarching principles and four standards that reflect key environmental and social areas and issues that are at the heart of IUCN's conservation approach. They form the core of the ESMS Policy Framework, which governs the ESMS and determines the minimum environmental and social requirements for IUCN projects.

The ESMS principles and standards are rooted in IUCN environmental and social policies and IUCN World Conservation Congress (WCC) resolutions. They also draw on IUCN values, good practice tools developed by IUCN Secretariat programmes and IUCN Commissions and on lessons learned during IUCN's long tradition of working at the interface of conservation and social issues and human rights. The ESMS principles and standards consolidate objectives of the *Convention on Biological Diversity* as well as other relevant international conventions and agreements on environmental and social issues including the *Universal Declaration on Human Rights* and the *United Nations Declaration of the Rights of Indigenous Peoples*.

The ESMS is aligned with globally recognized standards on environmental and social matters. With IUCN being an accredited agency to the Global Environment Facility (GEF) and to the Green Climate Fund (GCF), the ESMS has been rigorously examined by these two entities and found fully compliant with the entities' relevant policies – specifically with the GEF Policy for Agency Minimum Standards on Environmental and Social Safeguards and the Performance Standards of the International Finance Corporation (IFC) as relevant to the nature of projects implemented by IUCN.

¹ Available at www.iucn.org/esms

Table 2: GCF, IUCN and GOSL ESM Standards & Gaps

GCF E&S Safeguards	IUCN ESMS Procedures and Standards	Government Policy	Main Gaps relevant for the project and recommendations
<p>PS1: Assessment and management of environmental and social risks and impacts</p> <p>PS2: Labour and working conditions</p> <p>PS3: Resource efficiency and pollution prevention</p> <p>PS4: Community health, safety and security</p>	<ul style="list-style-type: none"> ESMS Manual providing an integrated methodological approach to identifying and managing environmental and social impacts and opportunities and to ensure appropriate stakeholder engagement. Selection of measures based on mitigation hierarchy using four stages: (i) screening of impacts; (ii) scoping and assessment of impacts; (iii) development of environmental management plans, and (iv) monitoring and review. ESMS Questionnaire provides for identifying social and environmental risks that are not covered by separate ESMS Standards including labour and working conditions, pollution risks and Community health, safety and security issues; Stakeholder participation and consultation as well as disclosure of information is further guided by the Guidance Note on Stakeholder Engagement² 	<p>Environmental and social risks of the new developments are handled by the Environment Impact Assessment process for projects and programmes. In the recent past the Strategic Environment Assessment (SEA) Process have been identified as a prerequisite for area-based development and the SEA legislation is now being finalized.</p> <p>Labour and working Conditions: the ILO International Labour Organization's (ILO) Declaration on the Fundamental Principles and Rights has been ratified by Sri Lanka</p>	<ul style="list-style-type: none"> The assessment of the national safeguard system carried out by the UN REDD programme³ identified gaps in the policy, laws and regulations regarding stakeholder participation; The interventions foreseen by the project do not trigger the need to carry out a formal EIA or SEA; however, IUCN's approach to stakeholder engagement as described in the ESMS Manual and the respective Guidance Note will be fully adhered to by the project.
<p>PS5: Land acquisition and involuntary resettlement</p>	<p>Standard on Involuntary Resettlement and Access Restrictions</p> <ul style="list-style-type: none"> applies to projects that require (1) resettlement of communities or (2) restricting peoples' access to areas and/or the use of natural resources and such restrictions would negatively impact peoples' livelihoods. Typical activities triggering the standard are <ul style="list-style-type: none"> ➢ establishing use restrictions under formal frameworks (e.g. framework for protected area), ➢ strengthening enforcement of resource restrictions, ➢ designing or redesigning protected area boundaries. Standard does not apply to projects that support local community organizations in establishing resource use regimes (including restrictions) for the purpose of sustaining long-term use of the resources. 	<p>Govt. has process and procedures in place for land acquisition and involuntary re-settlements. After the 30-year long conflict most processes and procedures have been re-evaluated and modified. The procedures apply for development-induced land acquisition but also land acquired for protected areas. For the latter the process is led by the Divisional Secretary and Forest Officials are also in the committee appointed to acquire lands. The land owners need to submit their deeds to this committee and the value is decided by the government assessor.</p>	<ul style="list-style-type: none"> There are areas that can be improved such as compensation mechanisms for involuntary resettlements after acquisitions including the values used for compensation payments. The project does not include resettlement activities, but there is a small likelihood that land access or use restrictions might to be applied. The project will ensure full compliance with the IUCN Standard and respective provisions for access restrictions (economic displacement). See chapter 7.1 for more details.

² Available at: https://www.iucn.org/sites/dev/files/esms_stakeholder_engagement_guidance_note.pdf

³ Available at: <https://www.unredd.net/documents/global-programme-191/safeguards-multiple-benefits-297/workshops-and-events-1316/17008-sri-lankas-national-approach-to-redd-safeguards-september-2016.html>

GCF E&S Safeguards	IUCN ESMS Procedures and Standards	Government Policy	Main Gaps relevant for the project and recommendations
	<ul style="list-style-type: none"> Requirement to assess consequences of resettlement or access restrictions and identify ways to avoid or minimize risk and/or to compensate for any residual impacts. Need for consultation with affected groups following FPIC <p>Agreed mitigation strategy should be documented in form of an Action Plan or a Process Framework</p>		
PS6: Biodiversity conservation and sustainable management of living natural resources	<p>Standard on Biodiversity Conservation and Sustainable Management of Living Natural Resources</p> <ul style="list-style-type: none"> ESIA/targeted assessment and mitigation needed for following risk issues (as per screening): <ul style="list-style-type: none"> ➤ development of (even small) infrastructure or activities that may cause disturbance to specific elements of biodiversity / areas of high biodiversity value; ➤ introduction or reintroduction of species where risks are identified that species develop invasive characteristics; ➤ harvesting of wild living resources (e.g. NTFP) with risks of unsustainable use of living natural resources or when affecting traditional use systems. Forest restoration projects need to maintain or enhance biodiversity and ecosystem functionality. Plantation projects need to demonstrate that they are environmentally appropriate, socially beneficial and economically viable. First avoidance of synthetic biocides, second appropriate pest management planning process, including risk assessment and disclosure of a Pest Management Plan, where impacts are significant. 	<p>The strategy is provided in the National Biodiversity Strategy and Action Plan 2030. Further, many other frameworks exist in the country that support this aspect.</p> <p>The National Invasive Alien Species (IAS) Policy of Sri Lanka was approved in 2016 with an objective of minimizing the risks of IAS on the biodiversity, ecosystems, economy and Society thus promoting the sustainable economic development. To regulate the pest management process, Sri Lanka has passed Act on Control of Pesticides (No 33 of 1980) and amendment to the act as No 06 of 1994.</p>	<ul style="list-style-type: none"> The main gap that exists in this area is the scientific monitoring capacity to baseline the situations and monitor the changes. Biodiversity risks of sub-projects, though expected to be minor, will be identified during the screening as described in chapter 7.4 and be addressed using IUCN biodiversity guidelines and tools.
PS7: Indigenous peoples	<p>Not triggered as the field consultations carried out during the design phase did not confirm the presence of indigenous peoples in the project site. However, an additional examination is planned during the social baseline study and associated community consultations to analyse whether there aren't any ethnic groups present in the sites that meet the broader IUCN definition of indigenous peoples.</p>		

GCF E&S Safeguards	IUCN ESMS Procedures and Standards	Government Policy	Main Gaps relevant for the project and recommendations
PS8: Cultural heritage	<p>ESMS Standard on Cultural Heritage</p> <ul style="list-style-type: none"> • If risks are identified, risk assessment guided by competent professionals with consultation of relevant groups such as local communities, government authorities, relevant civil society organisations, local experts and traditional knowledge holders; • Chance Find procedures • Equitable benefit sharing in cases where use of cultural heritage generates economic and social benefits; • Adherence to FPIC when projects affect cultural heritage to which communities have legal (including customary) rights 	<ul style="list-style-type: none"> • Government has established norms for cultural heritage related environment concerns implemented by the Central Environment Authority and the Dept. of Archaeology. • FPIC has been proposed and capacity building conducted under UNREDD. It is yet to be practiced legally. 	<ul style="list-style-type: none"> • Impacts on cultural heritage of the project are possible but not very likely. Will be addressed through Chance Find Procedures (see chapter 7.3)

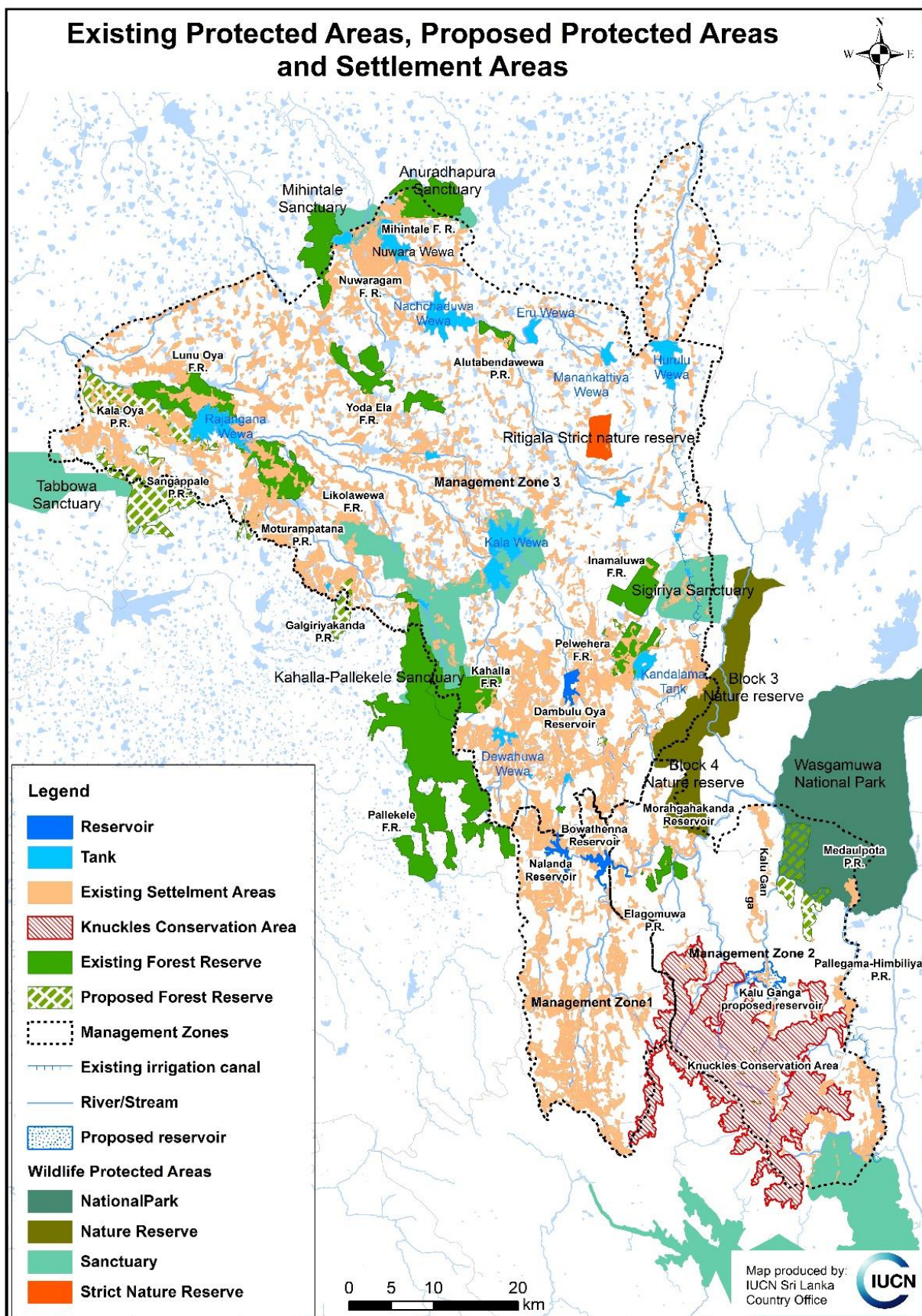
A high variation of soil types is observed in the slope terrains of the upper catchment area while the eastern side of the flat lower catchment area indicate uniform soils consisting of reddish-brown earth soils and humic soils. High intense rains due to the changes in the climate causing problems to soil degradation and high movability due to run off water. The measures will be taken to minimise the soil mobility and land degradation. However, the crop identification to resist the climate change impacts to be considered the soil types. The integrated land use maps on crop identification to be developed considering the soil types.

Forest Areas

The Department of Wildlife Conservation and the Forest Department are the two crucial organizations who manage forest lands in Sri Lanka. In the proposed project area there are 33 forest areas under any of the following categories of protection: Conservation Forest, Strict Natural Reserve, Forest Reserve or Proposed Forest Reserve (once the proposed forest reserves established as forest reserves, no new areas will be listed as proposed forest reserves) or Nature Reserve or Wildparks or Sanctuary. The existing and proposed sites are depicted in figure 4 below.

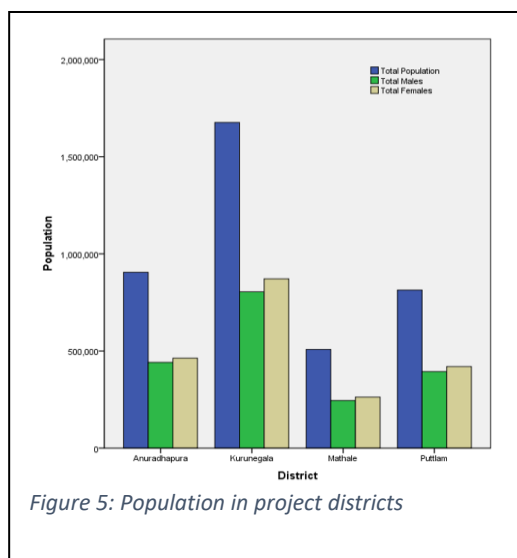
The project area includes nearly 40,000 hectares of forest reserves in three districts, 26 Divisional Secretary Areas, 125 Grama Niladhari Divisions with an adjacent population of approximately 140,000 peoples (69,700 men and 70,300 women). Nearly 16,000 hectares of proposed forest reserves, located in five districts (subdivided in 15 Divisional Secretary Areas and 75 Grama Niladhari Divisions) with an adjacent population of approximately 70,000 peoples (about 34,000 men and 36,000 women) make up additional project areas. The project also includes nearly 58,000 hectares of protected areas which are under the Department of Wildlife Conservation and located in in six districts (subdivided by 26 Divisional Secretary Areas and 133 Grama Niladhari Divisions) with an adjacent population or approximately 124,000 peoples (about 62,000 men and 62,000 women).

Figure 4: Existing and Proposed Protected Areas with Settlements



4.2 Socio Economic Context

Population, ethnic distribution, income and education



The four districts in the proposed project area are Matale, Anuradhapura, Puttalam and Kurunegala. As per the 2012 national census, the total population in these four districts is 3.9 million.

The most populated district is Kurunegala, which has a population of 1.6 million with 804,830 males and 871,170 females. The lowest population is recorded in Mathale district where the upper catchment area of the project is located.

A common feature among all four districts is that the female population is marginally higher than the male population.

As depicted in table 3, the Sinhala ethnic group is by far the largest group in the four provinces. But there is also small number of Tamils and Sri Lanka Moors, mostly in Puttalam and Mathale districts. Plantation communities in the Mathale district is the home for most of the Tamils of Indian origin while the Moors are mostly engaged in the trading in all districts. All communities have voting rights and they do participate in the national and regional governance mechanisms. Generally, the different ethnicities are living peacefully together in the four provinces despite their difference in ethnic background. However, the Country has suffered from a long period of civil conflict, which affected mainly the provinces in the northern and eastern parts of the country.

District	Ethnicity (%)				
	Sinhala	Sri Lankan Tamil	Indian Tamil (Estate Community)	Sri Lankan Moors	Other
Mathale District	83.9	4.2	5.3	6.4	0.1
Anuradhapura District	91.3	0.4	0.0	7.9	0.4
Kurunegala District Average	92.0	0.9	0.1	6.9	0.1
Puttalam District	79.8	5.1	0.2	14.6	0.3

Table 3: Ethnicity distribution in project districts

Among the project area's ethnic groups, the estate community (labourers working on the plantations) could be considered as a somewhat marginalised group compared to other social groups. Estate sector families live in houses provided by the estates, rent free, if one family member works in the estate. Whilst this reduces the expenditure of the household (in comparison to urban households) and increases disposable income, living in poor quality line rooms does stigmatize and alienate them from the rest of the society. In addition, relative to the rest of the households in Sri Lanka, estate households report lower access to toilets exclusive to the household and access to drinking water within the premises. They also appear to perceive that the quality of water they drink is relatively unsafe.

The 2009/10 Household Expenditure and Income Survey (HIES) reported a strong reduction in poverty amongst the estate population. The survey reported that the percentage of poor households in the estate sector reduced from a high of 32 percent in 2006 to 11 percent in 2009/10. Collective agreement negotiations between the trade unions and plantation companies led to a near 100 percent increase in daily wages in 2009, and this is likely to have contributed to this substantial reduction in poverty figures. Discussions are underway in 2019 to implement another increase in salaries in the estate sector and the plantations management highlighting the difficulty in doing so due to the poor economic performance in the tea and rubber sectors. The average income/ expenditure of estate sector households continues to remain lower than national averages and other sectors of the economy.⁴

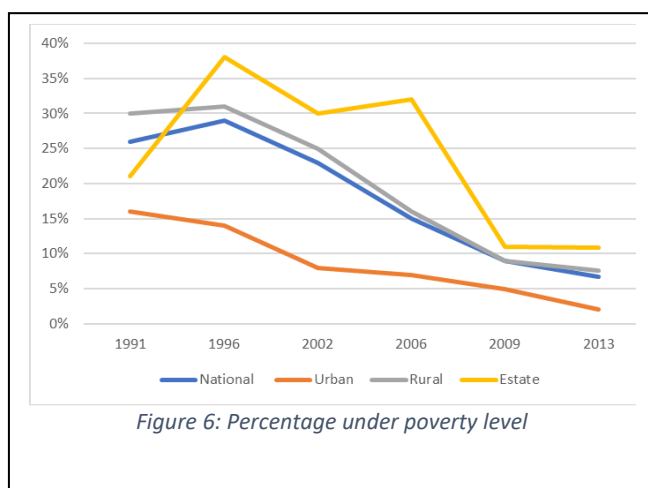


Figure 6: Percentage under poverty level

Overall there has been a reduction in poverty levels in all sectors between 1991 to 2013. However, poverty levels in the estate sector still recording a relatively higher level, as illustrated in figure 6, though with an also declining trend. The lower income households of the estate sector are considered one of the main drivers of degradation of the upper catchment area as their collection and use of natural resources for food, energy and other livelihood needs spurs increased infringement in forest areas, especially in the Mathale district; therefore, justifying the project's objective to ensure increased income levels in the estate sector and to promote alternative livelihood opportunities for other low income groups.

School education in Sri Lanka is compulsory till age 14, when students may disengage in favour of an apprenticeship or job. The first 5 years considered as primary education and at the end student has the option to sit for a scholarship examination to transfer to a school with better facilities to continue. Grades 10 and 11 in the secondary school prepare students for Ordinary General Certificate (GCE O-Level). Next the students continue to follow the Advanced GCE (A-Level) before entering to collage level (University or Technical) level education. The education system is highly subsidized by the Government. However, there are significant variations within the schools and the access to education.

Most of the students sit for Grade 5 exams as the primary education is compulsory giving an idea of the number of students in each area (district). The number of students at different levels in the education process provides an indicative picture of the educational levels including the drop outs. These dropping outs has different reasons and household poverty is one of the key concerns.

Based on the statistics for year 2016 between 38 to 47% students in project districts do not continue conventional studies after GCE O/L and the between 61 to 70% students do not pursue regular education after GCE A/L with compared to the level of students enrolled for education (using grade 5 student number).

Poverty and the demand for family work (unskilled labour) are some of the contributing factors for dropouts at the O/L stage. The segment of about 20% drop out at GCE A/L could be a group that can be trained on technical and business skills in given areas to improve the household income and reduce poverty. Further, compared to the rural and urban sectors the estate community has a low educational attainment, in general. In a country where education is key to coming out of poverty, the lower educational attainment makes people from the estates less eligible for participating in technical and vocational job-related training and/ or jobs and is likely to create long-term vulnerability

5. Potential environmental and social impacts and mitigation measures

The aim of the project is to generate resilient livelihoods by increasing capacity to adapt to climate induced change in critical upstream and downstream rural communities in Sri Lanka including protection of the ecosystem service flows that connect them. The project includes activities around land management for irrigation agriculture, plantations and forest reserves (component 1), promotion of sustainable/green value

⁴ Department of Census and Statistics

chains and payment for ecosystem services (Component 2) and strengthening institutional capacity for land management (component 3).

Main ESMS relevant activities of component 1 include vegetation management to control run-off and enhance infiltration along roads, rehabilitation of village ponds for water harvesting, climate smart farming techniques for rice production, increasing efficiency of irrigation, fertilizer and integrated pest control, promoting agroforestry, homegardens and analog forest through a menu of services including crop diversity, access to germplasm, nurseries, cultivation practices; restoration and sustainable intensification of plantations through conversion of under-performing crops into food gardens, agroforestry practices including intercropping with high-value short-rotation horticultural crops. Under component 2 the project will strengthen the capacity of farmers and collective groups as enterprises through advice and training in areas such as agri-processing, product development, branding, certification. Component 3 is ESMS relevant in the sense that it aims to promote inclusive and evidence-based land –use planning processes.

The project is expected to have highly positive environmental impacts; also social impacts related to local communities are expected to be highly positive, in particular in terms of water and food security and alternative income-generating options. However, some environmental and social risk issues have been identified during the ESMS Screening. It is not expected that any of the identified risks would likely cause significant adverse environmental and/or social impacts; most of the risk issues are preliminarily judged as low risk areas, very few moderate and it is expected that they can be readily addressed through good management practices and mitigation measures.

For a number of activities, the risks cannot be ascertained in more depth at the stage of project preparation because the exact sites for field interventions have not been identified yet and because decisions on specific interventions will be determined in a participatory process together with the respective local stakeholders. In the project proposal generic types of activities have been established, though, and a first high-level assessment of their potential negative social and environmental impacts has been undertaken. The results are depicted in a preliminary risk management plan in table 5 on the following page. A first appraisal of the significance of the identified risks has been made taking into account the estimated likelihood of impacts occurring and the severity/magnitude of potential impacts – following the classification guidance presented in table 4 below.

Table 4: Likelihood and Magnitude of planned activities

Description	Magnitude (Mg)		
	Minor (1)	Medium (2)	Major (3)
Likelihood (Lk)			
Almost Certain (4)	Moderate	High	High
Likely (3)	Moderate	Moderate	High
Possible (2)	Low	Moderate	Moderate
Unlikely (1)	Low	Low	Moderate

In addition to establishing significance table 5 below also provides recommendations for mitigation measures. Because the assessment is done based on generic activities without knowing further details and location of the activities, the table needs to be understood as indicative; its purpose is to provide general guidance for the detailed design of the interventions.

Table 5: Preliminary Risk Management Plan

Outputs and activities ⁵	Risk Issues/negative Impacts	Lk ⁶	Mg ⁷	Significance ⁸	Mitigation or control measures
1.1.1: Streamside protection and drainage management along roads	Drainage management may involve short-term removal of vegetation cover with risk of erosion and sediment movement, especially when done during wet season	2	1	low	Vegetation along watercourses and drainage lines will be retained to the extent possible and re-vegetation will be ensured as soon as possible. Careful consideration of timing of works avoiding wet season.
	Priority areas for intervention will be determined on the basis of sub-basin planning (3.1.1), but only a few sites will be able to benefit from project funding; this might create tensions among communities that don't benefit from initial investments.	2	1	Low	Project funding will be provided to initiate catchment protection while the PES is gradually phased in to maintain best practice over the life of the project.
1.1.2: Rehabilitation and establishment of village tanks, ponds and irrigation networks (including irrigation channels for direct rainwater harvesting and tapping stream networks)	Rehabilitation of old and construction of new village tanks and irrigation channels could lead to disturbance of vegetation cover and to erosion with risks of causing loss of top soil and landslides, in particular when water holding bodies are located in hill slopes. Risk of negatively affecting water dynamics through containment and diversion of surface water (e.g. drainage management along roads, rain water harvesting).	2	1	low	The biodiversity and soil risks are considered possible but not very likely as the project will predominantly rehabilitate existing tanks and irrigation networks. Rehabilitation of abandoned tanks that have a biodiversity and ecosystem importance might involve some disturbance during rehabilitation, however once the tank system is functioning again, it is becoming an eco-system itself. The project will use traditional and adapted tank rehabilitation techniques and ad-hoc tank rehabilitation will be avoided. If new tanks or ponds are built, sites will be carefully selected to avoid disturbance to native flora and fauna; a GIS-based planning tool will guide localization of appropriate sites and take relevant biophysical and socio-economic parameters into account. Works will be carried out during dry season to avoid soil erosion during excavation works. Only small-scale, low-invasive machinery and vehicles will be used, clear boundaries for vegetation clearance and management of retained vegetation will be maintained; natural barriers or micro bunds will be constructed along the contour to control erosion and landslides. Retention of topsoil for restoration (including tilling and revegetation) as soon as practicable.
	Rehabilitation of irrigation networks is expected to lead to increasing the quantity of water abstraction from local sources including ground water sources affecting the water table	2	1	low	This will be addressed in the tank rehabilitation design. Technologies available to avoid seepage and criteria will be developed together with the Department of Agrarian Development to use techniques such as upstream filling etc.
	Community safety: Poor construction management practices and design principles of tanks may lead to accidents.	1	2	low	The design of tanks, ponds and irrigation channels will reflect highest health and safety standards. As example, all rehabilitated or built tanks will have a lid and/or are appropriately secured to ensure safety for community members, particular for small children. During construction good construction site "housekeeping" and management procedures will be ensured (including managing site access).
	Community health risks: Increase of exposure to water-borne and water-related diseases associated with formation of standing water such as ponds	1	2	low	This will be a part of the maintenance of the tanks to make sure the water is safe for drinking and other purposes. Community action groups to monitor water pollution, natural water filtration methods used in Sri Lanka like "Kattakaduwa", community awareness to boil before drinking especially during the drought and floods season will mitigate the increase of water borne diseases.

⁵ The table maps planned activities to potential risk issues. Because different activities can involve similar risk issues, some activities are mentioned more than once.

⁶ Likelihood: unlikely (1), possible (2), likely (3), almost certain (4)

⁷ Magnitude: minor (1), medium (2), major (3)

⁸ Significance is a result of magnitude and likelihood as indicated in the risk matrix

Outputs and activities ⁵	Risk Issues/negative Impacts	Lk ⁶	Mg ⁷	Significance ⁸	Mitigation or control measures
	Selection of priority areas might be perceived as unfair / unjustified preferential treatment	1	2	low	This risk will be prevent using transparent selection criteria and including the community (both beneficiary and host parties) in the decision making process
	Excavations and movement of earth as part of construction of new ponds/tanks or of the irrigation network might risk encountering or even damaging cultural heritage resources, in particular if they are unknown/buried.	1	1	low	The risk is considered low given the small-scale nature of the interventions. However, guidelines will be in place and communicated to the entities executing the work to prevent damage on resources. Chance Find procedures (template available in the Standard) will be communicated to prevent damage on hidden/buried resources.
1.1.3: Restoration of forest mosaic landscapes (restoring degraded forests within protected areas and forest fragments, re-growing forests in priority areas for the supply of ecosystem services, especially watershed protection, and the planting of trees outside forests for improved sustainability and livelihoods).	Risk of accidental introduction of non-native species during restoration in all of the different land-use systems (forest reserves, community forests, plantations etc.)	2	2	moderate	The risks seem highest in restoration work conducted as a part of community forestry interventions in plantation and reserved forests since the seedlings will be supplied by the sources external to the Forest Department. Also when introducing intercrops between forest species the same risk could be transpired. A close monitoring system comprising department of Agriculture, department for Agrarian Development, Forest Department and Department of Wildlife Conservation will be established to manage the risk including clearance of selected crops. The IUCN Biodiversity Guideline for Forest Restoration will provide further guidance for risk mitigation. ⁹ In existing timber plantations the focus of the project is on understory rehabilitation and under-planting and exchanging pines and eucalypts that were planted previously.
	Social risks related to access and use restrictions				See analysis and risk mitigation presented in a separate table in chapter 7.1 disaggregating impacts by land use systems
	Potential conflict in areas where grazing takes place and cattle destroy seedlings.	1	2	low	The risk will be mitigated through establishing fences to protect gracing areas and seedlings. Also the farmers will be educated on the prohibited areas for grazing.
1.2.1: Increasing cropping intensity of irrigated rice in both upstream and downstream areas	Risk of non-point source pollution from run-off affecting water quality of surface or groundwater (e.g., contamination, increase of salinity) through increased use of fertilizers and pesticides	1	2	low	Increase of pollution not likely as the project will promote a balanced use and applications of fertilizer (avoiding over-fertilization) including the use of organic inputs and integrated pest control based on real time weather and pest incidence data. For controlling risk from pesticide use the project will refer to the IUCN Guidance Note for Pest Management Planning. A water quality monitoring system will be established with the participation of Water Resource Board and Department of Agrarian Development.
	Increase in GHG emission (methane) from due to inundated conditions	1	2	low	Not likely as the project will use climate smart techniques including more efficient use of irrigation water through better irrigation management.
1.2.2: Sustainable intensification of smallholder production	Increase in water abstraction from local water sources for irrigation purpose with impacts on the water table and/or might reduce water flow downstream and as such disadvantaging those users	2	1	low	Impacts are considered possible but of low magnitude as the project increases the available water through water harvesting infrastructure. Also, water usage for irrigation will be properly managed under community driven projects like community water supply projects. The water quota system and rewarding system for sustainable water usage will reduce the excessive demand for water and water wastages.
	Risks from pesticide application needed in case of infestation	2	1	Low	The project will provide technical support to farmers to reduce the applied quantities of pesticides through providing real time weather and pest incidence data. However, climate change might increase the prevalence of pests and the need for pesticides. The magnitude of impacts from pesticide application are overall considered minor as the project would advise on very targeted application (e.g. integrated pest control based on real time weather and pest incidence data). As per the lessons from the recent army worm attack in Sri Lanka (2018/2019), the government and the farmers were encouraged to use organic pest control methods and used controlled pesticide methods and/or destroy crops affected under compensation. Full adherence to IUCN Guidance Note on Pest Management Planning will be ensured.

⁹ Available at <https://portals.iucn.org/library/sites/library/files/documents/2018-022-En.pdf>

Outputs and activities ⁵	Risk Issues/negative Impacts	Lk ⁶	Mg ⁷	Significance ⁸	Mitigation or control measures
	Risk of inadvertently creating or aggravating inequalities between women and men or adversely impacting the situation or livelihood conditions of women or girls	1	2	Low	Unlikely to happen since the project's stakeholder engagement approach will ensure equal / appropriate participation of women and access to project benefits. Clear criteria on men women participation, having gender action plan and etc. will mitigate this risk
1.2.3: Restoration and sustainable intensification of plantations (including tea, coconut, rubber, timber and large-scale cultivation of spices)	There might be a potential need to promote climate adapted species which involves risks of species being selected that may develop invasive behaviour	2	1	Low	As the project will predominantly promote native species the risk is possible but not likely. In case suitability modelling with downscaled climate change predictions have identified the need to use non-native species, their selection will undergo a risk assessment and protocol following IUCN Guidelines for Reintroductions and Other Conservation Translocations ¹⁰
	Risks from pesticide application needed in case of infestation				See under 1.2.2
	Risks from lack of adherence to international labour standards, poor working conditions and low remuneration affect health and livelihood of estate labours	2	1	Low	The labour and working conditions on plantations are outside the direct influence of the project. However, it is anticipated that the intensification of production translates into increase profitability of companies that should also contribute to secure and improve employment conditions of plantation worker. In addition, the project will encourage companies to transform under-performing crops and plantations into food gardens to be offered to estate workers for cultivation to improve food security.
2.1.1: Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers	n/a				
2.1.2: Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands	Value chain activities might lead to environmental impacts during construction or operation phase (e.g. disposal of waste or waste water, release of hazardous substances, pollution etc.) or involve occupational health and safety risks; impacts can only be assessed once activities are known	TBD	TBD	TBD	Guidelines on waste management will be provided commensurate to the likely environmental aspects of the respective activity and related waste streams. See procedures for screening and risk management of sub-projects presented in chapter 6
2.1.3: Identification and implementation of value chain upgrading options for small holder and subsistence farmers engaged in climate smart agriculture	New market opportunities might lead to unsustainable harvesting of resources gathered from natural habitats	TBD	TBD	TBD	Guidelines for sustainable harvest and use of living natural resources such as non-timber forest products (NTFP) will be provided to monitor and control sustainable harvesting levels, specific for the different resources and respective user groups. See procedures for screening and risk management of sub-projects presented in chapter 6.
	Decisions about supporting individual companies, SMEs or cooperatives might risk unjustified preferential treatment and/or might discriminate certain groups/caste or miss reaching social disadvantaged groups.	2	1	low	The risk is considered possible but not very likely as the value chain assessment will result in a detailed overview of actors including needs, developmental aspirations and capacities of socially disadvantaged groups. The support to individual companies/organizations will be based on transparent and fair eligibility criteria that are a combination of economic and social criteria that will be communicated in a culturally appropriate manner; economic criteria will include viability of business plan, performance/own contributions; social criteria will consider the individual's economic position and needs and whether alternative income opportunities. When designing support activities, it will be ensured that vulnerable groups have access to relevant support (e.g. training, advisory services etc.), that these services are adequately designed to meet their needs and that their participation is not hindered by logistical or financial barriers or by any form of social stigmatisation or exclusion

¹⁰ Available at: <https://portals.iucn.org/library/efiles/documents/2013-009.pdf>

Outputs and activities ⁵	Risk Issues/negative Impacts	Lk ⁶	Mg ⁷	Significance ⁸	Mitigation or control measures
	Risk of inadvertently creating or aggravating inequalities between women and men when designing value chain support activities that present de facto access barriers	2	1	Low	Risk is considered possible but not likely as the Gender analysis and the value chain assessment will result in a detailed overview of actors including needs, developmental aspirations and capacities of women. When designing support activities, it will be ensured that women have access to relevant support (e.g. training, advisory services etc.), that these services are adequately designed to meet their needs and that their participation is not hindered by gender-relevant barriers
2.2.1: A portfolio of business cases for negotiating performance-based financial transfer mechanisms 2.2.2: A PES intermediary body as a part of the multi-stakeholder platform, and its governance system established	Decisions about participation in PES might create the perception of unjustified preferential treatment	1	1	low	Negative impacts are unlikely as potential smallholders as PES participants will be selected by using clear eligibility criteria (including opportunity costs, farming systems and other socioeconomic profiles) and Payment modalities will be discussed and consulted to both providers and beneficiaries. The risk could be mitigated by clear identification of users of the natural resources and the community and the sensitive area that is essential to have their support to protect. Example - a bottled water industry in downstream support to protect water sources relevant to them in the upstream.
2.2.3: A monitoring system for PES schemes in the upstream catchment area	n/a				
3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale	Proposed policy and planning mechanism might not provide for sufficient inclusion and appropriate representation of local communities and social groups and as such spatial planning decision might disadvantage these groups	1	1	low	Negative impacts are unlikely as the Stakeholder Approach to Risk Informed and Evidence Based Decision Making (SHARED) methodology will be used for co-designing and implementing an inclusive and evidence-based planning process across non-congruent hydrological and administrative boundaries. A project-level grievance mechanism will be established that will allow receiving concerns from groups that feel excluded. In order to ensure the less vocal population has access to submit their grievances, adequate representation of such groups need to be ensured at the establishment of community organizations. All grievances need to be channelled through this community organizations to grievance handling committee.
	Lack of recognition of customary land rights/ tenure systems of local communities (or perceived rights) create social conflict	1	2	Low	The application of SHARED methodology will be for technical interventions in order to enhance the economic benefits and land sustainability. This will not reflect in changing land rights of the owners, however they will be guided on sustainable economic usages of lands especially on agriculture and industrial purposes. Also incorporated risk reduction in the construction to minimize the impact of disasters like high wind, landslides and floods.
3.1.2 Develop a shared information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options	n/a				
3.1.3: Development and refinement of an options by context framework for SLM and sustainable intensification	n/a				
3.2.1: Establishment of nested-scale multi-	Set up of the platform might lack inclusion and appropriate representation of social groups	2	1	low	Probably but not very likely as sub-basin multi-stakeholder innovation platform will be established with contextualized composition according to the relevant government, civil

Outputs and activities ⁵	Risk Issues/negative Impacts	Lk ⁶	Mg ⁷	Significance ⁸	Mitigation or control measures
stakeholder innovation platforms from sub-basin to GN scale					society and private sector actors at the location, and identified through stakeholder mapping. It is expected high representation and high homogeneity of social groups at the sub basin levels. However social mapping will be done to identify any marginalized groups within sub basin levels and take actions to incorporate their participation in innovation platforms
3.2.2: Training in methods and tools for adaptive and participatory co-design of adaptation options	n/a				
3.2.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.	n/a				

6. Procedures for identifying and managing environmental and social risks of sub-projects

6.1 Site Selection

The project area has been delineated as the landscape comprising the upper watershed and downstream areas of the Knuckles Mountain Range. It includes the 15 key sub-catchment (watershed) areas as described in chapter 2. The actual sites and communities for the field interventions are not defined yet. The feasibility study had examined the biophysical characteristics and vulnerability situation of the catchment areas but the final selection of sites and the exact configuration of sub-projects will only be done during project implementation. This is because some of the field intervention require further in-depth assessment and prioritization to determine the sites; other sub-projects are demand driven and as such will depend on the interest articulated by the relevant stakeholders.

The table below identifies those activities that are considered sub-projects and for which the risk identification and management procedures will apply. Generally, each of the shaded activity is considered an individual sub-project. In some cases, it might be necessary to split one activity into different sub-projects, e.g. when they are implemented at different times or for geographical reasons.

Table 6: Proposed site selection criteria

Activities – only activities highlighted in grey are considered sub-projects	Process or criteria for selection of sites and/or sub-projects
1.1.1: Streamside protection and drainage management along roads	in-depth assessment and prioritization to determine the sites
1.1.2: Rehabilitation and establishment of village tanks, ponds and irrigation networks	Evaluate following in the selection process Priority to be given for cascade systems, further criteria are: number of farmers to benefit, sustainable maintenance systems, degree of community participation, command area to be cultivated as well as an estimation of costs and benefits
1.1.3: Restoration of forest mosaic landscapes	in-depth assessment and prioritization to determine sites using the following criteria: restoration needs, biodiversity value and connectivity objectives to be identified in the Community Forestry Management Plan
1.2.1: Increasing cropping intensity of irrigated rice in both upstream and downstream areas	Areas identified by integrated land use system (SHARED), clear by field verifications and farmer consultations, to be started with farmer trainings and demonstration areas and other demand driven criteria
1.2.2: Sustainable intensification of smallholder production	demand driven
1.2.3: Restoration and sustainable intensification of plantations	demand driven
2.1.1: Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers	n/a
2.1.2: Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands	Demand driven and depending on results activity 2.1.1
2.1.3: Identification and implementation of value chain upgrading options for small holder and subsistence farmers engaged in climate smart agriculture	Demand driven and depending on results activity 2.1.1
2.2.1: A portfolio of business cases for negotiating performance-based financial transfer mechanisms	Demand driven and depending on results activity 2.1.1
2.2.2: A PES intermediary body as a part of the multi-stakeholder platform, and its governance system established	n/a
2.2.3: A monitoring system for PES schemes in the upstream catchment area	n/a

3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale	n/a
3.1.2 Develop a shared information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options	n/a
3.1.3: Development and refinement of an options by context framework for SLM and sustainable intensification	n/a
3.2.1: Establishment of nested-scale multi-stakeholder innovation platforms from sub-basin to GN scale	n/a
3.2.2: Training in methods and tools for adaptive and participatory co-design of adaptation options	n/a
3.2.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.	n/a

The above table specifies the procedure and/or criteria that will guide site selection. This is to provide for transparency and fairness and to ensure that the selection of sites which involves allocation of benefits is not perceived as unjustified preferential treatment.

Once the sites for field interventions have been selected, a rapid social analysis will be carried out in each site to establish the site-level social baseline (see Annex 10.3 for a sample template outline). This includes providing an overview of social groups present in the site and describing forms of social differentiation (ethnicity, caste, status, class, wealth or others) and the groups' main economic activities and livelihood pattern. It will further allow the identification of vulnerable groups within each site.

6.2 Exclusion List

The following list describes the activities / sub-projects that are considered high risk projects and as such would not be supported by the project:

- Development of new large tanks: The project will consider, however, the rehabilitation of small tanks which the individual tank's surface area is less than one acre, to support the small holder farmers to cope with prolonged dry spells. The small tanks shall be considered under minor irrigation systems that will be managed by the Department of Agrarian Development.
- Large scale irrigation systems like transboundary canals and water diversion projects like Moragahakanda; the project will, however, consider to establish/rehabilitate minor irrigation systems that connect the small tanks and farmer fields.
- As part of the forest restoration work: no introduction of non-native species with risk of developing invasive character.
- As part of the sustainable intensification of smallholder production or of plantations, the project will not:
 - involve the importing or transfer of seeds
 - supply or use modern biotechnologies or their products in crop production
 - practices that may decrease biodiversity, or alter the ecosystem functionality or result in the degradation (biological or physical) of soils and water
- With regards to the use of pesticides, the project will not:
 - directly supply or use of pesticides that may cause of adverse effects to health and/or environment or result in violations of the IUCN Guidance Note on Pest Management¹¹ or national Code of Conduct of pesticides whatever is more stringent;
 - lead to an increased use of pesticides per ha (taking into account active substance, dilution rates and application rates).

¹¹ See ESMS Guidance Note on Pest Management Planning, available at: www.iucn.org/esms

- Pesticides will not be used in buffer areas, fragile ecosystems, areas with high biodiversity value
- With regards to value chain activities, the project will not support activities that
 - may significantly increase GHG emissions
 - lead to pollution of soil or water bodies
 - generate hazardous waste
- The project will not involve physical displacement of people (permanently or temporarily)
- Physical works including earth works will not be situated in an area where cultural resources (in particular hidden resources) are expected.

6.3 ESMS Screening Procedure

The purpose of the screening is to understand whether a sub-project might give rise to negative social and environmental impacts and - if risks have been identified - to determine the need for conducting further assessments to better understand the risks. Screening also determines whether sub-projects trigger any of IUCN's ESMS Standards and what tools should be used in response.

The screening results in a classification of the sub-project as low, moderate or high risk. A classification as high risk is considered very unlikely for the types of sub-projects funded under this project and the procedure described in the following will therefore not make any reference to this category. A sub-project is classified as **moderate risk** if it includes activities with potential adverse social and environmental risks and impacts, that can be determined with a reasonable degree of certainty, are limited in scale, few if any of them are irreversible, and can be addressed through application of standard best practice, mitigation measures and stakeholder engagement during project implementation.

The category **low risk** is used for sub-project that are expected to have minimal or no adverse social and environmental risks and impacts, and/or mitigation already devised as part of the implementation strategy (e.g. in form of outputs or activities) and this is expected to appropriately address risks.

The screening will be undertaken by the IUCN ESMS officer. The screening is guided by the ESMS Questionnaire which is included in the ESMS Screening & Clearance Template provided in Annex 10.7. In its first section the questionnaire analyses the sub-project on potential environmental or social impacts. The second section of the questionnaire focusses on impact issues related to the four ESMS standards and respective requirements:

- Standard on Involuntary Resettlement and Access Restrictions;
- Standard on Indigenous Peoples;
- Standard on Cultural Heritage;
- Standard on Biodiversity Conservation and Sustainable Use of Natural Resources.

This screening step is concluded by entering the screening decision into the respective cells of the Screening&Clearance Template and as such the document becomes the Screening Report. **Low risk** sub-projects do not require further assessment or mitigation action. The procedure for **moderate risk** sub-projects is described below.

6.4 Due Diligence Procedure for Moderate Risk Projects

If the ESMS Screening identifies environmental or social risks and classified the sub-project as moderate risk project, it will be necessary to analyse the significance of the identified risks (probability and severity/magnitude) and identify a strategy to avoid or mitigate the risks. In most cases these steps will require consultations with affected groups and other concerned stakeholders. Depending on the significance and nature of the issues a targeted risk assessment might be required. Given the size and the nature of the activities, it is not expected that any of the sub-project will require a comprehensive Environmental and Social Impact Assessment (ESIA) process. The terms of reference of such targeted risk assessment will be established by the ESMS officer who will also judge the adequacy of the assessment report. The ESMS officer will establish whether the assessment and the respective report can be undertaken by members of the project team (PMU) or whether external expertise is required. This decision should reflect the level of risks and required technical expertise as well as whether sensitivity of issues might require an impartial and independent view. Environmental impact issues related to drainage management or the rehabilitation of village tanks, for example, are assumed to be readily

addressed by staff from the respective technical teams. More complex social issues might require an independent social expert.

For impacts that cannot be avoided through changing the design or siting of the sub-project, mitigation measures need to be developed. The measures identified in table 5 in chapter 5 will provide guidance. The mitigation strategy will be documented in form of an Environmental and Social Management Plan (ESMP) developed by the individual or team that have been tasked with the risk assessment. A guidance note for ESMP development is available on the IUCN ESMS website and attached as Annex 10.2¹².

6.5 ESMS clearance

Sub-projects that are considered low risk will have already been cleared through the Screening Report. For moderate risk projects the ESMS officer carries out a dedicated Clearance step in order to check whether required risks assessments have been completed and that results have been appropriately incorporated in the design of the sub-project, including through the development of an Environmental and Social Management Plan (ESMP). The ESMS Clearance decision is documented by entering the screening decision and potential conditions into the respective cells of the Screening & Clearance Template. The document will be filed as Screening and Clearance Report.

6.6 Monitoring and Supervision of ESMP Implementation

All **moderate risk** sub-project will require the implementation of mitigation measures as specified in the sub-project's Environmental and Social Management Plan (ESMP). The executing entity which is responsible for the implementation of the respective sub-project is also in charge of implementing the mitigation measures.

The ESMP Guidance Note mentioned earlier provides a template for reporting progress of implementing the mitigation measures – to be completed by the executing entity according to the frequency established in the ESMP, at least on an annual basis. The executing entities' ESMP progress reports will be reviewed as part of the supervision mission by the IUCN ESMS officer. Aside from reviewing implementation progress this step will also check the effectiveness of measures in mitigating risks and screen for additional risks that may have emerged since the sub-project start. Depending on the risk issues and their significance the supervision mission might also include consultation with stakeholders and affected groups to gather feed-back on the effectiveness of measures.

Based on the executing entity's ESMP progress reports and the findings of the supervision mission the IUCN ESMS officer will prepare the submission of the Annual Performance Report (APR) on the environmental and social performance of the project to GCF

Sub-projects that are considered **low risk** don't require specific action except regular monitoring of emerging risks.

7. Provisions from ESMS Standards

7.1 Standard on Involuntary Resettlement and Access Restrictions

Landscape forest restoration interventions carried out under project activity 1.1.3 are expected to provide both environmental and social benefits. However, for restoration measures to be effective, often temporary restrictions to access and use of forest land and resources are required which might affect the livelihood of people who depend on these forest resources. The land-use systems targeted by the restoration work under 1.1.3 are quite diverse and include the following systems:

- Forests in existing protected areas,
- Forests or forest fragments in areas in the process of being designated as forest reserves,
- Forest plantations (timber and cash crops),
- Tea plantations,
- Grassland areas within forest areas, plantations or small-holder farmland,

¹² www.iucn.org/esms

- Forest lands governed by the Land Reform Commission (LRC) to be redistributed to landless peasants to bring about more equity.

As these systems are managed by different entities and affect different users, potential livelihood impacts need to be analysed for every land-use system selected for the restoration work. The likelihood and magnitude of social impacts differ between the different land use systems depending on who owns and governs the systems, who the users are and how dependent these peoples are on resources from those areas; and as such different land use systems will require different mitigation strategies.

The Standard is triggered if a sub-project includes activities that might restrict peoples' access to or use of land or natural resources where they have traditional or customary tenure, or recognizable usage rights (including communal resources). The following are typical activities that trigger the Standard's component on Access Restrictions:

- establishing new protected areas (PA)
- extending the area of an existing PA,
- improving enforcement of PA regulations or of other land use restrictions that were already formally "on the books" but not fully enforced, leading to impacts on people's livelihoods (including training guards, providing monitoring and/or enforcement equipment, providing training/tools for improving management effectiveness)
- constructing physical barriers that prevent people accessing certain places
- changing how specific natural resources are managed to a management system that is more restrictive (e.g. the creation of project-related buffer or safety zones, or an extension of a protected area, which limit or prohibit use of the land for other purposes).

It is important to understand the governance of the systems and who makes decision about restrictions in order to decide whether the Standard is triggered. As a general rule, the Standard only applies to sites where use and access restrictions are considered "involuntary" - meaning that such decisions are project-imposed and affected users do not have the right to refuse restrictions that result in economic displacement. The Standard is not triggered for situations where decisions about restrictions are taken voluntarily by those who are collectively using the area and resources for livelihood purpose. While not triggering the Standard, in such situations it is nevertheless necessary to, first, confirm that decisions were voluntary and transparent and didn't exclude certain groups and, second, to assess social impacts from restrictions, in particular on vulnerable groups. If impacts have been confirmed, the project needs to provide for mitigation.

Given the diversity of land-use settings that the project intends to influence a table is presented below that disaggregates the different land use systems and identifies for each of them risks from access restrictions and respective strategies for risk mitigation.

Table 7: Changes in current land use practices

	Land use regimes	Key characteristics incl. management authority	Potential livelihood impacts due to restrictions	Trigger decision, assessment needs and mitigation
Proposed Forest (FR) Reserves				
1	<p>10 proposed sites:</p> <ul style="list-style-type: none"> • Dambulu Oya • Dotulugala • Galgiriyaakanda • Kala Oya • Medaulpota • Moturampatana • Nikawehera • Pallegama Himbilyakanda (Part 1) • Palwehera • Sangapparale 	<p>Declaration of New Forest Reserves is in progress. The process is originated, led and managed by the Forest Department and Department of Wildlife Conservation.</p> <p>The sites are located in up- and downstream areas of the project, however the majority downstream which are dry zone areas and vulnerable for frequent drought.</p>	<p>A1.1.3 focuses on restoration of forest mosaic landscapes of degraded areas inside the forests. In order to sustain the restored areas there is a possibility that this might imply some form of restrictions compared to current uses for which communities might perceive having customary rights (even though statutory rights are with the state). As Forest Reserves in Sri Lanka do allow communities to harvest NTFP (if done in sustainable way) social risks from restrictions are considered possible, but not very likely.</p> <p>This rating also takes into account the formal procedure which will need to be followed by the divisional Secretariat for such process (e.g. providing reasonable period to the public to submit suggestions, grievances and objections on forest categorization proposal).</p>	<p>The screening of the sub-projects will judge whether the Standard on Access Restrictions is triggered in case a sub-project requires restrictions to enable restoration of degraded areas. This will take into consideration whether communities have (perceived) traditional rights and whether the required restrictions involve reducing allowed NTFP harvest rates. In case of trigger, an abbreviated Action Plan will be needed.</p> <p>With regards to the process of designating new forest reserves, this is considered outside the project's scope and hence does not trigger the Standard. However, the sub-project screening should take cumulative impacts into account (e.g. incremental impacts of the project when added to impacts from the designation process) and address them with mitigation measures.</p>
2	Buffer zones surrounding the above Forest Reserves	Buffer zones are governed and managed by the Forest Department or/and Community Forestry Organization under the supervision of Forest Department	The project aims to strengthen boundaries of FRs by supporting community forest organizations to create or restore buffer zone plantation. It will encourage community forest organizations to implement restoration measures and increase forest cover and manage the buffer zones more sustainably in order to ensure long-term supply of forest resources (trees, NTFPs etc.) to meet their livelihood needs.	<p>Because the intended change of management practices is aimed at improved sustainability and because the actual decision will be taken by the communities using the resources collectively, the Standard on Access Restrictions is most likely not triggered. However, each sub-project will be screened individually and the screening will also take into consideration whether there is a risk that restrictions might cause a community or groups within a community to lose access to resource usage where they have traditional or customary tenure, or recognizable usage rights.</p> <p>Second, even if the Standard is not triggered, the screening will assess whether there are livelihood risks for particular sub-groups from restrictions such as vulnerable groups within the communities and provide for risk mitigation.</p>
Existing Protected Areas				
3	Knuckles Conservation Forest (KCF)	World Heritage (WH) Site located in the project's upstream area; managed by Forest Department	The objective of the WH Site is to conserve its area for prosperity, with regard to biodiversity, soil, water, historical, cultural, religious, scientific and aesthetic values and to enhance contribution of forestry to the national economy as well as to the	The Green Listing process is diagnosing whether the protected area is managed according to good governance principles; it is not expected to lead to additional restrictions and hence does not trigger the Standard.

	Land use regimes	Key characteristics incl. management authority	Potential livelihood impacts due to restrictions	Trigger decision, assessment needs and mitigation
			welfare of nearby communities. The project will support the inclusion of the area into the IUCN Protected Area Green List – to become the first ever conservation forest in Sri Lanka to be listed. Being recognized and branded as Green List Site is expected to attract more global attention, increase the site's value as tourist destination and increase economic benefits for adjacent communities.	
4	Forest Reserves: see Annex 10.6 for a list of the reserves Strict Nature Reserve: Ritigala Nature Reserve: Block 3 and Block 4 Wild Parks: Wasgamuwa Sanctuaries: Kahalla-Pallekele, Anuradhapura, Mihinthale Sigiriya, Tabbowa Victoria Randenigala	Located in the downstream areas of the project; governing and management authority for the Forest Reserves is the Forest Department, all the other areas are governed and managed by the Department of Wildlife Conservation	Similar to the entries in row 1 – A1.1.3 focuses is on restoration work, but some potential for new restrictions related to the restored areas.	Similar to row 1: The screening of the sub-projects will judge whether the Standard on Access Restrictions is triggered due to potential restrictions related to restoration work and whether an abbreviated Action Plan needed.
	Plantations			
5	Forest plantation (timber and cash crops)	Managed for timber and NTFP extraction; Owner: Forest Department; Management: Community based Forestry organizations	A1.1.3: includes activities for restoration through understorey rehabilitation and under-planting. The project intends to encourage community forestry groups to manage specified areas which will provide tangible benefits for them such as wood from pruning and cash crop and intercrops as well as long-term benefits (timber harvest of the woodlot plantations). This approach has proven successful already in the following sites: Hettipola, Sulugune, Moragahaulpotha, Diggala, Aluthyaya Hathadukthuwa, Wagodapola, Walgamwawa, Haduwa, Dombagoda, Thibbatukanda. This activity is only expected to provide social benefits and will not involve access restrictions.	n/a
6	Plantations (tea, rubber, coconut, timber and large-scale cultivation of spices)	Managed by: privately managed plantation companies and three state owned companies	A.1.2.3 includes the development of food forests to address food security of estate worker families, some of whom have entered contract farming arrangements with estate companies. This activity is only expected to provide social benefits and will not involve access restrictions.	n/a

	Other Land Use			
7	Grassland	Multiple ownerships: Forest Department grasslands in Forest Areas, Plantation Companies plantation area, Small Holder Farmers the grasslands in private lands	A1.1.3 includes restoration of grassland within forest mosaic landscapes (conversion of bare grasslands to crop cultivation that are resilient for climate change). While restoration of grasslands in forest area will not impact communities, there is a potential that restoration of tree cover in open grasslands may affect the livestock sector as this might require temporary use restrictions.	The screening of the sub-projects will judge whether the Standard on Access Restrictions is triggered; this will be the case if the success of restoration of tree cover in open grasslands requires temporary use restrictions from communities/groups using these areas for the livestock grazing. If impacts are identified an abbreviated Action Plan will be developed. Mitigation measures might include supporting alternative animal feeding methods.
8	Forestlands to be redistributed to landless peasants for equity objective	Governed by the Land Reform Commission (LRC), only applicable for the Kandy and the Matala Districts (covering 174 ha)	The Government committed tree plantation on 0.2 million hectares by 2020 under Bonn Challenge. This will create pressure to the Forest Department to utilize the lands or even acquire new lands for expand planting forest trees.	Bonn Challenge Target http://www.bonnchallenge.org/content/sri-lanka

It is important to point out that the table presents only a generic analysis and it is up to the sub-project screening described in chapter 6.3 to determine for each sub-project, the likelihood of social risks and whether the conditions trigger the Standard. This decision will be informed by the rapid social baseline analysis mentioned in chapter 6.1 carried out for each of sites selected for field interventions (see Annex 10.3 for sample template outline). For all sites where forest restoration will be carried out this analysis need to include a review of current resource use of the communities surrounding the sites and the land rights/ tenure systems of local communities (including customary rights and perceived customary rights).

For sub-projects or sites where restrictions are considered necessary and where social impacts are likely an Action Plan to Mitigate Impacts from Access Restrictions (Action Plan) is required in accordance with the Standard and the respective Guidance Note.¹³ Given the nature of the interventions and their focus on restoration and sustainable management an abbreviated Action Plan is considered sufficient. This abbreviated Action Plan will need to have the following components:

- A. Description of the nature and scope of access restrictions put in place under the project
- B. Analysis of social, cultural and economic impacts from access restrictions
 - Identify all households/individuals that would be affected by the restrictions:
 - Differentiate, where applicable, between women and men, ethnic groups and vulnerable groups, such as marginalized groups, persons with disabilities, children, landless, elderly or displaced persons;
 - Specify the location of the project affected groups (preferably on maps);
 - Identify all impacts and losses that may be caused by access restrictions, including material and non-material impacts (e.g. related to spiritual, cultural, knowledge and educational values of the land and resources).
- C. Identification of mitigation measures
 - The first priority is to change sub-project design to avoid social impacts from access restrictions;
 - For impacts that cannot be avoided without compromising the restoration objective identify, together with legitimate representatives of affected groups, an adequate mitigation strategy, e.g. through compensation or provision of assistance or benefits to improve or at least restore their livelihoods (in real terms, compared to pre-displacement level);
 - Devise special measures for specific social (sub-) groups, in particular for women or vulnerable groups, to assure that the impacts do not fall disproportionately on vulnerable groups or that the project does not create or aggravate inequalities between men and women or between groups within the communities when providing assistance.
- D. Implementation arrangements
 - Describe the procedures for providing assistance, including roles, responsibilities and arrangements for coordinating the process;
 - Define the criteria for eligibility to assistance taking into account legal (including customary) rights and the identified livelihood impacts of restrictions; criteria must be transparent and fair in order to avoid any potential perception of discrimination or unjustified preferential treatment.
 - If mitigation occurs on a collective basis, it needs to be demonstrated how the benefits will be distributed to all eligible members;
 - Confirm the technical and operational feasibility and cultural adequacy of mitigation measures, establish required resources for implementing the mitigation measures and the implementation schedule;
 - Describe the plan for stakeholder participation in monitoring implementation of mitigation measures and how stakeholders can access the grievance and conflict resolution mechanisms (see further information about the Grievance Mechanism in chapter 8);

¹³ Available at www.iucn.org/esms

E. Participatory planning process

- Describe the participatory process used for engaging groups in the development of the action plan and list all groups and individuals involved in the process. Document the consultation process in reports and photographic or video evidence (as culturally appropriate).
- Indicate how consultation and participation of women and/or vulnerable groups is assured.
- Provide evidence to confirm that consent of affected groups was obtained.

As described above measures for avoiding or mitigating impacts need to be developed in consultation with the affected groups. Examples of measures for avoiding impacts from restrictions are for instance the establishment of community forestry organizations where the communities jointly agree on the use of areas in the forest reserve or buffer zone for improved sustainability (restoration/ increasing forest cover) and livelihoods (trees and crops etc). Annex 10.8 demonstrates the types of activities included in the Community Forestry Management Plans.

Mitigation measures could take the form of providing assistance to develop alternative income opportunities linked to the agricultural value chain (production, processing, commercialization) or to services around eco-tourism (lodging, restauration, hiking guides, event management, souvenir production). Another option are income opportunities for communities linked to conservation activities for which the ecosystem services (PES) mechanism developed under Output 2.2 could generate sustainable financial.

7.2 Standard on Indigenous Peoples

The Standard is not triggered as the field consultations carried out during the design phase did not confirm the presence of indigenous peoples in the project site. However, an additional examination is planned during the social baseline study and associated community consultations to analyse whether there aren't any ethnic groups present in the sites that meet the broader IUCN definition of indigenous peoples.

7.3 Standard on Cultural Heritage

Recent archaeological investigations carried out in the Knuckles range have revealed several caves with evidence of their occupation by Mesolithic man. Subsequently, from around 300 BC, some of the caves had become the abode of Buddhist monks. Another cultural feature of special significance in the project area are existence of ancient villages which, until recent times, had no road access. The inaccessibility of this mountainous area had sheltered the villages from the influence of modernization. It is understood that the Government of Sri Lanka intends to select some of the dwellings that are still in that form for conservation in order to preserve them as monuments.

The standard is triggered as the project includes selected infrastructure work related to the establishment of village tanks, ponds and irrigation networks. Given the small-scale nature of these works, it is considered not very likely that hidden resources are damaged by the works. But this risk need to be looked at as part of the sub-project screening. As precautionary measure the screening might instruct the executing entity responsible for the sub-project to make a Chance Find Procedure available to all entities executing the works. A template of such procedure is available in the IUCN ESMS Standard on Cultural Heritage.¹⁴

It is not considered very likely that sub-projects related to designing agricultural practices and value chain activities might affect cultural values, norms or practices of local communities. However, the screening should review this risk and determine the need of seeking specialist advice.

7.4 Standard on Biodiversity and Sustainable Use of Natural Resources

The Standard is triggered as a few biodiversity risks have been identified associated with water management works and activities related to intensification of agriculture production including rice, small holder and plantations. A comprehensive review of the generic activities has been undertaken and the identified risks are presented in the preliminary risk management table in chapter 5. Most of the risks are considered low significance given the project's focus on sustainable and low impact cultivation practices as depicted in the

¹⁴ Available at www.iucn.org/esms

table. The screening of the respective sub-projects will examine the risk issues in more depth taking into consideration the details of the sub-projects (available at that time) and the location of the fields / siting of infrastructures and the sensitivity of respective environments into consideration. Where needed, the screening will prescribe additional risk studies in adherence to provisions of the Standard on Biodiversity and Sustainable Use of Natural Resources including the Guidance Note for Pest Management Planning¹⁵ and/or the need to design explicit mitigation measures. The preliminary risk management table in chapter 5 already provides ample recommendation for mitigation measures.

8. Provisions for Stakeholder Consultation, Disclosure and Grievance Mechanism

8.1 Stakeholder Engagement and Disclosure

Provisions for Stakeholder Engagement and disclosure are described in the project's Stakeholder Engagement Plan (see Annexure 9 to the Funding Proposal) and as annexure 10.4¹⁶ of this document). Additional disclosure requirements might be needed and will be decided for each sub-project by the screening in accordance with the IUCN ESMS disclosure policy and with the requirements of the GCF Environmental and Social Policy and Information Disclosure Policy. An example is the need to develop and disclose a pest management plan where conditions apply as described in the respective Guidance Note quoted above. Detailed guidance on stakeholder engagement is provided in the IUCN Guidance Note on Stakeholder Engagement.¹⁷ Aside from establishing the IUCN ESMS disclosure policy and guiding principles for stakeholder engagement it also determines the mandatory procedures for stakeholder engagement along the project cycle and provides respective tools and templates.

As outlined in the Guidance Note the process of stakeholder engagement must be guided by the following principles:

- Stakeholder engagement begins as early as possible in the project planning process to gather initial views on the project proposal and inform design;
- Engagement actions are targeted to the audience taking into account the different access and communications needs of various groups and individuals, especially those who are vulnerable or disadvantaged;
- There should be sufficient emphasis on the local level (local communities, traditional leaders etc.) and for local civil society organizations;
- Engagement is carried out on a continuous basis, throughout the project cycle and as environmental and social (E&S) risks and impacts may arise, but in particular as part of the screening of sub-projects and during the implementation of required due diligence procedures as instructed by the screening (see chapter 6);
- Consultations are based on the prior disclosure and dissemination of relevant, objective, meaningful and easily accessible information in a timeframe that enables consultations with stakeholders in a culturally appropriate format;
- Consultations must be carried out in a non-discriminatory and gender-responsive manner, free of external manipulation, interference, coercion, discrimination and intimidation;
- In accordance with the ESMS Principle on the Protection of Vulnerable Groups, consultations should be responsive to the needs and interests of disadvantaged and vulnerable groups;
- Stakeholder feedback is encouraged and responded to - particularly as a way of informing project design and of identifying potentially affected people which would then need to be engaged in order to assess risks and develop mitigation measures;

¹⁵ Available at www.iucn.org/esms

¹⁶

<https://www.dropbox.com/s/2wgi4dhimtal8z7/Stakeholder%20Consultation%20and%20Engagement%20GCF%20Kunckles%20Project.pdf?dl=0>

¹⁷ Available at www.iucn.org/esms

8.2 Grievance Mechanism

IUCN has an institution-wide ESMS grievance and redress mechanism in place to address stakeholders' complaints related to issues where IUCN projects have failed to respect ESMS principles, standards, and procedures. The aim of the grievance mechanism is to provide people or communities fearing or suffering adverse impacts from a project with the assurance that they will be heard and assisted in a timely manner. The IUCN Grievance Mechanism Guidance Note¹⁸ describes the system's overall principles, roles and responsibilities, and the processes for lodging grievances, recording or logging grievances, resolving and escalation, providing feedback, and monitoring any agreed corrective actions. Key principles of the mechanism are:

- Accessibility: executing entity must inform all relevant project stakeholders (in particular by vulnerable groups) of the existence of this mechanism right at project start; where needed adequate assistance is provided for those that may face barriers to raise their concerns; complainants are not financially impacted by the process of making a complaint;
- Practical: provide for solving concerns at the local level first;
- Effective: allow simple and streamlined access to the Grievance Mechanism through a three-stage process and assurance that concerns submitted to the institution-wide IUCN Project Complaints Management System (PCMS) are resolved within a clear timeline (see more detail below);
- Independent: full independence from executing entity is ensured (starting with stage 2), so that stakeholder don't need to fear potential retaliation or negative consequences of bringing the information forward;
- Transparent: clear and known procedures are provided for each stage of the Grievance Mechanism including clarity on the types of outcomes;
- Maintenance of records: all complaints are registered and are reported on.

To enhance accessibility of the grievance mechanism, prevent grievance from building up and provide for effective project-level conflict solution the project will complement the institution-wide mechanism by a project-level mechanism. The main features of the grievance mechanism including local adaptations are the following:

Eligibility

Any community, organisation, project stakeholder or affected group (consisting of two or more individuals) who believes that it may be negatively affected by the executing entity's failure to respect IUCN ESMS principles, standards, or procedures may submit a complaint. Representatives (a person or a local organisation) can submit a complaint on behalf of a community, project stakeholder or affected group. Anonymous complaints will not be considered, however, complainants' identities will be kept confidential upon their written request.

The following requests are not eligible:

- complaints with respect to actions or omissions that are the responsibility of parties other than IUCN and the relevant executing entity under its authority in the context of the project;
- complaints filed:
 - after the date of official closure of the project; or
 - 18 months after the date of the official closure of the project in cases where the complaint addresses an impact resulting from project activities that was not, and reasonably could not have been, known prior to the date of official closure;
- complaints that relate to the laws, policies, and regulations of the country, unless this directly relates to the entity's obligation to comply with IUCN's ESMS principles, standards and procedures;
- complaints that relate to IUCN's non-project-related housekeeping matters, such as finance, human resources and administration because they fall under different mechanisms;

Three-stage process for resolving a grievance

To be practical and cost-effective, resolution of complaints should be sought at the lowest possible level. The IUCN grievance mechanism is conceptualized as a three-stage escalating process as shown in Figure 7. It starts with the executing entity and the affected party reviewing the conflict and deciding together on a way

¹⁸ Available at www.iucn.org/esms

forward that advances their mutual interests (stage 1). 'Deciding together' approaches are often the most accessible, immediate and cost-effective ways to resolve differences.

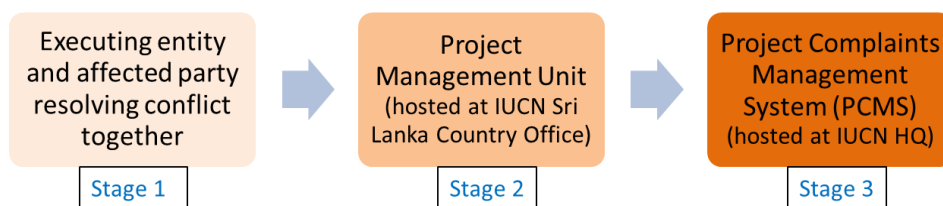


Figure 7: Three-stage process for resolving a grievance

While recognizing that many complaints may be resolved immediately between the executing entity and complainant, the concern can be escalated to a next higher level (stage 2) if no solution to the complaint is found by contacting the Project Management Unit (PMU) hosted in the IUCN Sri Lanka Country Office.

If these two stages have not been successful, the complaint can be forward to the centralized IUCN Project Complaints Management System (PCMS) – stage 3. Complainants should explain that good-faith efforts have been made to first address the problem directly with the respective executing entity and then with the PMU office. If the concern is sensitive, the complainant fears retaliation or any other justified reason, the first two stages can be skipped and the complaint can be escalated by the complainant directly to the PCMS.

Complaints can be received either orally (to the field staff), by phone or in writing placed in complaints box provided at the project sites or submitted by mail to the PMU or IUCN. A key part of the grievance redress mechanism is the requirement for the executing entity (stage 1), the PMU (stage 2) or IUCN (stage 3) to maintain a register of complaints received. The register also documents the response actions and status (solved/not solved). The executing entities are mandated to submit a copy of the complaint register to the PMU every six months.

All complainants shall be treated respectfully, politely and with sensitivity. Every possible effort should be made by the executing entity to resolve the issues referred to in the complaint within their purview. However, there may be certain problems that are more complex and cannot be solved at the local level. Such grievances will be escalated within ten working days to stage 2 (PMU). The PMU can be assisted by the IUCN Country Office in resolving the complaint. Where also the PMU doesn't succeed in solving the issue, it will need to be submitted (within 20 working days) to the PCMS where a dedicated complaint review and response mechanism will be triggered. The mechanism including timeline for responses and responsibilities is described in Table 8.

A written complaint (for any of the three stages) should include the following information (in any language):

- complainant's name, address, telephone number, fax number and email address and valid proof of representation if the complaint is filled by the representative of a legal person/entity;
- description of the project or programme concerned;
- the harm that is, or may result from IUCN's and/or the project executing entity's failures to respect IUCN's ESMS principles, standards, or procedures;
- actions taken to solve the issue, including previous contacts with the executing entity (stage 1) and the PMU (stage 2), where applicable, and reasonably detailed explanations why these stages have not provided a satisfactory solution; and
- list of supporting documents and attachments, as appropriate.

A template for the complaint is available on the IUCN website and will be translated into the local dialects in the project site and made available it appropriate channels. All complaints received through the PCMS trigger a formal review and response process following the action steps outlined in Table 7 and described below.

In cases where the situation is complex or contentious or the relationship between the executing agency and the complainant is conflictual, the Director PPG will request the investigator to carry out a formal compliance review (including site-visit) to allow for an in-depth investigation of the issues of non-compliance and their root causes and develop a plan for corrective actions. This review involves fact finding through interviews with the complainant, the executing agency, project-affected people and relevant stakeholders, comprehensive information gathering to allow factual determination of issues and, if needed, in-country inspections.

Table 8: Summary of the Project Complaints Management System (PCMS) Review process

	Action	Responsibility	Timeframe
1	Notify complainant whether complaint is eligible (based on eligibility criteria) and about further process	Head of Oversight, advisors	Within 5 working days of receipt of complaint
2	Appoint investigator for managing the case (based in the regional or country office and internal to IUCN, but independent from the executing entity) ¹⁹	Director PPG	
3	Notify the executing entity about the review process and request response (cc PMU)	Investigator	
4	Respond to IUCN regarding the complaint: - confirm eligibility of complaint - submit action plan and timetable	Executing entity	Within 20 working days
5	Review and approve action plan	Investigator	
6	Develop corrective actions for issues of non-compliance including - timetable - corrective actions and, if relevant, remedial or preventive measures, - evidence of consent complainant - provisions for progress reports	Executing entity	As per agreed timetable
7	Review and approve corrective actions	Investigator	
8	Produce grievance summary report	Executing entity	
9	Implement corrective actions and report on the progress (monitoring)	Executing entity	As per agreed timetable

Additional local adaptation

In order to ensure that any grievance that may arise is resolved in a manner that will accrue maximum benefits to both the project and affected parties, the following aspects will be taken into consideration in fine-tuning and communicating the grievance redress mechanism to all relevant stakeholder during the project's inception phase:

1. **Publication (Facts sheets/ Brochure/ Flyers)** – The project will publish the detailed information about the project and the grievance mechanism in different forms of publication targeting to different concerned parties and widely disseminated through different social media, print, and IUCN and executing entities' websites.
2. **Orientation to the Local Communities** – Different orientation programs will be organised at local level, with an aim to orient local communities about the nature and size of the project and the grievance mechanism.
3. **Stakeholder involvement in ESMP monitoring:** Involving stakeholders regularly in ESMP monitoring will serve as an accessible mechanism for the community to articulate concerns before issues are even building up.
4. **Appointing ombudsperson:** The Ombudsperson will be appointed as a contact person in cases of conflict between local communities and executing entities during the project implementation phase. Local communities, executing entities are free to initiate contact with the ombudsperson at any point. As independent persons of trust, ombudspersons offer advice and recommendations and will seek to mediate between the disputing parties. The ombudspersons will be bound to confidentiality. The selection committee will be formed for appointing ombudsperson, and criteria for appointing ombudsperson, and other rules and regulation will be developed by selection committee.

¹⁹ For high-risk issues, the Head of Oversight may appoint an external investigator.

5. **Grievance Box/ Complain Box:** Grievance boxes will be installed at all project sites. For the effective and accessible use of grievance box, the executing entity will inform all relevant project stakeholders of the existence of IUCN's grievance mechanism and about the relevant provisions of the ESMS. The information will be delivered in an appropriate form assuring that all relevant groups are reached, including women, indigenous peoples and vulnerable groups. The executing entities will ensure that students and personnel in at least one school near the project site are given leaflets with information on the project's nature and objectives, as well as clear guidance on how to contact IUCN in case of concerns or complaints over any negative impacts of the project, with the grievance installed.

9. Implementation Arrangements and Budget

The overall supervision of the ESMF implementation is with IUCN's ESMS Officer in accordance to IUCN's role as implementing and supervising agency. The procedures for identifying, assessing and managing risks of sub-projects have been described in chapter 6. Roles and responsibilities are summarized in the below table 9.

Table 9: Roles and responsibilities for risk procedure applied to sub projects

ESMS steps	Applicable for	Responsible entity	Involved entity	Guidance or Template
Complete ESMS Questionnaire	All sub-projects	Project team / PMU		ESMS Screening&Clearance
ESMS screening and report	All sub-projects	IUCN ESMS Officer	ESMS Expert Team	ESMS Screening&Clearance
Safeguard Tools (risk assessm., action plan access restrictions, pest management plan etc.)	As per screening	Project team/PMU or External expert ²⁰		
ESMP	Moderate risk sub-projects	Project team/PMU or External expert	Stakeholder / affected groups	ESMP– Guidance Note & Template
Appraisal of risk report and ESMP	Moderate risk sub-projects	IUCN ESMS Officer		
ESMS clearance of sub-project	Moderate risk sub-projects	IUCN ESMS Officer		ESMS Screening&Clearance
ESMP implementation & report progress	Moderate risk sub-projects	Project team / PMU		ESMP– Guidance Note & Template
Monitoring & Supervision ESMP implementation	Moderate risk sub-projects	IUCN ESMS Officer / global ESMS Coordinator	Affected groups	
Effectiveness ESMP (part of project evaluation)	Moderate risk sub-projects	External expert	Reg. ESMS Officer, Affected groups	
Stakeholder Engagement	All sub-projects	Project team / PMU		Project SH Engagement Plan and Guidance Note Stakeholder Engagement ²¹)

Addition to the roles described in the table above IUCN ESMS Officer will also provide safeguard training on the ESMS for all projects staff and relevant project partners during the inception phase of the project.

The budget for implementing the ESMF is described in the table 10 below.

²⁰ Commensurate to the level of risks

²¹ Available at www.iucn.org/esms

Table 10: Indicative budget for ESMF

ESMS steps / activities	Costs (in USD)	Description
Training for projects staff and Stakeholders on safeguards / ESMS	25,000	Provided by IUCN global ESMS Coordination and IUCN ESMS officer, includes staff time for the latter and travel/DSA for both
Translation of documents	5,000	External expert
Complete ESMS Questionnaire	5,000	Staff time Project team / PMU
ESMS screening sub-projects including field visit	15,000	Staff time and travel/DSA for IUCN ESMS officer to the site
Instruments (targeted risk assessment, Pest Management Plan)	10,000	External expert, only when required by screening
Development of ESMP	5,000	Staff time Project team/PMU and travel/DSA, staff time for advisory role of IUCN ESMS officer
Stakeholder Engagement consultations (in each site)	35,000	For ESMP dev., monitoring, communication grievance mechanism, includes staff time and travel/DSA project team/PMU
ESMS clearance of project proposal (incl. ESIA appraisal, if needed)	5,000	Staff time IUCN ESMS officer
Implement ESMP & report progress	15,000	Staff time Project team / PMU, for mod. risk sub-projects only
Supervision missions for ESMP monitoring (annually) and stakeholder consultations	20,000	Staff time for IUCN ESMS officer, travel and DSA for IUCN officer and global ESMS coordinator.
Effectiveness ESMP (part of project evaluation)	20,000	External expert, for mod. risk sub-projects only
Project- level grievance mechanism	25,000	
Total	185,000	

10. Annexes

- Annex 10.1: ESMS Screening Report
- Annex 10.2: Guidance Note ESMP
- Annex 10.3 Rapid social baseline analysis – sample template outline
- Annex 10.4: Stakeholder Consultation and Engagement Report
- Annex 10.5: List of existing and proposed Forest Reserves
- Annex 10.6: Population data Forest Reserves
- Annex 10.7: ESMS Screening&Clearance template
- Annex 10.8: Types of activities included in the Community Forestry Management Plans

ESMS Questionnaire & Screening Report & Clearance - **for field projects**

Project Data

The fields below are completed by the project proponent

Project Title:	Resilience enhancement of ecosystems and communities in the climate-vulnerable Highlands of Sri Lanka: the Amban ganga catchment and command area		
Project proponent:	Shamen Vidanage		
Executing agency:	Ministry of Mahaweli Development and Environment		
Funding agency:	GCF		
Country:	Sri Lanka	Contract value (add currency):	USD 47,700,000.00
Start date and duration:	01,01, 2019, 06Years	Amount in CHF:	CHF 48,181,818.00
Has a safeguard screening or ESIA been done before?	<input type="checkbox"/> yes <input type="checkbox"/> no	Provide details, if yes:	

Step 1: ESMS Questionnaire

The fields below are completed by the project proponent; the questionnaire is presented in Annex A

	Name and function of individual representing project proponent	Date
ESMS Questionnaire completed by:	Padmi Meegoda / Shamen Vidanage	12.06.2018
ESMS Screening is <i>(tick one of the three options)</i>	<p>1. <input checked="" type="checkbox"/> required because the project budget is ≥ CHF 500,000</p> <p>2. <input type="checkbox"/> required – despite being a small project (< CHF 500,000) the project proponent has identified risk issues when completing the ESMS Questionnaire</p> <p>3. <input type="checkbox"/> not required because project budget is < CHF 500,000 and no environmental or social risks have been identified when completing the ESMS Questionnaire (or only low risks that are fully addressed by the project activities); this is confirmed below by naming the staff member who carried out the self-screening.</p>	

The fields below are only applicable when option 3 is ticked above

	Name and function of individual representing project proponent	Risk category
Self-screening of ESMS risks completed by:		<input type="checkbox"/> low risk

Step 2: ESMS Screening

To be completed by IUCN ESMS reviewer(s); only needed when the options 1 or 2 above (marked in red) are ticked

	Name	IUCN unit and function	Date
IUCN ESMS Reviewer:	Linda Klare	ESMS Coordinator, HQ	18.3.2019
	James Dalton	Director, a.i. Global Water Programme	22.6.2018
	Title		Date
Documents submitted at Screening stage:	Project Proposal		08.01.2019
	Feasibility Draft GCF SL IUCN		9.1.2019

ESMS Screening Report²²

Risk category:

☐ low risk

☒ moderate risk

☐ high risk

Rationale: Summarize findings from the questionnaire and explain the rationale of risk categorization

See the following sections of the questionnaire for details:

Section A for findings about the stakeholder engagement process,

Section B on the 4 Standards,

Section C on other E&S impacts and

Section D on risk issues related to Climate change

The aim of the project is to generate resilient livelihoods by increasing capacity to adapt to climate induced change in critical upstream and downstream rural communities in Sri Lanka including protection of the ecosystem service flows that connect them. The project includes activities around water management and land restoration targeting agricultural areas, plantations and forest reserves (component 1), promotion of sustainable/green value chains and payment for ecosystem services (component 2) and strengthening institutional capacity for land management (component 3).

Under component 1 the project will implement vegetation management to control run-off and enhance infiltration along roads, rehabilitate village ponds and tanks for water harvesting and irrigation networks. It will further promote the restoration of degraded forests within protected areas and forest fragments and the planting of trees outside forests for improved sustainability and livelihoods. It will promote cropping intensity of rice production by increasing efficiency of irrigation and fertilizer management and through the use of integrated pest control. To improve food security, it will promote sustainable intensification of smallholder production; and promote the restoration and sustainable intensification of plantations by promoting low-impact techniques such as mulching and organic fertilizer, agroforestry practices and improving crop diversity.

Under component 2 the project will strengthen the capacity of farmers and collective groups as enterprises through advice and training in areas such as agro-processing, product development, branding, certification. Component 3 is ESMS relevant in the sense that it aims to promote inclusive and evidence-based land –use planning processes.

The project is expected to have highly positive environmental impacts as restoration, reforestation and sustainable land management practices are expected to improve the biodiversity status of the respective land use systems and improve water infiltration and other ecosystem services. Also social impacts are expected to be highly positive as it will improve ecosystem services relevant for local communities including water, enhance food security and provide other tangible economic benefits for different land owners and users.

However, some risk issues have been identified when completing the ESMS questionnaire. A complete list of identified impacts is presented in Annex A, main issues include:

- Potential need for short-term restrictions on the use of natural resources which might trigger livelihood impacts of resource users;
- Risks that impacts from conservation actions fall disproportionately on disadvantaged or vulnerable individuals or groups and / or that such groups might be disadvantaged or discriminated with regards to access to project benefits;
- Introduction of climate proofed tree and crop species might require the use of non-native species and associated risks of species developing invasive characteristics;
- Potential minor local environmental impacts related to agro-processing;
- Potential minor risks of damaging hidden/buried cultural heritage resources during excavations.

It is not expected that any of the identified risks would likely cause significant adverse environmental and/or social impacts that severely affects sensitive receptors (biodiversity, humans etc.), that were diverse, unprecedented, irreversible or permanent. Most of the risk issues are preliminarily judged as low

²² For projects below CHF 500,000 where no risks have been identified the screening report is completed by the project proponent - only the section on the rationale but the sections below that as low risk projects don't require assessments. The columns in the ESMS Questionnaire reserved for the IUCN ESMS reviewer will remain blank.

	<p>risks, very few moderate and it is expected that they can be readily addressed through good management practices and mitigation measures.</p> <p>Because priority areas for interventions and further details of project activities will be defined only during the implementation phase of the project, e.g. on the basis of sub-basin planning process, an Environmental and Social Management Framework (ESMF) is required. The ESMF delineates the process of assessing risks and identifying suitable mitigation measures, spells out requirements for consultation and disclosure, establishes implementation arrangements and identifies financial resources needed for ESMF implementation. The ESMF should further provide detailed guidance for ensuring compliance with the ESMS Standards. As such it will include elements of an Access Restrictions Mitigation Process Framework and guidance on assessment needs for risk related to the introduction of species.</p>	
Required assessments or tools	<input type="checkbox"/> Full Environmental and Social Impact Assessment (Full ESIA) <input type="checkbox"/> Partial Environmental and Social Impact Assessment (Partial ESIA) <input type="checkbox"/> Social Impact Assessment (SIA) <input type="checkbox"/> Environmental and Social Management Plan (ESMP) <input checked="" type="checkbox"/> Environmental and Social Management Framework (ESMF) <input type="checkbox"/> Other:	
Required actions for gender mainstreaming	<p>The existing Gender Analysis should be strengthened through consultation at the site level programmed as integral part of the social baseline analysis (see ESMF for further guidance). A Gender Action Plan has been developed. The results of the site-level consultations will further inform and expand the Action Plan.</p>	
ESMS Standards	Trigger	Required tools or plans
Involuntary Resettlement and Access Restrictions (see section B1 for details)	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> TBD	<input type="checkbox"/> Resettlement Action Plan <input type="checkbox"/> Resettlement Policy Framework <input type="checkbox"/> Action Plan to Mitigate Impacts from Access Restriction <input checked="" type="checkbox"/> Access Restrictions Mitigation Process Framework
Indigenous Peoples (see section B2 for details)	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> TBD	<input type="checkbox"/> Indigenous People Plan <input type="checkbox"/> Indigenous People Process Framework
Cultural Heritage (see section B3 for details)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> TBD	<input checked="" type="checkbox"/> Chance Find Procedures
Biodiversity Conservation and Sustainable Use Natural Resources (see section B4 for details)	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> TBD	<input type="checkbox"/> Pest Management Plan

Step 3: ESMS Clearance of Project Proposal

The fields below are completed by the IUCN ESMS reviewer at Clearance stage

	Name	Organization and function	Date
IUCN ESMS Reviewer Clearance Stage:	Linda Klare	IUCN, ESMS Coordinator	
	Title		Date
Documents submitted at Clearance Stage:	FP-IUCN-GCF-Sri Lanka -Funding Proposal		21.05.2019
	FP-IUCN-GCF-Sri Lanka -Annexure 5-ESM Framework		21.05.2019
	FP-GCF-IUCN-MMD&E-ICRAF-Knuckles -Annexure 2-Feasibility Study		26.04.2019
	FP-GCF-IUCN-MMD&E-ICRAF-Knuckles -Annexure 9-Stakeholder consultations-Final Version		26.04.2019
	FP-GCF-IUCN-MMD&E-ICRAF-Knuckles -Annexure 6-Gender Assessment and Action Plan-Final Version		26.04.2019

Have findings from ESIA triggered any changes (e.g. risk level or Standards triggered)	n/a		
CLEARANCE DECISION			
<input checked="" type="checkbox"/> Cleared	<i>The conclusions are positive and the project proposal meets all requirements with regards to avoiding or reducing environmental and social risks: the proposal is accepted.</i>		
<input type="checkbox"/> Conditionally cleared	<i>The conclusions call for improving one or more ESMS activities and/or for important re-formulation of some mitigation measures. This will lead to the proposal being conditionally cleared; the reviewer will provide guidance on the way forward.</i>		
<input type="checkbox"/> Clearance rejected	<i>Essential ESMS provisions have not been complied with, critical mitigation measures have not been incorporated or don't seem feasible or sufficient for avoiding or minimizing impacts; or significant data gaps still prevail and additional field assessments are required.</i>		
Rationale – Explain clearance decision (why cleared, conditionally cleared or rejected)	The project has been screened on environmental and social risks which resulted in the classification of the project as a moderate risk project due to the identification of a small number of risks and the fact that the final selection of sites and respective activities will only be decided during project implementation, e.g. on the basis of the sub-basin planning process. This has triggered the need to develop an Environmental and Social Management Framework (ESMF). The ESMF has been reviewed and considered appropriate for addressing the identified risks.		
Clearance conditions (when conditionally cleared, e.g. tasks to be completed during inception phase):	n/a		
Approval ESMS Clearance			
Name	Function	Date	Signature
Sheila Aggarwal-Khan	Director IUCN GEF/GCF		

Annex A: ESMS Questionnaire

Project summary

To be completed by project proponent - Please summarise the project briefly using no more than one page. The summary can be in form of bullet points. Include goal/objectives, expected results/outcomes, outputs (project deliverables) and main activities.

The project “Resilience enhancement of ecosystems and communities in the climate-vulnerable Highlands of Sri Lanka: the Amban ganga catchment and command area” expected to promote a transformational change in meeting the climatic challenges at microscale in a way that is replicated and up scalable. As such the project aims to enhance resilience and adaptive capacity of climate vulnerable ecosystems and populations and the public investment in the Amban Ganga (river) catchment and its commands area, through forest landscape restoration, improved and consistent water flow regime, reduce flood peaks and minimize dry spells and promote climate smart agriculture, value addition, access to premium markets, credit and insurance etc.

The project interventions proposed consisted of:

1. Sub-basin level governance, PES, information and adaptive planning capacity of the stakeholders;
2. Increased productivity (cropping intensity and food security) and resilience of upstream farmers, plantations and rural communities with concomitant environmental protection;
3. Greater value generated and captured by rural people and businesses through green growth and value chain upgrading; and
4. Increased cropping intensity, food security and resilience of downstream farmers

The theory of change (Fig. 1.) in the project is associated with the project is aiming at three GCF impact areas, namely, a) Increased resilience of the most vulnerable communities; b) Increased resilience of ecosystems and ecosystem services; and c) Increased resilience of health, well-being and water and food security.

The project will work both upstream and downstream vulnerable groups to meet the challenges of climate change using one overarching outcome, namely, the “Resilient livelihoods through capacity to adapt to climate induced change in critical upstream and downstream rural communities, including the protection of the ecosystem service flows that connect them.” The upstream and downstream activities are linked by two intermediate results. In the upstream the project will focus on “Sustainable land and water use in watersheds generating livelihood benefits locally and protection of water resources to downstream users with adaptive capacity at sub-basin and local scales to continue innovating to climate change.” On the other hand the downstream focus would be towards “Stable and productive water and land use relying on the irrigation and best practices to generate resilient livelihood benefits together with adaptive capacity to innovate and respond to climate change.”

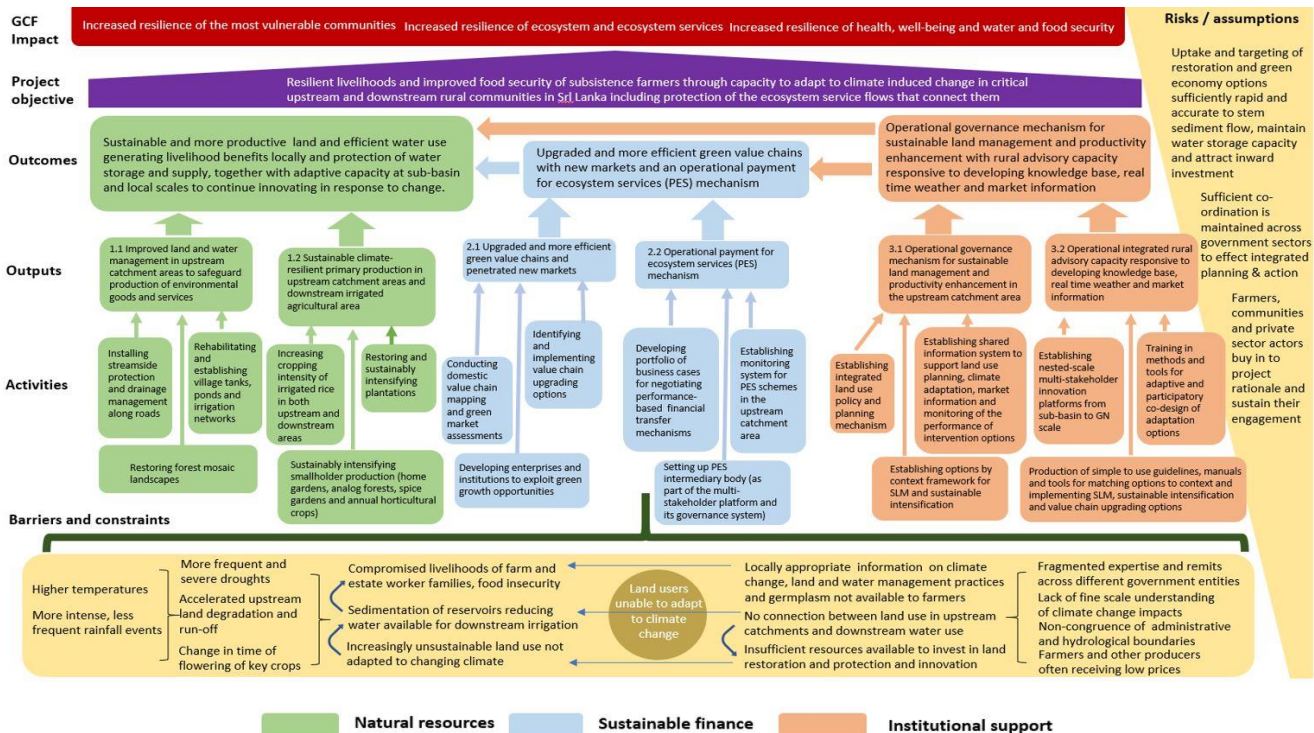


Figure 1: Theory of change

A. Process of stakeholder engagement during project conceptualization

1. **Stakeholder Analysis:** Has a project stakeholder analysis been carried out and documented – identifying not only stakeholders' interests in the project and their influence but also whether they might be affected by the project? Does the stakeholder analysis differentiate between women and men, where relevant and feasible? It is recommended to add the stakeholder analysis to the documents submitted at screening stage.

To be completed by project proponent

Yes, all key stakeholders have been consulted in the project designing phase. GCF team and the local counterparts visited the field and engage communities. Govt. agencies were consulted in Kandy and in Colombo several times to obtain inputs to the project as well as to validate the design elements.

IUCN ESMS Reviewer

An explicit analysis of stakeholders and their interest in the project, how they might influence the project and in which way they might be impacted by the project (positively or negatively) is still needed; some elements are provided in the Stakeholder Engagement Plan.

2. **Stakeholder Consultation:** Has information about the project – objectives, activities, sites and potential risks – been shared with stakeholders? Have consultations been held with relevant groups to discuss the project concept and risks? Provide details about the groups involved. Were women involved or consulted separately? Did the consultations involve stakeholders that might be negatively affected by the project? Were consultations conducted in a culturally appropriate way? Have results of the consultations been documented? Were results used to inform project design?

To be completed by project proponent

Yes, during the field visit to the area, a community consultation was done with community teams as well as individually. The changing climate and the water supply and difficulties in farming around the year had been discussed. Also, the forest governance issues and practical issues related to project implementation were investigated with community groups. Discussions have been cordial providing adequate space for everyone to contribute. No significant cultural barriers for consultations in Sri Lanka, so not relevant.

IUCN ESMS Reviewer

The stakeholder engagement plan provides a brief description of the stakeholder consultation process carried out during the project design phase. The documentation could be strengthened by providing quantitative data such as: number of meetings held, number of peoples consulted, disaggregated by gender and other social groups where relevant etc., main issues discussed and how this has been taken into account in project design. It is also not clear whether the discussion included risks of project activities. This should be explicit made up for during community consultations undertaken in the inception phase.

B. Potential impacts related to ESMS standards			
B1: Standard on Involuntary Resettlement and Access Restrictions			
	Project proponent		IUCN ESMS Reviewer
	Yes, no, n/a, TBD	Answer question, provide further detail where relevant	Comments, additional considerations
1. Will the project involve resettling peoples or communities? if yes, answer a-b below	No	Shaded cells do not need to be filled out	
a. Describe the project activities that require resettlement?			
b. Have alternative project design options for avoiding resettlement been rigorously considered?			
2. Does the project include activities that might restrict peoples' access to land or natural resources? Please consider the following activities: establishing new protected areas (PA) or extending the area of an existing PA, improving enforcement of PA regulations (e.g. training guards, providing monitoring and/or enforcement equipment, providing training/tools for improving management effectiveness), constructing physical barriers that prevent people accessing certain places; changing how specific natural resources are managed to a management system that is more restrictive ²³ ; if yes, answer a-h below	Yes		
Answer only if you answered yes to item 2			
a. Describe project activities that involve restrictions and the respective resources to be restricted.		Reforestation of degraded lands in catchment areas will need restricting the access to those areas which are used by local communities for cattle grazing, firewood and other needs but driving deforestation, until the vegetation is stable. The objective is to adopt the restrictions through community-based approaches where, community will be engaged to understand the value of restoration and how enhanced ecosystem services benefit them and increase resilience; communities will be involved in planting/reforestation and maintenance. Communities will also be part of the monitoring and advocacy, thereby observing the changes to the ecosystem and its benefits. This should not trigger any new plans and will be addressed in the ESMP.	The standard is triggered as there is a risk that the project might trigger involuntary restrictions on land use and access to natural resources that cause a community or groups within a community to lose access to resource usage where they have traditional or customary tenure, or recognizable usage rights. While the long-term impacts of sustainable managed areas might be positive, the short-term impact might be significant and need to be mitigated or compensated by the project.
b. Has the legal framework regulating land tenure and access to natural resource been analysed, broken down by different groups including women and ethnic/indigenous groups? Are customary rights for land and natural resources recognized? Are there		Most of the degraded lands belong to the Government or plantations, therefore, controlled by the legal environment regulating the ownership. Hence, the rights to the land uses also belong to the owners. However, traditionally the communities adjacent to those lands (that are partly degraded) have been using them for their benefits, mostly by harvesting	The baseline study should assess the current use and dependency of communities on natural resources as well as the tenure system including traditional or customary tenure or recognizable usage rights.

²³ Note that the Standard is not triggered if changes of natural resources management systems and respective restrictions are based on communities' or users' own and voluntary decisions – e.g. in order to ensure long-term use of these resources.

any groups at the project site whose rights are not legally recognized?		timber, forest products etc. Baseline data will be developed during the project implementation. Yes, the laws recognize the traditional rights. However, it is not applicable in this project	
c. Have the implications of access restrictions on people's livelihoods been analysed? Explain who might be affected and describe impacts. Distinguish social groups (incl. vulnerable groups, indigenous peoples) and men and women.		Access restriction will also bring in two topics, the carrying capacity of the lands and the extent the communities get restricted harvest and enjoy the benefits, beyond the anticipated benefits due to restriction. The restriction also provide a platform to talk about issues and benefits. In that regard, restriction is an essential part of the project success and will not fall into right violation domain.	A Process Framework or a document of similar nature needs to be established prior to finalizing project design that describes the requirements for assessing the social impacts of such restrictions (disaggregated by gender, ethnic, age and users).
d. Have strategies been considered to avoid restrictions by making changes to project design?			If livelihood impacts from restrictions are identified when implementing the Process Framework, alternative project design and strategies for minimising risks should be considered.
e. If it is not possible to avoid restrictions, will the project include measures to minimize or compensate for impacts from loss/ restrictions of access? Please describe the measures.		Yes, the project will educate the users the need for restriction, allow sustainable uses, in agreement with owners and also look for alternative ways to provide for the land uses prior to the project.	The project will promote sustainable intensification of smallholder production as well as the development of green enterprises and associated value chains which is expected to increase income opportunities and employment. These measures can act as mitigation measures provided they are targeted and suitable for the groups affected by the restrictions. The Process Framework should describe the process of assessing the effectiveness of such measures and the development of other suitable mitigation measures, when relevant, in consultation with the affected groups.
f. Are eligibility criteria established that define who is entitled to benefits or compensation? Are they transparent and fair (e.g. in proportion to their losses and to their needs if they are poor and vulnerable)?			To be defined in the Process Framework
g. Are measures culturally appropriate and gender inclusive? Does the geographical scale of the measures match the scale of the restrictions (e.g. will measures be accessible to all groups affected by the restrictions)?			Developing mitigation measures together with affected groups will ensure their suitability. The requirements for this process (who will be included etc.) should be defined in the Process Framework.
h. Has a process been implemented or started to obtain free, prior and informed consent (FPIC) from groups that are likely to be negatively affected by restrictions? Please describe the process (who has been consulted and how).		Not yet, however the FPIC will be automatically used as part of the project before restrictions and during the project while highlighting the benefits of restrictions.	The Process Framework will establish the requirements for FPIC
3. Will/might the project require the acquisition of land for project purposes (e.g. infrastructure development)? If yes, describe the current legal status of the land (private/ public, occupied/unoccupied).			The project includes rehabilitation / development of infrastructure elements (e.g. village level ponds and irrigation channels, etc.). When planning these activities and selecting the respective sites, it will need to be ensured that appropriate agreements with the respective land owners and any management entities will be obtained.

Conclusion of ESMS Reviewer on the Standard on Involuntary Resettlement and Access Restrictions

Standard triggered? Yes / No / TBD What are the main risk issues? If possible indicate their probability (unlikely, likely, almost certain) and impact (minor, moderate, major).	Yes	The standard is triggered as there is a risk that the project might require restrictions on land use and access to natural resources that cause a community or groups within a community to lose access to resource usage where they have traditional or customary tenure, or recognizable usage rights. The need for restrictions is not confirmed yet, but the probability is judged as likely. Because of this and in view of the project's intention to promote forms of co-management (shared management between communities and the respective government agency) of the targeted restoration areas, it is considered not appropriate to establish a full Process Framework; instead elements of Process Framework should be developed to be incorporated into the overarching ESMF (in the following referred to as abbreviated Process Framework).	
Are assessments required to better understand the impacts and identify mitigation measures? What specific topics are to be assessed?		Yes, an assessment of social impacts is required. The study should include an analysis of current use of resources and the impact of such restrictions and should be incorporated into the abbreviated Process Framework	
Have measures for avoiding impacts already been considered? Are they sufficient?		See above	
B2: Standard on Indigenous Peoples²⁴			
	Project proponent	IUCN ESMS Reviewer	
	<i>Yes, no, n/a, TBD</i>	<i>Answer question, provide further detail where relevant</i>	<i>Comments, additional considerations</i>
1. Is the project site in an area inhabited by or important to indigenous peoples, tribal peoples or other traditional peoples? If yes, answer questions a-j	No		
2. Even if indigenous groups are not found at the project sites, is there still a risk that the project could affect the rights and livelihood of indigenous peoples? If yes, answer questions a-j	No		As confirmed by Shamen Vidanage and respective map showing the location of settlements of Vedda people there is no presence of Vedda people in the project's area of influence.
Answer only if you answered yes to 1 or 2 above.			
a. Name the groups; distinguish, if applicable, the geographical areas of their presence (including the areas of resource use) and how these relate to the project's area of influence.			
b. What are the key characteristics that qualify the identified groups as indigenous groups? Do these groups identify themselves as indigenous?			
c. How does the host country's Government refer to these groups (e.g., indigenous peoples, minorities, tribes etc.)?			
d. Is there a risk that the project affects their livelihood through access restrictions ? While this is covered under the Standard on Involuntary Resettlement and Access Restrictions, if yes, please specify the indigenous groups affected.			

²⁴ The coverage of indigenous peoples includes: (i) peoples who identify themselves as "indigenous" in strict sense; (ii) tribal peoples whose social, cultural, and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations; and (iii) traditional peoples not necessarily called indigenous or tribal but who share the same characteristics of social, cultural, and economic conditions that distinguish them from other sections of the national community, whose status is regulated wholly or partially by their own customs or traditions, and whose livelihoods are closely connected to ecosystems and their goods and services

e. Is there a risk that the project affects their livelihood in some other means? E.g. by affecting their self-determination, cultural identity, values and practices, social cohesion, or by providing inequitable benefits?			
f. Does the project intend to promote the use of indigenous peoples' traditional knowledge?			
g. Are any indigenous groups living in voluntary isolation? If yes, how does the project respect their rights and avoid any negative impacts?			
h. Explain whether and how legitimate representatives of indigenous groups have been consulted to discuss the project and better understand potential impacts upon them?			
i. Has a process been started or implemented to achieve their free, prior and informed consent (FPIC) to activities that might affect them (positively or negatively)?			
j. Explain whether opportunities are considered to provide benefits for indigenous peoples? If yes, is it ensured that this is done in a way agreed with them and culturally appropriate and gender inclusive?			

Conclusion of ESMS Reviewer on the Standard on Indigenous Peoples

Standard triggered? Yes / No / TBD What are the main risk issues? If possible indicate their probability (unlikely, likely, almost certain) and impact (minor, moderate, major).	No	Not triggered as the field consultations carried out during the design phase did not confirm the presence of indigenous peoples in the project site. However, an additional examination is planned during the social baseline study and associated community consultations to analyse whether there aren't any ethnic groups present in the sites that meet the broader IUCN definition of indigenous peoples.
Are assessments required to better understand the impacts and identify mitigation measures? What specific topics are to be assessed?		See above; to be included in the ESMF
Have measures for avoiding impacts already been considered? Are they sufficient?		n/a

B3: Standard on Cultural Heritage²⁵

	Project proponent		IUCN ESMS Reviewer
	Yes, no, n/a, TBD	Answer question, provide further detail where relevant	Comments, additional considerations
1. Is the project located in or near a site officially designated or proposed as a cultural heritage site (e.g., UNESCO World Cultural or Mixed Heritage Sites, or	Yes	The project is downstream of the Knuckles conservation world heritage area as a part of the Peak Wilderness Protected Area that comprised of Horton Plains National Park and Knuckles	

²⁵ Cultural heritage is defined as tangible or intangible, movable or immovable cultural resource or site with paleontological, archaeological, historical, cultural, artistic, religious, spiritual or symbolic value for a nation, people or community, or natural feature or resource with cultural, religious, spiritual or symbolic significance for a nation, people or community associated with that feature.

Cultural Landscapes) or a nationally designated site for cultural heritage protection? if yes, answer a-c below		Conservation Forest. More than half of Sri Lanka's endemic vertebrates, half of the country's endemic flowering plants and more than 34% of its endemic trees, shrubs, and herbs are restricted to these diverse montane rain forests and adjoining grassland areas. The contribution or impact by the project is positive in this scenario as the project by improving the value of the conservation forests.	
2. Does the project site include important cultural resources such as burial sites, buildings or monuments of archaeological, historical, artistic, religious, spiritual or symbolic value? if yes, answer a-c below	No		
3. Does the project area site include any natural features or resources that are of cultural, spiritual, or symbolic significance (such as sacred natural sites, ceremonial areas, or sacred species)? if yes, answer a-c below	No	There are temples and other cultural sites used by people for their day to day life.	
a. Will the project involve development of infrastructure (e.g. roads, dams, slope restoration, landslides stabilisation) or construction of buildings (e.g. visitor centre, watch tower)?	Yes	Small scale soil and water conservation measures will be promoted with close supervision of relevant agencies to avoid any un intended on-site and off-site consequences	As the sites will only be known during project implementation, appropriate guidance on siting and impact assessment will need to be provided.
b. Will the project involve excavation or movement of earth, flooding or physical environmental changes (e.g., as part of ecosystem restoration)?	Yes	As part of the ecosystem restoration and to improve rainwater harvesting (ponds and dykes) some excavations and movement of earth will be done. However, in each situation, there will be guidelines to follow and adequate supervision assured through the project	Same as above
c. Is there a risk that physical interventions described in items a. and b. might affect known or unknown (buried) cultural resources?	No		Despite being small-scale interventions, Chance Find procedures (template available in the <u>Standard</u>) should be at hand and communicated to the entities executing the work to prevent damage on resources that are not known. In addition, the ESMF should will establish guidance for infrastructure development guidance to experience will be needed during the inception phase to identify and mitigate potential risks for issues
4. Will the project restrict local users' access to cultural resources or natural features/sites with cultural, spiritual or symbolic significance?	No		
5. Is there a risk that project activities might affect cultural values, norms or practices of local communities?	N/A		As some activities and practices have not been defined yet in detail, it is not possible to assess whether there are risks of them not being entirely compatible with cultural norms and values. In any case, it is understood that options will not be prescriptive, but rather offer land users a menu of species and practices appropriate for their conditions. The ESMF should provide guidance on community consultation to assess such risks and how to mitigate such risks.

6. Will the project promote the use of (or development of economic benefits) from cultural resources or natural features/sites with cultural significance?	Yes	During the eco-tourism activities and promotion of garden products such as spice, tea etc. the venues with natural features will be used as part of the tourism itinerary with adequate caution	This question inquires about using cultural resources to which communities have legal (including customary) rights, e.g. arts, folklore, traditional knowledge etc. But this does not seem to be the case for the proposed project activities.
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Conclusion of ESMS Reviewer on the Standard on Cultural Heritage

Standard triggered? Yes / No / TBD What are the main risk issues? If possible indicate their probability (unlikely, likely, almost certain) and impact (minor, moderate, major).	Yes	<p>The standard is triggered as the project includes selected infrastructure work. As the sites will only be known during project implementation, appropriate guidance on siting and impact assessment will need to be provided as part of the ESMF. Given the small-scale nature of these works, it is considered not very likely that hidden resources are found. Nevertheless, the chance find procedures should be made available to all entities executing the works as a safeguard.</p> <p>While it is not considered very likely either that project activities might affect cultural values, norms or practices of local communities, the ESMF should provide guidance how to assess and avoid such risks when designing agricultural practices and value chain activities.</p>	
Are assessments required to better understand the impacts and identify mitigation measures? What specific topics are to be assessed?	n/a		
Have measures for avoiding impacts already been considered? Are they sufficient?	n/a		

B4: Standard on Biodiversity Conservation and Sustainable Use of Natural Resources

	Project proponent		IUCN ESMS Reviewer
	Yes, no, n/a, TBD	Answer question, provide further detail where relevant	Comments, additional considerations
1. Is the project located in or near areas legally protected or officially proposed for protection including reserves according to IUCN Protected Area Management Categories I - VI, UNESCO Natural World Heritage Sites, UNESCO Biosphere Reserves, Ramsar Convention on Wetlands? If yes, provide details on the protection status and answer questions a-c	Yes	Knuckles conservation forest, which is part of the Central Highlands World Heritage Serial property.	During the inception phase, review of any reserves including Ramsar sites will be assessed and risk assessed and mitigated using the ESMF.
2. Is the project located in or near to areas recognised for their high biodiversity value and protected as such by indigenous peoples or other local users? If yes, provide details and answer questions a-c	Yes	The project is downstream of the Peak Wilderness Protected Area that comprised of Horton Plains National Park and Knuckles Conservation Forest. More than half of Sri Lanka's endemic vertebrates, half of the country's endemic flowering plants and more than 34% of its endemic trees, shrubs, and herbs are restricted to these diverse montane rain forests and adjoining grassland areas.	Surface water flow and groundwater recharge will need to be considered during the inception phase.
3. Is the project located in/near to areas which are not covered in existing protection systems but identified by	Yes	Project covers environmental protection area (EPA) of knuckles range as declared by the National Environment act.	

authoritative sources for their high biodiversity value ²⁶ ? If yes, provide details and answer questions a-c			
Answer only if you answered yes to items 1, 2, or 3 above.			
a. If the project aims to establish or expand a protected area (PA) or to change its management regime, is there a risk of negative impacts on natural resources in areas outside the PA?	No		
b. If the project plans any infrastructure in a PA or an area of high biodiversity value (e.g., watch tower, tourism facilities, access roads, small scale water infrastructure), is there a risk of negative impacts on biodiversity (e.g. on threatened species) during its construction and use?	No		
c. If the project promotes ecotourism, is there a risk of negative impacts on biodiversity (e.g., due to waste disposal, disturbance, slope erosion etc.)?	Yes	Risk on waste management and the pressure on over use of sites do exist. The project ESMP will address those issues and implement mitigation measures on waste management, education and improved governance to minimize the pressure on natural resource base.	Because some of the activities are not yet defined in detail, the ESMF should provide generic guidance how to minimize risks from ecotourism.
4. If the project includes plantation development, is there a risk of affecting natural forest areas or other areas of high biodiversity value?	No	These activities will improve the productivity of the degraded areas of tea and other plantations in the project area.	The ESMF needs to provide specific guidance on plantation development, including the provision that by no means natural forest and other areas of high biodiversity value are converted to plantations.
5. Will the project include introduction or translocation of species (e.g. for erosion control, dune stabilisation or reforestation) or include production of living natural resources? If yes, provide details and answer questions a-b	Yes	The project will involve in reforestation and green cover enhancements. However, the project will promote species diversity and not impact the existing biodiversity. The educational and awareness components of the project will highlight how climate induce temperature and rainfall intensities will change the species diversity etc., thereby, helping the beneficiaries from the action to better manage their own biodiversity and benefits during changing climates.	
a. Does this project involve non-native species or risk introducing non-native species by accident?	No		Not agreed. Under activity 1.2.2 (Sustainable intensification of smallholder production) the project will strengthen farmers' access to best-available quality germplasm of priority climate-resilient species, varieties and cultivars that match local biophysical and soil conditions; this seems to include options of non-native species.

²⁶ Areas important to threatened species according to IUCN Red List of Threatened Species, important to endemic or restricted-range species or to migratory and congregatory species; areas representing key evolutionary processes, providing connectivity with other critical habitats or key ecosystem services; highly threatened and/or unique ecosystems (e.g. to be determined in future by the evolving IUCN Red List of Ecosystems); areas identified as Key Biodiversity Areas (KBA) and subsets such as important Bird and Biodiversity Areas (IBAs), important Plant Areas (IPAs), important Sites for Freshwater Biodiversity or Alliance for Zero Extinction (AZE) sites.

b. If a.is yes, is there a risk that these species might develop invasive behaviour?	n/a		Not agreed. Depending on the species to be introduced there might be a risk of developing invasive characteristics. To manage such risks the IUCN Guidelines for Reintroductions and Other Conservation Translocations ²⁷ needs to be adhered to.
6. Is there a risk that the project might create other pathways for spreading invasive species (e.g. through creation of corridors, import of commodities, tourism or movement of boats)?	No	The invasive species in the area are known and the project will help mitigate IAS related challenge. However, the anticipated temperature changes may change IAS behaviour too and the project will alert the beneficiaries on the same fact.	
7. Is there a risk that the project negatively affects water flows through extraction, diversion or containment of surface or ground water (e.g., through dams, reservoirs, canals, levees, river basin developments, groundwater extraction) or through other activities?	No	The aim of the project is to manage the water cycle in a way that the water shortages in the upstream catchment and downstream command areas will be met (expected CC changes) as adaptive measures. Soil and water conservation measures in the project will reduce flood peaks and awareness and education measures will help beneficiaries to better understand the relationship between surface modifications related actions (cover, surface roughness and impact of paving and degradation, setting fire etc.) and water flow and hydrologic patterns.	It is understood that the project will use due diligence when planning water management interventions. For example for planning rainwater harvesting the project will use a GIS-based planning tool to ensure to guide localization of appropriate sites by taking into account relevant biophysical and socio-economic parameters.
8. Is there a risk that the project negatively affects water dynamics, river connectivity or the hydrological cycle in ways other than direct changes of water flows (e.g., by affecting water infiltration, aquifer recharge or sedimentation)? Also consider reforestation projects as originators of such impacts.	No	Again, the project will have positive benefits as the project enhances rainwater harvesting, ground water recharge, minimize erosion and surface runoff etc.	While increasing water harvesting overall is expected to be environmental beneficial, there is a certain risk that this is associated with lower water flows into rivers or water infiltration / aquifer recharge. It is recognized that the project includes ground water re-charge monitoring; nevertheless, this aspect will require review during the detailed planning of the interventions.
9. Is there a risk that the project affects water quality of surface or groundwater (e.g., contamination, increase of salinity) through irrigation/ agricultural run-off, water extraction practices, influence of livestock or other activities?	No	The project will monitor the water quality and quantity to estimate ecosystem benefits by the project. Hence the risk reduction will be reported, and project will not enhance risks	
10. If the project promotes the use of resources from natural habitats (such as timber or non-timber forest products), is there a risk that this might lead to unsustainable use?	No		Promoting the use of resources from natural habitat often entails risks of overuse. While it is acknowledged that it is the project's intention to promote sustainable use, it will be critical that the project provides a mechanism for monitoring the use, in particular in the buffer zones designated for ensuring provision of adjacent communities with forest products.

²⁷ IUCN/Species Survival Commission, 2013, *Guidelines for Reintroductions and Other Conservation Translocations*. Version 1.0, available at <https://portals.iucn.org/library/efiles/edocs/2013-009.pdf>

11. Does the project intend to use pesticides, fungicides or herbicides (biocides)? If yes, provide details and answer questions a-b	No	Project will not contribute to increase such uses already there in the project areas. On the contrary, climate smart agriculture systems proposed and promoted in the project is expected to reduce the agrichemical use.	As part of Activity 1.2.1 (Increasing cropping intensity of irrigated rice in both upstream and downstream areas) integrated pest control will be promoted. It is understood that the project will not fund the actual application of pesticides or chemicals, but will influence existing pesticide application by promoting the use of real time weather and pest incidence data in order to lead to a reduction of quantities of biocide applied by farmers and plantations.
a. Have alternatives to the use of biocides been rigorously considered or tested?			
b. Has a pest management plan been established?			
12. Is there a risk that the project unintendedly causes adverse knock-on effects on biodiversity in a wider area of influence (landscape/ watershed, regional or global levels) including transboundary impacts?	No	On the contrary, the project will do a positive contribution to the landscape, catchments, watersheds included in the project area.	
13. Is there a risk that consequential developments triggered by the project will have adverse impacts on biodiversity? Is there a risk of adverse cumulative impacts generated together with other known or planned projects in the sites?	No		

Conclusion of ESMS Reviewer on the Standard on Biodiversity Conservation and Sustainable Use of Natural Resources

Standard triggered? Yes / No / TBD What are the main risk issues? If possible indicate their probability (unlikely, likely, almost certain) and impact (minor, moderate, major).	Yes	The Standard is triggered given the risks identified above (implications on the water cycle, overuse of natural resources, potential introduction of non-native species) – overall being considered as relatively low, though. The risks will need to be assessed once detailed project activities and sites are known. Relevant provisions will be delineated in the ESMF.
Are assessments required to better understand the impacts and identify mitigation measures? What specific topics are to be assessed?	See above	
Have measures for avoiding impacts already been considered? Are they sufficient?	n/a at this stage	

C. Other social or environmental impacts

C1: Other social impacts

	Project proponent		IUCN ESMS Reviewer
	Yes, no, n/a, TBD	Answer question, provide further detail where relevant	Comments, additional considerations
1. Is there a risk that the project negatively affects human rights (e.g., right to self-determination, to education, to health, or cultural rights) – other than issues related to indigenous peoples which are dealt with in the	No		This should be confirmed during inception phase; social baseline should describe stratification according to caste and

respective standard? Differentiate between women and men, where applicable.			class, as well as gender and ethnicity and whether this causes any potential for discrimination.
2. Will the project influence land tenure arrangements or community-based property rights to land or resources and is there a risk that this might adversely affect peoples' rights and livelihoods? Consider in particular impacts on transhumant pastoralist, vulnerable groups, different gender etc.?	No	The project will not change land tenure although there will be partnerships between state agencies (land owner) and communities on land uses and benefit sharing. Nevertheless the potential impacts for vulnerability changes of a particular population group or gender related to project area is insignificant.	When developing forest or land co-management arrangements, it will need to be ensured that vulnerable groups resources will not be disadvantaged or discriminated.
3. Is there a risk that the project creates or aggravates inequalities between women and men or adversely impacts the situation or livelihood conditions of women or girls?	No	Project will contribute to enhance the equality amongst men and women. Also, the project will have gender specific activities and climate change and water availability has gender elements	The social baseline analysis undertaken during the project's inception phase should provide for enhancing the existing gender analysis by local gender data. Associated consultations with women and women groups should seek opportunities for complementing the gender action plan (GAP).
4. Explain whether the project use opportunities to secure and, when appropriate, enhance the economic, social and environmental benefits to women?		Interventions on home gardens, market linkages and value-added products, improved access to water sources and affordable renewable energy will benefit women more and improve their resilience and sustainability.	As expressed in the GAP.
5. Explain whether the project provide, when appropriate and consistent with national policy, for measures that strengthen women's rights and access to land and resources?		Yes, the project will adhere to women's rights and access to basic services related aspects. For example, women's right to access safe water in adequate quantities, basic nutrition, disaster preparedness, and ability to participate in decision making related to their and family issues (health, shelter, income, welfare etc.) are some of the areas the project will strengthen and in line with relevant national policies.	These intentions could be further substantiated through concrete activities and indicators to be able to measure achievements.
6. Is there a risk that the project might negatively affect vulnerable groups ²⁸ in terms of material or non-material livelihood conditions or contribute to their discrimination or marginalisation (only issues not captured in any of the sections above)?	No		Some project activities seem to benefit particularly actors who are economically better off such as irrigation rice farmers or owners of plantation; however it is understood that those activities are primarily aiming at environmental benefits. It is also well received that homegardens are promoted to serve as effective livelihood alternatives for vulnerable groups who don't have land rights; it will be important that the project ensures that vulnerable groups are not discriminated in accessing related project benefits (e.g. training, advisory services etc.), that these services are adequate for their conditions and that their participation is not hindered by logistical or financial barriers (e.g. inadequate information channels, lack of transport, requirement for tenure security or seed capital) or by any form of social stigmatisation or exclusion. The inception phase should provide for a more in-

²⁸ Depending on the context vulnerable groups could be landless, elderly, disabled or displaced people, children, ethnic minorities, people living in poverty, marginalised or discriminated individuals or groups.

			depth analysis of the social context at the scale of the intervention sites including a description of the stratification according to caste and class, as well as gender and ethnicity, in order to allow the identification of vulnerable groups.
7. Is there a risk that the project would stir or exacerbate conflicts among communities, groups or individuals (e.g. by increasing resource competition when promoting economic opportunities, strengthening rights of or providing projects benefits to selected individuals/ groups? Also consider dynamics of recent or expected migration and issues / needs of displaced people.	Yes	The project benefits (arising from ecosystem improvements), if not reach the vulnerable groups in a equitable manner this issue may arise. Project monitoring and feedback systems should address this, adequately.	<p>Risks of activities inadvertently leading to tensions between ethnic or social groups, in particular between the Tamils ethnic minorities and the Sinhalese majority, should be comprehensively assessed during inception phase when defining sites and details of implementation.</p> <p>Selection of beneficiaries for support activities (e.g. training on agricultural practices, provision of crop types, product development, business services such as certification, quality assurance, processing and collective marketing) should be done in a transparent way with clear eligibility criteria to avoid unintended discrimination. Land use planning mechanism promoted under component 3 should ensure that ethnic minorities are appropriately represented in the multi-stakeholder platforms created by the project.</p>
8. Is the project likely to induce immigration or significant increases in population density which might trigger environmental or social problems (with special consideration to women)?	No		
9. Is there a risk that the project affects community health and safety (incl. risks of spreading diseases, human–wildlife conflicts, unlawful or abusive acts of security personal/PA guards)?	No		
10. Is there a risk that changes in water infrastructure or water resource management may attract disease vectors (e.g. standing water) or inadvertently affect quality of drinking water?	No	The project activities will work otherwise and improved sanitation and other educational elements will reduce the risks	Standing water can increase water-based diseases such as malaria or dengue. However, heavy rainfall is assumed to create standing water in many other forms as does paddy rice fields. Hence the contribution of the ponds seems insignificant.
11. Is there a risk that the project negatively affects the operation of dams or other built water infrastructure (reservoirs, irrigation systems, canals), e.g., by changing flows into those structures, and as such impairing local communities' livelihood or income?	No	The project intervention in upstream of Ambanganga will contribute positively to enhance water security within the basin due to enhanced storage of water within the catchment, increase cloud capturing due to increased green cover, reduced runoff etc. Also the water infrastructure fed by the catchment to downstream locations such as systems H and H1 areas will help improve the water availability in the down streams, primarily as a result of enhanced water supply from upper catchment as well as water savings by smart agriculture.	Rehabilitating water harvesting ponds and canals has positive effects as it increases influx of water into the existing water infrastructure, hence more water to be distributed. The potential risk of structural damages of water infrastructure from high-intensity rainfall should be assessed during the inception phase and it needs to be ensured that dam operations are updated to accommodate punctual higher influx.
12. Might the project be directly or indirectly involved in forced labour and/or child labour?	No		

13. Is there a risk that the project negatively affects the livelihoods of local communities in indirect ways or through cumulative (due to interaction with other projects or activities, current or planned) or transboundary impacts?	No		
14. Are there any statutory requirements for social impact assessments in the host country (including provisions for disclosure and consultation) the project needs to adhere to?	No	The project does not involve a resettlement or a significant involvement of the society in a way it is triggering a social impact or disaster impact assessment. However the social impact by the project will be evaluated as part of M&E.	
15. Is there a risk that the project might conflict with existing legal social frameworks including traditional frameworks and norms?	No		

C2: Other environmental impacts

	Project proponent		IUCN ESMS Reviewer
	Yes, no, n/a, TBD	Answer question, provide further detail where relevant	Comments, additional considerations
1. Will the project lead to increased waste production, in particular hazardous waste?	No		Enterprise development (in particular when related to processing and small industry) might cause unintended negative impacts in case waste streams or waste water discharge are not properly managed.
2. Is the project likely to cause pollution or degradation of soil, soil erosion or siltation?	No		
3. Might the project cause pollution to air or create other nuisances such as dust, traffic, noise or odour?	Yes	Project activities may cause dust blowing, noise and temporary issues. The ESMP will address those identified issues	Guidance to be included in the ESMF.
4. Will the project lead to significant increases of greenhouse gas emissions or to the reduction of carbon pools (e.g. through changes in vegetation cover and loss of below and above ground carbon stocks).	No		
5. Is there a risk that the project triggers consequential development activities which could lead to adverse environmental impacts, cumulative impacts due to interaction with other projects (current or planned) or to transboundary impacts (consider only issues not captured under the Biodiversity Standard)?	No		
6. Are there any statutory requirements for environmental impact assessments in the host country (including provisions for disclosure and consultation) the project needs to adhere to?	No	The project does not involve establishment of major infrastructure nor investments on large industry that employ large number of people, triggering the needs for EIAs. Also the project activities are not considered to involve waste water discharges to environment.	
7. Is there a risk that the project might conflict with existing environmental regulations?	No		

Conclusion of ESMS Reviewer on other Social or Environmental Impacts

Have negative environmental or social impacts been identified? If possible indicate probability (unlikely, likely, almost certain) and impact (minor, moderate, major) of risks.	Yes	The desk review identified only minor social and environmental risks which are expected to be readily addressed in the inception phase guided by the ESMF.
Are assessments required to better understand the impacts and identify mitigation measures? What specific topics are to be assessed?	The inception phase should provide for a more in-depth analysis of the social context in the intervention sites including a description of the stratification according to caste and class, as well as gender and ethnicity; and whether social stratification could trigger any social risks, e.g. the project unintendedly aggravating inequalities or leading to discrimination. This is guided by the ESMF.	
Have measures for avoiding impacts already been considered? Are they sufficient?	The ESMF will also guide the identification of mitigation measures, where needed.	

D. Climate change risks (Risks caused by a failure to adequately take the effects of climate change on people and ecosystem into consideration)

	Project proponent		IUCN ESMS Reviewer
	<i>Yes, no, n/a, TBD</i>	<i>Answer question, provide further detail where relevant</i>	<i>Comments, additional considerations</i>
1. Is the project area prone to specific climate hazards (e.g., floods, droughts, wildfires, landslides, cyclones, storm surges, etc.)?	Yes	The project area is susceptible to climatic hazards such as droughts, floods, landslides, forest fires, and climate induced elephant – human conflicts because of water deficits. As the project objective is to mitigate the risks to vulnerable populations, these risks will be in the forefront of the project considerations, design and implementation	
2. Are changes in biophysical conditions in the project area triggered by climate change expected to impact people's livelihoods? Are some groups more susceptible than others (e.g., women or vulnerable groups)?	Yes	The biophysical conditions in the project areas will be impacted by climate induced temperature rise, higher night time temperatures, prolong dry spells etc. Poor, children and women are more vulnerable due to their economic status, physical strengths and other factors contributing to their exposure to climate and other risks. Invasive species can pose another bio-physical threat while the climate change may also change the type and shape of the green cover and river flow patterns etc. However, the project is mindful of those due to the primary project aim is to reduce the CC related risks.	
3. Is there a risk that climate variability and changes might affect the effectiveness of project activities or the sustainability of intended changes?	No		It cannot be ruled out that climate hazards and climate variability may negatively affect the viability of investments made or promoted by the project (e.g. choice of crop or tree species). It is understood, though, that this is addressed by the project by using suitability modelling with downscaled climate change predictions.

4. Could project activities potentially increase the vulnerability of local communities to current or future climate variability and changes?	No	Even in the small scale civil works, highest level of safeguards will be taken to avoid any negative consequences such as increase vulnerability to climate change	The project promotes changes in agricultural practices – if they fail due to impacts from climate change this might have strong repercussion on peoples' livelihood. It is understood, however, that this risk will be addressed, to the extent possible, by promoting climate-resilient solutions (climate smart agriculture, increasing efficiency of water use etc.) and by providing knowledge that enhances adaptive capacities (e.g. installing weather stations, establishing a climate adaptation information portal etc.).
5. Could project activities potentially increase the vulnerability of the local ecosystem to current or future climate variability and changes?	No	On the contrary the project activities may potentially decrease the vulnerability of the local ecosystem and enhance future resilience	Appropriate infrastructure investment, using natural and built options for water harvesting and infiltration, use of suitable tree species (confirmed through modelling) and monitoring of water flow and quality and of performance of promoted restoration options is expected to help avoiding risks and lead to increased adaptive capacity of the ecosystem. However, the effectiveness of these measure should be closely monitored and measures adapted where needed.
6. Explain whether the project seek opportunities to enhance the adaptive capacity of communities and ecosystem to climate change?		The project is designed for GCF funding targeting opportunities to enhance the adaptive capacity of communities and ecosystem to climate change	

Conclusion of ESMS Reviewer on the Climate Change Risks

Have negative impacts been identified? If possible indicate probability (unlikely, likely, almost certain) and impact (minor, moderate, major) of risks.	No	It is the project's explicit objective to increase resilience of ecosystems and communities to risks from climate change and as such it includes measures for addressing threats and risks, applies tools for assessing suitability of proposed measures and provides for monitoring of effectiveness and changes.
Are assessments required to better understand the impacts and identify mitigation measures? What specific topics are to be assessed	n/a	
Have measures for avoiding impacts already been considered? Are they sufficient?	n/a	

Developing and Monitoring an Environmental and Social Management Plan (ESMP)

1. Components of the ESMP

An Environmental and Social Management Plan (ESMP) documents the project's risk management strategy. It serves as an "Umbrella Document" that integrates the findings of all impact studies carried out during the design phase, the plans and other provisions for complying with the requirements of the Standards that were triggered as well as country- and site-specific information relevant for the project's risk management strategy. The ESMP will become an integral part of the project proposal.

The ESMP has the following content:

- a) Projects description including logframe and project activities, location and geographic extent of the project;
- b) Brief reference to the legal framework in the host country relevant for environmental and social management and how the projects ensures compliance;
- c) Complete list of identified negative effects that specific project activities may cause and their significance;
- d) Planned measures to avoid adverse environmental and/or social impacts, to minimise them to acceptable levels or to compensate for them; including responsibilities (staffing) and schedule for implementing the mitigation measures, their technical feasibility, cultural appropriateness, expected effectiveness in providing mitigation to all affected groups;
- e) Reference to plans required by the Standards (e.g. Indigenous Peoples Plan, Action Plan Access Restrictions etc.) and whether mitigation measures have been included or not in the ESMP;
- f) Cost estimates for the proposed mitigation measures and for ensuring compliance, to be included in the budget of the project proposal;
- g) Description of the executing entities' capacity to implement the ESMP; where needed, provide for capacity building measures (to be included in the ESMP budget).

For each mitigation measure the operational details need to be summarised in form of a table (see Template 1 below). A good synchronization with the project's overall implementation plan and its monitoring and reporting cycle is critical.

There are instances where a mitigation measure is already conceptualized as an activity in the project's main implementation plan. It is still advisable to also include this activity in the ESMP along with all other mitigation measures in order to provide an overall picture of the project's mitigation strategy and to be able to check the list of mitigation measures against the identified impacts. As such it serves to analyse whether measures are actually sufficient, feasible and sustainable for mitigating the impacts. In order to avoid repetition with the project's result framework and implementation plan, only the codes of the activity should be entered in this case (see footnote in Template 1).

2. ESMP Monitoring and Supervision

The ESMP needs to be monitored to track the progress in implementing the agreed mitigation measures. This should be done annually and based on Template 2 provided below. The first two columns are copied from the ESMP. For each measure it should be signaled whether implementation is on schedule (or ahead of schedule or completed), slightly delayed or delayed - using the suggested color coding. Where delays are encountered the reasons need to be explained and solutions suggested.

Aside from progress the effectiveness of the mitigation measures will also need to be monitored. Template 2 provides a simple format. Where measures are complex, a monitoring plan should be developed including key indicators, baseline and targets (see template 3 below). The executing agency should use observations and stakeholder consultations (in particular with affected groups) in order to judge the measures' effectiveness. The agency is also encouraged to seek synergies with the project's monitoring plan which might include indicators that can be used for judging the effectiveness of mitigation measures (e.g., livelihood indicators of affected groups). The findings are entered in the column on the right.

Annual monitoring should also identify any additional environmental or social risks that may have emerged since the project started and establish appropriate mitigation measures for any significant new risk. These additional risks and their mitigating measures should be added to the ESMP (Template 1 below) and reported on as part of annual monitoring.

The annual ESMP Progress Monitoring Table is reviewed by the implementing agency (e.g. IUCN) as part of the periodic project supervision missions.

Template 1: Environmental and Social Management Plan (ESMP)					
ESMS Standards		Triggered	Main issues, how they will be addressed and whether a stand-alone plan is required (e.g. Indigenous Peoples Pan, Process Framework etc.)		
Involuntary Resettlement and Access Restrictions		<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> TBD			
Indigenous Peoples		<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> TBD			
Cultural Heritage		<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> TBD			
Biodiversity Conservation and Sustainable Use Natural Resources		<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> TBD			
Category	Activities to comply with ESMS policy and provisions		Costs	Implementation Responsibility	Schedule
Disclosure Requirements					
Grievance Mechanism					
Gender Mainstreaming					
Stakeholder Engagement					
Key Social and Environmental Impacts and related Mitigation Measures					
Social & Environmental Impacts ²⁹	Mitigation measures ³⁰	Feasibility, effectiveness and sustainability ³¹	Costs	Implementation Responsibility	Schedule

²⁹ If Standards are triggered and it has been decided that the mitigation measures are not presented in form of a stand-alone plan (e.g. IPP, Process Framework etc.), the measures are described in this table

³⁰ Where mitigation measures have already been conceptualized as project activities, only the codes of the activities need to be entered (e.g. “-> see Activity 1.2.3”); other columns are not applicable to avoid repetition.

³¹ The ESMP has to confirm that proposed mitigation measures are feasible, that they are effective in providing mitigation for all affected groups and sustainable. In this column either describe how feasibility is confirmed or put ✓ to confirm that feasibility has already been proven elsewhere and indicate where to find evidence.

<i>New ESMS risks that have emerged</i>					

Note: The progress of implementing mitigation measures should be color-coded in column C:
Green = On Schedule/ Ahead of Schedule/ Completed, Orange = Slightly Delayed, Red = Delayed

ON SCHEDULE / AHEAD OF SCHEDULE/ COMPLETED	SLIGHTLY DELAYED	MAYOR DELAYS/ ISSUES
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Template 2: ESMP Monitoring

Period covered by the report:				
ESMS Standards	Describe the progress of implementing the required tools (Indigenous Peoples Plan, Process Framework etc.):			
Social & Environmental Impacts³²	Mitigation measures	Color coding	Describe status of completion , suggest solutions where problems are encountered	Early judgement: Does this measure seem effective?
<i>New ESMS risks that have emerged</i>				
<i>Other ESMS provisions</i>	Describe status of completion and evidence			Outstanding action and timing
Disclosure				
Grievance Mechanism				
Gender Mainstreaming				
Stakeholder Engagement				
<i>TO BE COMPLETED BY IMPLEMENTING AGENCY (IUCN)</i>			Date/Name of reviewer:	
ESMP monitoring - main findings:			Status ESMP <input type="checkbox"/> on schedule <input type="checkbox"/> slightly delayed <input type="checkbox"/> major delays/issues	

³² Column A and B are copied from the ESMP.

Template 3: Plan for Monitoring Effectiveness of ESMP					
Mitigation measures	Indicators <i>proving effectiveness of avoidance or reducing impacts</i> ³³	Baseline	Monitoring methodology	Target (mid-term)	Target (end of project)
A	B	C	D	E	F
<i>New ESMS risks that have emerged</i>					

³³ Identify one indicator for each mitigation measure. Use the same numbering as for mitigation measures as in Table 1 and use corresponding number for indicators; e.g., measure 1 (M1) would be monitored by indicator 1 (Ind1).

Rapid social baseline analysis – sample template outline

The rapid social baseline analysis should cover the following topics:

- Identification of the project's area of influence which is defined as the area where project activities take place and that is influenced by project activities. Specify the number of villages/hamlets and provide census data on population (including demographic trends) and maps.
- Identification of main social groups (including indigenous peoples, ethnic groups or minorities, different caste, vulnerable groups such as landless persons, marginalized groups or displaced people etc.) and qualitative description of key socio-economic and cultural features of these groups:
 - livelihood activities and sources of income (formal and informal, subsistence and commercial), dependence on natural resources (including resources that are already restricted/illegal);
 - developmental aspiration and opportunities, differences in capabilities, know-how and access to or control over resources;
 - risks and challenges faced by social groups, issues of discrimination and marginalization and existing or potential conflicts between or among groups;
 - values and attitudes toward natural resources;
 - with respect to indigenous peoples also describe
 - Government position towards indigenous peoples (recognition of groups as indigenous, national policies and affirmative action to respect rights etc.)
 - traditional livelihoods, spiritual / cultural beliefs and values including perspectives on the environment;
 - customary institutions and rules and relevant organizations.
- Gender analysis: provide gender-disaggregation of all of the above themes, elaborate in particular on differences in roles, practices and knowledge, on rights and power (including influence on decision making) as well as access to and control over resources;
- Description of the formal and customary land tenure system, of existing resource restrictions and practice of enforcement in the project site (disaggregated by social groups where relevant);
- Economic trends and prospects of the site and of the villages/hamlets; differences between villages that influence development opportunities (e.g. environmental/natural features, conditions of access/quality of roads etc.), where relevant;
- Important cultural resources (e.g. burial sites, buildings or monuments of archaeological or spiritual value) and natural features with cultural, or spiritual significance (e.g. sacred natural sites, ceremonial areas etc.)
- Description of related/relevant projects or developments in the project area that might provide opportunities or trigger negative cumulative impacts;
- Known sensitivities, public concerns about development plans or actions and relevant occurrences (e.g. past resettlement processes, legacy issues/historic injustices/any people affected by the establishment of the PA, concerns raised by local communities etc.)

(This is the Stakeholder Engagement Annexure 9 of the Funding Proposal)



Stakeholder Consultation and Engagement

In support of the Funding Proposal submitted to the Green Climate Fund (GCF) by Sri Lanka on “Strengthening Climate Resilience for Subsistence Farmers and Agricultural Plantation Communities Residing in the Vulnerable River Basins, Watershed Areas and Downstream of the Knuckles Mountain Range Catchment of Sri Lanka”

IUCN Sri Lanka Country Office

December 2018

Updated August 2019

A. Stakeholder Consultation during Project Formulation Process

1.0. Government Led Priority Identification

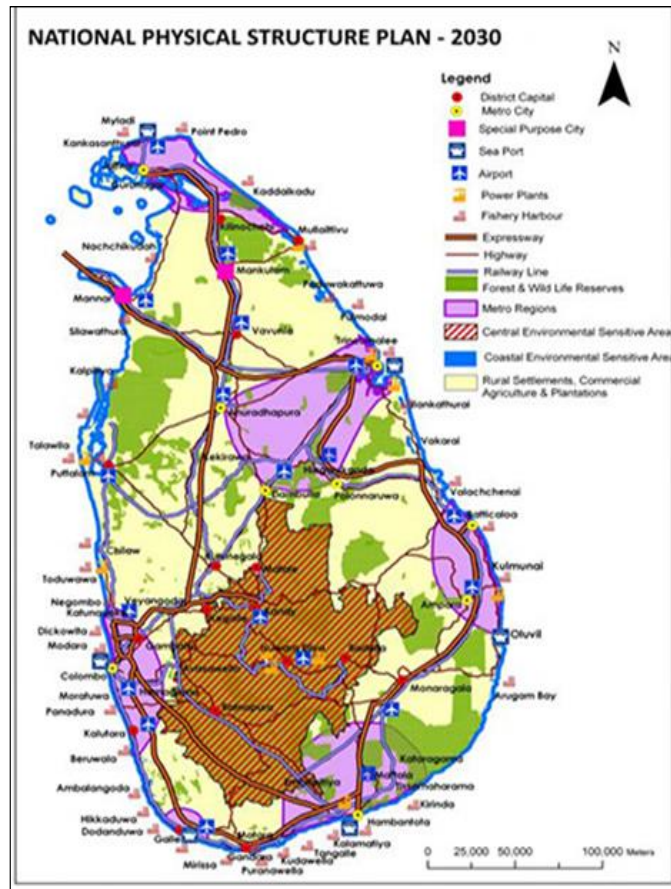


Figure 7: National Physical Structure Plan – 2030

The project proponent, the Ministry of Mahaweli Development and Environment (MMD&E) in Sri Lanka identified catchment protection as a critical measure to meet the challenges of climate change. This decision was supported by the national priorities identified in the National Physical Structure Plan 2030, developed by the National Physical Planning Department (NPPD).

The National Physical Plan indicates the need to **conserve and protect the Central Highlands** as the area plays a **key role in the hydropower, drinking and irrigation of water and serve as a livewire for industries, tourism and many socioeconomic activities.**

The same idea is adopted in the “Green (Haritha) Lanka Strategy and Action Plan 2030” by the MMD&E.³⁴

The value of highland protection was further validated at the national consultation on “Land Health is National Wealth Workshop in 2017³⁵” held between 11-13 October, 2017 in Colombo attended by over 100 professionals and agencies including Sri Lanka’s leading experts and stakeholders—from the government, academia, private sector, and multilateral organizations—from all aspects of agriculture, plantations, forests, soils, water and energy management. Endorsed by the President of Sri Lanka, the workshop produced an Action Plan to improve the health of the nation’s land and other natural resources.

MMD&E in principle adopted the strategy and recommendations out of the “Land Health is National Wealth – 2017” to be the area of co-operation for investments by GCF.

³⁴ Green Lanka Strategy and Action Plan (MMDE, 2017)

(<https://www.dropbox.com/s/yx5ah1tudi38igw/Green%20%28Haritha%29%20Lanka%20National%20Action%20Plan%202015-2022.docx?dl=0>)

³⁵ Workshop Report on Land Health is national Wealth (2017)

(<https://www.dropbox.com/s/v7sdtwtndnmmyf6x/Land%20Health%20is%20National%20Wealth%20Outcome%20Report.pdf?dl=0>)

The National Consultation was supported by the World Agroforestry Institute (ICRAF) among others. As such, “Land Health” consultations resulted in the initial momentum to formulate this project focusing on part of the central region around the Knuckles conservation area and climate impacts to that area and the areas benefiting from the environmental services provided by the Knuckles mountain area.

2.0. Strategic Approach for Technical Assistance

To operationalize the Central Highland Protection idea and to capitalize on the potential GCF investments to address climate concerns towards the protection of vulnerable populations depending on the Knuckles ecosystem affected by the climate change, in 2017, the Government of Sri Lanka (GoSL) through MMD&E requested the World Agroforestry Centre (ICRAF) to work with the GCF agency, International Union for Conservation of Nature – IUCN to formulate an investment proposal to leverage Government and Non-Government initiatives in the area with GCF investments for climate adaptation.

The ICRAF with the support of IUCN Sri Lanka undertook the formulation of the GCF investment proposal and selected the Knuckles area as the strategic focus area along with the irrigated downstream area that is benefitted by conservation activities in the water catching Knuckles upstream area.

IUCN’s association with ICRAF was beneficial as IUCN already had a sound base by working in the project area. For example, selected work in the Central Highlands where IUCN is involved are:

- a. Knowledge Enhancement in Central Highlands World Heritage Sites with HSBC, MMD&E, DWC and FD as partners: <https://www.iucn.org/asia/countries/sri-lanka/enhancing-education-and-awareness-central-highlands>
- b. Biodiversity assessment in the Moragahakanda and Kalu Ganga funded by MMD&E: <https://www.iucn.org/asia/countries/sri-lanka/biodiversity-plan-moragahakanda-and-kalu-ganga-agriculture>
- c. Watershed conservation in the Knuckles Conservation Forest funded by HSBC Bank: <https://www.iucn.org/asia/countries/sri-lanka/watershed-conservation-and-restoration-knuckles-conservation-forest>

3.0. Consultative Process

Prior to the project formulation, village communities and several vulnerable groups have been consulted including plantation workers. The different consultation events and topics and concerns raised by stakeholders were the following:

- a. Consultations with plantation management and communities held in “Elkaduwa Plantations” in the project area helped to understand how climate variability (rainfall intensity and shifts) affect the income sources and the extent of soil erosion losses. Efforts to establish forest gardens helped to understand the drivers of deforestation, climate impacts on soil erosion under different vegetations etc. The consultative session also included a visit to the “Matale Sudu Ganga” area on degraded lands and the “Riverstan” area in relation to grasslands.
- b. Consultations with upstream area communities in the project area was conducted with the “Pitawala” community representatives (about 50 numbers) from four village communities; namely, Pitawala, Atanwala, Rathkinda and Puwakpitiya, where both men and women participated. Community leaders who participated highlighted the climate influence in their livelihoods, primarily the impact on subsistence agriculture. Discussions revealed the reduced crop intensity in the area (less than 1) due to the lack of water, which in turn is aggravated due to climate change.
- c. Upstream Communities expressed about the lack of price assurance, post-harvesting losses, transport issues, and the lack of value addition opportunities, aggravated by climate challenge. Further, the smaller land size, averaging between 0.5 to 1 hectare per family do not provide the economics of scale for farming and are particularly vulnerable to climate change. In addition, climate induced high winds in the area made the farmers restrict farming work to one season from the traditional two seasons. Even during the season that they cultivate, the harvest is wind damaged and are sometimes faced with the lack of water or more water due to shifts in cultivation seasons.
- d. Downstream communities in project area occurred with the communities in the Hettipola town area in the downstream project area. Farmers use water brought to them through canals from the upstream catchment through the Moragahakanda Reservoir or Bowatenna Dam. Issues highlighted included wells drying due to long spells of dry days, primarily due to climate change, and increasing difficulty in obtaining a safe drinking water supply, forcing them to consume irrigation water. Irrigation water is contaminated with pesticides, fertilizer and dissolved minerals. In the area, there are over 2,000 Chronic Kidney Disease (CKD) patients reported, possibly due to the poor water quality. Populations consuming rainwater has less CKD incidents.
- e. Plantation communities in the Knuckles conservation area including community members residing in Eluwana area (includes Hettipola, and Laggala-Pallegama DS divisional areas). This community reported having less CKD issues with 117 patients, probably due to the higher quality of water in the areas. Their requirement is reliable household water supplies based on harvested rainwater for irrigation and drinking.

- f. Tamil speaking populations and communities in Tea Plantations in tea areas reported a lack of funds to invest on water treatment and water efficient methods, as a climate adaptation measure. Due to the lack of water, some of the tea estates are being converted to cinnamon and other export crops, leading to further land degradation. It was observed that export-oriented spices can grow as an under growth in plantations to improve the income of communities. Enasal and Cardamom are two traditional spices that bring good revenue, however, the farmers need initial capital for irrigation and processing of produce to prevent post-harvest losses as well as to provide value added products that will be long-lasting, nutritious, and hygienic. Potential landslides due to climate induced high intense rain is a factor of concern by the communities, in plantations, as well.
- g. Private and Non-Government Organizations (NGOs) involved in reforestation, natural capital management and innovative financing were consulted to better understand ongoing mechanisms used in the country and their experience.

Private Sector

- a. **Finlays** aims to replant 956 ha of land by 2019. However, over the years they have restored 21,150 ha of land. Some of their lands overlap ecologically important areas such as Peak Wilderness, Sinharaja and Kanneliya. Restoration is mainly done using native species.
- b. **Alliance Finance Company** has pledged to replant 600,000 plants (2583 ha) by the year 2021, with 191,518 already planted. Their work, which spreads across all 25 districts of Sri Lanka, is monitored twice a year through an internal monitoring mechanism with the support of other stakeholders. They have received LKR 10 million from domestic philanthropic & non-profit sectors for replanting activities. •
- c. **Aitken Spence Travels (Pvt) Ltd.**, has pledged to restore 50 ha of land, a project initiated in 2018. Ending in 2025. Approximately 8-10 ha have been restored thus far, with monitoring work conducted by in-house teams. As with Alliance Finance Company, Aitken Spence Travels receives its funding from domestic philanthropic & non-profit sectors. The company reports a total of two caretakers have been employed so far exclusively for their restoration work.
- d. **The Conservation Carbon Company**, sister company of Carbon Consulting Company, initiated a 20 year land restoration programme in 2010. They receive most of their funding from private sector stakeholders. Their monitoring mechanisms include the Plan Vivo Standard, Inter-government Panel on Climate Change (IPCC) Guidelines for AFOLU project, and the CarbonFix Standard for carbon dioxide sequestration calculations. Verification done by Dr. Edward Mitchard from the School of Geosciences, University of Edinburgh,

UK. The company has restored 27.6 ha (18,000 plants) so far, sequestration approximately 2,300 tonnes of carbon dioxide. Their restoration includes more than 90 species with a focus on crops that yield benefits for the surrounding communities. They were unable to provide an exact number of trees they plan to plant in the future, as it depends on funds. However, year around monitoring takes place where damaged trees are restored. A total of 45 families have been provided with fruit crops for replanting, which can help provide economic benefits as well. Through their restoration, their hope to create a biolink between Sinharaja and Kanneliya forests.

- e. **Sadaharitha Plantations** Limited has restored 800 ha thus far with investments from the private sector itself, under several different programmes. In a new project, they aim to plant 100,000 plants by 2019 (agar wood). Over 10 years, they have recorded a carbon dioxide sequestration of 5,017,430 kg as a result of planting 228,065 teak trees (*Tectona grandis*). They have created 120 jobs on their estates to manage the trees until they are harvested for commercial purposes.
- f. **Talawakelle Tea Estates PLC** has pledged to restore 700 ha of land from 2013 to 2023, with 534 ha restored so far (500,000 trees). Most funds are derived from the private sector, with some from the NGO sector (FAO). Their tree planting includes species such as *Eucalyptus grandis*, *Eucalyptus microcorys*, *Eu. Toraliana*, *Accacia mengium*, *Calliandra colothisis*, Kumbuk (*Terminalia arjuna*), Bamboo (*Bambusoideae*) and other native trees. Monitoring and management is carried out by a separate team allocated solely for this replanting project.
- g. **Earth Restoration (Pvt) Ltd.** supports restoring by using technology to register plants, termed LifeForce Units, on a digital platform to help calculate all its contributions to environment and people, in order to establish a payments system and to improve the effectiveness of reforestation. Thus far they are working in 25 acres of land, some of which is also overlapping Sri Lanka's Udawalwe National Park. They have employed 3 researchers, 2 ecological marketing specialists and 4 field staff to support this restoration work.
- h. **MAS Holdings**, one of Sri Lanka's largest apparel companies, has pledged to restore 25,000 ha of land (replanting, protecting and growing) by 2030. By 2017, they had restored 596 acres of land, including reforestation of 150 acres of land and removal of invasive species from 384 acres of land.
- i. **Biodiversity Sri Lanka** has pledged to restore 10 ha of land between 2016 and 2023 using LKR 36.7 million from private sector collected funds. Together with their project partners, they have planted 20,000 trees, while also hiring local villagers to support project implementation on the ground.

- j. **Rainforest Rescue International** has created 45 acres of man-made forests, using analog forestry principles, across 9 districts in Sri Lanka. Their work includes the world's first analog forestry testing site in Mirahawatte, Bandarawela. The organisation uses plants from community nurseries to support the locals. They aim to create 80 acres of analog forests.

Non-Governmental Organisations (NGOs) and Civil Society

- a. **The Small Fisherers Federation** is engaged in a replanting programme, which began in 2015 that aims to restore 12,000 ha by 2019. The programme is funded by Seacology. They have so far restored 480 ha of land using species such as *Rhizophora mucronata*, *Xylocarpus granatum*, *Lumnitzera recemosa*, *Avicennia marina*.
- b. **Green Movement** has in the past planted 70,000 trees between 2007 and 2015 and planted 60 mangrove plants between 2009 and 2014. They also supported land restoration by protecting 7000 ha of forests from forest fires and have also sustainable agriculture in 700 ha of areas. They are not currently engaged in any reforestation programmes.
- c. **Joint Community Development** NGO is currently planting 7500 trees in a new yearlong UN funded programme ending in April 2019. Monitoring is done with the support from local and regional Community Based Organisations (CBOs). Over the years, the organisation has replanted 34,650 plants so far. Their project areas overlap some protected National Parks such as Udawalawa and Randenigala.
- d. **The Friends of Biodiversity** Runakanda Forest Conversation Centre, with funds from philanthropic and non-profit sectors, is replanting in deforested regions in a low land area close to Sinharaja Rainforest (UNESCO World Heritage Site). The organisation supports the local communities by buying saplings for replanting from low income villagers.
- e. **Thuru** aims to plant 2 million trees by 2020, with support from funds from domestic philanthropic & non-profit sectors and approximately 300 volunteers spread across Sri Lanka's 25 districts. A proportion of their work also overlaps with the Sinharaja Forest Reserve. They have developed an app named Thuru which is used as a monitoring tool to tag a planted tree and monitor it. The organisation uses native and endemic plants (depends on the area) in its replanting work. A total of 6000 trees have been planted thus far.

- f. **The Rainforest Protectors** have pledged to restore 40 ha of land by May 2019, a project initiated in 2016, a proportion of which has been funded by MAS. They have replanted approximately 16 ha so far. Monitoring happens through an internal mechanism bi-annually. The organisation has replanted 30 native rainforest tree species. Some of other work is bordering Sinharaja Rainforest.
- g. **Mihithala Mithuro** Environmental Development Foundation initiated a 5-6 programme in 2017 to plant 84000 trees along the Kalu Ganga (river) in Sri Lanka. Funds for this project come from the public and philanthropic and non-profit agencies in the country. Monitoring is conducted by community societies in the local area.
- h. **The Organisation of Environment and Children's Rights Preservation** is engaged in restoring 162.5 ha of land within a one year period, ending in 2019. Financing is sourced from philanthropic and non-profit sector stakeholders. The Organisation mainly replants trees such as Kumbuk (*Terminalia arjuna*), Mee (*Madhuca longifolia*), Jackfruit (*Artocarpus heterophyllus*) and Mahogany (*Swietenia mahagoni*). They have engaged a total of 750 volunteers across 150 villages, three field officers and a manager to oversee replanting work.
- i. **Wanasarana Thurulatha Swechcha Society** has pledged to restore 50 ha in a new project starting October 2018 and ending in January 2019, with money sourced from private sector stakeholders. Monitoring is undertaken on a monthly basis by community leaders and organisation staff. Thus far, they have restored 32 ha of land in Masmulla, Dediyaigala, Tangalle and Batticaloa using Kumbuk (*Terminalia arjuna*), Mee (*Madhuca longifolia*), Jackfruit (*Artocarpus heterophyllus*) and Mahogany (*Swietenia mahagoni*) trees. Overall they have supported livelihoods of 175 individuals, including 50 women.
- j. **The Human and Community Youth Development Organisation** has pledged to restore 4000 ha of land between 2018 and 2019, using funds from the private sector. Monitoring is conducted through an internal mechanism that has been funded for by foreign investors. They have restored 1000 ha so far, sequestering 18,312 tonnes of carbon dioxide. With their replanting work, which focuses on *Gliricidia* trees (*Gliricidia sepium*), they have enhanced the incomes of 2000 farmers and improved the livelihoods of 250 other individuals through community wood supply and energy from the power plant.
- k. **Rainforest Alliance** has been managing 8000 ha across 164 tea estates since 2009. Monitoring of work is conducted on an annual basis by accredited auditors. Their work in land restoration is in sustainable agriculture spread across 9 districts. In addition to the 8000 ha, Rainforest Alliance also aims to replant 6 ha close to the Sinharaja

Rainforest in 2019 and aim to replant 45,000 native plants in farms, schools and factories on an annual basis. They receive support from United Nations Environment Programme (UNE) – Global Environmental Facility (GEF), Private Tea Companies, Tea Buyers (IDH, Unilever, Kirin Holdings), Regional Plantations Companies. Approximately 150 new jobs have been created as a result of their work.

- I. **Eco Chain (Pvt) Ltd** aims to plant 500 Mee trees (*Madhuca longifolia*) in 6 months, starting from December 2018, with monitoring support from Community Based Organisations. In a previous project, they had distributed 1000 Jackfruit trees (*Artocarpus heterophyllus*) to 1000 families in Gampaha and Colombo regions to support their livelihoods.

These entities may potentially play different roles in the investment project based on their ability to work with communities and the techniques they have adopted and tested. Several of them have been already included in the partner list with their roles identified. Others may join in the project during the implementation, on need basis.

Agencies with innovative designs/programmes were engaged for potential collaborations. For example, project such as communications, marketing and transactions (Dialog and Unilever); Analog Forestry and Earth Restoration – a mechanism to count oxygen added via plants and compensate the custodians of trees, old and new; and Certification systems for Forest and Plantation Products – Rainforest Alliance etc. were included in the project.

International best practices were added though IUCN (Green Listing of Heritage and Nature resources) and Precision Farming, early warnings, market information and Decision Support Systems through ICRAF; and World Food Programme Productivity based crop insurance (damage) schemes are some of the illustrative examples of international practices.

Other projects that are complementary were consulted such as the UNDP managed GCF project and World Bank manage Climate Smart Agriculture Irrigation Project as described in the Funding Proposal Section C2.

B. Stakeholder Engagement during Project Implementation

1. Stakeholder Analysis and Engagement Strategies

The nature of the activities and the demonstrated interest and motivation and technical and management capacity of government agencies and other technical partner organizations determined the selection of partners who would assume an active role in the implementation of specific components of the project or provide specific technical inputs. In addition to these

technical partners and in adherence to the IUCN Policy on Stakeholder Engagement³⁶, the project will also ensure meaningful, effective and informed participation of other critical stakeholders, of civil society organizations, local communities, the young generation and **women. These include the groups that are considered the project's primary beneficiaries: the subsistence/small holder farmers, marginalized and vulnerable plantation workers, community-based organizations on forest conservation and forest adjacent communities.** Ensuring active and meaningful participation is important as the concrete field interventions and their sites are still to be identified and designed; hence the engagement of these local stakeholders will be critical to understanding their views and interests to ensure targeted design of the intervention.

Engaging at the local level is also a vital element for promoting transparency and accountability, effective participation and inclusion – key principles of the IUCN Environmental and Social Management System (ESMS). IUCN also encourages active participation of a wide range of stakeholders, including local actors, in the actual implementation of project activities as well as in project monitoring and in the project's governance structure (e.g. steering committee).

Table 1 provides a summary on how the different stakeholder entities link with the Executing Entities (MMDE, IUCN Sri Lanka and ICRAF) under different project activities. Table 2: below describes their role of stakeholder entities in the project as well as the project's engagement strategies. Further refinement and fine-tuning of these roles and the engagement strategy will take place at project launch and during the inception phase when the actual intervention sites have been selected. The engagement strategy will then be converted into an actual Stakeholder Engagement Plan (SEP) with concrete engagement measures, roles, schedule and responsibilities. For each of the below listed groups the engagement strategy would depend on the activities which are targeted to them, considering their experience. etc. Table 3 below provides a succinct overview the expected contribution and inputs from partners under the project activities led by the EEs (MMDE, IUCN and ICRAF).

³⁶ The policy is documented in the IUCN Stakeholder Engagement Guidance Note, available at: https://www.iucn.org/sites/dev/files/esms_stakeholder_engagement_guidance_note.pdf

Table 1: Stakeholder entities contributions to activities facilitated by different Executing Entities

EE	Partners
Component 1 - Climate-resilient sustainable land management	
Output 1.1. - Improved land and water management in upstream catchment to safeguard production of environmental goods and services	
Activity 1.1.1 - Streamside protection and drainage management along roads	
IUCN Sri Lanka	Mahaweli Authority of Sri Lanka, Forest Department, Provincial Irrigation Department, Universities, Provincial Ministry on Road Development, Provincial Irrigation Department, Natural Resource Management Centre (NRMC) of Dept. of Agriculture and CBOs through IUCN Sri Lanka
Activity 1.1.2 Rehabilitation and establishment of village tanks, ponds and irrigation networks	
IUCN Sri Lanka	Department of Agrarian Development, Provincial Irrigation Department, CBOs through IUCN Sri Lanka, Department of Agriculture
Activity 1.1.3 - Restoration of forest mosaic landscapes	
IUCN Sri Lanka	Forest Department, Universities and Rainforest Rescue International (RRI)
Output 1.2. - Sustainable climate-resilient primary production in upstream catchment areas and downstream irrigated agricultural area	
Activity 1.2.1 - Increasing cropping intensity of irrigated rice in both upstream and downstream areas	
MMDE	Department of Agrarian Development, Provincial Department of Agriculture and Mahaweli Authority of Sri Lanka
Activity 1.2.2 - Sustainable intensification of smallholder production	
MMDE	Department of Export Agriculture (DEA), Provincial Department of Agriculture, Universities Department of Agrarian Development, Rainforest Rescue International, Department of Meteorology and ICRAF
Activity 1.2.3 - Restoration and sustainable intensification of plantations	
IUCN Sri Lanka	Ministry of Plantation Industries, Regional plantation Companies, Department of Export Agriculture and Biodiversity Sri Lanka (BSL)
Component 2. - Secure financing mechanisms for sustainable land management	
Output 2.1 - Upgraded value chains	
Activity 2.1.1 - Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers	
ICRAF	Universities, Department of Export Agriculture, Department of Agriculture
Activity 2.1.2 - Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands	
IUCN Sri Lanka	Department of Export Agriculture, Provincial Department of Agriculture and National Enterprise Development Authority of Ministry of Industries and Commerce

Activity 2.1.3: Identification and implementation of value chain upgrading options for small holder and subsistence farmers engaged in climate smart agriculture	
IUCN Sri Lanka	Department of Agrarian Development, Department of Export Agriculture and Provincial Department of Agriculture
Output 2.2. - Payment for environmental services (PES) mechanism	
Activity 2.2.1 - A portfolio of business cases for negotiating performance-based financial transfer mechanisms	
IUCN Sri Lanka	ICRAF and MMDE
Activity 2.2.2 – A PES intermediary body as a part of the multi-stakeholder platform and its governance system established	
IUCN Sri Lanka	ICRAF and MMDE
Activity 2.2.3 - A monitoring system for PES schemes in the upstream catchment area	
ICRAF	IUCN and MMDE
Component 3 - Institutional capacity strengthened	
Output 3.1. - Governance mechanism for sustainable land management and productivity enhancement in the upstream catchment area	
Activity 3.1.1- Develop an integrated land use policy and planning mechanism at sub-basin scale	
IUCN Sri Lanka	LUPPD, NRM (Department of Agriculture), MMDE and ICRAF
Activity 3.1.2 - Develop a shared information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options	
ICRAF	NRM (Department of Agriculture), LUPPD, Information Communication Technology Agency (ICTA)
Activity 3.1.3 - Development and refinement of an options by context framework for SLM and sustainable intensification	
ICRAF	LUPPD, Department of Agrarian Development, Department of Export Agriculture Universities, NRM (Department of Agriculture), IUCN Sri Lanka
Output 3.2.: Integrated rural advisory capacity responsive to developing knowledge base, real time weather and market information	
Activity 3.2.1. - Establishment of nested-scale multi-stakeholder innovation platforms from sub-basin to GN scale	
IUCN Sri Lanka	Provincial Department of Agriculture, MMDE (planning), Universities and ICRAF
Activity 3.2.2 - Training in methods and tools for adaptive and participatory co-design of adaptation options	
ICRAF	NRM (Department of Agriculture), IUCN Sri Lanka, Universities
Activity 3.2.3 - Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options	
ICRAF	NRM (Department of Agriculture), IUCN Sri Lanka, Universities

Table 2: Stakeholder analysis and envisaged role during project implementation

Stakeholder	Stakeholder analysis and role during project implementation
Government Agencies	
Department of Agrarian Development (DAD)	<p>As the key agency in minor irrigation tanks and based on earlier experience with IUCN, DAD will help communities to repair the village tanks and ensure organic farming and optimal water resource use is practiced.</p> <p><u>Project activities:</u> DAD will be primarily responsible for activity 1.1.2: Rehabilitation and establishment of village tanks, ponds and irrigation networks.</p>
Department of Agriculture (DOA)	<p>The main objectives of the DOA is to maintain and increase productivity and production of the food crop sector in Sri Lanka. To that extent, the department is involved in research, providing internet and phone based extension services (www.krushiradio.lk; www.krushiradionews.lk etc.; crop forecast information system (Croplook) via publications and internet; Agro-Technology Park demonstrating agronomic practices as well as conservation methods; production of seed and planting material; regulatory services related to plant quarantine; soil conservation and pesticides etc. DOA manages the Rice Research and Development Institute, Field Crops Research and Development Institute, Horticultural Crops Research and Development Institute and six technical service centers—Seed Certification and Plant Protection Centre, Seed and Planting Material Development Center, Extension and Training Centre, Socio Economics and Planning Center, Natural Resource Management Center, and Progress Monitoring and Evaluation Unit.</p> <p><u>Project activities:</u> 1.2.1: Increasing cropping intensity of irrigated rice in both upstream and downstream areas; 1.2.2: Intensification of Sustainable smallholder production; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; and 2.1.2: Provide technical support for Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands</p>
Mahaweli Authority of Sri Lanka (MASL)	<p>MASL oversees the Mahaweli River Development Programme and the Authority's focus spans to the development of the region as well. Most of the project area falls under the jurisdiction of MASL and the Authority will provide irrigation facilities and monitor ecosystem services and is in charge of hydro dams and large irrigation projects balancing drinking, power generation and agriculture needs.</p> <p><u>Project activities</u> relevant to MASL include 1.1.1: Streamside protection and drainage management along roads; 1.1.2 Rehabilitation and establishment of village tanks, ponds and irrigation networks; 1.2.2: Intensification of</p>

	Sustainable smallholder production; and 1.2.3: Restoration and intensification of sustainable plantations. In addition, MASL will be involved in setting up of the management groups in the lower catchment.
Irrigation Department (ID)	<p>The Irrigation Department is the foremost authority in all matters related to irrigation including that of developing land and other water resources for agriculture, hydro power, flood control, domestic use, industrial use and agriculture development. ID is involved in developing irrigation and drainage facilities for cultivable lands, the management of water for sustainable agriculture and also provisioning necessary phases and irrigation and water related needs of major to medium irrigation schemes and projects.</p> <p><u>Project activities:</u> ID's involvement in the project includes; 1.1.1 Streamside protection and drainage management along roads; and 1.1.2: Rehabilitation and establishment of village tanks, ponds and irrigation networks.</p>
Forest Department (FD)	<p>The Forest Department is strongly associated with the protection of the valuable forest landscape in the island by enforcing necessary regulations against deforestation, unauthorized logging, destruction of landscape etc. The Forest Department Research Unit will help to maintain and monitor the forest cover changes.</p> <p><u>Project activities:</u> FD will provide support for activities 1.1.3: Restoration of forest mosaic landscapes and 1.2.3: Restoration and intensification of sustainable plantations.</p>
Survey Department of Sri Lanka (SD)	<p>SD is the authority in charge of geodetic information of the island.</p> <p><u>Project activities:</u> It will be instrumental in mapping and carrying out the necessary surveys to facilitate the activities of the project, such as 1.1.3: Restoration of forest mosaic landscapes; 1.2.3: Restoration and intensification of sustainable plantations; 2.2.3: Establish a monitoring system for PES schemes in the upstream catchment area ; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; and 3.1.2 Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>
Central Environment Authority (CEA)	<p>CEA is the main authority in Sri Lanka dedicated to the protection of the environment. The main objective of the organization is to protect, manage and enhance the environment. CEA is also involved extensively in pollution prevention and control.</p> <p>Project activities: CEA inputs will be valuable 1.1.1: Streamside protection and drainage management along roads; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.2: Provide technical support for Enterprise and institutional development to</p>

	exploit green growth opportunities for small holder farmers in the uplands; 2.1.3: Enterprise and business development to exploit green growth opportunities; 2.2.2: Setting up a PES intermediary body as a part of the multi-stakeholder platform, and its governance system established; and 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale.
Gem and Jewellery Research Institute	<p>The Research Institute of Gem and Jewelry is a dedicated arm that conducts surveys on gems in Sri Lanka along with necessary research.</p> <p><u>Project activities:</u> The institute will be involved in activities 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.3: Enterprise and business development to exploit green growth opportunities and 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale.</p>
Geological Survey and Mines Bureau (GSMB)	<p>GSMB is in charge of mapping the locations suitable for mining, providing mining related services, regulating exploration, extraction, value addition and transportation and trading of minerals.</p> <p><u>Project activities:</u> GSMB work is related to activities 1.1.2: Rehabilitation and establishment of village tanks, ponds and irrigation networks; 2.1.3: Enterprise and business development to exploit green growth opportunities; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; and 3.1.2: Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>
Water Resource Board (WRB)	<p>WRB is in charge of ground water resources in the country and provides guidance in sustainable harvesting of ground water resources while administering regulations and laws on assessing, conserving, harnessing, developing and utilizing water resources.</p> <p><u>Project activities:</u> WRB will be involved in activities related to 1.1.1: Streamside protection and drainage management along roads; 1.1.2: Rehabilitation and establishment of village tanks, ponds and irrigation networks; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; 3.1.2: Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options; and 3.3.2: Training in methods and tools for adaptive and participatory co-design of adaptation options.</p>

Dept. of Meteorology (DOM)	<p>DOM is responsible for weather and climatological services to the country. Dept of Meteorology observes and collates weather elements, maintain climatological databases, issues early warnings and advisories on weather related events, encourage study and research in meteorology, climatology, climate change and allied subjects, and organize and contribute to public awareness programs.</p> <p><u>Project activities:</u> DOM will be instrumental in 1.2.1: Increasing cropping intensity of irrigated rice in both upstream and downstream areas; 1.2.2: Intensification of Sustainable smallholder production; and 3.1.2: Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>
Disaster Management Centre (DMC)	<p>The main activities of DMC include planning preparedness, dissemination of early warning for the vulnerable population, emergency response, coordination of relief and post disaster activities in collaboration with other key agencies. Project is closely connected to drought response actions of DMC.</p> <p><u>Project activities:</u> DMC will support in the activities such as 1.1.1: Streamside protection and drainage management along roads; 1.1.2: Rehabilitation and establishment of village tanks, ponds and irrigation networks; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; 3.1.2: Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options; 3.3.1: Establishment of nested-scale multi-stakeholder innovation platforms from sub-basin to GN scale; and 3.3.2: Training in methods and tools for adaptive and participatory co-design of adaptation options.</p>
Natural Resources Management Centre (NRMC) of the Dept. of Ag.	<p>The Natural Resources Management Centre (NRMC) focuses on enhancing the use of land and water resources, based on science, to improve national agricultural productivity in a sustainable manner. As such, the main research areas of the institute include soil conservation and watershed management, land suitability evaluation, agro-meteorology and climate change, geo-informatics and remote sensing, productivity enhancement, soil and water quality assessments and on-farm water management—all of which are instrumental in the planning of the activities. NRMC maintains the Agro-Technology Park in Peradeniya, one of the best conservation planning demonstration sites.</p> <p><u>Project activities:</u> NRMC will play a key role in the project and provide support to activities 1.1.1: Streamside protection and drainage management along roads; 1.1.2: Rehabilitation and establishment of village tanks, ponds and irrigation networks; 1.1.3: Restoration of forest mosaic landscapes; 1.2.1: Increasing cropping intensity of irrigated rice in both upstream and downstream areas; 1.2.2: Intensification of Sustainable smallholder production;</p>

	1.2.3: Restoration and intensification of sustainable plantations; 2.2.2: Setting up a PES intermediary body as a part of the multi-stakeholder platform, and its governance system established; 2.2.3: Establish a monitoring system for PES schemes in the upstream catchment area; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; 3.1.2 Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options; 3.1.3: Development and refinement of SLM framework; 3.3.1: Establishment of nested-scale multi-stakeholder innovation platforms from sub-basin to GN scale; 3.3.2: Training in methods and tools for adaptive and participatory co-design of adaptation options; and 3.3.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.
Centre for Agriculture Research and Policy (CARP)	The priorities of the CARP include advising the co-coordinating and consolidating efforts within Sri Lanka and funding research projects/programs and promoting scientific research linkages in prioritized areas. As such, the CARP will participate, contribute and benefit from the results of all activities of the project. CARP's main role would be to upscale the outcomes of the GCF investment.
Genetics and Plant Breeding Division of Dept. of Export. Agriculture	<p>The Genetics and Plant Breeding Division is involved in developing high yielding and high-quality agricultural crops specifically for export purposes.</p> <p><u>Project activities:</u> The division will be involved in activities such as 1.2.2: Intensification of Sustainable smallholder production; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.2: Provide technical support for Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands 2.1.3: Enterprise and business development to exploit green growth opportunities; and 3.3.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.</p>
Tea Board	<p>Tea Board is in charge of promoting tea, ensuring necessary regulations especially in terms of exports, defining, protecting and certifying the regional origins of Ceylon tea, Monitoring and controlling the quality and purity of tea exported from Sri Lanka including pricing and market information.</p> <p><u>Project activities:</u> Tea Board will be involved in 1.2.3: Restoration and intensification of sustainable plantations; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.2: Provide technical support for Enterprise and institutional development to</p>

	exploit green growth opportunities for small holder farmers in the uplands; and 2.2.1: Developing a portfolio of business cases for negotiating performance-based financial transfer mechanisms
Tea Smallholders Development Authority (TSHDA)	<p>The TSHDA is responsible for small holdings in the country and play a key role in productivity, marketing and welfare of the tea smallholders.</p> <p><u>Project activities:</u> TSHDA will be involved in 1.2.2: Intensification of Sustainable smallholder production; 1.2.3: Restoration and intensification of sustainable plantations; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.2: Provide technical support for Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands; and 2.2.1: Developing a portfolio of business cases for negotiating performance-based financial transfer mechanisms.</p>
Tea Research Institute (TRI)	<p>TRI provide facilities to undertake research in cultivation and processing, commercializing research, technology dissemination, advocacy and raising awareness etc.</p> <p><u>Project activities:</u> TRI will play a key role in activities related to 1.2.2: Intensification of Sustainable smallholder production; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.2: Provide technical support for Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands; and 3.3.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.</p>
Rubber Control Department of Ministry of Plantation? (Department of Rubber Development)	<p>The Department of Rubber Development regulates the rubber production related inputs and facilitate technology and marketing of rubber outputs.</p> <p><u>Project activities:</u> The department will be involved in 1.2.2: Intensification of Sustainable smallholder production; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.2. Provide technical support for Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands; and 3.3.3. Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.</p>
Rubber Research Institute (RRI)	Responsible for research and development on all aspects of rubber cultivation and processing including awareness and education.

	<p><u>Project activities:</u> The RRI will be providing inputs to activities such as 1.1.3: Restoration of forest mosaic landscapes; 1.2.2: Intensification of Sustainable smallholder production; 1.2.3: Restoration and intensification of sustainable plantations; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.2: Provide technical support for Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands; 2.1.3: Enterprise and business development to exploit green growth opportunities; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; and 3.1.2 Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>
Coconut Research Institute (CRI)	<p>The role of CRI and its divisions is related to the development of the coconut industry in Sri Lanka. The CRI promotes collaborative research with other National Institutes and Private Sector Organizations.</p> <p><u>Project activities:</u> The Institute has 11 Research Divisions and five Service Divisions capable of adding value in activities 1.2.2: Intensification of Sustainable smallholder production; 1.2.3: Restoration and intensification of sustainable plantations; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.2: Provide technical support for Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands; 2.1.3: Enterprise and business development to exploit green growth opportunities; 2.2.1: Developing a portfolio of business cases for negotiating performance-based financial transfer mechanisms; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; and 3.1.2 Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>
National Botanical Gardens Department	<p>The Department is instrumental in implementing Fauna and Flora Protection Ordinance and Botanical Gardens Ordinances. They also prepare, monitor and assess policies, programs and projects related to the subjects of sustainable development, wildlife, botanical gardens and zoological gardens. Other responsibilities of the department include the preparation of sustainable measurements and environmental indicators, conservation of the flora of Sri Lanka, maintenance of the botanical gardens in Sri Lanka and development of the floriculture in Sri Lanka, conservation of wildlife resources in Sri Lanka, enacting necessary measurements to promote eco-tourism in the island etc.</p>

	<p><u>Project activities:</u> the department will provide inputs for activities on 1.1.3: Restoration of forest mosaic landscapes; 1.2.2: Intensification of Sustainable smallholder production; 2.1.3: Enterprise and business development to exploit green growth opportunities; 2.2.3: Establish a monitoring system for PES schemes in the upstream catchment area; and 3.1.2 Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>
Education Department	<p>As the core department charged with the education of the future generation of Sri Lanka, the department's ability to reach the children to create awareness and promote sustainable practices will be valuable in spreading the benefits of the project. Education Department will be engaged in project activities through the Environment Pioneer Programme; environment monitoring activities and observing and learning from all activities of the project.</p> <p><u>Project activities:</u> The Dept., teachers and students will be specifically involved in activities such as 3.3.2: Training in methods and tools for adaptive and participatory co-design of adaptation options and 3.3.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options, among other things. The project will provide exposure tours to students to learn different aspects of sustainable development, environment monitoring etc.</p>
National Planning Department (NPD)	<p>NPD is committed to policy development, planning and implementation, to accelerate Sri Lanka's economic growth and social progress. As such, their involvement in the project will be manifold especially in the front of social development, reaching out to communities and enabling development activities to take place under the project. Maintenance of accounting and financial analysis system for effective utilization of Foreign Aid, review of economic development policies, strategies and programs, appraisal of project proposals submitted by line agencies etc. NPD will be a direct beneficiary of the project outcomes and it will be helpful in mainstreaming the project findings in national planning, budgeting and monitoring.</p> <p><u>Project activities:</u> NPD can specifically be involved in understanding the national implications in 1.1.2: Rehabilitation and establishment of village tanks, ponds and irrigation networks; 1.1.3: Restoration of forest mosaic landscapes; 1.2.2: Intensification of Sustainable smallholder production; 1.2.3: Restoration and intensification of sustainable plantations; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.3: Enterprise and business development to exploit green growth opportunities; 2.2.1: Developing a portfolio of business cases for negotiating performance-based financial transfer mechanisms; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; and 3.1.2 Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>

External Resources Department (ERD)	<p>ERD is responsible for the quality assurance of the use of external funding and to optimize the use of investments from different sources.</p> <p><u>Project activities:</u> In the project, ERD will help to upscale the findings of the project in other projects and to negotiate resources to do so.</p>
Department of National Budget (NBD)	<p>As NPD and ERD, the NBD is also a part of the national financial mobilization mechanism, including the priority decisions targeting finances.</p> <p>Project activities: NBD will facilitate the co-financing allocations and play a key role in upscaling the findings during the project. NBD will help to facilitate the promotion of Payment for Ecosystem Services (PES) models in national processes.</p>
Industrial Technology Institute (ITI)	<p>ITI is the national agency supporting innovations in industrial development. ITI undertakes contract, testing, investigation and research, for improving product quality, technical processes and methods used in industry, and for discovering new processes and methods to be used in industry.</p> <p><u>Project activities:</u> Creating awareness, imparting knowledge and investing in research to better improve industries will enable them to be involved in activities such as 1.2.2: Intensification of Sustainable smallholder production; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.2: Provide technical support for Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands; 2.1.3: Enterprise and business development to exploit green growth opportunities; 3.3.2: Training in methods and tools for adaptive and participatory co-design of adaptation options; and 3.3.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.</p>
Institute of Post-harvest Technology (IPHT)	<p>IPHT is responsible for research related to quality improvement of products, diversification of value-added products and development of post-harvest machinery and processing technologies.</p> <p><u>Project activities:</u> IPHT will work in activities such as, 1.2.1: Increasing cropping intensity of irrigated rice in both upstream and downstream areas; 1.2.2: Intensification of Sustainable smallholder production; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and</p>

	<p>subsistence farmers; 2.1.2: Provide technical support for Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands; 2.1.3: Enterprise and business development to exploit green growth opportunities; 3.3.2: Training in methods and tools for adaptive and participatory co-design of adaptation options; and 3.3.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.</p>
<p>Horticultural Research Development Institute (HRDI), Dept. of Agriculture</p>	<p>HRDI will work in the project to promote alternate sources of income to families who rely on one crop or one activity. Homegardens, and ornamental flower/plant cultivation could be promoted within communities with proper guidance and training.</p> <p><u>Project activities:</u> HRDI will be involved in activities such as 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.3: Enterprise and business development to exploit green growth opportunities; and 3.3.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.</p>
<p>Agrarian Training Centre of Dept. of Agriculture (HARTI)</p>	<p>HARTI is responsible for socioeconomic research relating to the use of land and water in Sri Lanka and it is also involved in providing relevant training to farmers, field workers and managers in both the state and non-state sectors.</p> <p><u>Project activities:</u> HARTI will play a role in leading the efforts to carry out socioeconomic related monitoring and reporting from baselines to progress while sharing its long-experience in annual work plan development and sharing the project experiences in the national planning processes.</p>
<p>Land Use Policy Planning Department (LUPPD)</p>	<p>LUPPD is responsible for the development of land use plans at district and divisional levels including mapping. LUPPD is cost sharing and co-financing the project through its in-kind and technical inputs.</p> <p><u>Project activities:</u> LUPPD offices at the national and sub-national levels will participate in project activities throughout the project period, specifically in activities 1.1.1: Streamside protection and drainage management along roads; 1.1.2 Rehabilitation and establishment of village tanks, ponds and irrigation networks; 1.1.3: Restoration of forest mosaic landscapes; 1.2.2: Intensification of Sustainable smallholder production; 1.2.3: Restoration and intensification of sustainable plantations; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; and 3.1.2: Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>

National Building Research Organization (NBRO)	<p>NBRO is the specialized Government agency, under the Ministry of Disaster Management for all landslide related expertise. The project area has a number of landslide prone areas and the project activities are also involved in modifications to the hydrologic regimes in the upper catchment area.</p> <p><u>Project activities:</u> NBRO expertise will be used in activities such as 1.1.1: Streamside protection and drainage management along roads; 1.1.2: Rehabilitation and establishment of village tanks, ponds and irrigation networks; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; and 3.1.2: Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>
Road Development Authority (RDA) and Provincial RDA	<p>RDA is responsible for the maintenance and development of road networks including the planning, designing and the construction of new highways, bridges and expressways to augment the existing road network.</p> <p><u>Project activities:</u> RDA is involved in 1.1.1: Streamside protection and drainage management along roads and 3.1.2: Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>
Ministry of Social Welfare and Samurdhi Authority	<p>Samurdhi Authority is responsible for empowering low-income groups by providing funds for investments and welfare. Equipped with specific schemes and programs devoted to different levels of rural and urban societies. Involving the Samurdhi Authority will ensure that benefits provided through the different <u>project activities can be targeted to low-income groups and other vulnerable members of forest adjacent communities</u></p>
Dept. of Wildlife Conservation (DWC)	<p>DWC is responsible for wildlife conservation elements such as protection, research, education, sustainable use and benefit sharing of the resources.</p> <p><u>Project activities:</u> DWC will be involved in activities such as 1.1.3: Restoration of forest mosaic landscapes; 1.2.3: Restoration and intensification of sustainable plantations; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.2.2: Setting up a PES intermediary body as a part of the multi-stakeholder platform, and its governance system established ; 2.2.3: Establish a monitoring system for PES schemes in the upstream catchment area; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; and 3.1.2: Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options.</p>

Ministry of Plantation Industries and Plantations in the project area namely the Elkaduwa Plantations, Janatha Estate Development Board and State Plantations Corporation – Midlands; Opalgala; Harepark; Private Sector Plantations – Midcar; Meezan etc.	<p>Ministry of Plantation Industries is responsible for policies on subsidies to the plantation industries and the project area has tea and rubber plantations. The Ministry and individual estates that will be involved in the project in multiple areas depend on the location of the plantation.</p> <p><u>Project activities:</u> Illustrative activities will include 1.1.3: Restoration of forest mosaic landscapes; 1.2.2: Intensification of Sustainable smallholder production; 1.2.3: Restoration and intensification of sustainable plantations; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.2.2: Setting up a PES intermediary body as a part of the multi-stakeholder platform, and its governance system established ; 2.2.3: Establish a monitoring system for PES schemes in the upstream catchment area; 3.1.1: Develop an integrated land use policy and planning mechanism at sub-basin scale; 3.1.2: Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options; 3.3.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.</p>
Sustainable Energy Authority of Sri Lanka (SEA)	<p>SEA promotes renewable energy development and use. The main objective of the authority is to ensure energy security, increase indigenous energy and improve the energy efficiency rank.</p> <p><u>Project activities:</u> The SEA will help the project to promote solar, wind and other biomass related energy production, storage and use to help the project activities including the greening of the area-based products.</p>
Ministry of Primary Industries – Dept. of Export Agriculture	<p>The Dept. of Export Agriculture is in charge of organizing and promoting cultivation and processing of Export Agricultural Crops. It undertakes conducting agronomic, post-harvest, economic and market research, organizing production and providing quality plants and planning material, administering assistance schemes, training, conducting crop protecting action, promoting the usage of fertilizer, assisting in organizing and arranging marketing, etc.</p> <p><u>Project activities:</u> the Dept. will be instrumental in 1.2.2: Intensification of Sustainable smallholder production; 2.1.1: Conduct Domestic value chain mapping and green market assessments for products especially from small holder and subsistence farmers; 2.1.2: Provide technical support for Enterprise and institutional development to exploit green growth opportunities for small holder farmers in the uplands; 2.1.3: Enterprise and business development to exploit green growth opportunities; 2.2.1: Developing a portfolio of business cases for negotiating performance-based financial transfer mechanisms; 2.2.2: Setting up a PES intermediary body as a part of the multi-stakeholder platform, and its governance system established; 3.1.2 Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of</p>

	intervention options; 3.3.1: Establishment of nested-scale multi-stakeholder innovation platforms from sub-basin to GN scale; and 3.3.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.
District Secretariats in the Project Area	<p>What is their role?</p> <p>Project activities will be coordinated closely with the District Secretariats and District Planning Units. The project area is mostly covered by the districts of Matale, Kurunegala and Anuradhapura. District Secretaries or officials of delegated authorities will participate in the Project Board Meetings where Results Based Annual Work Plans and budgets will be discussed and approved. In those districts, the District Agriculture Committees (DACs) will be used to disseminate the project progress.</p>
Divisional Secretariat Divisions (DSD) Offices in the Project Area	Project area involves 40 DS divisions and 1,084 GN (Village level) Divisions. Development officers attached to the Divisional Secretariat Offices will play a key role in the Strategic Teams identified in the project implementation arrangements. They will be part of all project activities and the type and extent of activities will very depend on the area of the DSD.
Organizations at Local Level	
Farmers, in particular subsistence / small holder farmers	Subsistence/smallholder farmers are the main beneficiaries of the project's component on sustainable primary production and the promotion of analog forestry. In the inception stage the group/s will get to know about the project and will have an opportunity to provide their inputs which will help to refine the design. Next ground of inputs will be at the formation of SDTs where the Governance structure will be refined. At the implementation stage the famers will participate and benefit from the project while providing information on the changes as a result of projects (ex: Household data collections on consumption patterns, water foot prints, income changes and other data). They will contribute to the lessons learned and the overall assessments when the project matured. Most importantly they will work on sustainability measures beyond the project period.
Plantation workers who represent marginalised and vulnerable ethnic groups	Among the project area's ethnic groups, the estate community (labourers working on the plantations) which are mainly Indian Tamil are considered as marginalised and vulnerable groups. Plantation workers are the main beneficiaries of the home garden etc. During the inception, the plantation workers will help to develop the baseline information related to the work they will be involved and contribute by way of initial feed back on the proposed activities. With the refined workplans they will interact with the areas-based project management teams and collect information while implementing project activities. The information will generate a rich picture of the changes as a result of the project interventions. They will capture the energy and water foot prints and changes in

	<p>their livelihoods and wellbeing. This continued support to monitoring will help the project to measure the impact and ensure the sustainability beyond the project.</p>
Forest adjacent communities	<p>The forest adjacent communities will benefit from project activities by working closely with Forest Department and other authorities during the implementation while enhancing their income and reducing the dependency on natural resources. They will engage in sustainable harvesting of forest products through agreements with Forest Department; providing labour and technical inputs for project activities such as tree planting, nursery development, processing produces etc. In the inception phase their roles will be clearer due to the locational dependency of the possible contributions. These communities will also help as service providers in IUCN Green Listing related ecotourism and other income generations in the area. A selected group of forest adjacent community members will help in project data collection (eg: visitor numbers, additional income generation etc.). They can also play a key role in monitoring such as measuring sediment reductions, growth of tree cover etc., after a specific training.</p>
Community-based Organizations on Forest Conservation	<p>The CBOs engaged through the project will act as a conduit to improve the sharing of best practices in forest conservation, act as change agents by taking the messages to communities and improve market access as they have the potential to consolidate the produce and help in marketing related logistics. On the conservation, the CBOs will work with the management teams of the project to organize exchanges between different communities to share best practices and create synergy so that area-based products can be developed by collecting the efforts of individual farmers. CBOs who are good in technology and management can work with processing canters (establish and manage). In the process the CBO will benefit and expected to transform as entities who will ensure the sustainability of the project.</p>
Youth and students	<p>The engagement of youth will be in education and awareness on the environmental and ecosystem process and it will be accomplished by engaging the youth and student in monitoring project benefits. For example, the students can monitor the extent of erosion (sediment delivery and the changes to sediment delivery as a result of best practices). These students can highlight the impact of best practices and continue the knowledge transfer among their community and beyond the community through student exchanges, debates and class room projects. The student activities will be primarily in the implementation and the type of activities and the operationalizing modalities will be discussed with school teachers and Education Department staff, based on the project experience IUCN and others have in other projects with student engagement. Students will be one of the key groups who will be generating monitoring data. In addition, youth groups can be involved in planning and implementation in an organized way through volunteering.</p>

Women – individual and groups	Women will consist of a large segment on the beneficiaries. Their roles are elaborated in the Gender Action Plan (Annexure 6 of the Funding Proposal) ³⁷
Research and Think Tanks	
Universities	<p>Universities will play a lead role in mobilizing technical assistance, providing field level study support through graduate student research and providing support in project monitoring activities, especially the actions related to PES, Water Quality and simple modelling of environment flows.</p> <p>Universities will benefit from the project activities as the project provides opportunities for university staff, research and students to work hands on with project activities. Project area is in close proximity to number of universities with different expertise. University of Peradeniya, Rajarata (North Central Province) University based in Anuradhapura, Wayamba (North-Western Province) University based near Kurunegala are the closest but there is expertise the project can mobilize from other universities such as University of Sabaragamuwa; University of Sri Jayawardenapura; University of Colombo; University of Kelaniya; Open University of Sri Lanka etc. In addition, there are possibilities of partnering with Universities outside of Sri Lanka through the Sri Lankan universities.</p>
Institute of Policy Studies (IPS)	<p>IPS is a Government Think Tank carrying out policy related studies including climate change, ecosystems and health.</p> <p>IPS will be mobilized to help in the case study development, project monitoring and developing material for national level upscaling and mainstreaming of project results.</p>
Institute of Fundamental Studies (IFS)	<p>IFS based in Kandy is a resource agency for geology, flora and water chemistry related work.</p> <p>IFS's capacity will be mobilized by the project in appropriate areas specifically to work with ICRAF led component 3 activities.</p>
International Organizations	
Rainforest Rescue International (RRI)	RRI is a leading Non-Governmental Organization extensively involved in analog forestry and establishing forest corridors. The RRI maintain two research and educational facilities on landscape restoration and development. RRI expertise was used in the project conceptualization,

³⁷ <https://www.dropbox.com/s/docmphuwurj8en/06.%20%20%20FPP-IUCN-GCF-Sri%20Lanka%20-%20Annex%206%20Gender%20Assessment%20and%20Action%20Plan.docx?dl=0>

	<p><u>Project activities:</u> During the project RRI will help in training and capacity building and monitoring the Analogue Forestry related implementation.</p>
International Water Management Institute (IWMI)	<p>IWMI headquartered in Colombo, Sri Lanka is a resource agency for climate impact assessments on agriculture, water resource management, environment flows and ecosystem-based adaptation. IWMI maintains several databases that can be tailored to support project activities. IWMI's landscape modelling capacity would be useful in evaluating the impact of the project interventions.</p> <p><u>Project activities:</u> Specific roles for IWMI will be in the project activities such as 3.1.2: Develop the SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options; 3.3.1: Establishment of nested-scale multi-stakeholder innovation platforms from sub-basin to GN scale; and 3.3.3: Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options.</p>
World Food Programme	<p>WFP implements a number of innovative insurance programmes and strategies to reduce and mitigate risks and enhance resilience. The Rural Resilience Initiative (R4) enables vulnerable rural families to increase their food and income security by managing climate-related risks. These experiences can be transferred to the project.</p>
World Bank	<p>The World Bank promotes smart agriculture and smart irrigation system among other things. Technologies such as micro irrigation, precision farming and water and energy use efficient techniques promoted by World Bank are useful in this investment project.</p> <p>The collaboration with the World Bank will be complementary to the work proposed in Components 1 and 3.</p>
UNDP	<p>Works on biomass to energy, community forestry, emission reductions and climate smart agriculture through different funding sources. Important in policy development and Govt. engagements.</p> <p>The water use efficiency work carried out by UNDP and the experience will be useful to this project in the component 2 in value chain development as well as in water use efficiency improvements in the irrigated areas.</p>
Food and Agriculture Organization	<p>Leading agency supporting erosion control and support to small farmers and land use planning. The FAO Technical Assistance Co-operation efforts include smart agriculture, precision farming and minimizing chemical loads to streams and reservoirs.</p> <p>The component 2 of the investment project will be complementary to the FAO work and its policy developments in precision farming in the country.</p>
Private Sector	

Keels Super Markets	One of the largest market chains interested in green vegetables and products. They maintain backward integration to ensure the supply chain and standards that can be linked with small holder farmers. This partner may contribute in strengthening the market linkages in the component 2 of the project.
Cargills	As Keels Cargills also engage in contract farming and training and capacity building of farmers to minimize post-harvest product losses and provide incentives for farmers to develop new products and add value in Component 2.
CBL	Leading dry food chain in Sri Lanka – mostly export oriented. Also CBL maintain forward contracts for Bee Honey and other superfood development in the country. The component to and green listing work in activity 2.1.2 will be a niche area for CBL in the project.
Dialog Axiata	Dialog Axiata PLC supports smallholder tea farmers in Sri Lanka through Digital mediums. Often following a multi crop model on average land holdings of less than an acre. Dialog have existing partnerships with the Government and other stakeholders on collating and sharing learnings and best practices as well as expert advice with these farmers. This telecom agency will be useful in the component 3 of the project to establish the communication platforms and also in component 2 to support the propagation of insurance and payment gateways.
Unilever	Unilever is a key player in the supply chain improvements. Its Sustainability Initiatives include working with suppliers to green the supply chain and will be a key partner in SPA related product development and marketing

Table 3: Roles of partner entities under activities led by EEs (MMDE, IUCN and ICRAF)³⁸

Activity/EE	Pre identified contractors/Partners	Type of inputs anticipated
Activity 1.1.1 - Streamside protection and drainage management along roads (IUCN Sri Lanka)	Mahaweli Authority of Sri Lanka	<ul style="list-style-type: none"> • Conduct water quality/ sedimentation measurements • Provide base data • Develop maps to identify areas for water flow management
	Forest Department	<ul style="list-style-type: none"> • Identify sensitive and highly conserved areas • Provide measures and controls for forest streamside • Provide inputs on conserving forest species in river banks
	Provincial Irrigation Department	<ul style="list-style-type: none"> • Install sedimentation trapping methods in the irrigation channels • Control measures for water flow • Measuring sedimentation
	Universities	<ul style="list-style-type: none"> • Novel concepts of structural measures for streamside protection • Modelling and researching the sedimentation loadings for irrigation systems
	Provincial Ministry on Road Development	<ul style="list-style-type: none"> • Implement roadside drainage constructions and maintenance • Use of community labour and compensate them
	Natural Resource Management Centre	<ul style="list-style-type: none"> • Designing the streamside protection considering site specific requirements • Implement streamside protection activities
	Dept. of Agriculture	<ul style="list-style-type: none"> • Identification of crop varieties for streamside protection • Use of trapped sedimentation
	CBOs	<ul style="list-style-type: none"> • Undertake minor contracts for construction • Organising community labour • use of trapped sediments in tree plantings and forestry
Activity 1.1.2 Rehabilitation and establishment of village tanks, ponds and irrigation networks	Department of Agrarian Development	<ul style="list-style-type: none"> • tank de-siltation • rehabilitation of tanks • training community
	Provincial Irrigation Department	<ul style="list-style-type: none"> • Designing irrigation network for minor irrigation • Flood control measures • Runoff the water and spill water management

³⁸ EEs identified under each activity are responsible for the delivery of the activity.

(IUCN Sri Lanka)	CBOs	<ul style="list-style-type: none"> • Undertake minor de-siltation under DAD supervision • Organise community labour • Tree planting programs in riverbank and catchment
	Department of Agriculture	<ul style="list-style-type: none"> • Introducing new crop varieties • Value addition for agricultural production
Activity 1.1.3 - Restoration of forest mosaic landscapes (IUCN Sri Lanka)	Forest Department	<ul style="list-style-type: none"> • Conduct buffer zone plantation • Establishing fire belts • Conduct enrichment plantings • Contract with the community on farmer woodlots • Cash crop cultivation in forestlands • Implement the green listing plan for KCF
	Universities	<ul style="list-style-type: none"> • Research activities • Curriculum and train community on forest-related tourism • Skill enhance training to cater to tourism demand
	Rainforest Rescue International (RRI)	<ul style="list-style-type: none"> • Organise cross-sharing visits for communities • Establish and train the community on plant nursery management
Activity 1.2.1 - Increasing cropping intensity of irrigated rice in both upstream and downstream areas (MMD&E)	Department of Agrarian Development	<ul style="list-style-type: none"> • Capacity building training for farmer associations • Training on the SRI method • Introducing resilient climate paddy and other crop varieties
	Provincial Department of Agriculture	<ul style="list-style-type: none"> • Provide seeds varieties to farmers • Multiplication of seeds which are tolerant to climate change and deliver high crop yield • Conduct farmer training on best agriculture practices
	Mahaweli Authority of Sri Lanka	<ul style="list-style-type: none"> • Facilitate the activity 1.2.1 in areas belongs to Mahaweli Area. • Replication of work in the downstream area mainly in Anuradhapura District which belongs to the project area • Conduct capacity building sessions for farmer organisations
Activity 1.2.2 - Sustainable intensification of	Department of Export Agriculture (DEA)	<ul style="list-style-type: none"> • Introducing export-oriented crops • Training on value addition options

smallholder production (MMD&E)	Provincial Department of Agriculture	<ul style="list-style-type: none"> • Provide plants and seeds to farmers • New farming technology and equipment • Conduct farmer training on best agriculture practices
	Universities	<ul style="list-style-type: none"> • Transform the new research knowledge to farmers through project support • Identification of problem areas for research • Facilitating innovation platforms • Design courses and farmer school curricula
	Department of Agrarian Development	<ul style="list-style-type: none"> • Identify possible land areas for expansions • Provide support to farmers on technical guidance in the field • Introducing precision farming technology in Sri Lanka • Disseminate seasonal weather forecasting to farmers for better plan the disaster impacts
	Rainforest Rescue International	<ul style="list-style-type: none"> • Sharing the experience in the rainforests areas and wet zone • Raise awareness among the public
	Department of Meteorology	<ul style="list-style-type: none"> • Provide weather forecasting and seasonal weather forecasting • Expand the monitoring stations in the project area • Baseline data provider on rainfall, temperature, wind etc. • Monitor the climate models and project impact in long term
	ICRAF	<ul style="list-style-type: none"> • Experience from other countries • Precision farming technology • Intercrop models on forest and commercial species
Activity 1.2.3 - Restoration and sustainable intensification of plantations (IUCN Sri Lanka)	Ministry of Plantation Industries	<ul style="list-style-type: none"> • Review policies on subsidies to the plantation industry • Provide facilitation for ministry managed plantation land
	Regional plantation Companies	<ul style="list-style-type: none"> • Identify and allocate areas for plantation including degraded areas for improvements • Encourage the plantation community to participate in the GCF project
	Department of Export Agriculture	<ul style="list-style-type: none"> • Organising and promoting cultivation in plantation lands • Promote the processing of export crops • Provide quality plants and plant materials • Promoting the usage of carbonic fertiliser
	Biodiversity Sri Lanka (BSL)	<ul style="list-style-type: none"> • Private sector coordination

Activity 2.1.1 - Domestic value chain mapping and green market assessments for products especially from smallholder and subsistence farmers (ICRAF)	Universities	<ul style="list-style-type: none"> • Provide technical assistance to both institutes and farmer community • Field level assessments and studies
	Department of Export Agriculture	<ul style="list-style-type: none"> • Conduct market researches • Assisting marketing • Development of e-marketing platform to benefit the farmers in the area to enter the export market
	Department of Agriculture	<ul style="list-style-type: none"> • Crop forecast information system for export-based local buyers • Agrotechnology park for green technology • Production of planting materials and seeds • Regional warehouses and processing centres to farmers
Activity 2.1.2 - Enterprise and institutional development to exploit green growth opportunities for smallholder farmers in the uplands (IUCN Sri Lanka)	Department of Export Agriculture	<ul style="list-style-type: none"> • Identify new markets • Conduct exhibitions and symposiums to promote smallholder production in the project areas • Disseminate new technology for agriculture-based enterprises
	Provincial Department of Agriculture	<ul style="list-style-type: none"> • Establishing regional production zones in line with KCF Green Listing initiatives • A local platform for innovations • Capacity-building support to new agriculture-based enterprises
	National Enterprise Development Authority of Ministry of Industries and Commerce	<ul style="list-style-type: none"> • Facilitate and manage financial schemes to support smallholder enterprise development with the support of the project • Conduct CBO training
	Forest Department	<ul style="list-style-type: none"> • Implement actions under IUCN green listing certification process in Knuckles Conservation Area • Releasing lands for community-based conservation and sustainable economic development • Promoting the destination among local and international tourism organisations
Activity 2.1.3: Identification and implementation of value chain upgrading options for smallholder and	Department of Agrarian Development	<ul style="list-style-type: none"> • Development of certification for organic farming and promote • Certification for climate resilience initiatives and contributions made by enterprises for efficient use of natural resources in farming
	Department of Export Agriculture	<ul style="list-style-type: none"> • Establish brand and areas specific image to the product

subsistence farmers engaged in climate-smart agriculture (IUCN Sri Lanka)		<ul style="list-style-type: none"> • Facilitate and promote the green-related standards for existing and new enterprises
	Provincial Department of Agriculture	<ul style="list-style-type: none"> • Promoting regional production zones in line with KCF Green Listing initiatives • Developing Regional platform for innovations
Activity 2.2.1 - A portfolio of business cases for negotiating performance-based financial transfer mechanisms (IUCN Sri Lanka)	ICRAF	<ul style="list-style-type: none"> • Link Information on ecosystem services and solutions for ES provisions to spatially explicit assessment and interventions of land degradation • Develop criteria to select smallholder farmers as PES participants
	MMDE	<ul style="list-style-type: none"> • Provide policy development support • Aware and train the government officers in the project area • Facilitate the financial support initiation of Mahaweli Authority
Activity 2.2.2 – A PES intermediary body as a part of the multi-stakeholder platform and its governance system established (IUCN Sri Lanka)	ICRAF	<ul style="list-style-type: none"> • Technical support to establish PES intermediary body • Development of terms of reference and governance roles and responsibilities
	MMDE	<ul style="list-style-type: none"> • Administration of PES intermediary body • Policy development • Ensure sustainability • Replication in other vulnerable areas as a tested strategy
Activity 2.2.3 - A monitoring system for PES schemes in the upstream catchment area (ICRAF)	IUCN Sri Lanka	<ul style="list-style-type: none"> • Systemizing the recording of the impact of PES initiatives towards set indicators • Development of water quality measurement and timely reading together with the partners • Appropriate analysis
	MMDE	<ul style="list-style-type: none"> • System for PES audit • Facilitate information sharing
Activity 3.1.1- Develop an integrated land use policy and planning	LUPPD	<ul style="list-style-type: none"> • Map the land use at the sub-basin level • Facilitate integrated planning
	NRMC	<ul style="list-style-type: none"> • Identification and implementation of best land-use practices at sub-basin level

mechanism at the sub-basin scale (IUCN Sri Lanka)	MMDE	<ul style="list-style-type: none"> • Incorporate climate adaptation plans at the sub-basin level • Implementing adaptation programs identified by the integrated plan
	ICRAF	<ul style="list-style-type: none"> • Establishing a SHARED system • Technical support to SDT teams
Activity 3.1.2 - Develop a SHARED information system to support land use planning, climate adaptation, market information and monitoring of the performance of intervention options (ICRAF)	NRMC	<ul style="list-style-type: none"> • Implement sub-basin level solutions for degradation • Training government officers and community on best land-use techniques for climate induce issues
	LUPPD	<ul style="list-style-type: none"> • Development of Land use maps • Managing the SHARED database at the sub-basin level
	Information Communication Technology Agency (ICTA)	<ul style="list-style-type: none"> • Provide technical input to develop SHARED systems • User requirement and design of the database • Training the front and back end users
Activity 3.1.3 - Development and refinement of options by context framework for SLM and sustainable intensification (ICRAF)	LUPPD	<ul style="list-style-type: none"> • Generate land use maps to understand the context
	Department of Agrarian Development	<ul style="list-style-type: none"> • Identify the context-specific farming solutions • Context-specific crop diversification needs
	Department of Export Agriculture	<ul style="list-style-type: none"> • Identify the different options to cater to export needs • Study the potential export crops that suit for different climate impact contexts
	Universities	<ul style="list-style-type: none"> • The field surveys and studies • Global experience and lessons in similar contexts • Agriculture trials and models for testing • Testing potential adaptation measures
	NRMC (Department of Agriculture)	<ul style="list-style-type: none"> • Options for different land management • Knowledge codification
	IUCN Sri Lanka	<ul style="list-style-type: none"> • Options of conservation and adaptation without compromising the development opportunities
Activity 3.2.1. - Establishment of	Provincial Department of Agriculture	<ul style="list-style-type: none"> • Evaluate best agriculture-related adaptation options to multiply the benefits

nested-scale multi-stakeholder innovation platforms from sub-basin to GN scale (IUCN Sri Lanka)	MMDE	<ul style="list-style-type: none"> • Incorporate the options in national adaptation strategy • Conduct public innovation competition for adaptation issues
	Universities	<ul style="list-style-type: none"> • Research and development • The industrialisation of innovation with the support of the project
	ICRAF	<ul style="list-style-type: none"> • Technical inputs to innovation platforms • Innovative solutions for greening dry and intermediate zones mainly downstream areas of the project
Activity 3.2.2 - Training in methods and tools for adaptive and participatory co-design of adaptation options (ICRAF)	NRMC (Department of Agriculture)	<ul style="list-style-type: none"> • Codification of new knowledge generated from the project
	IUCN Sri Lanka	<ul style="list-style-type: none"> • Contribute to incorporate ES and BD related knowledge to strengthen climate adaptation
	Universities	<ul style="list-style-type: none"> • Codification of new knowledge generated from the project
Activity 3.2.3 - Development of simple to use guidelines, manuals and tools for matching options to context and implementing SLM, sustainable intensification and value chain upgrading options (ICRAF)	NRMC (Department of Agriculture)	<ul style="list-style-type: none"> • A series of guidelines, manuals and trainer guides • Development of smartphone apps • Distance learning courses and materials
	IUCN Sri Lanka	
	Universities	

Annex 10.5: List of existing and proposed Forest Reserves

Sn No.	Forest reserves (including new forest reserves upgraded from proposed reserve list	Gazette Number
1	INAMALUWA F.R	1944/03/02
2	KAHALLA F.R.	1935/10/11
3	LIKOLAWEWA F.R.	Gazetted (number to be located)
4	LUNU OYA F.R.	Gazetted (number to be located)
5	MIHINTALE F.R.	1924/11/14
6	NUWARAGAM F.R.	1935/05/29
7	PALLEKELE F.R.	Gazetted (number to be located)
8	PALWEHERA F.R.	1936/03/27
9	YODA ELA F.R.	1950/02/10
10	ALUTABENDAWEWA F.R.	2013/05/28
11	ELAGOMUWA F.R.	2018/07/06
12	PALLEGAMA HIMBILIYAKADA 2 F.R.	2018/02/28
	1	
13	POTOWA F.R.	2015/07/15
14	WEGODAPOLA P.R.	2009/11/18
	Pending list of proposed reserves to be upgraded as Forest Reserves	
15	DAMBULU OYA P.R.	
16	DOTULUGALA P.R.	
17	GALGIRIYAKANDA P.R.	
18	KALA OYA P.R.	
19	MEDAULPOTA P.R.	
20	MOTURAMPATANA P.R.	
21	NIKAWEHERA P.R.	
22	PALLEGAMA HIMBILIYAKADA 1 P.R.	
23	PALWEHERA P.R.	
24	SANGAPPARLE P.R.	
	World Heritage Site/Conservation Forest	
25	Knuckles	Gazetted as Conservation Forest

Annex 10.6: Population data Forest Reserves

Details of existing forest reserves

Forest Reserve	Forest Extent (Ha) within Project Area	District	Division	GND	Adjacent Population	Male	Female
Aluthabandawewa	487	Anuradhapura	Thirappane	Aluth Punchikulama	783	376	407
				Ethungama North	938	466	472
				Ethungama South	826	390	436
				Gnanikkulama	741	372	369
				Meewellewa	984	488	496
				Uttimaduwa	481	230	251
				Wannamkulama	302	146	156
Elagomuwa	922	Matale	Naula	Ambana	201	111	90
				Elagamuwa	545	280	265
				Galboda	117	65	52
				Galporugolla	333	169	164
				Kambarawa	664	333	331
				Moragolla	223	111	112
Inamaluwa	2013	Matale	Dambulla	Digampathaha	1249	658	591
				Etawarahena	1096	527	569
				Inamaluwa	1560	772	788
				Nagalawewa	903	449	454
				Siyambala Wewa	581	283	298
				Pothana	762	391	371
		Anuradhapura	Palugaswewa	Wayaulpatha	877	442	435
Kahalla	3338	Matale	Galewela	Bulanawewa	2561	1218	1343
				Kosgahahinna	969	462	507
				Moragolla	842	388	454

				Pibidunugama	639	329	310
				Ralalerotawewa	787	384	403
		Anuradhapura	Palagala	Budugehinna	785	381	404
				Kalugala	1163	603	560
				Parawahagama	910	442	468
				Pelbendiyawa	671	316	355
Likolawewa	3446	Anuradhapura	Thambuttegama	Helambawewa	885	436	449
				Makulewa	1338	677	661
				Mudungoda	1526	733	793
				Thammennawa	1780	860	920
		Kurunegala	Galgamuwa	Lassanagama	729	372	357
				Ethiniwetunugala	849	427	422
				Bandaragama	1257	612	645
				Ganangamuwa	1442	673	769
				Gemunupura	517	253	264
				Jayalanda	995	484	511
				Kepela	928	464	464
				Mahagalkadawala	1093	517	576
				Medagama	1440	716	724
				Medagama East	714	351	363
				Padavigama	1518	735	783
				Usgala	761	362	399
				Siyambalagamuwa	722	340	382
				Thissapura	722	340	382
				Track 4 Usgala	543	268	275
				Walagambapura	797	408	389
				Walaswewa	706	352	354
Lunuoya	3945	Anuradhapura	Nochchiyagama	Mihiripura	856	416	440
				Rankethgama	2089	1041	1048
			Rajanganaya	4 ½ Kanuwa	1374	662	712

				Angamuwa	1324	634	690
				Gemunupura	1853	915	938
				Kalundegama	1484	701	783
				Maha Thimbirikalla	1904	911	993
				Naigala	1349	650	699
				panthiyawa	1143	561	582
				Randenigama	1176	588	588
				Sirimapura	1155	583	572
				Thissapura	878	421	457
				Thumbullegama	1348	640	708
				Track 3	1089	526	563
				Track 4	1355	665	690
				Track 7	1251	583	668
				Track 9 - 10	1883	953	930
		Kurunegala	Giribawa	Bambare	1089	556	533
				Halmillagala	837	394	443
				Kokmaduwa	595	308	287
				Serasumgala	629	307	322
				Thimbiripokuna	843	415	428
Mihinthale	3270	Anuradhapura	Mihinthale	Hene Watta	2117	1000	1117
				Kannattiya	1554	723	831
				Kunchikulama	2814	1371	1443
				Ruwangama	2160	1044	1116
			Nuwaragam Palatha Central	Thannayamkulama	1102	559	543
				Theppankulama	2293	1140	1153
Nuwaragam	2757	Anuradhapura	Nachchaduwa	Aluthwewa	1730	831	899
				Kimbulakada	1572	790	782
				Shrawasthipura	2165	1050	1115
				Shrawasthiwatta	1632	777	855
			Nuwaragam Palatha East	Pothanegama	2853	1394	1459

			Thalawa	Moragoda	1769	897	872
Pallekele	15351	Matale	Galewela	Dembawa	754	348	406
				Aluthwewa	1480	688	792
				Hathadukkuwa	991	493	498
				Hombawa	1402	639	763
				Kendangamuwa	986	475	511
				Kospotha	1372	676	696
				Wegodapola	825	365	460
		Anuradhapura	Pallepola	Millawana Pahalagama	766	391	375
			Galnewa	Kandule Gama	242	125	117
				Siyabalangamuwa South	586	272	314
			Palagala	Ambagaswewa	596	287	309
				Maneruwa	689	334	355
		Kurunegala	Polpithigama	Bulnewa	892	451	441
				Paragaha Ela	536	256	280
				Siyambalangamuwa	718	378	340
				Thalawa	857	411	446
Palwehera	1962	Matale	Dambulla	Athuparayaya	1883	935	948
				Bellanneoya	1301	645	656
				Kandalama	2213	1117	1096
				Kumbukkandanwala	874	439	435
				Pahala Erevula	1031	612	419
				Pelvehera	2216	1125	1091
				Rathmalkatuwa	1161	563	598
				Vilhatha	572	292	280
				Yakkuragala North	1097	516	581
				Yakkuragala South	1087	536	551
Potowa	52	Matale	Galewela	Palapathwala	1088	523	565

Yodaela	2509	Anuradhapura	Nachchaduwa	Pahalawewa	1023	507	516
				Kaluarachchiyagama	1080	546	534
				Thuruwila	1390	674	716
			Thirappane	Idigahawewa	435	220	215
				Paidikulama	681	340	341
				Walagambahuwa	480	230	250
			Thalawa	Eppawala	1974	998	976
				Galmaduwa	954	453	501
				Kadurugaswewa	1114	578	536
				Kiralogama	1570	756	814
				Kurunduwewa	1875	918	957
				Mawathawewa	1129	549	580
				Medagama	1471	720	751
				Nallamudawa	1318	655	663
				Palugaswewa	2246	1130	1116

Details of proposed forest reserves

Proposed Forest	Forest Extent (Ha) within Project Area	District	Division	GND	Adjacent Population	Male	Female
Dambuluoya	76	Matale	Dambulla	Embulambe	794	398	396
				Kiralessa	556	281	275
				Kiralagolla	925	458	467
				Puwak Attawala	812	411	401
				Pannampitiya	1250	609	641
Dotugala	52	Kandy	Udadumbara	Kaikawala	116	64	52
				Meemure	280	148	132
				Pusseela	272	137	135
		Matale	Laggala-Pallegama	Etanwala	134	70	64
				Narangamuwa	301	152	149
				Ranamuregama	434	212	222
Galgiriyakanda	1209	Kurunegala	Ehetuwewa	Divulgane	521	241	280
				Kaduruwewa	579	267	312
				Mudiyanneegama	718	362	356
			Polpithigama	Kumbukkadawala	1149	581	568
Kalaoya	5479	Anuradhapura	Rajanganaya	4 ½ Kanuwa	1374	662	712
				Kalundegama	1484	701	783
				Maha Thimbirikalla	1904	911	993
				panthiyawa	1143	561	582
				Sirimapura	1155	583	572
				Veheragala	2834	1384	1450
		Kurunegala	Galgamuwa	Medagama	1440	716	724
			Giribawa	Solepura	1147	561	586

				Bambare	1089	556	533
				Damsopura	1018	479	539
				Halmillagala	837	394	443
				Hasthirajapura	1189	575	614
				Ihala Giribawa	876	414	462
				Jayanthipura	815	399	416
				Kokmaduwa	595	308	287
				Mahasenpura	806	383	423
				Orugala	983	479	504
				Pahala Giribawa	706	347	359
				Pathane Wewa	932	439	493
				Perakumpura	1415	701	714
				Sandagala Palatha	1001	505	496
				Serasumgala	629	307	322
				Solewewa	1779	851	928
				Thammitagama	489	250	239
				Thimbiripokuna	843	415	428
				Weerapokuna	975	481	494
Medaulpotha	2374	Matale	Laggala-Pallegama	Akarahediya	411	218	193
				Dasgiriya	609	313	296
				Dewaladeniya	545	294	251
				Kaluganga	671	331	340
				Maoya	332	190	142
		Polonnaruwa	Elahera	Atharagallewa	2326	1124	1202
				Kirioya	1006	533	473
Moturampathana	430	Kurunegala	Galgamuwa	Buduruwakanda	1175	542	633
				Kelegama	607	306	301

				Kumbukwewa	546	267	279
				Kurundankulama	976	504	472
				Padipanchawa	804	383	421
Nikawehera	6		Galewela	Dambagolla	1250	635	615
Pallegama Himbiliyakanda	969	Matale	Wilgamuwa	Himbiliyakada	249	123	126
				Kumbukoya	272	138	134
				Topwalapitiya	393	198	195
Palwehera	337	Matale	Dambulla	Bellanneoya	1301	645	656
				Etawarahena	1096	527	569
				Kandalama	2213	1117	1096
				Kumbukkandanwala	874	439	435
				Pallegama	1121	549	572
				Palutawa	752	393	359
				Pelvehera	2216	1125	1091
				Pothana	762	391	371
				Rathmalkatuwa	1161	563	598
				Welihena	1487	722	765
Sangappale	4995	Kurunegala	Giribawa	Aliyawetunawewa	1202	559	643
				Gampola	410	199	211
				Hettiarachchigama	878	437	441
				Ihala Maradankadawala	499	249	250
				Madige	1374	680	694
				Pothana	785	381	404
				Thambutta	695	330	365
				Weragala	337	173	164

Details of the protected areas under Department of Wildlife and Conservation

Protected Areas by DWC	Forest Area (ha) within project area	District	Division	GND	Population	Male	Female
Anuradhapura Sanctuary	1781	Anuradhapura	Mihinthale	Ruwangama	2160	1044	1116
Block 3 Nature reserve	2194	Matale	Dambulla	Angunawel Pelessa	416	200	216
				Ihala Ereula	870	422	448
				Kalundewa Paranagama	713	334	379
				Pahala Erevula	1031	612	419
				Welangolla	889	441	448
Block 4 Nature reserve	1271	Matale	Naula	Bambaragahawatta	334	163	171
				Dambagolla	279	137	142
				Helambagahawatta	361	180	181
				Maragamuwa	385	193	192
				Pubbiliya	425	213	212
				Thalagoda	728	354	374
Kahalla-Pallekele Sanctuary	21017	Matale	Galewela	Moragolla	842	388	454
		Matale	Galewela	Pibidunugama	639	329	310
		Anuradhapura	Palagala	Hinguruwewa	777	367	410
				Ipulwehera	832	402	430
			Galnewa	Kallanchiya	618	288	330
				Kandegama	551	272	279
				Kandule Gama	242	125	117
				Kandulugamuwa	523	259	264
				Kumbukwewa	249	118	131
				Negama	1286	583	703

				Siyabalangamuwa South	586	272	314
				Siyambalewa	791	395	396
			Ipalogama	Amanakkattuwa	262	124	138
				Kusalanagama	1526	690	836
				Puliyankulama	1683	830	853
				Vijithapura	1245	635	610
				Walawwegama	1869	927	942
			Kekirawa	Dambewatana	838	421	417
				Horapola	1357	665	692
				Karukkankulama	550	259	291
				Mailagaswewa	732	359	373
				Neekiniyawa	1322	657	665
				Olombewa	1918	910	1008
				Shasthrawelliya	476	212	264
				Uduruwa	1089	510	579
				Unagollewa	830	395	435
			Palagala	Wambatuwewa	652	310	342
				Aluth Galkiriyagama	1167	570	597
				Ambagaswewa	596	287	309
				Andiyagala	928	444	484
				Balaluwewa	773	366	407
				Balaluwewa 2	938	441	497
				Gam Sabha Halmilla Wewa	1177	572	605
				Gambirigaswewa	628	305	323
				Gonadeniyagama	950	461	489
				Kalugala	1163	603	560
				Karavilagala	397	196	201
				Kirindiwatta	819	391	428

				Maneruwa	689	334	355
				Meewewa	424	232	192
				Pahalagama	636	302	334
				Parawahagama	910	442	468
		Kurunegala	Ehetuwewa	Andarawewa	776	387	389
				Bongama	804	401	403
				Kuda Kathoruwa	729	353	376
				Maha Kathnoruwa	420	221	199
				Mahaweli Thenna	942	448	494
				Medinnoruwa	923	474	449
				Pothanagama	658	310	348
				Wedinigama	656	328	328
				Weliyawa	731	360	371
			Polpithigama	Bulnewa	892	451	441
				Siyambalangamuwa	718	378	340
				Thalawa	857	411	446
Mihintale Sanctuary	105	Anuradhapura	Mihinthale	Kurundankulama	1731	837	894
			Nuwaragam Palatha East	Step 1 part 1	1894	990	904
				Isurumuniya	1517	731	786
				Saliya Mawatha	1887	911	976
				Pothanagama	2853	1394	1459
				Shuddha Nagaraya	717	413	304
				Thisawewa	113	61	52
				Wessagiriya	1249	685	564
				Keerikkulama	1762	852	910
				Mahakalattewa	1793	889	904
				Nuwara Wewa	1886	948	938
				Step 1 part 2	2491	1275	1216
				Step 2 part 2	4566	2666	1900
				Thammennakulama	4348	2094	2254

				Thammennapura	1608	775	833
				Wannithammennawa	1601	786	815
Ritigala Strict nature reserve	1301	Anuradhapura	Kekirawa	Heenukkiriyawa	1030	490	540
			Kekirawa	Keeriyagaswewa	438	238	200
			Palugaswewa	Galapitagala	447	223	224
			Thirappane	Alagollewa	690	353	337
				Muriyakadawala	467	220	247
				Uttupitiya	782	373	409
Sigiriya Sanctuary	4090	Matale	Dambulla	Avudangawa	607	321	286
				Digampathaha	1249	658	591
				Egodawewa	912	471	441
				Gedigaswalana	728	371	357
				Kimbissa	791	394	397
				Mailattawa	1866	1016	850
				Nagalawewa	903	449	454
				Palutawa	752	393	359
				Pidurangala	548	273	275
				Pothana	762	391	371
				Sigiriya	616	342	274
				Thalkote	1143	588	555
Tabbowa Sanctuary	14953	Kurunegala	Giribawa	Gampola	410	199	211
				Hettiarachchigama	878	437	441
				Ihala Maradankadawala	499	249	250
		Puttalam	Karuwalagaswewa	Rambawewa	577	285	292
Victoria Randenigala	2995	Kandy	Minipe	Hasalaka Nagaraya	1400	684	716
				Gurulupotha	792	401	391
				Hasalaka	1439	758	681
				Keenapelessa	1399	704	695
				Maha Eswedduma	1202	566	636

				Rathnella	1268	602	666
			Udadumbara	Dambagahapitiya	292	131	161
				Dumbaragama	754	357	397
				Gangoda	419	212	207
				Gedaramada	203	103	100
				Kirigankumbura	585	276	309
				Mahawala	323	148	175
				Oyathenna	454	228	226
				Poppitiya	235	111	124
				Thalagune	325	144	181
				Udadumbara	526	268	258
				Udakumbura	224	112	112
				Udapitawala	634	302	332
				Wasgamuwa National Park	8350	Matale	Laggala-Pallegama
Dewaladeniya	545	294	251				
Maoya	332	190	142				
Wilgamuwa	Aliwanguwa	778	396				382
	Handungamuwa	677	326				351
	Kumbukoya	272	138				134
	Thunhiriyawewa	751	357				394
	Topwalapitiya	393	198				195
	Viharagama	743	357				386
Polonnaruwa	Elahera	Atharagallewa	2326			1124	1202
		Kirioya	1006			533	473

Annex 10.7: ESMS Screening&Clearance template

The generic version of the IUCN ESMS Screening and Clearance template is available on IUCN ESMS website at www.iucn.org/esms. The template will be adapted to commensurate to the level of expected risks of sub-projects during the inception phase.

Annex 10.8: Types of activities included in the Community Forestry Management Plans

Activities included in the CFMPs	
A.	Participatory forestry activities
	1. Enrichment Planting
	2. Buffer Zone planting & management
	3. Catchment planting
	4. Agro-Forestry Woodlots
	5. Live fence to prevent elephant invasions
	6. Live fence for forest demarcation
	7. Planting of fruit plants in selected areas in the forest
	8. Fire protection
	9. Homegarden development
	10. Tree improvement
B.	Community infrastructure development activities
	1. Rehabilitation of minor tanks
	2. Drinking Water Project
	3. Renovation of village temple
	4. Support to the village school
	5. Renovation of the Community Hall
	6. Renovation of the road to the temple
	7. Provide books to the village library
	8. Rehabilitation of minor irrigation channel
	9. Rehabilitation of minor tanks
	10. Agro well construction
C.	Capacity Development activities
	1. CBO Strengthening and Improvement
	2. Leadership training
	3. Financial management training
	4. Health Camps
D.	Income generation activities
	1. Productivity Improvement programs for Agric Crops
	2. Training on beekeeping
	3. Training on Cultivation spice crops (ie. Pepper)
	4. Banana and Papaya cultivation
	5. Handicraft training
	6. Training on mushroom cultivation
	7. Training on forest guiding
	8. Training on livestock management
	9. Sewing Training
	10. Beauty culture Training
	11. Training on Anthurium Growing
	12. Carpentry Training
	13. Sweets making (Food technology) training

