Sri Lanka: Eco-Systems Conservation and Management Project (ESCAMP)

Social Management Framework (SMF)

Ministry of Environment
Department of Wildlife Conservation
Forest Department
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Acronyms

ADB	Asian Development Bank
BCAP	Biodiversity Conservation Action Plan
CBO	Community Based Organization
CSIA	Continuous Social Impact Assessment
DS	Divisional Secretariat
DWC	Department of Wildlife Conservation
ECAs	Elephant Conservation Areas
ESCAMP	Eco-Systems Conservation and Management Project
FD	Forestry Department
FFPO	Flora and Fauna Protection Ordinance
GEF	Global Environmental Facility
GOSL	Government of Sri Lanka
GRC	Grant Review Committee
GRM	Grievance Redress Mechanism
HEC	Human Elephant Conflict
HECOEX	Human Elephant Co-existence
HQ	Headquarters
IDA	International Development Association
IP	Indigenous People
IPP	Indigenous People Plan
IPPF	Indigenous People Planning Framework
MOE	Ministry of Environment
MERs	Managed Elephant Ranges
NPCMWE	National Policy on the Conservation and Management of Wild Elephants
NGOs	Non-Governmental Organizations
NIRP	National Involuntary resettlement Policy
PA	Protected Areas
PAPs	Projects Affected Persons
PMU	Project Management Unit
RAP	Resettlement of Affected Parties
SIA	Social Impact Assessment
SLFI	Sri Lanka Forestry Institute
SLTDA	Sri Lanka Tourism Development Authority
STDP	Sustainable Tourism Development Project
STDs	Sexually Transmitted Diseases
TA	Technical Assistance
WTC	Wildlife Training Center
WB	World Bank

Executive Summary

This report is a Social Management Framework (SMF) for the Eco-Systems Conservation and Management Project (ESCAMP) of the Ministry of Environment (MOE), Forest Department (FD) and Department of Wildlife Conservation (DWC), Sri Lanka. It outlines the major impacts of the project on local communities and points out possible mitigatory strategies for the identified impacts.

The project intends to support the Forest Department (FD) and the Department of Wildlife Conservation (DWC), in the successful implementation of the Forest Ordinance (FO) and the Flora and Fauna Protection Ordinance (FFPO) of Sri Lanka and in achieving key Biodiversity Conservation Action Plan (BCAP) objectives. Sri Lanka's biodiversity is largely found in the wet zone of the country although the dry forest ecosystems are severely threatened due to development pressures. The most sensitive areas with regard to biodiversity and threats due to development pressures are: (i) the South West and Central wet zone; (ii) the South Eastern dry and arid zone; and (iii) the mixed climatic zone ranging from the wet zone in parts of the Central Province to the intermediate and dry zones of the North Western, North Central and Eastern Provinces. Therefore, ecologically important regions from these three priority climatic zones have been identified as the focus of the project.

Within these three priority climatic zones, the project will concentrate its investments and activities on four conservation landscapes, which are contiguous areas with unique ecological, cultural and socio-economic characteristics. The selected conservation landscapes are dominated by protected areas (PAs) belonging to both the Department of Wildlife Conservation (DWC) and Forest Department (FD). These four landscapes also contain ecologically sensitive sites and wildlife corridors outside the designated PA network which were identified in a Protected Area Gap Analysis Study[1] as needing strategic conservation interventions. The four landscapes comprise: (i) the biodiversity rich landscape ranging from the Kanneliya-Dediyagal-Nakiyadeniya (KDN) forest to Galways Land Sanctuary (SA) in the South West and Central wet zone; (ii) from the South Eastern dry and arid zone, the forest ecosystem ranging from Bundala National Park (NP) to Maduru Oya NP, which is the landscape with the largest PA network in the country; (iii) from the mixed climatic zone, the landscape ranging from Victoria-Randenigala-Rantambe to the integrated land-seascape of Pigeon Island Marine NP; and (iv) the integrated land-seascape of Bar Reef SA-Wilpattu NP to Kahala Pallekelle SA, also from the mixed climatic zone. The specific sites for project intervention within these conservation landscapes are not known at this point and will be available during project implementation because this is a demand driven project.

The project comprises four major components focusing on the following:

1. **Promoting Ecosystem Conservation and Management:** A demand driven component with three funding windows for specified activities submitted by FD and DWC, either individually, jointly or in collaboration with other stakeholders.
2. **Demonstrating Human Elephant Conflict (HEC) Management through Co-existence:** Develop and implement effective Human Elephant Co-Existence Models (HECOEX) to minimize the conflict.

[1] Portfolio of Strategic Conservation Sites/Protected Area Gap Analysis in Sri Lanka, Department of Wildlife Conservation, May 2006. The Gap Analysis in Sri Lanka was conducted in May 2006 for DWC in order to assemble a portfolio of strategic conservation sites that better represents the biological diversity and ecological systems and identify sites outside the PA system that needed added protection for biodiversity conservation.

3. **Enhancing the Quality of Nature-based Tourism in support of PA Conservation and Management:** Promote nature based tourism activities in selected protected areas.
4. **Strengthening Knowledge and National Capacity for Ecosystem Conservation and Management**: Enhance infrastructural facilities and capacity of staff at FD and DWC through training programs, particularly with affiliations to international conservation and training organizations.

The first two components will trigger WB OP 4.10 and 4.12. While the project will not involve involuntary resettlement or land acquisition, these operational policies will be triggered as some of the sub-projects and activities to be funded may impact on communities' access to natural resources in the PAs and thus affect their livelihood; and in the vicinity of two of the PAs which may be benefit from project funds, there are communities of Indigenous Peoples living. Since the exact sub-projects are not known at appraisal, this SMF outlines a Resettlement Policy Framework (Appendix C) which establishes the process by which members of potentially affected communities participate in design of sub-projects, adequate compensation and mitigation measures. It also contains guidelines for an Indigenous Peoples Plan (Appendix D) to be developed in connection with any sub-projects in the PAs of Gal Oya National Park and Maduru Oya National Park, where IPs will be affected. The SMF also outlines the requirements for SIAs of individual sub-projects as well as the general Continuous Social Impact Assessment which on recurrent basis will assess the overall social impacts of the project interventions.

Component 1: Potential Impacts

Potential impacts of Component 1 are related to issues that would be faced by potential applicants for funding from the three windows and community members once projects have been approved for funding. The foreseen impacts are as follows:

1. Potential beneficiaries of funding (FD and DWC) may require assistance and awareness regarding the formulation of project proposals.
2. Collaborations between different organizations (e.g. FD and DWC) in making joint grant applications may be difficult due to their existence as mutually exclusive organizations over a long period of time.
3. The review committee appointed by MOE for approving proposals may need additional members to ensure its bias-freeness.
4. Equal access to TA for both FD and DWC for proposal writing.
5. Competition among bidders for funds may delay the application approval process.
6. Impacts on communities once a proposal has been approved can vary according to the projects. It is difficult to predict such impacts at this stage as the final proposals have not yet been received. However, a list of preliminary proposals forwarded by FD and DWC indicates changes to the 'traditional' ways of how forest land has been used by communities, impacts on livelihoods, impacts due to increased tourism activities etc.

Component 1: Mitigation of Potential Impacts

The mitigation of the above issues requires improved awareness and transparency of the funding procedures, involvement of independent members such as academics and non government technical experts in the proposal review process, in case of impact of land use in PAs, follow the Resettlement Policy Framework (Appendix C) and the generic SIA to be conducted for all relevant subprojects under this component (Appendix B), awareness campaigns to inform community members about the potential impacts of a project once approved, community involvement during the planning and implementation of a project and

the establishment of Local Grievance Redress Mechanisms (GRMs). If the approved projects are going to introduce changes to land use patterns and restrict livelihood activities, the implementing agencies would have to assist affected persons to improve their livelihoods or restore them in real terms to pre-project levels. In case of sub-projects for the two PAs where IPs live, an IPP (Appendix D) shall be developed.

Component 2: Potential Impacts

Component 2 is likely to have an impact on:
1. Livelihood patterns of community members.
2. Delays in paying compensation to PAPs.
3. Lack of collaboration between FD and DWC in jointly implementing HECOEX models.
4. Lack of awareness about the guidelines involved in submitting research proposals.
5. Bias in approving research proposals.

Component 2: Mitigation of Potential Impacts

The mitigation of these impacts involve conducting a SIA for all pilot sites, following the Resettlement Policy Framework guiding community involvement in developing socially sustainable HECOEX models, making communities aware about the HECOEX models, community consultations, forming an 'independent' committee to approve and pay compensation for impacts on livelihoods, appeals to the local GRMs, assistance with the submission of research proposals and the appointment of 'independent' members to the research committee approving the research proposals. If the approved pilot projects are going to introduce changes to land use patterns and restrict livelihood activities, the implementing agencies would have to assist affected persons to improve their livelihoods or restore them in real terms to pre-project levels. In case of sub-projects for the two PAs where IPs live, an IPP shall be developed as part of the sub-project.

Component 3: Potential Impacts

The potential impacts of Component 3 can be outlined as follows:
1. Lack of equal treatment in distributing opportunities for skills enhancement in tourism related employment within FD and DWC.
2. Limited opportunities to earn a maximum profit through employment in tourism due to limitations placed on numbers of visitors to the parks.
3. Impacts of increased tourism activities in the areas.

Component 3: Mitigation of Potential Impacts

The mitigation of the above issues involve prioritization of individuals who should receive opportunities to enhance their skills, wide publicity about such opportunities, a mechanism to monitor and regulate tourism activities within protected areas, developing links with SLTDA and awareness campaigns for both foreigners and local communities.

Component 4: Potential Impacts

Component 4 is likely to raise issues in the following areas:
1. Sustainability/ maintenance of infrastructural developments.
2. Bias in selecting candidates for trainings with national and international agencies.
3. Appointing a bias-free consortium of conservation NGOs.
4. Lack of national community focused NGOs in the above consortium.

Component 4: Mitigation of Potential Impacts

The mitigation of the above issues involve wide publicity on training opportunities and the criteria for selection, appointment of an independent selection committee to select candidates for the trainings, provision of equal opportunities irrespective of gender, ethnic and religious affiliation for being selected for training programs and wide publicity related to the appointment of conservation and community focused NGOs into the consortium.

Summary

In summary, the recommended mitigation strategies point out the general need for SIAs for relevant sub-projects funded under component 1 and all pilot sites under component 2 prior to and during project implementation and intensive stakeholder consultations with community members incl. IPs, appointment of independent members into all committees responsible for any kind of selection, awareness campaigns, the establishment of local GRMs and collaborations with SLTDA.

Sri Lanka: Eco-Systems Conservation and Management Project
Social Management Framework (SMF)

1.0 Introduction and Background

The Eco-Systems Conservation and Management Project (ESCAMP) intends to support the Government of Sri Lanka (GOSL) in its attempts to strengthen biodiversity conservation and ensure sustainability of its development process in the landscapes dominated by protected areas. The objective of the project and its description are provided in sections below. This document is the Social Management Framework (SMF) for ESCAMP prepared in keeping with World Bank's safeguard policies and submitted in lieu of a specific project's social assessment for appraising the social aspects of the project.

The history of wildlife conservation and environmental protection in Sri Lanka dates back more than 2000 years in recorded history when Mihintale was declared a sanctuary by ancient Kings for the benefits of plants, animals and people. Fostered by the Buddhist philosophy of respect for all forms of life, subsequent rulers upheld this noble tradition and took various initiatives to protect the forests and its wildlife resources for future generations. Then came the colonial era, where exploitation of forests and its resources became the order of the day as opposed to the royal tradition of sustainable utilization. This is evident by some of the earlier government ordinances which promoted and paved the way for logging, hunting and conversion of natural areas to large plantations for economic gain. During this time and later, much of the wet zone forests, where the bio-diversity is highest, were lost. In the post-independence era, some of these exploitative trends continued, even accelerated with land settlements, large scale irrigation and agriculture, energy generation etc. becoming key priorities of successive governments. As such, today, Sri Lanka's natural resources are faced with many threats and require deliberate interventions by the state to protect and conserve whatever is left for the well-being of its present and future generations.

Conservation of bio-diversity is of special significance to Sri Lanka. The country, although small in land area, has a varied climate and topography resulting in rich biodiversity distributed in a number of different eco-systems. With the highest bio-diversity per unit area, Sri Lanka is ranked as a global bio-diversity hot spot. Yet, at present, the country is faced with a serious erosion of its eco-systems and the bio-diversity they host. The country's high population density, high levels of poverty and unemployment and widespread dependence on natural resources by some of the key economic sectors such as agriculture, mining, tourism has exerted considerable pressure on the country's precious natural resources. A recent survey has shown that 33% of the inland vertebrate fauna and 61% of its flora are nationally threatened. Around two thirds of the threatened bio-diversity is endemic to Sri Lanka. Twenty one species of endemic amphibians have not been recorded for the last 100 years and these species are, for most purposes, considered extinct. One in every 12 species of inland indigenous vertebrates of Sri Lanka is currently facing an immediate and extremely high risk of extinction in the wild. This trend will continue, and even worsen, unless more stringent and corrective measures are not taken.

1.1 Objectives of this Report

The current report, which puts forward the social management framework for this project identifies the impacts of the project on local communities and other stakeholders. Particular attention will be placed on its negative impacts and the report will also suggest mitigatory

strategies for the negative impacts identified. However, it must be noted here that the project designers have paid careful attention to the social impacts that are likely to emanate from this project and certain mitigation strategies have been already built into the project description (See Appendix A).

The report will firstly provide an introduction to the project and the communities that are likely to be impacted by the project. Assessment of project impact will be done from a WB social safeguards perspective in keeping with the World Bank's social safeguard policies. Particular attention will be paid to which WB operational policies will be triggered due to project activities and strategies for mitigating such impacts would also be discussed. Following these introductory sections the report will begin its main discussion on impacts and strategies for their mitigation. The four project components, from 1 to 4, will be taken up for discussion in that sequence. The impacts of each component will be discussed first followed by suggested mitigating strategies. Finally, all the mitigating strategies discussed throughout the report will be summarized.

1.2 Components of the Project

The three most sensitive areas that would be the focus of the project are as follows:
1) South-east dry and arid zone
2) South-west and central wet zone and
3) Mixed climatic zone ranging from the wet zone in parts of the Central Province to the intermediate and dry zones of the North-western, North-central and Eastern Provinces.

Within the above regions, four conservation landscapes have been selected for project interventions. The selected conservation landscapes are dominated by protected areas (PAs) belonging to both the Department of Wildlife Conservation (DWC) and Forest Department (FD). These four landscapes also contain ecologically sensitive sites and wildlife corridors outside the designated PA network which were identified in a Protected Area Gap Analysis Study[2] as needing strategic conservation interventions. The four landscapes comprise: (i) the biodiversity rich landscape ranging from the Kanneliya-Dediyagal-Nakiyadeniya (KDN) forest to Galways Land Sanctuary (SA) in the South West and Central wet zone; (ii) from the South Eastern dry and arid zone, the forest ecosystem ranging from Bundala National Park (NP) to Maduru Oya NP, which is the landscape with the largest PA network in the country; (iii) from the mixed climatic zone, the landscape ranging from Victoria-Randenigala-Rantambe to the integrated land-seascape of Pigeon Island Marine NP; and (iv) the integrated land-seascape of Bar Reef SA-Wilpattu NP to Kahala Pallekelle SA, also from the mixed climatic zone.

The proposed ESCAMP project is designed with four main components which are summarized below in terms of specific outputs (See Appendix A).

1.2.1 Component 1 (Promotion of Ecosystem Conservation and Management)

Component 1 of the proposed project is three facilities for ecosystem conservation and management. Component 1 is designed with the objective of supporting the Government of

[2] Portfolio of Strategic Conservation Sites/Protected Area Gap Analysis in Sri Lanka, Department of Wildlife Conservation, May 2006. The Gap Analysis in Sri Lanka was conducted in May 2006 for DWC in order to assemble a portfolio of strategic conservation sites that better represents the biological diversity and ecological systems and identify sites outside the PA system that needed added protection for biodiversity conservation.

Sri Lanka (GOSL) to achieve the objectives stipulated in its Biodiversity Conservation Action Plan (BCAP), the Fauna and Flora Protection Ordinance (FFPO) and Forest Ordinance (FO). This component will promote demand driven and decentralized approaches to conservation and management of natural ecosystems. It will consist of three windows for: (i) implementation of the landscape level conservation plans with emphasis on programs for conservation and management of critical ecosystems outside the Protected Area (PA) Network; (ii) improving the management of selected PAs within the conservation landscape and (iii) improving community participation in reducing deforestation and forest degradation.

The key outputs of this component will be to;

1) Support the conservation and management of valuable ecosystems that are within and outside the protected areas (PAs) through partnerships with relevant government agencies and the local population.
2) An independent committee of experts appointed by the MOE which will include broad stakeholder participation will review grant proposals. It will comprise independent technical experts in the field of wildlife conservation and forestry management, who are appointed for their technical expertise and not for institutional representation. The committee will also include representatives from the national conservation NGOs.
3) **Window 1**- Pilot project proposals that involve a joint submission by key stakeholders involved in management of the landscape, led by the key conservation agencies will be entertained. Eligible partnerships with DWC and FD include key GOSL institutions active in the selected landscape, such as Local Government Authorities, Divisional Secretariats, other national or provincial Government Agencies, national or local NGOs, universities and research institutions, the private sector and community groups.
4) The proposals eligible for funding would be designed to strengthen multiple use ecosystem management, ecosystem restoration and conservation planning by explicitly identifying ecosystem services, enhance protection status of sensitive ecosystems, wildlife corridors and conservation of ecosystem services and regulations and guidelines for green infrastructure.
5) Since conservation and management of ecosystems cutting across administrative or jurisdictional control is novel in Sri Lanka, agencies may need technical assistance (TA) to prepare proposals. Such TA could be funded under Window 1 as well.
6) **Window 2**- To sharpen incentives and promote demand-driven interventions, Window 2 of the would fund proposals submitted on a competitive basis by field-based PA managers. DWC and FD will be the lead agencies in submitting proposals to the grant facility. In order to encourage better coordination of PA management, preference given to proposals from DWC and FD for joint management of PAs.
7) Competition among bidders is expected to improve efficiency and promote more cost-effective and relevant interventions. Support will be provided for activities related to protected area conservation and management, such as habitat management, removal of invasive species, ecosystem management, water resource management etc.; improvements in park infrastructure such as park buildings, roads and culverts, etc.; and strengthening enforcement.
8) **Window 3** – To improve community participation in reducing deforestation and forest degradation, this window would provide resources to continue the FD's strategy for community forestry management. It will fund proposals submitted by FD for community participation in activities leading to better forest management.
9) A key aspect and major benefit of the community approach is the formation of self-help groups and community-based organizations (CBOs), who could be advocates of

conservation within the landscapes. Membership in such organizations is based on the family unit and both men and women would participate in and benefit from the program.

10) The implementation of the approved community action plans would improve the management of natural resources to support livelihoods and contribute to poverty reduction, especially in the conservation landscapes of the country's dry and intermediate zones. Specific site selection within the conservation landscapes and the buffer zones will be based on the range management plans prepared for the entire country by FD and prioritized on the basis of conservation issues faced by the respective forest reserves, including an analysis of the vulnerability of forests to deforestation and forest degradation within the identified conservation landscapes.

1.2.2 Component 2 (Demonstrating Human Elephant Conflict (HEC) Management through Co-existence)

The objective of component 2 is the promotion of pilot projects in human elephant co-existence (HECOEX). Human elephant conflict (HEC) is a major socio-economic, political and conservation issue and is a main reason that aggravates rural poverty over much of the country's dry zone. The pilot projects are expected to turn wild elephants from economic liabilities and the foes of local farmers, to wild, living, communal and economic assets. The project would support a number of innovative pilots to address the HEC issue based upon recent studies, which formed the basis of preparation of the National Policy on the Conservation and Management of Wild Elephants (NPCMWE) which was ratified by the Cabinet in 2006. The key outputs are summarized below.

<u>Sub-component 2.1</u>

1) This sub-component would explore opportunities for reducing HEC by managing elephant populations according to natural ecosystem boundaries rather than artificial administrative boundaries of land which is the present practice.
2) HECOEX models will be pioneered in managed elephant ranges (MERs). The project will provide incentives for regulating and managing the seasonal agricultural practices in MERs to minimize conflict and optimize habitat quality.
3) Instruments such as payment for environmental services (cash transfers), insurance schemes and compensation mechanisms for optimizing agricultural practices will be piloted during implementation.
4) Four pilot sites for implementing the HECOEX models have been identified jointly by the DWC and FD in the Southern and Eastern regions in areas where HEC is severe. Two out of these have been prioritized to carry out the first round of pilots. These sites are: (i) Mattala- Bundala- Wilmanne; and (ii) Nimalawa- Kochipathana- Yala.
5) The proposed strategy for mitigation of HEC in the pilot areas are to restrict elephants to areas with sufficient natural habitat (areas designated as MERs, with no change in land ownership) and protect permanent cultivations and human settlements by constructing electric fences on their perimeter and pilot testing different economic incentive packages for the community so that elephants in their midst will no longer be considered a destructive force. In situations where crops are damaged by elephants, crop compensation through insurance schemes will be offered to the victims. Likewise, the community members will be made aware of possibilities through which they could perceive the elephants as an economic asset. For example, they will be able to promote elephant viewing as part of community-based tourism during non-cultivating periods.
6) Implementation of the pilot HECOEX models will be led by the Coordination mechanism of the Gaja Mithuro program (National Program for Human Elephant Conflict mitigation)

with joint participation of DWC and FD as well as communities and other stakeholders including NGOs, local authorities, and the private sector, where applicable.

7) HEC is most severe in the North Western part of the country where the human populations have spread into elephant habitat and isolated elephants into increasingly small fragments of forests. However, HECOEX models developed for the South and East are unlikely to work effectively since coexistence is much more difficult in areas of permanent agriculture, than in areas of shifting or *chena* agriculture. Suitable models cannot be developed in the absence of elephant ranging data[3]. Socio-economic data on the communities/ individuals that are likely to be affected by HEC is also not available currently. These data on elephants and well as humans will be collected as a first step in the design of the pilots and well prior to implementation of the pilots. Data collected over the next year and a half will enable appropriate HECOEX models to be developed for pilot projects to commence in Year 2 of the project in the North Western part of the country.
8) The forests in the Northern Province are believed to be land mined and demining of forests is the last priority of the Government's demining program, elephants could be ranging in abandoned village and agricultural areas that have been taken over by shrub jungle. With the resettlement of people and opening up of agricultural land, HEC could be a serious issue. In the event of a problem, funds under this sub-component will be set aside for a pilot HECOEX in the Northern Province.

Sub-component 2.2

9) Successful pilot models implemented under the project will be used to develop a National Plan for Mitigation of HEC in Sri Lanka
10) This sub component will fund research into gaining a better understanding of elephants and the current pattern of human land use within the MERs, thus leading towards a reduction in HEC. Research proposals will be entertained from research organizations, conservation organizations, academia and individual researchers. Preference will be given to proposals submitted jointly with the DWC and/or FD. An independent committee comprising technical experts will be tasked with approval of the research proposals.

1.2.3 Component 3 (Enhancing the Quality of Nature-based Tourism in support of PA Conservation and Management)

This component intends to promote nature-based tourism in the national parks and forest reserves, enabling Sri Lanka to be marketed as a destination for nature, culture and beaches".

1) The project will be complementary to the proposed IDA supported Sustainable Tourism Development Project (STDP). ESCAMP will focus on developing nature-based tourism opportunities within the PA system, which includes terrestrial, wetland and marine sites while STDP will focus on tourism opportunities outside the PA system.
2) This component will be designed to enhance the quality of nature tourism opportunities in priority PAs under the jurisdiction of DWC and FD, including marine protected areas. By capitalizing on their first-hand knowledge of the PAs, the communities constitute an inherent supply of tourism operators– whether as guides, interpreters, retailers or service providers. However, skills enhancement is an imperative element of priority PA development plans to bolster the local population's capacity to capture the benefits of nature-based tourism.

[3] An Elephant Range is a geographical area within which elephants move about. Elephant ranging data can be gathered by affixing tracking devises to elephants and keeping records of their movement. Such data is essential prior to the development of HECOEX model.

3) The project will support studies on establishing optimum numbers of visitors within limits of acceptable change within PAs of high visitation and assist DWC and FD to implement such programs.
4) This component would support intensive training opportunities for game guides and volunteer guides to specialize in interpretation services and language skills. Other visitor facilities such as the construction of nature trails, wayside interpretation points, observation towers, wildlife hides, campgrounds and refurbishment of existing bungalows within PAs, will be supported under this component.

1.2.4 Component 4 (Strengthening Knowledge and National Capacity for Ecosystem Conservation and Management)

This component which has 3 sub-components will focus on upgrading the Wildlife Training Center(managed by DWC) and Sri Lanka Forestry Institute (managed by FD) in order to facilitate the process of long-term sustainability of PA management.

Sub-component 4.1

1) Provide basic improvements to the available infrastructure facilities at WTC and SLFI.
2) Upgrade technical capacity of resource persons in order to facilitate curriculum revision.
3) Support the implementation of training evaluation procedures.
4) Explore possibilities of developing affiliations to international training institutions.

Sub-component 4.2

5) Strengthen strategic management capacity and staff skills at DWC and FD.
6) Provide the required equipment and infrastructure for DWC and FD to improve their institutional capacity.

Sub-component 4.2.1

Capacity building will also be provided through internal and external training courses, study tours and affiliations with international PA management agencies (such as South African National Parks Authority and Smithsonian Institute).

7) Short-term task oriented international and domestic consulting services will be provided, as needed.

Sub-component 4.2.2

8) Build the capacity of FD so that community approaches for reducing forest dependency can be implemented nationally.
9) Assist FD in developing and implementing regulations on community participation on the basis of the recently amended Forest Ordinance

Train FD staff on community approaches

Sub-component 4.3

10) This sub-component will support project monitoring activities, targeted studies that would assist in effective project implementation and technical assistance to MOE.
11) Project activities will be independently monitored by a consortium of national conservation NGOs.

1.3 Profile of Communities likely to be affected by ESCAMP

The specific areas in which the ESCAMP project would be implemented have not yet been decided and therefore, a precise profile of the local communities is difficult to develop at this stage. Secondary data on household income for the two potential sites identified in the South for the HECOEX pilots will be collected prior to pilot project implementation. However, the FD and DWC has made initial proposals for implementing certain project activities in the

areas under the jurisdiction of the respective departments, which are within the four landscapes identified for project interventions. FD intends to implement projects around Sinharajah, Knuckles and Hurulu Eco-Park areas while DWC intends to do the same in the Southern, North Western, North Central, Central and Eastern areas of the country.

In all these areas the majority of the villagers are Sinhalese Buddhists, while there are potential sites such Maduru Oya and Gal Oya National Parks with "Vedda" communities living in the buffer zone. A majority of the community members represent low income categories. However, the livelihood patterns of the people living in the different locations and their dependence on forest land seem to vary. People living around the Sinharajah and Knuckles area are engaged in paddy cultivation, highland agriculture and small tea holdings. They depend on forest land for tapping palm, collecting firewood, food and medicinal plants, and illegal activities such as cultivating marijuana plantations and poaching. People, living in the Southern, North Central and Eastern parts of the country, who would be affected by the project are largely engaged in *chena*[4] cultivation. The majority of *chena*s are grown on government owned FD land. Theoretically *chena* farming is therefore, an illegal activity. The *chena*s and national parks exist in close proximity to each other, which increases the impact of HEC. Additionally these communities are also dependent on forests for activities similar to those described above. Indigenous Peoples are living in the vicinity of two PAs, the Maduru Oya National Park and the Gal Oya National Park from where they derive part of their livelihood.

The above profile is drafted entirely based on personal communication with FD and DWC officials and two DWC reports compiled by the Centre for Conservation and Research[5]. The lack of comprehensive information about the communities which would be affected by ESCAMP is obvious. Therefore, a major overall mitigatory strategy proposed by this SMF is to conduct a baseline survey on the relevant communities based on the final sites that will be supported by the project. Most of this data may be already available in the DS offices of the respective areas and if so, what would be required is a compilation of a comprehensive document about the communities using these existing sources. A comprehensive understanding about the characteristics of the communities would be essential prior to the development and implementation of relevant project activities in order to foresee potential impacts on the local communities. A SIA prior to relevant sub-project implementation will be essential in this regard – and would also comprise the requisite procedures to be followed in case of livelihood impact on local communities or presence of IPs in the project area. This will require the services of a NGO or expert/s recruited by MOE (See Appendix B for basic TOR).

[4] "A *chena* is piece of land which is left to lie for a period of years, ideally five, and then prepared and cultivated for one year. Traditionally, *chena* lands are temporary undeeded lands located on high, usually sloping land not suited for paddy cultivation. The two main crops are maize, *Zea maize* (called Indian corn by locals), finger millet, *Eleusine coracana* (called *kurakkan*). Secondary crops include manioc, sweet potatoes, beans and varieties of pumpkin. The aforementioned crops are said to require less rainwater than paddy and are harvested before the paddy crop." from De Munck V.C. (1993) *Seasonal Cycles: A Study of Social Change and Continuity in a Sri Lankan Village*, Asian Educational Services, New Delhi.

[5] Relative abundance and movement patterns of wild elephants, assessment of the level of human elephant conflict and effectiveness of management strategies in the Southern region (2007).
Management of elephant range outside protected areas (Pilot Study) (2008).

1.4 World Bank Safeguard Policies

The proposed project will not permit any involuntary resettlement and involuntary land acquisition. Even though involuntary land acquisition and resettlement of individuals and/or families will not take place due to project activities, ecosystem restoration and conservation planning is likely to affect land use patterns of the communities. For example, community members would have to change the traditional ways of how they used FD land for *chena* cultivation and adapt to new land use structures introduced by the project which may impose certain restrictions on land use. This will have an impact on their livelihoods. Hence, OP 4.12 will be triggered, and a Resettlement Policy Framework establishes the process by which members of potentially affected communities will be consulted and participate in design of project and mitigatory/compensation measures (Appendix C).

As two of the potential PAs have communities of indigenous people living in the vicinity, WB OP 4.10 on indigenous people is also triggered. Respect and protection of dignity, human rights, economies, and cultures of indigenous peoples would have to be ensured during project activities (See Appendix B for standard TOR for a SIA, and Appendix D comprising guidance for development of an Indigenous Peoples' Plan). The project has already commenced consultations with the two indigenous peoples communities in order to introduce the project and inform them of the possibility of the two PAs being potential project sites.

2.0 Potential Impacts of the Project Components and Mitigation Strategies

Component 1, 2 and 3 is likely to have the most visible direct impact on the local communities. Component 1 which deals with three funding windows for promotion of ecosystem conservation and management will directly have an impact on potential beneficiaries while also impacting the local communities indirectly as pilot projects (if approved) are likely to change their socio-economic and cultural scenario. Component 4 will have the strongest impact on the DWC and FD. These impacts followed by proposed mitigation strategies are discussed below according to the components.

2.1 Impacts of Component 1

The first activity under this component is the preparation of conservation landscape management plans for the four identified landscapes. The preparation of these plans will provide information to the Government to make environmentally sensitive development decisions within the conservation landscapes. Under sub-component 1.2 of the project there will be 3 funding windows with specific objectives for each window (see project description section). First grant window will entertain proposals that aim to promote eco-system conservation at a landscape level with a particular emphasis on areas outside the PA network and the second grant window will focus on management interventions needed within declared protected areas, while the third grant window will fund projects on community participation to reduce forest degradation and deforestation.

Proposals funded under window 1: may include a broad range of activities needed to protect and conserve the identified critical eco-system. Every intervention under this window will also be assessed for social impacts. Typical activities funded under this window are: (i) identification of wildlife corridors and making connectivity linkages for the long term survival of flagship species such as elephants. This may involve the construction of electric fences for isolating these corridors from developed and human habituated areas; (ii) restoration of degraded ecosystems; (iii) restoration of existing degraded or abandoned water bodies; (iv) valuation of environmental services within the landscape and restoration of degraded but potentially high ecosystem services; and (v) preparation of green infrastructure guidelines for use for infrastructure development projects (not funded by this project) within the conservation landscapes.

Proposal funded under window 2: Activities supported under this window will be restricted to within declared protected areas of DWC and FD. It is recognized that all activities proposed will eventually have significant conservation benefits. The specific activities that will be proposed will be known only when proposals are finalized but DWC and FD have proposed a list of preliminary activities to be funded under this window. Typical activities that would be funded under this window include: (i) rehabilitation and development of water resources in PAs; (ii) habitat management including control of invasive species; (iii) rehabilitation of existing roads; (iv) improvements in existing park infrastructure; (v) species monitoring and recovery programs; and (vi) strengthening enforcement.

Proposals funded under window 3: is for community participation in activities that result in reducing forest degradation and deforestation. Specific site selection within the conservation landscapes and the buffer zones will be based on the range management plans prepared for the entire country by FD and prioritized on the basis of conservation issues faced by the respective forest reserves, including an analysis of the vulnerability of forests to deforestation and forest degradation within the identified conservation landscapes. The action plans would aim to: (i) reduce deforestation and forest degradation by reducing the dependency on extractive forest resources by providing alternative agricultural and non-agricultural income generating opportunities for local communities; (ii) enhance the productivity and environmental sustainability of agricultural lands within the selected conservation landscapes; (iii) reduce soil erosion; (iv) improve soil and water conservation in agricultural lands and home gardens; (v) increase the quality and quantity of timber produced from designated woodlots and home gardens and (vi) assisting the FD in management of selected forest reserves.

The direct impacts of Component 1 are likely to be felt mostly by potential beneficiaries who would be submitting proposals for receiving funds. However, the communities will also be impacted at a later stage of Component 1 after the proposals have been reviewed and approved. All proposals will be submitted by either DWC and/or FD as the lead agency. Even if the two departments submit proposals jointly with other organizations (such as conservation NGOs) the key applicant would be one of the two departments.

It is difficult to judge the nature of the impacts that would be felt by the communities as final proposals for have not yet been submitted. However, both DWC and FD have submitted a list of activities they would like to implement. This SMF discusses certain potential impacts on the communities based on some selected items in this list of preliminary proposals.

2.1.1 Lack of Knowledge about Developing Pilot Project Proposals: Potential grantees with an interest in applying for a grant may not be fully aware of the process involved in compiling an application and the procedures of selecting successful applicants. The component already has provisions for technical assistance for applicants. In addition to technical assistance necessary for developing a proposal, the potential grantees should be made aware of the general procedures of the application process. Furthermore, technical assistance and information about the grant procedures must be made widely available for all potential grant applicants. This process has commenced already and will be an on-going exercise during the first three years of the project.

2.1.2 Lack of Collaboration in making Joint Submissions: The different groups that can develop and submit proposals may not necessarily find collaborating exercises easy to manage. For example, DWC and FD (under Window 1) have functioned for years as two separate entities even though their departmental responsibilities may have several cross cutting themes. Likewise, the different partnerships that can be formed for developing proposals under Window 1 may not necessarily represent the same or similar interests. For example, a government organization may have a service orientation while a private organization may have profit orientation. Nevertheless, partnerships between such organizations will be necessarily for the effective implementation of an approved project. A mechanism to facilitate such collaborations would have to be set up under the project.

Making potential grantees aware of the advantages in submitting joint proposals is one such mechanism.

2.1.3 Appointment of an 'Independent' Proposal Review Committee: Component 1 stipulates that an independent committee appointed by the Secretary to the MOE will decide on the approval of proposed projects. This may raise issues of equal treatment for applicants if the review committee comprises solely individuals from the Ministry. Inclusion of other 'independent' individuals or organizations such as NGOs and academics may be necessary to avoid accusations of unequal treatment.

2.1.4 Technical Assistance for Project Proposals: As mentioned above, the project has made provisions for technical assistance for potential grantees. However, this may lead to issues if such assistance is not made equally available for all potential grantees. Such TA should be made widely and easily available to ensure equal treatment.

2.1.5 Competition among Bidders: It is anticipated that competition among bidders (potential grantees) would lead to more efficient, cost-effective and appropriate interventions. While this may be true, competition can also delay the project approval process due to large numbers of submissions with equally 'useful' suggestions for projects. The review committee must adopt ways in which they can efficiently and effectively complete the process without delays. Developing common review criteria for all proposals, prioritizing FD and DWC needs, and recruitment of specialists (such as academics) to look at the proposals etc. will be useful for expediting the process.

2.1.6 Impacts on Communities if Proposals are Approved: As stated above, it is difficult to judge the nature or magnitude of the potential impacts of the grant proposals (if approved) on the local communities as the proposals have not yet been submitted. However, Component 1 states that funds would be provided for multiple use ecosystem management, ecosystem restoration and conservation planning. These activities would include habitat management, removal of invasive species, ecosystem management, water resource management etc.; improvements in park infrastructure such as park buildings, roads and culverts, etc.; and strengthening enforcement. Ideas about and potential impacts of possible proposals that may be submitted for approval under Component 1 can be drawn from a preliminary list of proposals provided by DWC and FD.

According to the preliminary list of proposals provided by DWC, they are expecting to prepare management plans for the management of park land. Such a plan may restrict certain livelihood activities engaged in by the local communities within park land which is in fact already considered illegal by the Flora and Fauna Protection Ordinance (FFPO) of Sri Lanka. The Ordinance very clearly stipulates that the use of park land for activities other than visitation is prohibited. Nevertheless, there are situations where the local communities use park land for livelihood activities such as for grazing purposes of domestic cattle. Through developing management plans under the ESCAMP project DWC is expecting to receive support, particularly financial support, for enhancing the management plan activity. By doing so, stronger restrictions may be placed on those using park land for 'illegal' activities such as that described above. As these are anyway illegal activities the DWC will not be (legally) responsible for the threats posed to the community members' livelihoods. Even though financial compensation may not be offered to such individuals, they would have to be given priority of compensating for their loss through means other than financial. The project implementing agencies would have to compensate such individuals through some means in

accordance with WB OP 4.12. For example, DWC can give such individuals the priority in selecting community members for construction work in the parks that is proposed under the project. The sub-project SIAs outlined in section 2.4.4 will guide the assessment of impact on people's livelihoods and the Resettlement Policy Framework sets out the process to be followed to ensure community consultation and participation in project design and development of adequate mitgation/compensation measures.

Similarly, water resource management activities may request grants for building new tanks within park premises to overcome the issue of water scarcity faced by animals in the park. Since these tanks would be built on park land, it is unlikely to have a direct negative impact on the communities. On the contrary, the construction of tanks may provide employment opportunities for villagers. Similarly, improvements to park infrastructure is also likely to generate employment opportunities for villagers. All attempts should be made for equal distributions of these employment opportunities among interested parties in the community. . Providing wide publicity to these opportunities in order to inform all interested parties to apply for such positions would be useful for ensuring equal opportunities.

Improvements to park infrastructure, another preliminary proposal by DWC, are likely to improve visitations to the parks by local and foreign tourists. FD also has made a preliminary proposal for improving the quality of nature-based tourism under the project. This will undoubtedly have positive and negative impacts on local communities. A positive impact would be an improved market for the villagers' products. For example, *chena* cultivated 'fresh' vegetables and fruits are a popular item bought by local tourists. Likewise, small boutiques for the sale of refreshments for tourists or handicrafts would also improve income generation for community members. The community members can work together towards jointly establishing such sale points.

A negative impact of improved visitations by tourists will be the impact it can have on local culture. Some of these potential impacts can be subtle impacts such as those on local attitudes, consumption patterns and fashion. Others may be the more obvious and serious impacts such as the abuse of drugs, changes in sexuality patterns that may pose threats of STDs such as HIV/AIDS and the use of child labor to improve profits. These will be discussed in detail in section 2.5 where impacts of Component 3 are discussed.

2.1.7 Impact on communities by window 3: A key aspect and major benefit of the community participation in reducing forest degradation and deforestation is the formation of self help groups and the CBO. The CBO provides an entry point to the village for government agencies, making it far easier to provide technical assistance and training to the community. At the same time, the increased interaction with government agents leads to the transfer of both technical and market information to the community.

The FD facilitates a range of capacity building activities for the CBO members in areas such as leadership, planning, conducting meetings, effective communication, financial management and record keeping. As a result of the capacity building activities, and technical assistance and moral support from the Forest Department and other government agencies, the communities have a new level of confidence, both in terms of initiating activities to enhance their social or economic wellbeing, and seeking external assistance to support these activities. For example: the CBO at Diulgaswewa, in Puttalam District, was established in 2007 with support of Natural Resources Management Project (NRMP). Its members are farmers that previously relied predominantly on dryland cropping and agricultural labour (available during

the harvesting of paddy). The CBO members now have a range of alternative income generating activities (cashews, teak woodlots, vegetables); they have used the financial benefits to help invest in education (textbooks, etc); and under their own initiative, the CBO lobbied local politicians to extend the electrical grid to their village. The district government responded favourably to their request, and they received electricity in August 2009. In a similar manner, window 3 is expected bring about number of social impacts including:

- CBO membership based on a family unit, hence giving opportunity for both men and women to participate in and benefit from program activities;
- Opportunity for a substantial proportion of the group leaders to be women and allowing them not only to play a leading role in managing the affairs of the groups but have significant status within the community;
- Empowering participating communities to invest their labour and financial resources in a wide range of social infrastructure projects, and access external financial support, for schools, water supplies, community halls, access roads and places of worship;
- Culturally, this window helps communities maintain (or rekindle) traditional ties with the forest, including the use of medicinal plants, food plants (such as *madu*)[6] and other NTFPs;
- Contribute to community cohesion and unity; and
- Improve livelihoods of participating communities.

The program is not directly targeting disadvantaged families, such as those containing disabled or elderly people because site selection within the conservation landscapes and the buffer zones will be based on the range management plans prepared for the entire country by FD and prioritized on the basis of conservation issues faced by the respective forest reserves, including an analysis of the vulnerability of forests to deforestation and forest degradation within the identified conservation landscapes.. However, the strength of the family unit in Sri Lanka means that the disabled and elderly will share in the benefits, along with other household members, by increasing the level of income of participants. This will increase the capacity of these households to access specialist services and provide appropriate care.

2.2 Mitigation Strategy and Guidelines

Potential impacts of Component 1 outlined above are mainly related to the submission, review and approval of proposals for pilot projects, and the impacts of those projects on the local communities, if proposals are approved. Therefore, most mitigation strategies suggested here are related to creating awareness among potential grantees and active participation of local communities.

2.2.1 Improve awareness and transparency: The project can help potential grantees improve their capacity to succeed in receiving funds through enhancing the transparency of the process and through providing information required to succeed. For example, providing relevant information on the MOE, FD and DWC websites, and the publication of leaflets in English, Sinhala and Tamil languages will improve access to information. It is also proposed to inform potential grantees about the criteria that would be taken into account when selecting proposals for the award of grants. These strategies will minimize or eliminate any possibilities of exclusion experienced by those applying for funds.

[6] A native tree species, from which the leaf buds are used as a salad and the fruit used to make flour.

The above strategies of improving awareness of potential grantees must also concentrate on informing potential grantees about the advantages of submitting joint proposals with another organization; particularly joint proposals by FD and DWC. The information also must mention how TA for developing proposals, a provision made under Component 1, can be accessed. This has already commenced with joint workshops being held between DWC and FD.

2.2.2 Involvement of 'independent' individuals/ organizations in the review process: Section 2.1.3 and 2.1.5 above discusses strategies that can be adopted to enhance the unbiased nature of the review committee that will be appointed by the MOE for the review of project proposals. Inclusion of representatives with the required expertise from NGOs and university academics into the committee has been decided. This is also expected to expedite the process of selecting proposals for the award of funds. MOE has identified the members of the Proposal Review Committee, which comprises a majority of non-governmental members. The committee will be appointed prior to project negotiations.

2.2.3 Awareness for community members about projects prior to implementation: As stated in section 2.1.6, it is difficult to precisely determine the potential impacts of pilot projects at this stage as the proposals and action plans have not yet been received. Certain possible impacts have been discussed in section 2.1.6 based on a list of preliminary proposals submitted by FD and DWC. The DWC and the FD are engaged in consultations with local communities and with IPs regarding the project and its expected impact. These consultations and active involvement of local communities likely to be affected by the project should continue throughout the project duration, and when an SIA has been conducted as part of relevant sub-project preparation, the results should be discussed with the local community. If a particular project is likely to have negative impacts on livelihoods, consultations with community members are imperative and should be conducted prior to implementation. The impactees should be made aware of the impact and also be asked for the kind of compensation or mitigatory solution they require. It is essential that the consultations are conducted as a two-way dialogue rather than a top-down information/awareness campaign.

2.2.4 Involvement of community members in developing and implementing pilot projects: Getting the community members involved in the development and implementation of relevant pilot projects will also help minimize negative impacts on the community due to project activities. Stakeholder consultations with representatives from the communities such as, Grama Niladhris, school principals and teachers, Samurdhi officers and other village level government officials can be useful, particularly at the development stage of a proposal. Opinion surveys, focus group discussions and semi-structured interviews with selected community members representing the two genders, age groups, ethnicities and religious groups can be useful, particularly before the implementation of a particular project. If a particular project that is approved affects the communities negatively, the communities will not support its implementation. Therefore, consultations with the community members become essential.

An NGO can be assigned the task of conducting these stakeholder consultations with community members.

Social Impact Assessments (SIAs) will assess the impact of relevant sub-project activities on communities. The Resettlement Policy Framework establishes the process to be followed regarding community involvement in case sub-projects impact on community access to

natural resources in the PA. For sub-projects in Gal Oya National Parlk and Maduru Oya National Park, an IPP shall be developed as part of the sub-project formulation. (See section 2.4.4 below). Consultations with the IP communities surrounding the two PAs have already been initiated by DWC.

2.2.5 Establishment of Local Grievance Redress Mechanisms (GRMs): Local GRMs should be established under the project with the joint participation of FD and DWC. The Proposal Review Committee discussed in section 2.1.3 or a separate committee can be appointed as the GRM. The membership should comprise officers from FD and DWC, Grama Niladhari and 2 other village level government officers, 2-3 community members to represent the interest of the communities and an independent member such as a lawyer. The community members appointed to the GRM can be leaders of CBOs in the communities.

If a particular community member is not satisfied about how his/ her appeal was addressed by the GRM, he/ she could make an appeal to the Proposal Review Committee.

Awareness campaigns discussed in section 2.2.3 should also inform the communities about the GRM and the process of making an appeal to the GRM.

Records of all community grievances brought to the attention of the GRM, the processes of how the GRM dealt with those grievances, the solutions sought and further appeals made to the Proposal Review Committee should be filed at FD or/ and DWC for transparency and for future reference. The development of a database containing the above information seems feasible. Interested parties should be given access to these records and/ or database. This information should be published on the web sites of FD and DWC.

2.3 Impacts of Component 2

Activities under Component 2 are likely to impact community members affected by HEC and proposal writers interested in researching the HEC issue. If the HEC pilots are planned for Gal Oya National Park or Maduru Oya National Park, an Indigenous Peoples' Plan will be developed.

2.3.1 Impact on Livelihoods of Local Community Members: Restrictions on livelihoods of community members due to the project is possible due to activities that plan the regulation of *chena* cultivation. The land that is likely to subjected to these regulatory and management measures are only used for cultivation and other livelihoods. Villagers do not live on these lands. Regulation and management of the cultivation of seasonal agricultural crops will undoubtedly affect the traditional ways in which the community has engaged in their livelihoods. Instead of the traditional patterns of choosing plots of land 'freely' for their *chenas*, community members would have to restrict their cultivations to plots of land allocated for cultivation by FD. Yet these plot allocations would officially legitimize an activity that is currently considered illegal, which would benefit the *chena* farmers. These plots of land would be protected by an electric fence in order to minimize 'elephant threats'. Measures to minimize impacts on livelihood loss or restriction will be taken through community involvement and consultations. Furthermore, compensation for such loss would be paid at the cost necessary for them to re-build livelihoods.

Restricting *chena* cultivation to small plots of land within a bigger area allocated by the FD and protected by an electric fence may reduce 'elephant threats' to the crops. However, it

may introduce new threats to the crops. For example, spread of agricultural diseases or insects is easy to control in a situation where cultivation is done in scattered plots of land. However, when these plots are clustered together diseases and threats by insects and other pests can spread faster and may become unavoidable. This poses a threat to livelihoods.

2.3.2 Impact on Land Ownership and/ or Land Use: Land used by community members for *chena* cultivation is in PAs and already under the ownership of FD. The project components will not involve any acquisition of land. However, component 2 will undoubtedly alter land use patterns of community members. Individuals would have to be compensated for such alterations, particularly if they have to abandon plots of land on which they have already cultivated due to project activities[7]. In situations where individuals are forced to abandon half grown crops in order to begin new plantations in the allocated plots of land, they would have to be compensated with an amount of money adequate for them to begin a new *chena*. The compensation would have to include costs (valued at the market rate) for cutting and burning of trees, ploughing, and seeds.

An independent committee comprising government officials, villagers and other stakeholders would have to be appointed for the management of the compensation program. However, a decision has been taken that the HEC pilot projects will be commenced at a time where there will be no adverse impact on the villagers during that particular cultivation season. Since the *chena* farmers are providing a significant conservation service by creating elephant habitat, during the non-cultivation season, the Government has decided to allow the use of multiple use forests and other state forests (not conservation forests) for the use of managed *chena* cultivation. Therefore, the community involved with *chena* cultivation will not be deprived of their livelihoods.

2.3.3 Delayed Payment of Compensation: Component 2 intends to pilot test compensation packages for any losses caused by elephants. Similar compensation policies are outlined in the LAA and NPCMWP. However, prior experience in Sri Lanka shows delays in making such payments to be very common due, mostly to, inefficiencies in the government sector. Such delays would have adverse effects on the poor and marginalized communities that are likely to form the masses in these local communities. Prioritized and efficient payment of compensations must be made a prime responsibility of the above mentioned independent committee. Prioritized and efficient payment of compensations must be monitored and necessary actions should be taken to address any delays by the project coordinating unit and will be also a responsibility of the national project steering committee.

2.3.4 Lack of Collaboration in Jointly Implementing HECOEX Models: The project plans, under sub-component 2.1, to implement HECOEX models jointly with the support of DWC and FD under the guidance of the MENR. Wildlife and forest are two mutually inseparable entities in any country. Community members are likely to live on FD land and on some DWC sanctuary land, but not in conservation forests of FD and national parks of DWC. But the elephants are on lands belonging to both departments. However, as explained above in section 2.1.2, DWC and FD have been established and functioned as mutually exclusive organizations in Sri Lanka. Trying to get these two organizations to work together may lead

[7] For crops that are likely to be cultivated in *chenas*, see footnote 2 in section 1.4 of the report.

to issues of collaboration. If FD and DWC cannot come to an agreement about the models that would be implemented it would eventually put the local communities who are affected by HEC in jeopardy by delaying a solution. Therefore, it is imperative that the MOE convinces FD and DWC about the importance of working together on the HECOEX models. The two agencies are showing effective collaboration through the Gaja Mithuro (National Human Elephant Conflict Management Program) since 2008 and the two agencies have already agreed on the HECOEX models to be implemented under ESCAMP.

2.3.5 Submission of Research Proposals: The researchers/research organizations that would be submitting research proposals would be aware of the general guidelines involved in developing a research proposal. However, they may not be aware of specific guidelines for submitting such proposals for ESCAMP and the technical details of how to succeed in getting approval for a research project. This information must be made easily accessible to all potential applicants in order to encourage the submission of such research proposals. The research proposal guidelines, proposal formats and selection criteria should be placed in the MOE, DWC and FD websites.

2.3.6 Approval of Research Proposals: Approval of successful research proposals will be undertaken by an independent committee appointed by DWC. Groups of researchers who have been engaging in similar research for DWC in the past may be favored in the selection process for purposes of convenience. Innovative ideas by new researchers may go unnoticed because of this. It would be imperative that all proposal writers are given an equal opportunity to have their proposals approved based on merit. Inclusion of individuals from FD and the academia should ensure that the Research Committee functions as an 'independent' body. In order to ensure there is no conflict of interest, no member of this committee can submit or be a party to submission of a research proposal.

2.4 Mitigation Strategy and Guidelines

Mitigation strategies to deal with the issues identified above will include mostly stakeholder consultations with and awareness campaigns for community members. Community grievances due to Component 2 must also be dealt with. In case of IPs, an IPP should also be developed as part of the sub-project.

2.4.1 Community involvement in developing a socially appropriate and sustainable HEC strategy: The Resettlement Policy Framework outlines the process whereby stakeholder consultations with communities, who are affected by HEC, should be an integral part of developing a HECOEX model for piloting. Section 2.2.4 identified individuals who would be stakeholders for such consultations and the strategies that could be adopted. Scientific research done on HEC may not necessarily reflect the experiences and desires of communities who are the victims of HEC. Stakeholder consultations can reduce or eliminate any disparities that may exist between research findings and real-life experiences – and research into IPs supposedly more harmonious coexistence with elephants would also be very valuable for developing suitable HECOEX pilots. Since the local communities are the major human stakeholder (victim) in the HEC, their views and perceptions on resolving the issues is essential.

2.4.2 Consulting the communities about the chosen HECOEX model: A particular HECOEX model will be chosen for implementation based on scientific research and stakeholder consultations in each pilot site, and the communities must be fully informed and

consulted about the details of the plans and its expected impact on them, and consulted about suitable and adequate mitigation and compensation measures. This is an essential requirement for ensuring that the model is community-friendly and sustainable. This process has already commenced in the 2 proposed pilot sites in the South.

2.4.3 Impacts on land use patterns and livelihoods: Consultations with community members must also discuss the impacts the project is likely to have on their land use patterns and livelihoods derived from the PAs. While most of the impacts may have been identified prior to implementation of project activities, these consultations may raise further issues that have not been thought of. The community can also be given the opportunity to suggest solutions for their problems as well.

Land acquisition or forced resettlement of individuals will not be approved or supported under the project because this is contrary to the basic premise of the human-elephant co-existence models piloted under the project.

2.4.4 Social Impact Assessments (SIAs): SIAs should be conducted prior to and during implementation of relevant sub-project activities. The SIAs will outline expected impacts of the HECOEX model and suggest mitigation strategies and compensation measures.

In addition to the above SIAs, a broader Continuous SIA (CSIA) will be done for the overall project during the second and fourth year of the project. This SIA will review the larger issues of overall social impact of the project (See Appendix B for Generic SIA guidelines).

These generic and broader SIAs and CSIAs can be assigned to a specialized consultancy firm. These CSIAs would require expertise input from sociologists and economists. SIA and CSIAs can gather data from a representative sample of community members using techniques such as questionnaires, interviews and focus group discussions.

The findings made during these SIA and CSIAs can then be forwarded to relevant FD and DWC authorities for action.

2.4.5 Payment of compensations for impacts on livelihoods: An independent committee comprising FD and DWC officers, Grama Niladharis, Samurdhi Officers and 1-2 other village level government officers, representative groups of community members and an independent member such as a lawyer or an academic would have to be appointed for the management of the compensation program. The committee must develop strategies for making the payment of compensation quick and efficient. These committees for each site will be appointed prior to the commencement of the HECOEX pilots.

2.4.6 Appeals to the Local GRMs: If certain community members are not satisfied about the payment of compensation or have issues of livelihood which have not been adequately addressed by the project, they can make an appeal to the local GRMs described in section 2.2.5. The membership and the procedures of the GRM will be as stipulated in section 2.2.5.

Community members must be made aware of the GRM in their region and its procedures during the awareness campaigns discussed in section 2.4.2.

2.4.7 Recruitment of a Research Organization under the project to assist the HECOEX pilot programs: The MOE can use the services of a Conservation NGO to convince the FD

and DWC officers about the advantages of jointly implementing HECOEX model. This would minimize any possibilities of implementation delays caused by disagreements between FD and DWC about the most appropriate HECOEX model. Joint meetings to decide on suitable HECOEX models for the south-east pilots have taken place and the basic outlines of the models have already been agreed.

2.4.8 Independent members to the Research Committee: Component 2 stipulates that the review and approval of research proposals for grants will be done by an independent technical committee. Inclusion of members from the FD, academia and members from the NGO discussed under section 2.4.6 will be useful for minimizing any potential bias that may occur in the approval process.

2.4.9 Impacts on Indigenous People (IP): Indigenous People live in the vicinity of the PAs of Maduru Oya National Park and Gal Oya National Park. Guidelines for the development of an Indigenous Peoples Plan in case of sub-projects in these two PAs are included in Appendix D. Free and informed consultations on the proposed project and its SMF have been conducted by the DWC with both these IPs communities (see Appendix F for Minutes of initial consultations). A IP Community Development Plan for the Rathugala IP community has already been developed by the community assisted by the DWC. It is attached in Annex G.

2.5 Impacts of Component 3

Component 3 is expected to improve the capacity of DWC and FD staff to engage in nature tourism within protected areas. Staff will be trained as game guides, interpreters etc. and investments will be made within protected areas to improve nature tourism opportunities and facilities.

2.5.1 Selecting Individuals from DWC and FD for Nature Tourism-related Skills Enhancement: Selection of individuals for nature tourism-related trainings has to be based on their existing capacities as the number of such available opportunities would be limited, especially at the higher levels of the agencies. It is imperative that there is transparency with regard to staff within the two departments to be trained. Equal opportunity must be provided for volunteer guides of DWC to participate in such training.

2.5.2 Limiting Visitations to PAs: Tourist visitations to some PAs appear to have exceeded the carrying capacity of the PA and if so, this is detrimental to the ecosystem in the PA. The project is expected to support studies that would be useful for figuring out the optimum number of visitors to identified PAs and help DWC and FD implement such programs. Just as over visitation may cause damage to the ecosystem, limited visitations would inhibit individuals' full capacity to generate an income through tourism-related employment. Striking a balance between these two is imperative in order to sustain tourism opportunities and to attract locals towards such employment possibilities. The employment opportunities must have an in-built mechanism of compensating for the limitations such as the approval to sell goods and services at a higher price and to engage in mobile sales etc.

2.5.3 Impacts of Increased Tourism Activities in the Localities: A significant positive impact of increased tourism activities in the proposed sites have already been identified in the project plan; i.e. increased employment/ income opportunities for the villagers. However,

tourism is not known only for its positive impacts. It can have several subtle as well as severe negative impacts on the communities living in the sites. Some of these issues have been briefly discussed in section 2.1.6.

Tourists, especially foreigners, may be perceived to possess lack of respect for local cultures and practices if they are not made aware of these aspects of local communities. They may need to be made aware of proper attire, traditional village beliefs about forests and wild life in order to avail such difficult situations which may even put them at risk.

Harassment of foreign tourists is also a possibility in a situation where the influx of tourists increases to an area. In such situations the harassed individuals can call up the tourism hotline based in Colombo or the nearest police station. They would also have to be informed about the relevant authorities and their contact details.

At the same time, the local community needs to be made aware of the sexual risks that are usually associated with tourism. Risks of pedophilia and STDs such as HIV/AIDS in areas where tourism is currently a flourishing industry are some examples. Provision of sexual services to foreigners is currently an industry engaged in by poor and marginalized individuals living in areas where tourism is a major attraction. Communities must be made aware of these possibilities in order to protect themselves against such threats.

Drug addiction through associations with tourists may also be of concern for communities. Although the abuse of drugs such as marijuana may be high among adults in the communities the introduction of foreign drugs, particularly to the young, may pose a threat to the communities. The proposed project must pay careful attention to these possibilities because the negative impacts involved here can cause long term social problems that can affect Sri Lankans in general.

2.6 Mitigating Strategy and Guidelines

Mitigation strategies for the likely issues of Component 3 are related to securing equal opportunities for permanent DWC and FD staff and volunteer guides in DWC in training, local communities and tourists during activities of nature based tourism.

2.6.1 Selection of individuals for nature tourism-related skills enhancement: FD and DWC must develop a priority list of who should be given nature tourism-related training opportunities based on the roles and responsibilities of staff (volunteer or permanent) and also their existing capacities. Volunteer guides in DWC have in the past received step motherly treatment when it comes to training. The project should ensure that guides who interact with tourists (national or international) visiting the protected areas should all be provided training in interpretation and languages. There should be no discrimination based on whether the staff member is on the permanent cadre or a volunteer, particularly since it is the volunteers who are mainly used by DWC for guiding and interpretation work. In order to address this, the project will train all Game Guards and Volunteer Guides in the DWC as well as all guides involved in nature based tourism in FD in nature interpretation.

2.6.2 A mechanism to monitor and regulate tourism activities: In section 2.5.2, it was discussed that limited visitations may inhibit maximum income opportunities for community members through tourism. It is recommended that such employment opportunities have in-built mechanisms to compensate for such limitations. For example, selling of goods and

services to tourists or safari hotels and guest houses at a price higher than the market rate as conservation produce can be allowed in the project areas. Since most agricultural activities around PAs is *chena* agriculture and elephant habitat created by *chena* after growth could qualify its produce as conservation produce, if properly marketed. The project can support such awareness creation among the tourism operators and park visitors. Likewise, the mobile sale of goods and services, for example taking cut fruits for sale to visitors, near the park entrance may be encouraged, with proper authorization from the respective departments. However, authorization should be based on a transparent and competitive basis. Such vendors should be regulated and monitored in order to secure the interests of tourists. For example, mobile sale of goods and services must be restricted to certain areas and should not be allowed in areas where tourists relax.

Monitoring of nature tourism within PAs is the responsibility of the respective departments. The two departments have established institutional mechanisms for regulating and monitoring nature based tourism within PAs, which would be relied upon and strengthened under the project if needed.

2.6.3 Collaborations with Sri Lanka Tourism Development Authority (SLTDA): MOE could develop links with the SLTDA which now under MED, the parent ministry of DWC, for efficient mitigation of likely negative impacts of tourism on local communities and the tourists. Development of brochures describing local customs and practices to make foreigners aware of appropriate behaviors in the local communities can be done with the assistance of SLTDA. It might also be possible to incorporate such information to existing publications by SLTDA.

The brochures must also inform foreigners about action to take and numbers to contact in a situation of emergency. This would ensure the safety of foreigners in these areas. The brochures must be printed in English and few other foreign languages representing the nationalities of frequent visitors to the areas.

The monitoring mechanism discussed on section 2.6.2 can also get expert assistance from SLTDA or make links to existing SLTDA tourism monitoring mechanisms.

It is also recommended that awareness campaigns be organized for the communities in order to inform them of the likely positive and negative impacts of tourism and ways in which they can prevent the negative impacts. These awareness campaigns must use local school principals, teachers and religious leaders as resource persons to get a strong message across to the children and youth in the area. These individuals can also be encouraged to conduct similar awareness programs for the community in schools and during religious activities. This would ensure sustainability of knowledge passed through the awareness programs. CBOs can also play a useful role in organizing these awareness programs. Professional groups such as lawyers and doctors can also be used as resource persons in these campaigns. Awareness campaigns should be conducted in the main medium of communication (probably Sinhala) is the areas with leaflets containing the same information printed in other languages (Tamil and English).

2.7 Impacts of Component 4

Component 4 largely deals with improving the infrastructure and improving the capacity of staff at FD and DWC. Most likely issues of the component is therefore, related to bias that may influence the selection of individuals for training programs.

2.7.1 Improved Infrastructural Facilities: Component 4 has provisions for improving infrastructural facilities of WTC and SLFI (under sub-component 4.1) and DWC and FD (under sub-component 4.2). These facilities will undoubtedly promote efficiency. However, improved infrastructural facilities would require technical expertise in order to sustain or maintain the improved facilities. Such experts would have to be either trained from among the existing staff of these organizations or be recruited.

2.7.2 Affiliations to International Training Institutions: Such affiliations are discussed under sub-components 4.1 (for trainees at WTC and SLFI) and 4.2 (for staff at DWC and FD). In both components, this may restrict participation to certain groups within the organizations based on, for example, their linguistic capacities. Furthermore, bias towards certain groups or individuals due to their number of service years may skew the selection process. Therefore, existing capacities/ competencies of individuals and years of service may restrict training opportunities in a foreign country or by foreign resources persons. An independent selection committee comprising executive officers from DWC and FD will be the first step in foreign training selections. The DWC and FD committees must establish standard criteria for the selection of individuals. Thereafter, the selection of beneficiaries and the rationale for selection has to be approved from the National Project Steering Committee (NPSC) which includes independent members from academia and conservation NGOs.

2.7.3 Consortium of National Conservation NGOs for Monitoring: Sub-component 4.3 stipulates that monitoring of project activities will be conducted by an independent consortium of national conservation NGOs. NGOs are usually considered to be bias-free organizations. However, the selection of NGOs into this consortium would have to be done in an independent manner by the MOE in order to ensure that it is bias-free.

Furthermore, the consortium should get the involvement of NGOs that would be interested in representing the interests of the communities. If the consortium is going to be dominated by conservation NGOs the interests of local people may be overshadowed by their interest to protect the flora and fauna in the sites.

2.8 Mitigation Strategy and Guidelines

Mitigation strategies for the potential issues identified above deal mostly with providing equal opportunities for FD and DWC staff and the trainees at WTC and SLFI.

2.8.1 Wide publicity for training opportunities: Notices related to training programs offered through foreign agencies must be given wide publicity within FD and DWC. The notices must also give details of the minimum qualifications required for application.

2.8.2 An independent selection committee: It is recommended that selection for the above trainings be done through a selection committee comprising FD and DWC officers and some independent members such a lawyers and academics.

2.8.3 Equal opportunities: All potential applicants for the trainings must be treated equally in the selection process. Equality must be ensured irrespective of gender, ethnicity and religion. Applicants who have not received adequate training (national and international) should receive priority in training over staff who has participated in previous training courses.

2.8.4 Selection of NGOs: The members of the consortium of conservation NGOs to undertake independent reviews of the project will be selected from among the conservation NGOs/community that is presently in the ESCAMP Project Preparation Consultative Group comprising conservation NGOs, wildlife enthusiast and academics. The consortium should transparently select local community NGOs to play a role in evaluating the project's performance in local PAs. This would ensure that the local community interest is protected.

3.0 Overall community consultation

The public participation or community consultation process to resolve natural resource management issues will have a major impact on the types of decisions which result. Such consultations will be carried out in all specific project intervention sites. In all specific project areas where communities will be directly affected by project activities, awareness on the project will be held to educate the buffer zone communities, local authorities and other stakeholders on the project, what benefits it will bring to the area and people and to explore on how they can participate in carrying out the project activities.

3.1 HECOEX pilot areas

The DWC and MED as part of the Gaja Mithuro, national HEC management program together with Government Agents and Divisional Secretaries have continuously held consultations with communities in all HEC affected areas in the country. The Hambantota and Moneragala districts where the proposed HECOEX pilots are located in the south-east region of the country, too has had several such consultation meetings. These consultations have discussed the level of the problem and existing methods used to address the HEC issue in each area. The project will document these consultations, build upon them to hold specific consultations introducing research findings on elephant ranging patterns, explore best practice experiences of communities, alternative options to address the issue, and benefits to communities.

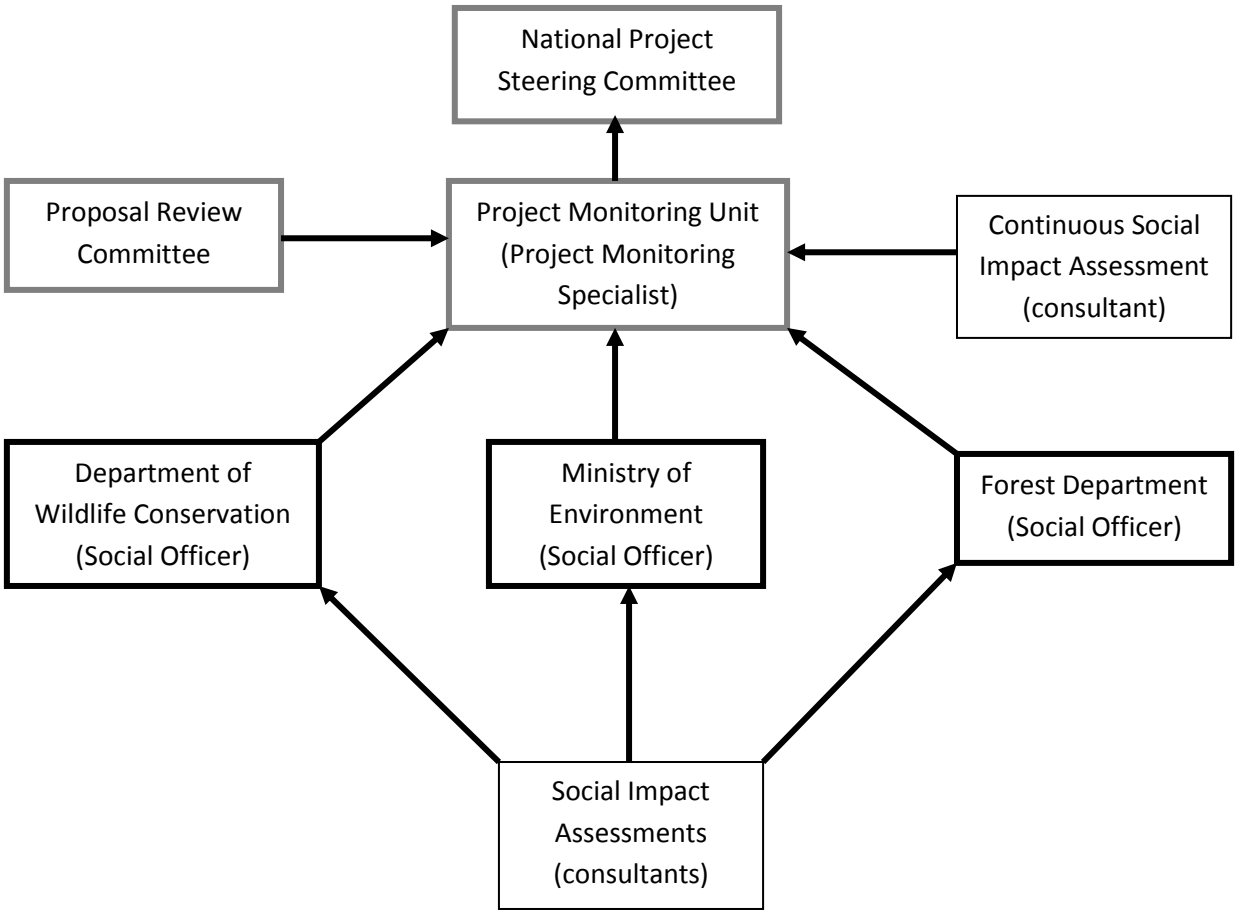
Similar process will be also followed in the north-western region once the relevant research data and information are in place.

3.2 Indigenous Peoples areas

On April 16 and 17, the DWC held consultations with “Vedda” communities in Dambana and Ratugala areas in the borders of Maduru Oya National Park and Gal Oya National Park respectively. During the consultations, the DWC provided an overview of the proposed ESCAMP, the activities that have been planned, potential effects to these communities by the project and discussed their issues, experiences and needs and possibilities of accommodating their needs. The minutes of the two consultations are provided in Appendix F.

4.0 SMF Implementation and Monitoring Flow Diagram

SMF Implementation
SMF Monitoring/Review
Reporting



Appendix A

Detailed Project Description

SRI LANKA: Eco-Systems Conservation and Management Project (ESCAMP)

The project has four main components: (i) promoting ecosystem conservation and management; (ii) demonstrating human elephant conflict (HEC) management through coexistence; (iii) enhancing the quality of nature-based tourism in support of PA conservation and management; and (iv) strengthening knowledge and national capacity for ecosystem conservation and management. All project activities will take place within the four identified landscapes and are expected to contribute towards establishing effective ecological networks, securing the integrity of ecosystems and viable populations of species while promoting green infrastructure development and promoting nature based tourism in protected areas within the conservation landscapes.

The project, although divided into components for clarity, is supporting complementary activities that contribute towards improving the management and stewardship of the conservation landscapes through investments and interventions in specific PAs and other biologically critical locations in the terrestrial, marine and wetland ecosystems of the identified landscapes. Project interventions are intended to enhance Sri Lanka's ability to become the "wildlife wonder of Asia". The proposed project would have four main components (listed below).

Component 1: Promotion of Ecosystem Conservation and Management (US$11.8 million)

Sri Lanka has an extensive network of PAs, comprising 14% of the country's land area. The PA network is managed by the Department of Wildlife Conservation (DWC) and the Forest Department (FD). The 2006 Gap Analysis identified critical ecosystems outside the PAs[8] where population and development pressures are threatening the connectivity and integrity of wildlife corridors and linkages among PAs that are essential to the long-term survival of flagship species. The project would provide support for conserving and managing four conservation landscapes through partnerships with relevant GOSL agencies and key stakeholders of the landscapes, including the local population.

There are severe development pressures that could lead to degradation of ecosystem quality and service potential unless the Government takes a new approach in pursuing its development program within ecologically sensitive landscapes. This is particularly important when development projects are planned in land and seascapes where the country's priority protected areas are located. The four selected landscapes for project intervention include the key priority PAs in the country. While the situation for biodiversity conservation, particularly for wildlife and forestry management, is critical and challenging within the landscapes, there are still excellent opportunities for the Government to implement its development program within such landscapes by ensuring that infrastructure is smart, green and compatible with the surrounding ecosystems. Some of the mechanisms that can be used to ensure the compatibility of infrastructure with the larger ecosystem would include land use planning that is ecologically sensitive, wildlife corridors, strategic environmental assessments, other environmental assessments that look at the cumulative impacts on the landscape, human-elephant conflict risk assessments and guidelines or regulations for green infrastructure. Therefore, the project would support the preparation of four strategic conservation landscape plans in the selected landscapes led by the key spatial planning agencies of Government and use of project resources to implement key aspects of such plans.

In order to foster ownership, efficiency and commitment on the part of the implementing agencies, a competitive demand-driven approach to interventions in priority ecosystems – that is, the four conservation landscapes – will be applied. Component 1 funds will be allocated through an annual

[8] Protected areas are defined as lands identified for conservation and protection under the Fauna and Flora Protection Ordinance and the Forest Ordinance.

competitive call for proposals from DWC and FD through their regional network that will promote demand-driven and decentralized approaches to conservation and management of natural ecosystems. Proposals will be called annually for first three years of project implementation.

Proposals can be submitted for funding under three windows, each of which would support specific objectives: (i) Window 1: landscape level investment programs for conservation and management of critical ecosystems outside the PA network in the selected landscapes; (ii) Window 2: investments in conservation and management of PAs within the selected landscapes; and (iii) Window 3: participatory programs to reduce community dependence on forest resources within the core landscapes and its buffer zones. The activities supported under these funding windows will be integral parts of the four strategic conservation landscape management plans to be prepared under the project.

The main principles and objectives that would guide the funding of proposals are as follows:

- All proposals are based on the four strategic conservation landscape management plans which would incorporate the respective PA management plans.
- An independent Committee of Experts appointed by MOE with broad stakeholder participation would review funding requests.
- A mechanism for averting conflict of interests between potential recipients and the proposal review committee has been applied.
- Collaboration among multiple agencies (notably, FD and DWC) and other users of the landscapes would be encouraged by establishing appropriate rules and incentives for the award of funds for Window 1 proposals.
- The proposals require verifiable (and preferably quantifiable) criteria for monitoring progress.
- Additional funding will depend on the performance of previously funded activities.

Sub-Component 1.1: Preparation of Strategic Conservation Landscape Plans (US$ 0.25 million)

While Sri Lanka has a long history of conservation of its protected areas, landscape level conservation and management is still in its infancy. The World Wildlife Fund (WWF) and the World Conservation Union (IUCN) developed a framework for making landscape level conservation decisions which will be used as the basis for developing strategic conservation landscape plans for the project's four landscapes. The landscape approach helps to reach decisions about the advisability of particular development interventions (such as roads, agricultural projects or other infrastructure) and to facilitate the planning, negotiation and implementation of activities across a whole landscape dominated by conservation areas. It integrates top-down planning with bottom-up, participatory approaches.

The landscape approach involves:

- "defining opportunities and constraints for conservation action within the landscape
- establishing effective ecological networks
- securing the integrity of ecosystems and viable populations of species
- developing rapid assessment systems for landscape scale forest quality including the identification of high conservation value forests
- setting out a stakeholder negotiation framework for land and resource use decisions and for balancing the trade-offs inherent in such large-scale approaches and
- recognizing and using overlapping cultural, social, and governance "landscapes" within biologically defined areas"[9]

The strategic conservation landscape plans developed under the project will be used to influence the national physical planning agencies and other stakeholders in the creation of green infrastructure that

[9] The Landscape Approach, Position Paper, WWF and IUCN, 2002

would be compatible with the surrounding ecosystems dominated by protected areas. National and sectoral plans of the Government, within the conservation landscapes, must consider the habitat needs of the flagship species, in particular elephants, and related biodiversity considerations. Designated PAs and critical wildlife corridors should be declared "no development zones" because this measure would be the least costly way of ensuring compatibility between development and conservation. Development plans will have numerous options within the mitigation hierarchy such as ecosystem conservation zones, effective stakeholder engagement, environmental management systems and biodiversity offsets that could be used in developing strategic conservation landscape plans.[10] Workshops consisting of key stakeholders in each identified conservation landscape will be held, led by the National Physical Planning Department supported technical experts and will help develop the strategic landscape management plans based on the framework and principles of the World Wildlife Fund (WWF) and the World Conservation Union (IUCN) on the construction or utilization of green infrastructure. Environmental service values of different ecosystems, particularly outside the PA network, will be determined so that GOSL would be able to make informed development planning decisions in the conservation landscapes.

Since PAs within the landscape may have their own PA Management Plans or PA Management Plans would be developed for the remaining PAs as required by the Fauna and Flora Protection Ordinance, the strategic landscape conservation plans will focus on broad guidelines and principles for the management of PAs within the landscape, with the details laid out in the respective PA management plans. The details of conservation and management of the landscape outside the PA system, including guidelines for smart, green infrastructure, will be developed under the strategic conservation landscape management planning process. The strategic planning exercise – led by the National Physical Planning Department in collaboration with MOE, FD and DWC while being supported by external technical experts and key stakeholders active in the conservation landscape – would be completed within the first six months of project implementation.

Sub-component 1.2: Funding Windows 1, 2 and 3 (US$11.73million)

The resulting strategic plans will form the basis for the investment proposals to be submitted for financing under the three funding windows described below. Periodic impact evaluations of the funded activities would be carried out during project implementation. *The creation of the Proposal Review Committee for the three funding windows is a condition of project negotiations.*

Window 1: Implementation of the Landscape Level Conservation Plans with Emphasis on Programs for Conservation and Management of Critical Ecosystems Outside the PA Network (US$3.75 million)

It is recognized that jurisdictional controls over land do not coincide with natural ecological boundaries, resulting in the fragmentation of habitats and uncoordinated interventions. To foster more effective stewardship of natural habitats, Window 1 would fund proposals submitted for implementation of key aspects of the strategic landscape level conservation plans focusing on conservation and management activities *outside* the PA network within the landscape.

In order to ensure the sustainability of the interventions in the landscape, FD and DWC must take the lead in submitting proposals for funding. Proposals led by either FD or DWC individually or jointly along with the stakeholders in the conservation landscape will be considered for funding. However, to encourage collaboration between the two agencies that is essential for the long term sustainability of conservation in Sri Lanka, preference will be given to project proposals jointly submitted by DWC and FD. Landscape level conservation and management requires the active participation of all the stakeholders involved in the landscape. Therefore, DWC and/or FD will be required to submit proposals in partnership with GOSL institutions active in the selected landscape, such as development

[10] Smart Green Infrastructure in Tiger Range Countries: A Multi Level Approach, Quintero J., Roca R., Morgan A.J., Mathur A., GTI SGI Working Group, Technical Paper.

planning agencies, local government authorities, divisional secretariats (DS), other national or provincial government agencies and with national or local NGOs, universities and research institutions, the private sector and community groups. Interventions based on the respective strategic conservation landscape plans can be initiated by other stakeholders in the landscape. However, the submission of proposals must be made by either DWC or FD or jointly (the latter is preferable) – in conjunction with the relevant stakeholders – to ensure sustainability and institutional commitment. Accordingly, the funds for Window I activities will flow through FD and DWC.

Environmental decision-making in Sri Lanka has been focused largely on mitigating the direct impact of development projects. While this is a very important aspect, the narrow focus on mitigation and protection (such as the declaration of PAs) tends to neglect the broader issue that people in their daily lives depend on a range of services that ecosystems provide. Management of the conservation landscape so that the ecosystem services it provides are intact is fundamental if development is to be sustainable.[11]

The eligibility criteria for Window 1 funding are summarized below.

- A proposal must be an integral part of the strategic landscape conservation plan.
- It would strengthen the sustainability of ecosystems under multiple uses through planning, regulations and physical interventions.
- It would encourage ecosystem restoration and conservation planning by explicitly identifying ecosystem services, including valuation of such services.
- It would enhance the protection status of sensitive ecosystems, wildlife corridors and conservation of ecosystem services.
- It would develop regulations and guidelines for green infrastructure to be located within the conservation landscapes.

Preference would be given to the conservation and management of the critical ecosystems outside the PAs where population and development pressures are threatening the connectivity and integrity of wildlife corridors and linkages between PAs that are essential to the long-term survival of flagship species. Typical investments under this window would be restoration of degraded ecosystems through reforestation, conservation and protection of wildlife corridors and linkages between PAs, restoration of water resources for agriculture and wildlife use, rehabilitation of degraded wetlands for provision of ecosystem services, restoration of watersheds and development of regulations and guidelines for green infrastructure so that infrastructure development is compatible with the sensitivity of ecosystems. Since conservation and management of ecosystems cut across administrative or jurisdictional controls and landscape approach is a novel concept in Sri Lanka, the participating agencies may need funding for TA to prepare specific proposals. Such TA requests would be considered under Window 1.

Window 2: Improving the Management of Selected Protected Areas within the Conservation Landscape (US$5.00 million)

Priority PAs within the four landscapes either have existing PA management plans or will have to prepare PA management plans as required by the Fauna and Flora Protection Ordinance. The investment activities identified for funding under this window must be in compliance with the Fauna and Flora Protection Ordinance (FFPO) and the Forest Ordinance (FO), as the case may be. The activities must also be compatible with the conservation ideals of the strategic conservation landscape management plans prepared for the four landscapes under this component. Field-based PA managers are well acquainted with the challenges of PA management and conservation as well as the local needs and conditions. Often, PA managers are under-resourced and have limited incentives to meet centrally defined goals.

[11] J. Ranganathan, C. Raudsepp-Hearne, N. Lucas, F. Irwin, M. Zurek, K. Bennet, N. Ash, and P. West, *Ecosystem Services – A Guide to Decision Makers*, World Resources Institute, 2008.

To sharpen incentives and promote demand-driven interventions at the PA level, Window 2 will provide funding for proposals submitted by field-based PA managers on a competitive basis. In view of the project development objective (PDO), the focal GOSL agencies eligible to request Window 2 funding will be DWC and FD and such proposals will be limited to activities within their respective PAs. In order to ensure collaboration and complementarity in the management of adjacent PAs within the conservation landscape, wherever possible, partnerships between DWC and FD will be encouraged. Even in instances where individual proposals are submitted by respective PA managers of DWC and FD for interventions in adjacent PAs belonging to the same ecosystem, the activities funded under Window 2 must be complementary. Proposals from DWC and FD for joint management of PAs and complementary proposals submitted individually by DWC and FD in adjacent PAs of the same ecosystem would be preferred.

Window 2 aims to reward innovation, performance and accountability in PA conservation and management. Competition among the applicants is expected to improve efficiency and promote more cost-effective and relevant interventions.[12] In view of the lessons from experience elsewhere, funding will be based strictly on verifiable and quantitative performance targets to assure transparency. Conservation and management activities of terrestrial, marine and wetland PAs in the four conservation landscapes will be eligible for funding under this window. Window 2 funds will be disbursed only to DWC and FD.

DWC and FD have agreed on the criteria for selection of priority PAs located within the four conservation landscapes for interventions under the project. They include:

- areas of high biodiversity significance
- threatened ecosystems
- locations with observed high presence of endemic species as well as flagship species
- locations with potential for non-consumptive ecosystem services
- PAs at risk of surrounding development pressures, particularly in the dry zone
- PAs with high nature based tourism potential and requiring intensive management
- priorities identified in the BCAP and other environmental plans as well as the Gap Analysis for addressing issues faced by PAs

Typical activities that would be funded under this window include: (i) rehabilitation and development of water resources within PAs; (ii) habitat management including control of invasive species; (iii) rehabilitation of existing roads within PAs; (iv) improvements in existing park infrastructure; (v) species monitoring and recovery programs; (vi) protection of inviolate areas for species conservation; (vii) implementation of real time field based monitoring systems; and (vi) strengthening enforcement. No major infrastructure that would have significant adverse environmental consequences within PAs will be supported under the project. Any activity supported within the PA systems would be required to undertake an environmental analysis and prepare Environmental Management Plans to mitigate any adverse impacts. All project-supported interventions will be in line with the respective PA management plans, in keeping with the project's landscape approach.

Window 3: Improving Community Participation in Reducing Deforestation and Forest Degradation (US$2.98million – financed by Australian Agency for International Development (AusAID))

The concept of community participation in assisting the Forest Department to reduce deforestation and forest degradation was introduced into the National Forest Policy of Sri Lanka of 1980. The

[12] Such incentive-based approaches to conservation are being more widely used across the world (see, e.g., A. Arendodo "Green Auctions", *Ecological Economics* (forthcoming), E Bulte and R Damania "Modeling the Economics of Interdependent Species", *Natural Resource Modeling,* 2002, 16 pp 21-33*;* T. Cason and R Gangadharan, "A Laboratory Based Test of Conservation Auctions" *Journal of Environmental Economics and Management*, 2004, 46, pp 446-57.

policy endeavors "to involve local communities in development of private woodlands and forestry farms through programs of social forestry". This concept was further expanded in the National Forest Policy of 1995 to incorporate the development of partnerships with local communities, community management of forest resources and benefit sharing with communities in an attempt to reduce deforestation and forest degradation in Sri Lanka.

FD implemented a community forestry project based on the National Policy in five districts of Sri Lanka with financial assistance from AusAID during 2003-2009. Based on the success of this initiative, FD prepared the Strategy for Community Forest Management in 2008 and undertook community forestry activities in an additional nine districts during 2007-2009 with FD's own funds introducing community forestry to 14 out of 22 districts in the country. Subsequently, AusAID decided to provide FD with additional funding for further expansion of the program for 15 districts (including some districts in which such activities are taking place at present) and the funds will be administered by the World Bank on behalf of AusAID through ESCAMP. In order to complement ESCAMP's interventions, the geographic focus of the interventions under this window will be the communities in the core areas of the four conservation landscapes and the adjacent buffer zones.

A key aspect and major benefit of the community approach is the formation of self-help groups and community-based organizations (CBOs), who could be advocates of conservation within the landscapes. Membership in such organizations is based on the family unit and both men and women would participate in and benefit from the program. A substantial proportion of the group leaders are women and they play a leading role in the management of the affairs of the groups, thereby strengthening their status within the community. Women in Sri Lanka are characterized by low political representation (less than 5% at national level), an unemployment level that is double that of men and employment in low-paying jobs requiring few skills. Facilitating female participation in the self-help groups and CBOs is important for increasing women's roles as producers, community members and advocates of conservation.

Window 3 will fund proposals (community forest action plans) submitted by FD for community participation in activities leading to better forest management. The proposals will be prepared in consultation with the respective communities. The objective of the proposals submitted under Window 3 would be to involve communities in reducing deforestation and forest degradation in the conservation landscapes and buffer zones. The implementation of the approved community action plans would improve the management of natural resources to support livelihoods and contribute to poverty reduction, especially in the conservation landscapes of the country's dry and intermediate zones.

Specific site selection within the conservation landscapes and the buffer zones will be based on the range management plans prepared for the entire country by FD and prioritized on the basis of conservation issues faced by the respective forest reserves, including an analysis of the vulnerability of forests to deforestation and forest degradation within the identified conservation landscapes. The action plans would aim to: (i) reduce deforestation and forest degradation by lowering the dependency on extractive forest resources through alternative agricultural and non-agricultural income generating opportunities for local communities; (ii) enhance the productivity and environmental sustainability of agricultural lands within the selected conservation landscapes; (iii) reduce soil erosion; (iv) improve soil and water conservation in agricultural lands and home gardens; (v) increase the quality and quantity of timber produced from designated woodlots and home gardens and (vi) assisting the FD in management of selected forest reserves. Typical activities in the action plans would include: rehabilitation of local tanks to provide water for irrigation and domestic purposes, the establishment of woodlots; improving the productivity of home gardens and a range of other agricultural and non-agricultural income-generation activities; projects to improve social infrastructure; and capacity building of the communities.

The funding of action plans will entail a two-stage process. The Proposal Review Committee will first evaluate and approve the sites proposed for community related projects aimed at reducing forest

dependence and the funding required for community mobilization, capacity building and preparation of community action plans. Once the community action plans have been prepared, the Proposal Review Committee will evaluate and approve the funding required to implement the plans. In areas where community action plans already exist and they are ready for implementation or where implementation of some aspects of the plan are proceeding, these plans could be submitted directly to the Proposal Review Committee for funding approval for implementation of the community action plans. In 2007, FD established community programs with its resources in nine districts. Since it continues to fund the programs, the likelihood of long-term sustainability of Window 3 is high.

Funding Review Process for Windows 1, 2 and 3

The proponents of project proposals under the three windows of Component 1 will be responsible for submission of their respective proposals to the Proposal Review Committee. Proposal implementation will generally be over a two year period, with longer durations provided for more complex projects. The proposal review process will consist of two stages. Stage 1 will involve the review of a concept note with a proposed budget by the Proposal review Committee. Once the concept has been agreed in Stage 1, the proponent will be required to re-submit a more detailed proposal that includes a detailed budget, procurement plan, implementation arrangements and environmental and social safeguards assessments (done accordance with the requirements of the Environmental Management Framework and the Social Management Frameworks) for review to the Proposal Review Committee and for concurrence to the World Bank. Thereafter, funds would be provided to the proponent for the implementation of the project. No funds can be disbursed under this component without the prior approval of the World Bank where compliance with the overall objectives of ESCAMP and sustainability of the proposed interventions will be assessed prior to approval.

The Proposal Review Committee will be chaired jointly by the Additional Secretary, MOE (Natural Resource Management) and Additional Secretary, Ministry of Agrarian Services and Wildlife and will include the following members: (i) Director General Department of National Budget; (ii) Director PPD, MOE; (iii) Director Biodiversity Secretariat, MOE; (iii) Director General, Department of National Planning; (iv) four academic experts in forestry and wildlife from the university system; (v) four members representing NGOs; (vi) a representative with expertise in project management from the University of Moratuwa; (vii) a representative from UNDP's GEF Small Grants Program. A minimum of seven Proposal Review Committee members, a majority of whom are not in the public service, must participate in the evaluation and approval process. Selection of the Proposal Review Committee members will be conducted so as to preclude any conflict of interest vis-à-vis project proponents. If a particular proposal presents a conflict of interest vis-à-vis a Proposal Review Committee member, the latter will have to recuse oneself from the evaluation and approval process for that proposal. Representatives of the World Bank and AusAID (for community action plans submitted to Window 3) may participate as observers at Proposal Review Committee meetings. In order to ensure transparency in the selection process, proposals will be presented to the Proposal Review Committee semi-annually by the respective project proponents at a workshop, where representatives from the conservation community can participate and comment, although they have no voting power. *The formation of the Proposal Review Committee is a condition of project negotiations.*

Eligibility for funding will be based on the principles outlined in the respective sections of the three windows as described above. Project proposals will be solicited on a semi annual basis during the first three years of the project. Future additional funding of proposals from all three windows will be based on the performance and progress of implementation of the sub-projects funded by ESCAMP (completed or near completion) and their outcomes. Periodic impact evaluations of the funded activities would be carried out during project implementation.

Component 2: Demonstrating Human Elephant Conflict (HEC) Management through Co-existence (US$ 11.00 million)

HEC is symptomatic of Sri Lanka's environmental challenges and remains high among the priorities of GOSL, in general, and MOE and MASW in particular. Addressing HEC is therefore a national priority. HEC has reached alarming proportions in many parts of the dry zone in Sri Lanka with around 70 humans and over 200 elephants being killed annually due to the conflict. It is a major socio-economic, political and conservation issue and is a key to alleviating rural poverty over much of the country's dry zone. With increased development and the inevitable erosion of habitats, the problem is set to worsen unless immediate remedial action is taken.

Current approaches have done little to address the problem. HEC mitigation in Sri Lanka and in Asia, for that matter, has been based solely on attempting to restrict elephant movements by limiting them in DWC controlled PAs through ill conceived elephant drives, translocations and attempts to restrict movement by electric fences located on the boundaries of national parks. Studies undertaken in Sri Lanka have shown that translocation and confinement are not a viable management strategy and jeopardizes the survival of Sri Lanka's elephants both within and outside the PAs with no long term benefit for reducing HEC. This is largely because restricting elephants to DWC PAs reduce their current habitat to 30 percent of what they use at present.[13] The current management strategies have largely failed because the approach neglects the root causes of the problem. Most national parks are already at or even beyond carrying capacity and hold the maximum number of elephants they can support. Additionally, national parks are generally primary or mature forests and they provide sub-optimal habitat for edge species, such as elephants. Hence, over two-thirds of elephants in Sri Lanka roam outside PAs controlled by DWC and conservation forests managed by FD.[14]

The translocation of individual crop raiding and other problem elephants have shown that the translocated elephants either try to return to their home range or indulge in problem activities in the new location. Often such translocated elephants create greater problems to communities after their release in new sites, resulting in translocation of the problem as well as the elephant. In addition, research conducted on behalf of DWC has demonstrated that elephant drives that are conducted mainly in response to political and social pressures have failed to eliminate crop raiding elephants from the drive areas. Construction of electric fences along the administrative boundaries of DWC PAs has failed to yield the expected outcomes with fence breaking by Elephants commonplace, since elephants range is limited by the ecological boundaries and not man-made administrative boundaries of PAs. There is, therefore, a need to find a new approach to management of the human elephant conflict by finding mechanisms that turn wild elephants from economic liabilities and the foes of local farmers to wild, living, communal and economic assets.

Extensive discussions of this issue suggest that GOSL and the scientific community recognize that, with the declining elephant habitat, the scale of the problem is overwhelming current measures and alternative approaches to HEC management are called for. The availability of recent telemetry data on elephant movements provides GOSL with a tremendous opportunity to pioneer new science and observation-based adaptive management approaches which could be replicated across the elephant range in Sri Lanka and if successful, in the other Asian elephant range states (13 South and Southeast Asian states). The project would support a number of innovative projects to address the HEC issue based upon the recent scientific advances that contributed to the preparation of Sri Lanka's National Policy on the Conservation and Management of Wild Elephants ratified by Cabinet in 2006.

Sub-component 2.1: Projects for Demonstrating Human Elephant Co-existence within High Conflict Areas in Selected Conservation Landscapes (US$10.00million)

This sub-component would explore opportunities for reducing HEC by managing elephant populations according to natural ecosystem boundaries rather than artificial administrative boundaries

[13] Fernando, P., Wickramanayake, E., Weerakoon, D., Janaka, H.K. Gunawardena, M., Jayasinghe, L.K.A, Nishantha, H.G., Pastorini, J., (2006) The Future of Asian Elephant Conservation: Setting Sights Beyond Protected Area Boundaries, *Conservation Biology*.

[14] Unpublished research data of the Center for Conservation and Research carried out on behalf of DWC.

of land which is the present practice. A landscape conservation strategy aimed at allowing elephants to continue ranging outside PAs based on using on-going shifting agriculture outside PAs to create optimal habitat for elephants and providing benefits to farmers through elephant conservation will be piloted.[15] This is consistent with the National Policy for the Conservation and Management of Wild Elephants and GOSL's "Gaja Mithuro" program (National HEC Management Program), which invests in short term actions prescribed under the National Policy on Conservation of Wild Elephants while ESCAMP will invest in the intermediate to long term actions.[16] The policy calls for elephants to be managed in elephant conservation areas (ECAs) which are landscapes consisting of PAs within DWC's and FD's purview, as well as managed elephant ranges (MERs) which are lands outside the PA network. This will expand the elephant ranging areas to 80 percent of their current habitat, instead of trying to restrict elephants to 30 percent of their habitat as has been attempted and has proved to be a failure. There will be no transfer or change in land ownership when elephants are managed in ECAs and MERs. The ECAs and MERs will be used as management areas predominantly for elephants.

The people of Sri Lanka have had a benevolent attitude towards elephants throughout history, due to their religious and cultural traditions[17]. Attitudinal surveys conducted among HEC affected populations in southern Sri Lanka are also supportive of the people's benevolent attitude towards elephants with the community requesting that measures be taken to reduce (not eliminate) elephant destruction rather than remove elephants from their areas.[18] Such benevolence by HEC-affected communities lays a sound foundation for piloting HECOEX models. HECOEX models will be pioneered in MERs where elephants will be restricted from human settlements and permanent agriculture by electric fencing, while being allowed to range freely in other forms of compatible land use. The project will provide incentives for regulating and managing the seasonal agricultural practices in MERs to minimize conflict and optimize habitat quality.

The ground work for developing such innovative approaches for HECOEX models over a representative area in the South-Eastern region has been completed on the basis of research and observational data gathered by DWC supported by conservation organizations over the last ten years. The appropriate approach would vary with the intensity of the conflict and the economic situation on the ground. In order to ensure that HECOEX models are an effective tool to manage HEC, there is a need to find mechanisms that turn wild elephants from economic liabilities to economic assets for the affected community. In addition to empowering communities that will be participating in the HECOEX demonstration programs, the project will pilot a series of economic incentives such as (i) community benefits from activities supported under Window 3 of Component 1; (ii) payments for environmental services (cash transfers); (iii) insurance schemes and compensation mechanisms to mitigate the impact of elephant depredation; and (iv) opportunities for community-managed nature-based tourism such as elephant viewing, in order to demonstrate that coexisting with elephants has economic benefits to the community. This goes well beyond the current compensation scheme administered by DWC for elephant induced deaths. A study will be carried out on viable economic incentives and its implementation mechanisms during project implementation. The Bank will review the fiduciary aspects of the proposed economic incentives prior to approval of the use of funds.

The proposed strategy for mitigation of HEC in the pilot areas will strive to: (i) restrict elephants to areas with sufficient natural habitat (such as managed elephant ranges (MERs) with no change in land ownership)—such as forest reserves outside the DWC's PA system; (ii) protect permanent

[15] Fernando, P., Wickramanayake, E., Weerakoon, D., Janaka, H.K. Gunawardena, M., Jayasinghe, L.K.A, Nishantha, H.G., Pastorini, J., (2006) The Future of Asian Elephant Conservation: Setting Sights Beyond Protected Area Boundaries, *Conservation Biology*

[16] National Policy for the Conservation and Management of Wild Elephants in Sri Lanka, Ministry of Environment and Natural Resources and Department of Wildlife Conservation, 2006. .

[17] Perceptions and Patterns of the Human Elephant Conflict in Old and New Settlements in Sri Lanka: Insights for Mitigation and Management, Pritiviraj Fernando, Eric Wickramanayake, Devaka Weerakoon, L.K.A. Jayasinghe, Manori Gunawardene, and H.K. Janaka, Biodiversity and Conservation 14:2465-2481, (2005).

[18] Unpublished survey conducted by the Center for Conservation and Research on Community Attitudes after the Walawe Left Bank Elephant Drive (2008).

cultivations and human settlements by constructing electric fences around such sites; and (iii) pilot different economic incentive packages for the community so that elephants in their midst will no longer be considered a destructive force. Since the HECOEX project sites are part of a conservation landscape dominated by large PAs, radio telemetry data on elephant ranging in the landscape have shown that the PA network has provided elephants with refuge and food during the rainy season when the single annual crop was grown. During the dry season, elephants moved into slash and burn agriculture areas and utilized left over crops and pioneer vegetation in fallow fields. The land use patterns and agricultural practices in the conservation landscape selected for the pilot projects in the south eastern dry and arid zone facilitates the piloting of coexistence models.

The project will seek to pilot schemes that adequately compensate farmers for the losses that arise from living with elephants, recognizing that existing mechanisms have failed. The most successful example that warrants close exploration and piloting in the Sri Lankan context is similar to that undertaken in the Shenkotah Gap of India's Western Ghats. The design of a compensatory scheme for economic losses is complicated by two aspects: asymmetric information and externalities. The former implies that the prospective victim holds more information and can thus extract greater surplus. The latter implies that the costs of HEC are on individuals but the benefits of conservation are global. That is to say, the need is for a mechanism that extracts the "right" behavior at the lowest possible cost. Therefore, the design would require the application of highly sophisticated game theory and incentive mechanisms complemented with other more common approaches, such as insurance.

Four sites for implementing the HECOEX demonstration models have been identified jointly by DWC and FD in the Southern and Eastern regions in areas where HEC is severe. These sites are: (i) Mattala-Bundala-Wilmanne; (ii) Nimalawa-Kochipathana-Yala; (iii) Beralihela-Lunugamwehera; and (iv) Lahugala-Galoya. These sites are all within the conservation landscape ranging from Bundala NP to Maduru Oya NP, in the south eastern dry and arid zone. These sites are representative of the major HEC challenges and include *chena* (shifting) agriculture plots, sedentary agriculture and a pilot for an area slated for heavy development, i.e., the area surrounding the proposed international airport in Mattala, which has a high density of elephants at present and has the potential for major HEC problems in the near future with the construction of the airport. Since the Government is preparing a development plan for the Hambantota Region, which includes the site for the airport and proposed conservation or green areas, the time is opportune to pilot a HECOEX model in an area of heavy development, although the challenges will be tremendous. Based on the experience from these four sites, further sites will be identified for HECOEX projects to be supported under project in the South Eastern landscape.

HEC is most severe in the North Western part of the country where unplanned development has resulted in the human population encroaching into elephant habitat in a haphazard manner, creating a landscape where human and elephant habitat is one and the same. The main form of livelihood in these areas is irrigated agriculture with two annual growing seasons. The area is a mosaic of settlements, agriculture and small forest patches with ill defined human and elephant use areas. Preliminary radio telemetry data show that the elephants range within the habitat mosaic year round, occupying remnant forest patches and raiding adjacent crops at night[19]. Therefore, elephants come into daily conflict with people and raid permanent agricultural crops and home gardens of communities living in previous elephant habitat, creating a severe conflict situation.

The proposed pilot projects in the North Western part of the country will be an integral part of the conservation landscape consisting of the integrated land-seascape of Bar Reef SA-Wilpattu NP to Chundikulam SA in the north to Kokilai SA in the east to Kahala Pallekelle SA in the south and in the Mahaweli region which is in two conservation landscapes. The landscape between Wilpattu NP and Kahalle Pallekelle SA is an area with the highest incidence of HEC in Sri Lanka. Since the North

[19] Perceptions and Patterns of the Human Elephant Conflict in Old and New Settlements in Sri Lanka: Insights for Mitigation and Management, Pritiviraj Fernando, Eric Wickramanayake, Devaka Weerakoon, L.K.A. Jayasinghe, Manori Gunawardene, and H.K. Janaka, Biodiversity and Conservation 14:2465-2481, (2005).

Western part of the country and parts of the Mahaweli region are largely in permanent agriculture unlike the South and East which is predominantly seasonal agriculture, HECOEX models developed for the South and East are unlikely to work effectively since coexistence is much more difficult in areas of permanent agriculture. New models appropriate for the local situation must be developed for areas with permanent agriculture where two crops are planted annually. Elephant behavior and ranging information in the North Western part of the country is scarce, with only preliminary data collected over a year available at present. Since elephant ranging data are necessary for suitable HECOEX models to be developed for the North West and Mahaweli region, additional information on elephant ranging patterns is needed. Currently, a limited amount of data is being collected by DWC via radio telemetry, since late 2008. The project proposes to intensify systematic data collection and combined with the radio telemetry data that has been collected to date as well as additional habitat and land use data collected in the first year of the project, develop appropriate HECOEX models for demonstration projects in areas of permanent agriculture and high human habitation. These demonstration projects will commence in Year 2 of the project in the conservation landscape of the North Western part of the country and the Mahaweli region.

Successful pilot models implemented under the project will be used to develop a master plan for mitigation of HEC in Sri Lanka. Not only will the pilots include community empowerment to coexist with elephants and physical measures (e.g. fencing to protect life and property), they will also explore payments for environmental service schemes, insurance mechanisms and other approaches designed to generate economic benefits to the affected community from the presence of elephants. If the economic incentives supported by the project in the pilot sites within the conservation landscapes prove to be viable HECOEX mechanisms, sustainable funding by the Government could be developed, for example, through increased nature tourism revenue for implementing HECOEX models beyond the project period. There are experiences in other countries of sustainable funding mechanisms from conservation revenue that will be explored during the project and adopted to suit the situation in Sri Lanka. Project funds, however, would not be used to fund translocations and elephant drives which have had limited success in terms of sustainability and are ethically controversial. Neither will project funds be used for capture and domestication of problem elephants

Sub-component 2.2: Developing a National Master Plan for Mitigation of the Human Elephant Conflict and Practical Models for Human Elephant Coexistence (US$1.00 million)

HEC has become such a serious socio economic, political and conservation issue in Sri Lanka with no long-term solution. This is because the approach to the problem is anthropocentric and mired in beliefs and traditions of the past. The current approach of trying to confine elephants to PAs through elephant drives and capture-translocations, and attempting to restrain elephants inside administrative boundaries of PAs rather than within ecological boundaries has its origins in the colonial era and has failed consistently. Preliminary monitoring data show that neither capture-translocations nor elephant drives have reduced HEC. The data show that elephant drives may have already exceeded the carrying capacity of the recipient PAs, placing the entire elephant population in jeopardy. Yet, the practice continues due to public and political pressure exerted upon DWC, resulting in large sums of money being spent by the Government on translocations and elephant drives that have minimal impact. A particularly telling example is the Walawe Left Bank elephant drive that cost in excess of Rs. 150 million (US$ 1.35 million) but resulted in sub-optimal results with problem elephants returning to the development areas they were driven from, leading to a greater HEC problem. Although DWC is fully aware of the futile situation, the agency is unable to resist the political and public pressure to conduct translocations and elephant drives because DWC is unable to demonstrate the failure of such approaches with adequate data and has not offered an alternative solution to date.

Scientific research undertaken by conservation organizations and DWC has been used to develop a HECOEX approach on the basis of elephant ranging and foraging patterns, habitat and land use. These models will be tested in pilot areas in sub-component 2.1 in the South East, North Western and Mahaweli regions. While HEC is most prevalent in these regions, it is also a serious problem in most other parts of the dry zone in Sri Lanka. But data on elephant ranging patterns for developing models

to mitigate HEC in the other areas of the dry zone are limited. With available information on elephant behavior, ranging patterns, ecology, demography, temporal and spatial use of the mosaic of protected and unprotected habitats and the response to management actions, DWC and the scientific community would gain a better understanding of human-elephant interactions in order to develop the capacity in Sri Lanka to address HEC more effectively. DWC will be able to identify the geographic locations where HEC exists and data collection is required. The agency will issue calls for proposals from research organizations, conservation organizations, academia and individual researchers to undertake studies aimed at gathering valuable information. These studies would be conducted in collaboration with DWC and/or FD.

Data on the extent of HEC in the Northern Province are non-existent. The data collected prior to the civil conflict indicate the presence of large elephant populations in the forests of the Northern Province. While elephants are known to have suffered some casualties from the armed conflict, habitat changes caused by the conflict as well as abandonment of villages and agricultural areas that have now been taken over by shrub jungle are likely to have increased elephant populations in some areas. With the end of the armed conflict and re-settlement of the IDPs in their villages, there may be a grave possibility of escalating HEC in the region. Since the forests are believed to be land mined and demining of forests is the last priority of the Government's demining program, elephants may range in abandoned villages and agricultural areas that have been taken over by shrub jungle. With the resettlement of IDPs and opening of agricultural land, HEC could become a serious issue. Funds under this sub-component will be set aside for the collection of data on the elephant distribution, ranging patterns, habitat and land use as well as the development and implementation of a pilot HECOEX in the Northern Province if necessary.

Component 3: Enhancing the Quality of Nature-based Tourism in support of PA Conservation and Management (US$6.00million)

Tourism is one of Sri Lanka's growth drivers. Despite the prolonged conflict, the industry remains resilient with an annual average of close to 500,000 tourist arrivals over the last few years. But the current focus of tourism is narrow and is based on relatively inexpensive package tours of beach resorts and cultural attractions. Few package tourists ever visit a national park and their spending patterns are among the lowest of any category of tourist in Sri Lanka[20]. Conversely, those tourists who do visit national parks spend about $70 per day excluding accommodation or almost twice as much as the package tourists. Those who visit national parks tend to be more discerning, spending more in the country and are likely to tour a greater number of destinations in the country.

Sri Lanka is well placed to capitalize on this market and to boost revenues from nature-based tourism. The country is renowned for its natural beauty and rich biodiversity. The scope for diversifying into alternate tourist products that cater to travelers with more interest in the natural environment that generate higher economic benefits is significant. The proximity of national parks to cultural attractions and beaches presents opportunities for tapping a more lucrative segment of the tourist market attracted by the combination of "nature, culture and beaches." Unlike its regional competitors, Sri Lanka has a uniquely high density of natural and cultural assets, including the renowned "cultural triangle" and a rich array of celebrated species such as elephants, leopards and sloth bears. Sri Lanka is ranked among the best places in the world for leopard watching as well as the best location for viewing large herds of Asian elephants and fast becoming a destination for whale watchers.

This has led GOSL to identify responsible nature-based tourism as an important area for diversifying the country's tourism products. Moreover, nature-based tourism would support conservation and promote environmental education. The groundwork for such tourism in selected PAs under DWC was laid by the recently concluded PAM&WCP financed by ADB, GEF and Netherlands. FD has embarked on an intensive program of promoting nature based tourism in forest reserves. The proposed project would build upon the foundations laid in DWC and FD.

[20] Nature-Based Tourism and the Human Elephant Conflict in Sri Lanka, World Bank, 2010.

However, much needs to be done before the PA network can realize its full potential from nature-based tourism. The challenges for developing nature-based tourism within Sri Lanka's PA network are vast. While the PAs have attracted a sizeable number of domestic visitors, international tourist visitation has been less than 10% of all visitors to the country in 2009. These figures are low compared to other countries in the region largely due to the limited facilities and services for visitors to PAs and the poor quality of interpretation services. According to a recent World Bank contingent valuation survey, visitors rank wildlife viewing highly but are dissatisfied with every other aspect of the tourism experience (facilities, interpretation, guides, crowding, etc). [21] Without service improvements, there is little scope to extract further fees from visitors. With enhanced services, the willingness to pay rises dramatically (by about 30% on average with basic improvements).

The project would complement the ongoing IDA-supported Sustainable Tourism Development Project (STDP) that aims to support the systemic changes required to reposition and transform the tourism industry in Sri Lanka in the medium- to long-term by creating conditions for sustainable (community, cultural and environmentally centered) tourism development. ESCAMP will focus on developing nature-based tourism opportunities within the PA system in the four conservation landscapes that includes terrestrial, wetland and marine sites while STDP will focus on tourism opportunities outside the PAs.

This component will be designed to enhance the quality of nature-based tourism opportunities in priority PAs under the jurisdiction of DWC and FD, including marine PAs, within the four conservation landscapes. The development of nature-based tourism, if appropriately managed, provides opportunities for the local populations to benefit from the conservation of ecosystems, thereby engendering a culture of environmental protection and stewardship. By benefiting from the local population's first-hand knowledge of the PAs, the communities could serve as an inherent supply of tourism operators – whether as guides, interpreters, retailers or service providers. However, skills enhancement is an imperative element of priority PA development plans that would bolster the local population's capacity to capture the benefits of nature-based tourism.

The project will fund the investments needed for nature-based tourism and visitor services for PAs that have been identified as potential sites within the conservation landscapes based on carrying out needs assessments.[22] The investments which will be based on a strategic view of the range of nature-based tourism opportunities available in the respective PAs and the mechanisms for developing them in an optimal way, without exceeding the carrying capacity of PAs .[23] Some PAs are experiencing over visitation already and this is detrimental to the ecosystem. In PAs such as Yala National Park, Minneriya National Park, Horton Plains National Park, Uda Walawe National Park and Sinharaja World Heritage Site, where visitation may be exceeding the carrying capacity, the project will support studies aimed at establishing the optimum number of visitors while simultaneously taking into account the carrying capacity limits of PAs. In the event such national parks are over visited and such visitation is considered detrimental to the long term sustainability of fauna and flora of the respective protected areas, the project will assist DWC and FD in implementing programs for ensuring visitation within the carrying capacity of the PAs.

DWC and FD would prepare funding requests for priority PAs within the four conservation landscapes based on their nature-based tourism and visitor services plans. Based on the services offered by the two departments, typical funding requests would include improvements in visitor facilities such as the construction of nature trails, wayside interpretation points, observation towers,

[21] Nature-Based Tourism and the Human Elephant Conflict in Sri Lanka, World Bank, 2010.

[22] Areas for assistance may include: (i) identifying nature-based tourism needs within the PA network; (ii) prioritizing, enhancing and developing nature-based tourism opportunities of current and potential new attractions; (iii) piloting benefit sharing mechanisms with communities as identified in the 2010 World Bank policy note; and (iv) training and capacity building of tour guides and other relevant staff.

[23] Ecotourism and the Department of Wildlife Conservation in Sri Lanka, Phil Dearden, Protected Area Management and Wildlife Conservation Project, Asian Development Bank, TA No. 3273-SRI, April 2000.

wildlife hides, canopy walks, campgrounds and refurbishment of existing bungalows within PAs. The project would encourage Sri Lanka realizing its full potential in nature based tourism by supporting and encouraging innovative features in nature based tourism such as nature walks, night safaris, non-motorized boats for wildlife viewing, kayaking or canoeing down rivers flowing through PAs, etc., as long as these activities are permitted under the FFPO and FO. Collaboration between ESCAMP and STDP will be ensured when funding requests are approved for PAs that fall within STDP's targeted geographic area.

The need for improvement of the quality of the interpretation services has been identified as a major drawback to the country realizing its nature based tourism potential. This component would support intensive training opportunities in interpretation services and language skills for both game guards and volunteer guides. In addition to general interpretation training, selected guides with interest could be trained in specialized areas such as elephants, leopards, bears, birds or vegetation/habitat. Development of specialized interpretation skills could enable the DWC and FD to offer specialized tours to interested clients at higher fees, while retaining general guides for the regular entrance fees. Both DWC and FD have bungalows for visitors within PAs which offer a unique experience of living within a protected area. Since the quality of management of the bungalows could be improved, in addition to any renovations needed, the project will support training of bungalow staff so that the refurbished bungalows would be better maintained and offer a higher quality of service. The safari jeep drivers from the local community who take local and international tourists to PAs have been observed to be undisciplined and tend to disturb wildlife due to poor park etiquette. The project will support training for those drivers along with a program for monitoring compliance and imposing penalties for non-compliance of park rules.

Component 4: Strengthening Knowledge and National Capacity for Ecosystem Conservation and Management (US$9.06million)

Sub-component 4.1: Upgrading and Strengthening of the Capacity of the Wildlife Training Center and Sri Lanka Forestry Institute (US$2.50million)

The long-term sustainability of PA management, biodiversity conservation and environmental management in Sri Lanka depends, *inter alia*, upon the availability of specialized human resources in wildlife, forestry and environmental management. Some field level skills are taught at the Wildlife Training Center and Sri Lanka Forestry Institute, managed respectively by DWC and FD. Upgrading of the technical capacity of the resource persons and the quality of the training programs, including curriculum revisions, has to be addressed. Basic improvements to available infrastructure facilities are needed. This sub-component would assist both agencies in strengthening their training capabilities and in mainstreaming learning through the implementation of training evaluation procedures. Opportunities for twinning arrangements with international training institutions will be explored in order to raise the standard of these two institutions to regionally recognized institutions in wildlife conservation and forestry training.

Sub-component 4.2: Improving Skills and Capacity of Conservation Agencies (US$1.99 million)

The proposed project will strengthen DWC's and FD's strategic management capacity and staff skills, provide the required equipment and infrastructure, develop adaptive field management and enhance the agencies' competence in enforcement.

Sub-component 4.2.1: Building Capacity for Promoting Improved Conservation Management (US$1.00 million)

This will be accomplished by exploring opportunities to build international partnerships with institutions in other countries that have overcome challenges similar to the ones faced by PA management agencies in Sri Lanka, such as the South African National Parks Authority and the Smithsonian Institution. Such opportunities would allow DWC and FD to have direct access to global

best practices in nature-based tourism as well as in decentralized and participatory PA management. Institutional reforms that were delayed in DWC due to government bureaucracy beyond the control of the department have been resolved and the reforms envisioned under the ADB/GEF/Netherlands financed PAM&WLC Project has continued even after the closure of that project. ESCAMP will assist the DWC and FD to consolidate the gains from the reform process. Capacity development will be carried out through the provision of internal and external training courses, study tours and basic equipment. Short-term, task-oriented international and domestic consulting services will be provided, if required, under this sub-component.

Sub-component 4.2.2: Building Capacity for Improved Community Participation to Reduce Dependence on Forest Resources (US$0.99 million – financed by Australian Agency for International Development (AusAID))

The objective of this specific sub-component is to build the capacity of FD so that community approaches for reducing forest dependence can be implemented nationally. The project would assist FD in developing and implementing regulations on community participation on the basis of the recently amended Forest Ordinance. FD staff will be trained in community approaches. This sub-component will also fund monitoring and evaluation of community-related activities on a regular basis. It is anticipated that this sub-component will provide the necessary support to FD to replicate community programs more broadly within the department's programs. FD will be expected to submit an annual program of institutional capacity building and training based on the principles outlined above for review and approval by the World Bank and AusAID prior to the utilization of funds.

Sub-component 4.3: Project Monitoring and Evaluation, Targeted Studies and Technical Assistance (US$-0.50 million)

This sub-component will support project performance monitoring activities, targeted studies that would assist in effective project implementation and TA to PPD of MOE in natural resource management planning and policy making as well strengthening PPDs capacity for monitoring and evaluation. For example, a study on the marginal costs of green and smart infrastructure vis-à-vis the benefits of eco-system conservation and the revenue potential of eco-tourism could be undertaken. The project performance will be independently monitored by a consortium of national conservation NGOs at the end of years 2 and 4, while achievement of project objectives and outcomes will be monitored by the same group at project closure.

Sub-component 4.4: Incremental Expenses for Government Employees (US$4.07 million – financed by the Government of Sri Lanka (GOSL)

Since this project would be implemented by regular staff of DWC and FD, GOSL stipulated allowances to top up the existing salaries of the staff of the implementing agencies will be paid under this component by GOSL counterpart funds. In addition, field expenses of staff and routine operating and incremental costs will also be supported from GOSL funds under this sub-component.

Appendix B

Generic Guidelines/ TOR for Social Impact Assessment[24]

Social Impact Assessment (SIA) involves the collection of data related to measurable change in human population, communities, and social relationships resulting from a development project or policy change; in this case an eco-systems conservation and management tourism project. The SIA must gather data on the following variables prior to the implementation of the project (planning/ policy development stage).

1. Population Characteristics- present population and expected change, ethnic and racial diversity etc.
2. Establish Socio-economic baseline: Household survey including a description of production systems, labor, and household organization; and baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and informal economic activities) and standards of living (including health status) of the affected population;
3. Assess the magnitude and nature of the expected livelihood impact of proposed sub-project, and basic data on vulnerable groups or persons for whom special provisions may have to be made
4. Community and Institutional Structures- the size, structure, and level of organization of local government including linkages to the larger political systems. They also include historical and present patterns of employment and industrial diversification, the size and level of activity of voluntary associations, religious organizations and interests groups, and finally, how these institutions relate to each other.
5. Political and Social Resources- the distribution of power authority, the interested and affected publics, and the leadership capability and capacity within the community or region. Potential impact of project interventions on inter-community relations and local minorities in the wider locality.
6. Individual and Family Changes- factors which influence the daily life of the individuals and families, including attitudes, perceptions, family characteristics and friendship networks.
7. Community Resources- patterns of natural resource and land use; the availability of housing and community services to include health, police and fire protection and sanitation facilities. A key to the continuity and survival of human communities are their historical and cultural resources. Possible changes for indigenous people and religious sub-cultures also fall here.

Scope of work:

1. Gather data on all variables and during all the stages specified above. Mobilization of research assistants in this venture.
2. Use participatory tools in data gathering.
3. Public involvement- Develop an effective public plan to involve all potentially affected publics.

[24] These guidelines are based on the international SIA guidelines/ principles put forward by IAIA (International Association for Impact Assessment- USA) (2003) and on the guidelines by the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment, USA (1994). The consultant/s undertaking each SIA must be encouraged, as much as possible, to follow the international guidelines specified by these organizations. However, certain adaptations may be required to suit the Sri Lankan social, economic and cultural scenario.

4. Identification of alternatives- Describe the proposed action or policy change and reasonable alternatives.
5. Baseline conditions- Describe the relevant human environment/area of influence and baseline conditions: The baseline conditions are the existing conditions and past trends associated with the human environment in which the proposed activity is to take place.
6. Scoping- After obtaining a technical understanding of the proposal, identify the full range of probable social impacts that will be addressed based on discussion or interviews with numbers of all potentially affected.
7. Projection of estimated effects.
8. Predicting community responses to impacts- Determine the significance to the identified social impacts.
9. Indirect and cumulative impacts- Estimate subsequent impacts and cumulative impacts. Indirect impacts are those caused by the direct impacts; they often occur later than the direct impact, or farther away. Cumulative impacts are those impacts which result from the incremental impacts of an action added to other past, present, and reasonably foreseeable future actions regardless of which agency or person undertakes them.
10. Changes in alternatives- Recommend new/ changed alternatives and estimate/ project their consequences: Each new alternative or recommended change should be assessed separately.
11. Mitigation- Develop a mitigation plan.
12. Monitoring– Develop a monitoring program.

Expertise required:
This may vary according to the components.
It is recommended that individuals with at least a Master's Degree in social science with experience in applied research techniques be recruited as chief researchers.
Several assistants who possess at least a BA degree should be recruited to support the chief researcher.

Deliverable:
1. Interim reports to be submitted one month after the SIA for comments by FD and DWC.
2. Final report to be submitted two weeks after receiving comments.

Appendix C

Resettlement Policy Framework

No land acquisition or involuntary resettlement will be funded under the project and Project Affected Persons are entitled to full livelihood restoration. Since the proposed projects may cause restrictions in access to natural resources in legally designated parks , protected areas and buffer zones, this Resettlement Policy Framework will establish a process by which members of potentially affected communities participate in design of project components, determination of measures necessary to achieve resettlement policy objectives, and implementation and monitoring of relevant project activities.

In situations where land is acquired from private land owners or even squatters, resettlement of the owners and their homesteads can bring about negative impacts and issues. Some issues from the Sri Lanka legal framework that need further attention to ensure compliance with Bank's OP 4.12 are highlighted below:

- *Avoiding/Minimizing Land Acquisition*: As there are no clear guidelines the only limiting factor might be the costs which may discourage acquisition more than necessary.
- *Eligibility for Compensation*: As the provisions for inquiry into the affected persons' interests and compensations claim indicate, there is a need to recognize the rights of the titleholders and others who have some form of legal basis to the interest claims.
- *Relocation of Homestead Losers:* Stipulates "reasonable expenses" to effect any change of residence caused by the acquisition. There is need for reallocation of lands and other facilities.
- *Socioeconomic Rehabilitation:* No provisions are there to mitigate long-term socioeconomic changes the PAPs and households might undergo in the post-acquisition period.
- *Ensuring Payment/Receipt of the Compensation:* In acquisition of land it would be necessary to ensure that the PAPs would actually *receive* the awards.
- *Deduction Due to Market Price Appreciation*: On the other hand, deduction of an appreciation in market value, where a portion of a plot is acquired and the market price of the remainder is likely to increase. Such reasonable deductions of the market value of the acquired portion should be taken in to consideration.

The Land Acquisition Act (LAA) of 1950 seems to recognize the government's accountability to the affected property owners, who could challenge a decision up to the Supreme Court and the Board of Review. While this may have been necessitated by the application and practices of the act, the process is very time consuming. Resolution of the court cases, where the appeals could go up to the Supreme Court and Board of Review, could take a relatively long time. But the act is not sufficiently clear about how they affect possession takeover[25].

[25] It is reported that some court cases have caused stoppage of the civil works under a component in the Southern Expressway project.

The procedure involved in Land Acquisition under the Land Acquisition Act is outlined in the table below:

Activity		Responsibility	Minimum period for task (weeks)
1	Request sent to the Land Ministry under the Section 2(1) of the Act	Project executing agency	2
2	Approval granted by the Minister	Minister of Land	2
3	Preparation of a perimeter survey plan	Survey Department	4
4	Publication of notice under Section 4	Ministry Lands	6
5	Inquiry under Section 4, if any objections are brought to the Minister's notice. Notice issued giving date of inquiry (after giving sufficient time). Followed by the inquiry and submission of the report to the ministry of lands.	Acquiring officer	9
6	The Minister's decision to acquire the land to be published in the Government Gazette.	Minister of Lands	5
7	Preparation of the preliminary plan under the section 6	Survey Dept.	6
8	Publication of the notice that an inquiry will be held under section 7(1) and those interested to appear before the inquiring officer for an inquiry	Acquiring officer	6
9	Under the section 8, any person interested in respect of the land can deliver to the acquiring officer the names and addresses of the interested parties and nature of interest in the land and all other details as rent, profit etc.	affected persons	
10	Inquiry under Section 9 by acquiring officer to ascertain the market value, compensation claims of the parties and interests. Valuation department to be requested to estimate the amount of compensation to be paid.	Acquiring officer	8
11	Decision of inquiry (under Section 10 - 1) of persons' right to the lands. If claimant is not satisfied with the decision, the Acquiring Officer can make a reference to district court/primary court and defer the decision until the court order is made.	District court/ Primary court	Indefinite
12	The result of the inquiry under Section 9 and decision under Section 10 which is the final determination makes his award under 17- giving details of	Acquiring Officer	5

	(1) Persons entitled to compensation (2) Nature of interests (3) Amount of compensation (4) Appointment of such compensation		
13	If the parties disagree they can appeal to the Board of Review	APs/Board of review	Indefinite
14	Payment of compensation	Acquiring officer	4
15	A notice under Section 38A is gazetted (if the land is not taken over earlier). This is a vesting order.	Minister	6
16	Taking possession of the land	Acquiring officer	3
17	Registration of the land and state title in the land registry	Ministry of lands	3
	Estimated total number of weeks		69

Some of the shortfalls and the difficulties with using the 1950 LAA for time-bound development projects are widely recognized by project execution agencies of GoSL and the donors supporting development projects in Sri Lanka. This led to formulation of a National Involuntary Resettlement Policy (NIRP), by taking into consideration the resettlement principles and guidelines of major donors, including the World Bank. Amendments to the 1950 LAA have also been recommended to complement provisions of the NIRP and facilitate preparation and implementation of the land-based development projects. The NIRP has been adopted by the government, but the amendments to the acquisition act remain to be incorporated. As a result, land acquisition remains as difficult as before, even though the NIRP is followed to plan resettlement activities. Under the circumstances, the land acquisition process to be followed in the proposed development project makes use of the country's existing LAA, the NIRP and the Bank's OP 4.12. In case of less than 200 PAP, an Abbreviated Resettlement Framework may be followed (see Appendix C, annexure (i)).

Impact Mitigation Principles

The mitigation principles and guidelines proposed below are based on the provisions adopted in the NIRP of Sri Lanka, and the Bank's OP 4.12 on Involuntary Resettlement.

- Where displacement is unavoidable, resettlement of the PAPs will be planned and developed as an integral part of the project and will be implemented as a development program.
- Homestead-losers, including the households living on public lands without authorization, will be given the options of physical relocation in similar locations of their choice, or in designated resettlement sites, and will be assisted with relocation.
- The relocation sites, wherever needed, will be selected in consultation with the potential resettlers, and will be provided with the social and community facilities similar to those used previously. All efforts will be made not to take the PAPs far away from their residual lands, if any, and the existing sources of income and livelihood.
- For compensation and assistance, encroachers who have been regularized by GoSL, and those who have earned prescriptive rights to public lands they presently use, will be treated as landowners with legal titles to the lands.

- Absence of legal title will not be considered a bar to compensation for non-land assets created by public land users[26].
- Vulnerability of the PAPs, in terms of economic, social and gender characteristics, will be identified and mitigated with appropriate policies.
- Where community-wide impacts are caused in the form of affecting community facilities, restricting access to common property resources, and the like, the project will rebuild such facilities and provide for alternative accesses.
- The project executing agency will bear the costs of land acquisition and resettlement.

Impact Mitigation Modalities

The following types of compensation/ entitlement will be paid for losses expected to be caused by the project.

- Replacement costs will include registration costs or stamp duties in cases replacement of the affected lands and other assets involve such costs, subject to actual replacement.
- Loss of houses/ structures and other immovable assets of value, which are to be rebuilt, will also be compensated for at replacement costs.
- Loss of other assets like trees, which cannot be replaced, will be compensated for at current market prices at the time of first acquisition notification. Compensation for affected orchards and similar commercial plantations will take into account the loss of investment and income. [MENR will use expert assistance and any available standards in determining the compensation.]
- Cut-off dates will be established to determine compensation eligibility of persons and their assets. These are the dates on which census of the affected persons and their assets will be taken. Assets like houses/ structures and others which are created, and the persons or groups claiming to be affected, after the cut-off dates will be ineligible for compensation.
- Where acquisition causes displacement from homesteads, the project will encourage for and assist with self-relocation. Where self-relocation is infeasible, the project will arrange for lands to relocate, and provide for basic social and physical infrastructure.
- The project will identify and implement policies to mitigate any adverse impacts that are unique to any project locations and have so far remained unknown.
- Compensations/ entitlements due to the PAPs will be paid in full before they are evicted from the public lands.

Impacts and Impactees Eligible for Compensation/ Assistance

The mitigation principles and impact mitigation modalities stated in the preceding section are operationalized by defining and categorizing the potential impacts/ losses which will qualify for mitigation. The losses/ impacts listed below are only the likely ones and remain open to revision as the specific projects are selected and social risks screening and assessment are carried out. Any unforeseen impacts, as and when encountered, will be taken into account along with appropriate measures to mitigate them.

[26] According to the Land Acquisition Act, if a person keeps using public land for 10 years or more may earn 'prescriptive right' and may become eligible for compensation for the land as well.

Impacts Eligible for Mitigation

Lands (All Kinds):
All kinds of lands, such as agricultural, residential, commercial, fallow and any other kinds of lands acquired from private ownerships. The following land users will also qualify for compensation:

1. Where public lands, on which encroachers/ users have been regularized, are acquired or taken back, the affected land users will be entitled to replacement costs of the lands.
2. Where public lands, on which the users qualify for prescriptive rights (for use for 10 years or more), are taken back, the affected land users will be entitled to replacement costs of the acquired lands.
3. Where public lands are taken back from legally authorized private users, the users will be entitled to the remaining lease value and entitlements for other losses in accord with the stipulated policies.
4. The unauthorized or informal users of public lands, such as squatters and encroachers, are not eligible for compensation for land, but for other losses covered by the mitigation policies.

Built Structures:
Houses and Other Structures on Public Lands: All built structures, such as living quarters, commercial and those used for other purposes.
Trees and Orchards: Market price of all trees, including those in orchards, grown on private and public lands. The compensation for fruits and other crops will be assessed and paid in terms of seasonal and perennial characteristics.
Fruits and Other Crops: Compensation will be assessed based on the market value of the crops standing in the field and those found on trees.

2. *Seasonal Crops:* Compensation of such crops will be paid for only one season.
3. *Perennial Crops:* For a reasonable period of time based on the year's value of the crops grown on the acquired lands.

Business and Wage Income: Temporary loss of business and wage income by the owners and employees of businesses affected on private and public lands, for a reasonable period of time.
Severe Impacts on Livelihood: The persons /households, whose livelihood- irrespective of landownership status- is severely affected, would be assisted to deal with the changed circumstances.
Common Property Resources: MENR will provide alternative access to or develop similar resources, whichever is appropriate. [No compensation will be paid in cash.]
Usufruct Rights: If such rights, which have been acquired by private citizens/groups through a formal agreement with the government, MENR will pay for remainder of the lease value or fulfill the obligations agreed in the contract and any other entitlements in accord with the mitigation policies. [Where agreements are between private parties, the owner of the affected property will fulfill any obligations agreed between them.]
Unforeseen Losses/ Impacts: All other losses/ impacts that have remained unknown as of now, but identified in PAP censuses will be mitigated with appropriate measures.

Project Affected Persons (PAPs)

As follows from the proposed mitigation principles and modalities, the following persons/ households/entities will be entitled to financial and other forms of compensation and

assistance. It is to be noted that depending upon the types of losses a PAP may be entitled to more than one form of compensation.

***Regularized Encroachers**:* Those who have been regularized on the public lands acquired or taken back for the project, as determined by the Divisional Secretaries.
***Persons with Prescriptive Rights on Public Lands**:* Those who have been using the public lands for at least 10 years, as identified by the Divisional Secretaries.
Informal Users of Public Lands (Squatters and Encroachers): Residing on public lands and/or using such lands for income earning purposes.
***Persons with Usufruct Rights**:* Owners of business and other activities on formally leased-in public lands.
Community or Groups: Where local communities and groups are likely to lose income earning opportunities or access to crucial common property resources, special development programs will be undertaken to provide alternatives to restore and improve their livelihood.

Compensation Payment

As the lands will be acquired by using the present acquisition act, the Divisional Secretaries will pay all mandated compensation to all affected persons recognized by LAA. MENR will pay all other compensations/ entitlements that have been stipulated beyond the jurisdiction of acquisition act, to all eligible affected persons/ households, such as titleholders, regularized encroachers, prescriptive right holders, and informal public land users.

Consultation and Information Dissemination

The project executing agency, MENR, will ensure that all would-be affected persons, titleholders, regularized encroachers and those who have earned prescriptive rights to public lands, and informal users (squatters) of public lands, are consulted about the impacts of the proposed regularization of access to Protected Areas; proposed impact mitigation policies; and the process that would be followed to implement them. Consultations will be carried out with all stakeholders and through community meetings, which will seek active participation of the local government and administration officials. Focus-group discussions will be carried out in particular with adversely affected persons/ households. MENR will seek the assistance of a local CBOS/NGO to facilitate the consultation process.

Discussions will especially focus on the planned regulation of access to natural resources, vis-à-vis the rights and responsibility of the affected people; the impact mitigation policies and the measures that have been stipulated beyond the LAA; and the mechanisms adopted to implement them. Among other issues, consultation will include the following topics:

- Types of affected persons (including squatters) as recognized by the LAA.
- Types of losses eligible for compensation under the LAA.
- Valuation of affected assets: preparation of the *compensation claims* at open market prices; inquiry into the claims by the Divisional Secretaries and further assessments by the Valuation Officers.
- Compensation payment process.
- Any other issues/ topics concerning land acquisition and compensation.

The following topics will be discussed in greater details:
- Principles and modalities adopted for mitigation

- Affected persons/ households and assets eligible for compensation
- Mitigation measures specific to losses/ impacts, including physical relocation options, special grants stipulated for acquisition-induced vulnerability.
- Grievance Redress Mechanism – its function, procedure to lodge grievances, etc.
- Compensation payment process to be used by MENR

Required documentation of these discussion meetings will consist of minutes with dates, venues, number of participants, issues/ topics discussed, major feedback which may have policy implications in terms of unforeseen impacts and project design considerations, and any agreements that may have been reached. Documentations will be available during IDA supervision of the project.

Grievance Redress Mechanism

According to the LAA allows the persons who are displaced from public lands do not have a right to bring their grievances to any institutional entities. However, the Bank policy requires the borrowers to establish mechanisms to deal with issues and grievances that might be raised by all affected persons, including the informal users of public lands. The procedure is meant to reduce the incidence of expensive and time consuming litigation involving minor issues among the landowners, and to give an opportunity to those not covered by the LAA. The general GRM established under the project will process land and livelihood related grievances.

The decisions made by GRM will be binding on the project execution agency. To instill confidence and trust in the procedure, the convener will ensure that all grievance decisions are made in formal hearings and that the individual GRM members are not contacted by the aggrieved PAPs or stakeholders in advance. The convener will have the authority to ensure impartiality, fairness and transparency. The GRM will record the details of the grievances and the reasons that led to acceptance or rejection of the particular grievances, and will make them available for review by the IDA supervision missions and other interested persons/ entities.

Monitoring arrangements.

The whole project will undergo Continuous Social Impact Assessment in year 2 and 4, where the overall impact of the project will be assessed, in particular its impact on local communities and their livelihood. Special attention will be paid to communities affected by sub-project funded under component 1 and 2 (see generic TOR, Appendix E).

Appendix C, Annexure (i): Abbreviated Resettlement Framework

In compliance of the Bank's Operational Policy 4.12, in case of less than 200 Project Affected People (PAPs), the following abbreviated Resettlement Framework shall be followed in order to restore housing and issue economic compensation for loss of land and livelihood through a consultative and mutually agreeable process.

Principles

- all land should be surveyed and mapped and agreement reached with government on explicit eligibility cut-off date.
- where land is disputed or land ownership is not clear, the land will be surveyed and a map hereof issued to the affected families. In case of land disputes, attempts should be made to settle disputes prior to project start.
- customary and collective rights, e.g. to grazing land and commons, should be verified and documented through community-level consultations and local authorities. Customary and collective rights are also subject to compensation.
- compensation for land, housing and assets are based on principles of replacement cost and mutually agreeable solutions based on consultative approach with PAPs.
- where affected land provide income, the equivalent to the value of the crop lost will be given in compensation, based on the value of the harvests lost until the replacement crop (e.g. fruit tress) come into full production.
- if land forms basis for other income, the value of the income hereof will be subject to third party assessment
- if PAPs are squatters/informal settlers on the land, they will receive economic/material compensation to re-establish themselves elsewhere (e.g. on government land) without suffering damage to their livelihood or living standard.

Process

1. Survey of land and assets & census of Project Affected Peoples, including squatters and informal settlers:

- the surveyed land and assets should be identified, marked and photographed, and by the defined eligibility cut-off date the areas should be secured against encroachers.
- the Project Affected People should be identified and registered with full data and photographs
- a compensation package should be developed (categories of impacts and appropriate entitlements to formal and informal settlers landholders and squatters), and
- initial consultations should be conducted to identify any salient issues or concerns impacting on affected people. Gender separate consultations should be conducted in order to properly ascertain the views of the women.

2. Calculation of individual entitlements. There should be continued consultations with the affected people regarding the project, land acquisition and compensation package in order to reach mutually agreeable solution to land/asset acquisition and/or shifting of house. In case any PAP refuses to shift, an abbreviated Resettlement Plan, compliant to OP 4.12, should be developed.

3. The compensation package and abbreviated Resettlement Plan should be submitted to the Bank for approval

4. The acquisition process is only completed with the actual payment of compensation to Project Affected People and settlement of any grievances they may hold.

Appendix D

WB OP 4.10 on Indigenous People

Since two of the PAs in the project areas under ESCAMP have IP living in them, the WB Operational Policy on Indigenous Peoples (OP 4.10) is triggered. Sub-projects proposed for these areas require special measure taken in order to ensure that due considerations have been made to safeguard the cultural identity and way of life of the IPs, mitigate negative impact and ensure their involvement in project planning and implementation.. This will require the conduct of a specific Social Assessment and a subsequent development of an Indigenous Peoples Plan. This will require the contracting of a CBO or a community NGO to closely engage with the IP community for this. The following guidelines for the Social Assessment and Indigenous Peoples Plan should be followed[27]:

Social Assessment

The social assessment must include the following elements, as needed:

(a) A review, on a scale appropriate to the project, of the legal and institutional framework applicable to Indigenous Peoples.
(b) Gathering of baseline information on the demographic, social, cultural, and political characteristics of the affected Indigenous Peoples' communities, the land and territories that they have traditionally owned or customarily used or occupied, and the natural resources on which they depend.
(c) Taking the review and baseline information into account, the identification of key project stakeholders and the elaboration of a culturally appropriate process for consulting with the Indigenous Peoples at each stage of project preparation and implementation.
(d) An assessment, based on free, prior, and informed consultation, with the affected Indigenous Peoples' communities, of the potential adverse and positive effects of the project. Critical to the determination of potential adverse impacts is an analysis of the relative vulnerability of, and risks to, the affected Indigenous Peoples' communities given their distinct circumstances and close ties to land and natural resources, as well as their lack of access to opportunities relative to other social groups in the communities, regions, or national societies in which they live.
(e) The identification and evaluation, based on free, prior, and informed consultation with the affected Indigenous Peoples' communities, of measures necessary to avoid adverse effects, or if such measures are not feasible, the identification of measures to minimize, mitigate, or compensate for such effects, and to ensure that the Indigenous Peoples receive culturally appropriate benefits under the project.

Indigenous People Plan (IPP)

The development of an IPP as an integral part of the proposed sub-project must include the following elements:

(a) A summary of the social assessment (above).

[27] For more details visit:
http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTINDPEOPLE/0,,menuPK:407808~pagePK:149018~piPK:149093~theSitePK:407802,00.html

(b) A summary of results of the free, prior, and informed consultation with the affected Indigenous Peoples' communities that was carried out during project preparation and that led to broad community support for the project.
(c) A framework for ensuring free, prior, and informed consultation with the affected Indigenous Peoples' communities during project implementation
(d) An action plan of measures to ensure that the Indigenous Peoples receive social and economic benefits that are culturally appropriate, including, if necessary, measures to enhance the capacity of the project implementing agencies.
(e) When potential adverse effects on Indigenous Peoples are identified, an appropriate action plan of measures to avoid, minimize, mitigate, or compensate for these adverse effects.
(f) The cost estimates and financing plan for the IPP.
(g) Accessible procedures appropriate to the project to address grievances by the affected Indigenous Peoples' communities arising from project implementation. When designing the grievance procedures, the borrower takes into account the availability of judicial recourse and customary dispute settlement mechanisms among the Indigenous Peoples.
(h) Mechanisms and benchmarks appropriate to the project for monitoring, evaluating, and reporting on the implementation of the IPP. The monitoring and evaluation mechanisms should include arrangements for the free, prior, and informed consultation with the affected Indigenous Peoples' communities.

Disclosure

The Social Assessment and the draft IPP shall be widely disseminated among the IP community using culturally appropriate methods and locations. Local NGOs/CBOs should be involved in the process, which should involve dissemination in local language in easily accessible locations as well as through presentations in public meetings, with facilitated discussions of the plan. The Social Assessment and IPP should be reviewed and cleared by the WB and then made available to the public by the WB and the MENR at national and local level.

Appendix E
Generic Guidelines for Continuous Social Impact Assessment (CSIA)

CSIA refers to an overall SIA conducted in Years 2 and 4 on the whole project. Through direct interaction with the local population in the project areas, the CSIA is expected to provide an independent assessment of the wider social impacts of the project interventions, implementation of the safeguards framework, functioning of local GRMs, impact on land tenure in the project areas and of development of local entrepreneurship and investments. The CSIA helps to monitor the social dimensions of the ESCAMP and in doing so highlight the risks, challenges, opportunities and problems within the project.

Objectives

Through direct interaction with the local population in the project areas, the CSIA is expected to provide an independent assessment of the wider social impacts of the project interventions, implementation of the safeguards framework, livelihood restoration and socio-economic impact of sub-projects, in particular the HECOEX pilots, functioning of local GRMs, impact on land tenure and overall livelihood in the project areas. The CSIA helps to monitor the social dimensions of the ESCAMP and in doing so highlight the risks, challenges, opportunities and problems within the project.

Scope of Work

The CSIA will be implemented during the second and the fourth year of the project. After the first round, the TOR will be reviewed and adjusted according to the evolving project needs. The consultants are expected to cover all sub-projects funded under the project and the majority of consultancy time will be spent interacting with local communities in the sub-project areas.

The CSIA reports will provide an overall social impact assessment, and in particular on any Indigenous Peoples living in project areas, assess livelihood impact of project interventions on local communities, highlighting implementation weaknesses, social/ethnic issues, land issues, other grievances and provide feedback with specific recommendations for actions. The reports will cover, but not be limited, to the following:

1. Assess the implementation of the Social Management Framework in general and any Indigenous Peoples' Plans in particular.
2. Assess each sub-project and their impacts on the communities separately, in particular the livelihood and general socio-economic impact and compare to the initial SIA conducted. Assess the effectiveness of measures taken to improve (or at minimum restore) incomes and livelihood.
3. Assess the HECOEX pilots implemented and their impact on the affected communities – in particular the livelihood and general socio-economic impact and compare to the initial SIA. Assess the effectiveness of measures taken to improve (or at minimum restore) incomes and living standards
4. Assess the level and nature of community participation in sub-project implementation. Assess the social inclusion of minorities/vulnerable/women in consultations and in distribution of sub-project benefits and compensations/livelihood restoration.

5. Assess the transparency and efficiency of the Grievance Redress Mechanism under the project incl. a review of issues, adequacy and speed of resolution, and satisfaction of complainants.
6. Review compliance with social safeguard issues and general social impact in terms of gender, vulnerable groups, social exclusions, demographic change, and monitor/update the Project Risks and Mitigation Measures.

On request of the Bank, the CSIA reports may also include additional issues in the agreed scope of services, which may emerge during implementation.

Methodology

The CSIA will be conducted at the end of Year 2 and 4 of the project period by an independent consultant firm. The CSIA will include all areas covered by the project. The consultancy firm will annually conduct detailed surveys sampling at least 10 percent of the population from each project area and submit the report within three month after the completion of a given phase.

Apart from conducting a Household survey to monitor livelihood impact of ESCAMP regulations of access to natural resources, the CSIA will also comprise a community audit of the project, gathering the perceptions and feedback from local communities regarding project implementation and impact. Hence, the consultants will also need to combine community facilitation skills with those of independent analysis. The methods employed may include,

- Individual stakeholder interviews and community discussion forums.
- Participatory rural analysis
- Household interviews in designated project areas

Consultants are expected to interact closely with Project Staff, Government Agents, Divisional Secretaries, Gram Niladharis and relevant NGOs, CBOs and other development agencies active in the project areas to obtain necessary information required to complete the scope of services.

Outputs

Inception report: A report at the outset of the consultancy that details final methodology derived from field visits and discussions with local communities, Project Implementation unit, local authorities in project area, DW and FD and other relevant stakeholders.

Final report: The consultants will produce a final report on the overall social impacts of the project with three months after project completion.

Appendix F

Minutes of Initial IP Consultations

Dambana Indigenous Community

Date : April 16, 2010
Venue : Dambana Junior School, Dambana

The meeting was attended by the Indigenous People's leader, Uruwarige Wannileththo and Indigenous community from Dambana. The indigenous community of Dambana lives adjacent to the Maduru Oya National Park. While the DWC had made the announcement for the consultation meeting by visiting each house of Indigenous community, only 66 persons participated out of a total of 380 families. A funeral in the community on the same day resulted in a lower than expected level of participation. There were only male members of the Indigenous People's community (IP) that attended. Upon inquiry, it was mentioned that while there was no formal discouragement of female participation, traditionally, only the males participated in discussions of this nature.

The following officials also participated in the meeting;

1. Mr. Ananda Wijesuriya, Director General, Department of Wild Life & Conservation (DWC)
2. Mr. H.D. Ratnayake, Director (Operations), Department of Wild Life & Conservation
3. Mr. Ranjan Marasinghe, Deputy Director (Law Enforcement), DWC
4. Mr. Sisira Kumara de Silva, Assistant Director(Mahaweli Region), DWC
5. Mr. D.M.J. Wicramasinghe, Park Warden, Maduru Oya National Park (MNP)
6. Mr.H.M.Karunaratne, Wild Life Guard, MNP
7. Mr. S.C. Weerasinghe, Wild Life Ranger, Ulhitiya
8. Mr. S.P.G. Lionel, Range Assistant, MNP
9. Mr. H.M. Ranbanda, Wild Life Guard, MNP
10. Mr. G.G.M.M. Weerasinghe, Wild Life Guard, MNP
11. Mr. K.J. Ratnayake, Wild Life Guard, MNP
12. Mr. P.P Fernando, Range Assistant
13. Mr. P.A.L. Chandrakanth, Wild Life Guard, MNP
14. Mr. W.M.P.B. Wijekoon, Wild Life Guard, MNP
15. Dr. Sumith Pilapitiya, Lead Environmental Specialist (South Asia Region), The World Bank (Colombo Office)
16. Ms. L. Jayawardhana, Consultant, The World Bank (Colombo Office)

All IPs, and other official participants were welcomed by the MNP Park Warden and the Assistant Director (Mahaweli Region) outlined the objectives of the consultations.

During his speech he highlighted the objectives of the consultations and further explained that DWLC could not do any large scale development in the Maduru Oya National Park (MNP) in Sri Lanka due to 30 years of war in the country. Though MNP was not closed for visitation due to the war, no development activities were undertaken in the park during the last three decades. With the dawn of peace in the country, the DWC sees an opportunity to develop the natural resource base of MNP and improve the opportunities for nature based tourism. Since the proposed development activities may have impacts on the indigenous

community living adjacent to MNP, the DWC decided that they would like to consult with the indigenous community to solicit their views and suggestions. He stated that it was a privilege for DWC to discuss future development requirements and plans with IPs as they are closely associated with MNP.

Next, the Director General, DWC (DG) addressed the IP community. He stated that after the end of the war, all national parks have been opened for the public. When parks open to the public, tourism to the national parks increase and with increased visitation the neighbouring community's living standards improve due to additional income infusion into the area. The IP community could benefit from the improved economic situation in the area. But the IP community needs to ensure that their traditional lifestyle is not adversely affected by increased tourism in the area. Hence, it is necessary to identify ways for the IP community to benefit from tourism as well as identify issues that may be faced by IPs while tourism and development activities are going on MNP. The DWC will try its best to help the IP community around MNP to improve their lives by assisting in solving any problems and issues that may arise when the DWCs development program for MNP is being implemented. Though DWC may not be able to address all problems and issues faced by IPs, the DWC is committed to help IPs to find appropriate solutions.

Representing IP Community, IP leader, Uruwarige Wannileththo, made a long speech highlighting issues faced by IPs due to so-called "development" of the country. He recalled that the relationship between DWC and IPs was not the best since MNP was declared a Protected Area in 1983 and the IPs were deprived of their traditional livelihoods, even though some access to MNP is permitted. He complained that while the Government deprived the IP community of their traditional access to MNP, thus their livelihood, nothing was done by the Government to prepare and train them for alternate livelihood and lifestyles. This has made life very difficult for the IP community. The DWC had been looking at the IP community as if they were "destroyers" of the forests. But the IP community has always lived in complete harmony with the forests and wildlife. Animals were hunted in the past for satisfying the need of food for the IP community and not for commercial exploitation. Extraction of non-timber forest products have also been done on a sustainable basis without long term destruction to forest resources. So the IP community can be considered the allies of the DWC rather than adversaries. But the IP chief was happy to note that now the relationship between the DWC and the IP community has changed. The DWC has now built a close relationship with IPs by consulting them on various issues and depending on their assistance to protect the forest and wildlife resources of MNP. The IP chief is of the opinion that DWC cannot protect MNP effectively without the assistance of the IPs because they live adjacent to the national park and are more aware of outsiders entering the park than even the DWC. Before 1983, all forest and wildlife resources in MNP were available to the IPs and they had managed to utilize these resources in a sustainable manner. IPs never destroyed forests as they survive and lived in forests. But since 1983 there have been many restrictions imposed on them. DWC should realize that the sustenance of the IP community is dependent on the forest and that the IP community will not destroy the forests on which their survival depends upon. Once MNP was declared a national park the IP community lost many of the rights they had to access the forest freely and continue with their livelihood. While limited access has been provided to the IP community, they feel that they should be given virtually free access.

Even though their access to MNP is restricted, they realize that DWC still requires the IPs participation in conserving MNP. Yet they feel that although the DWC states that they need

the IP involvement in forest conservation and several discussions have been held to that effect, nothing positive has happened so far.

The IP chief requested the DG DWC to recruit IP youth for work as volunteer guides and laborers in MNP. It will help them to earn an income as most of them are unemployed at present. As they have no regular income sources, most engage in illegal fishing activities.

The IP Chief requested the DG DWC to grant permission to his people to walk through the national park to access the Maduru Oya reservoir for fishing. Although the DWC has permitted fishing in the Maduru Oya reservoir, access is not from the Dambane side. So the IPs who would like to fish in the reservoir has to go approximately 50 km in a circuitous route to gain access to the reservoir.

The local Grama Niladari (GN) spoke next. He also requested that DWC should get the support of the IP community when there are development activities taking place in MNP. Further he highlighted that due lack of communications between DWLC and IPs, there is no way to inform wild life officers when elephants attack the surround villages.

H.W. Gunathilake from IP community explained the issues faced by them. As destroying crops by elephants is a big issue, he requested to put up an electrical fence to protect their harvest. Further he asked to rehabilitate few lakes and ponds for fishing. According to his explanation, fishing is the main income generation activity among IPs.

U.W. Seneviratne also representing the IPs, stated that earlier IPs livelihoods were based on activities in forest land that has been declared a national park in 1983. Now these activities are not permitted and access is restricted.

IPs have faced many issues and problems after restrictions were placed in accessing MNP and harvesting forest products and hunting. While they are agreeable to change their lifestyles, he said that they need assistance in their transition to a new way of life. If DWC is able to facilitate easy access to the Maduru Oya reservoir or develop some other water bodies and stock them with fish, the IPs can survive through inland fisheries and that their dependence on the forest can be reduced. This would mean that many of the illegal activities that they indulge in now can be eliminated as fishing provides an adequate income forthem. Further he stated that rehabilitation of Weeraketiya Lake will help at least 10 families to survive without accessing to forest resources.

T.W. Premadasa is a primary school teacher. He is from IP community and he highlighted the opportunities available in the area, to improve their economy without accessing to forest resources. In his opinion, it is possible to introduce new fish and fishing methods in the three existing lakes in the area.

He also felt that trees or plants required for “Negenahira Navodaya” program in the Eastern Province can be grown in nurseries and provided from Dambana. He requested assistance from DWC to find and link the markets. If so, IPs can fulfil the requirement of plants for the program. This will help to improve IPs economy without accessing to forest resources as DWC wishes.

He also highlighted some possibilities for home-based economic activities such as brick making which can be initiated if DWC assists in providing the technology. He further

suggested that selling herbs, fruit and other plants is also another activity which can be introduced to IPs.

Issues and concerns of the IP community in Dambane were discussed by community members for some more time. However, these were repetitions of what has been raised above.

In summary, there were four main concerns raised by the IP community:

(i) The IP community would like DWC to issue identity cards to them and permit them access through MNP to the reservoir for fishing. The distance through the park to the reservoir is approximately 10 km. The DWC was also requested to assist in rehabilitation of village tanks and other water resources and stock them with fish so that the IP community could get involved in inland fisheries, in addition to or instead of going to the Maduru Oya reservoir for fishing;

(ii) The IP community should be given preference when DWC is recruiting "volunteer" guides and unskilled labour for work in park related activities;

(iii) The IP community involved in agriculture should be provided with electric fences so that they are able to protect their crops from elephant damage; and

(iv) Since the IP community has been restricted from carrying out their traditional livelihood activities which are forest depended, they should be given training and the means to move into other forms of livelihoods. This includes opportunities for alternate income generating activities such as brick making, marketing herbs and fruits, plant nurseries, better agricultural practices, etc.

The Director General, DWC responded to their requests by stating that:

(i) The DWC would look into the possibility of issuing ID cards to the IP community and the feasibility of providing access to the reservoir through MNP, keeping in mind that free public access through a national park is prohibited under the Fauna and Flora Protection Ordinance. The DWC would seriously look into rehabilitation of existing village tanks and water resources so that the IP community could be involved in inland fisheries;

(ii) The DG agreed that DWC would give priority to the IP community when recruiting "volunteer" guides and labor for MNP. However, he cautioned the IP community that recruitment of guides is dependent on the amount of visitation to MNP and since the park has hardly been visited due to the armed conflict in the country, it may take time before visitation in MNP increases to the level in other national parks in the south. He also mentioned that DWC is proposing a program of developing the natural resources and visitor facilities in MNP so that visitation could be increased;

(iii) The DWC agreed that electric fencing of priority areas could be accommodated under the existing "Gaja Mithuro" National Human Elephant Conflict Management Program; and

(iv) The DWC promised to explore options within the departments own funding as well as collaborate with other national rural development programs to leverage funds for awareness training and funds for alternate income generating activities.

The Director (Operations) DWC concluded the meeting by thanking the IP community for being present (even though there was a funeral in the community) and for their valuable inputs. He promised that this dialogue will be continued and that they would do their best to address the issues and concerns raised by the IP community as outlined by the Director General of DWC.

Ratugala Indigenous Community

Date : April 17, 2010
Venue : Rathugala Montessori School, Rathugala

The Leader of the Indigenous People's community and members of the Indigenous community from Rathugla participated at the meeting. Announcements for the meeting were made by visiting each house of Indigenous community. A total of 41 members of the Rathugala Indigenous Community were present at the consultation meeting. Representation included both males and females. The following officials also attended the meeting;

1. Mr. H.D. Ratnayake, Director (Operations), Department of Wild Life & Conservation (DWC)
2. Mr. M.G. Sooryabandara, Deputy Director (Planning & ICT), DW-LC
3. Mr. Buddhika Vidanage, Park Warden, Gal Oya National Park (GNP)
4. Mr. Saman Pathmasiri, Wildlife Guard, Mullegama Area
5. Mr. Prasad Kumara, Mullegama Area
6. Mr. Priyantha Padmalal, Inginiyagala
7. Mr. Nalin Jayasoriya, Inginiyagala
8. Mr. D.M. Wimalaratne, Wild Life Guard, Nilgala
9. Dr. Sumith Pilapitiya, Lead Environmental Specialist (South Asia Region), The World Bank (Colombo Office)
10. Ms. L. Jayawardhana, Consultant, The World Bank (Colombo Office

While Park warden welcomed all participants, the Deputy Director explained the objectives of meeting. He explained the importance of the indigenous community in the Rathugala areas and the role the community could play in assisting the DWC to conserve and protect the Gal Oya National Park (GONP). He mentioned that the DWC is proposing a program of development within the GONP since the park had been neglected for some years due to the conflict in the country. Now with peace in the country, the DWC would like to ensure that GONP is upgraded so that there will be more park visitation. Increasing park visitation will also depend on how well the DWC manages the natural resources of the park and the development program of DWC will include better management of natural resources in the park. He reminded the participants that this meeting was the next step in the consultation process commenced by the DWC in 2008/9 where the IP community at Rathugala participated in participatory rural appraisal (PRA) to identify development needs for the Rathugala IP community. He recalled the process they went through to prepare the participatory village development plan and how the DWC had implemented the key priority of the plan, which was the provision of a secure water supply for the village school. This discussion was to discuss the other priorities of the community and to see if the issues and

concerns identified in the plan was still valid or whether any changes are needed. He further stated that building a strong relationship and partnership between IP and DWLC is needed and that can help in solving each others' problems.

The Leader of the IP community initiated the discussion by speaking of the issues and problems faced by the IP community in Rathugala since the GONP was declared. The IP community in Rathugala was 100% dependent upon the resources of the forests, now designated as GONP, until the park was declared and their access to the park was restricted. The IP leader stated that the Rathugala IP community was still virtually fully dependent on the resources of GONP. At present about 70-80% of their population survives from forest resources by collecting fire wood, fruits and berries, Ayurvedic plants, bird nests and eggs , and bees and wasps honey. He admitted that a few still indulged in poaching, but stated that it was only for their food rather than for commercial purposes. A few were still involved in Chena cultivation by cleaning forests, cutting trees for timber etc. But he said that although the IP community still accessed the forest resources in the national park, they did not overexploit the resources. Since the IP community had always lived in harmony with the forests and their livelihood depended on it, it is the advantage of the IP community that forest resources were extracted in a sustainable manner. Throughout their lives and that of their ancestors, the IP community practiced conservation and used their resources sustainably. Therefore, the DWC should look upon the IP community as allies in their conservation efforts and not as adversaries. The IP community has noticed that "outsiders" are entering GONP and extracting forest resources, including poaching, for commercial gain. When these outsiders are confronted by DWC staff, they pretend that they are from the Rathugala IP community, knowing that the DWC may be more lenient with the IP community. This gives a negative impression about the IP community in the eyes of the DWC. Also when members of the IP community see outsiders exploiting the resources of GONP, they would like to inform the DWC. However, some are concerned that the DWC may question why and what the IPs were doing in GONP as well. Since the present Park Warden knows everybody in the IP community in Rathugala, this has not been an issue and the IPs are able to inform the DWC about outsiders committing offences within GONP. Therefore, he requested that the DWC issue ID cards to the members of the Rathugala IP community so that if they are in GONP when there is a new Park Warden who does not know them individually, the DWC will be able to distinguish them from "outsiders" that enter the forest for illegal activities. He highlighted another key issue the IP community is facing, which is the lack of water for drinking and agriculture. They have to dig holes in the river bed to get clean water for drinking purposes. They were very grateful to the DWC for having funded the construction of a drinking water well for the community school. He also highlighted the fact that the poverty level within the Rathugala IPs is very high.

Jayawardena Herath from IP community stated that the Government through the Divisional Secretary had agreed to allocate the Rathugala IP community 100 acres of land for the community to use for agriculture. While this had been stated, the land has yet to be demarcated and assigned to the community. They were hopeful that the Government will allocate the land to the community soon and provide them with land use permits. But they were concerned that even if they are given the land for cultivation, the unavailability of a source of irrigation water will be an issue. He said that there are few water tanks in their area that is in a state of disrepair and could be rehabilitated. Once rehabilitated, those tanks can be used for their agricultural activities. He sought DWC assistance for rehabilitation of these tanks.

DWC Inquired whether the IP community faced problems due to elephants coming to the village and destroying their crops. According to the IP community, the presence of elephants is not an issue. They said that they know techniques to the elephants away from their village and crops. When questioned whether there was loss of life due to the human-elephant conflict, the answer was that the IP community had suffered no such loss.

M.M. Leelawathie, who is a member of the IP community, is the pre-school teacher for the IP village pre-school. She said that she teaches 15 children in the pre-school with virtually no assistance or facilities from the Government. Although the pre-school building was constructed with the financial assistance from an international NGO, they failed to provide funding for the construction of toilet facilities for the kids. At present, the children use the adjacent forest as a toilet. In addition there is no water for the pre-school and the children have to use water in the stream nearby for drinking and sanitation purposes.

The teacher stated that there are no facilities, equipment or material provided by the Government even though she had been promised such support. She was asked to get Montessori Teacher Certification so that she could be employed by the Government, which she has successfully done but to no avail. She therefore gets no financial assistance as a salary from the Government and neither does the pre-school get any funds for materials. She manages the school with contributions from parents. Since the parents are very poor, the average monthly contribution is about Rs. 300. Therefore, she manages the pre-school with this money and uses it for equipment and supplies. She works on a voluntary basis. She as concerned that the children do not have adequate nutrition in their food. Therefore, on most days the attendance at the pre-school is around 8 students as parents who do not have money or food to send with their kids to pre-school, and keep them at home.

The Principal of the Junior School also stated that attendance of students is very poor as parents take children with them to find work and look for other income generation activities in the area.

H.M. Chandana stated that most of the members of the IP community do not have water and sanitation facilities at these homes. He requested DWC to construct a few wells that that can be used for drinking water and agriculture.

An interesting dialogue of issues and problems ensued thereafter. The community was most concerned that their culture was being lost due to assimilation into the larger Sinhala community. They saw assimilation as a necessity for survival but also would like to protect and retain their culture and traditions. They felt that they would like to have a Cultural Centre and a small museum to preserve artifacts and provide an opportunity for tourists, both local and international, to learn about their culture. They have already been allocated some land by the Government for the proposed Cultural Centre but did not have the funds to construct it. They seem to have been assured of a part of the funds by a NGO. They were hoping that DWC could provide some funding to bridge the gap in funding. The cultural centre will also help them to sell their products, Ayurvedic plants, honey, etc. to sell to tourists who visit the park.

They spoke of the 2 day workshop organized by the DWC for the IP community at Rathugala to identify their problems and issues in 2008. This workshop was conducted as a participatory rural appraisal and the outcome had been an indigenous peoples community development plan for Rathugala.

The key issues identified by the IP community in the development plan are as follows:

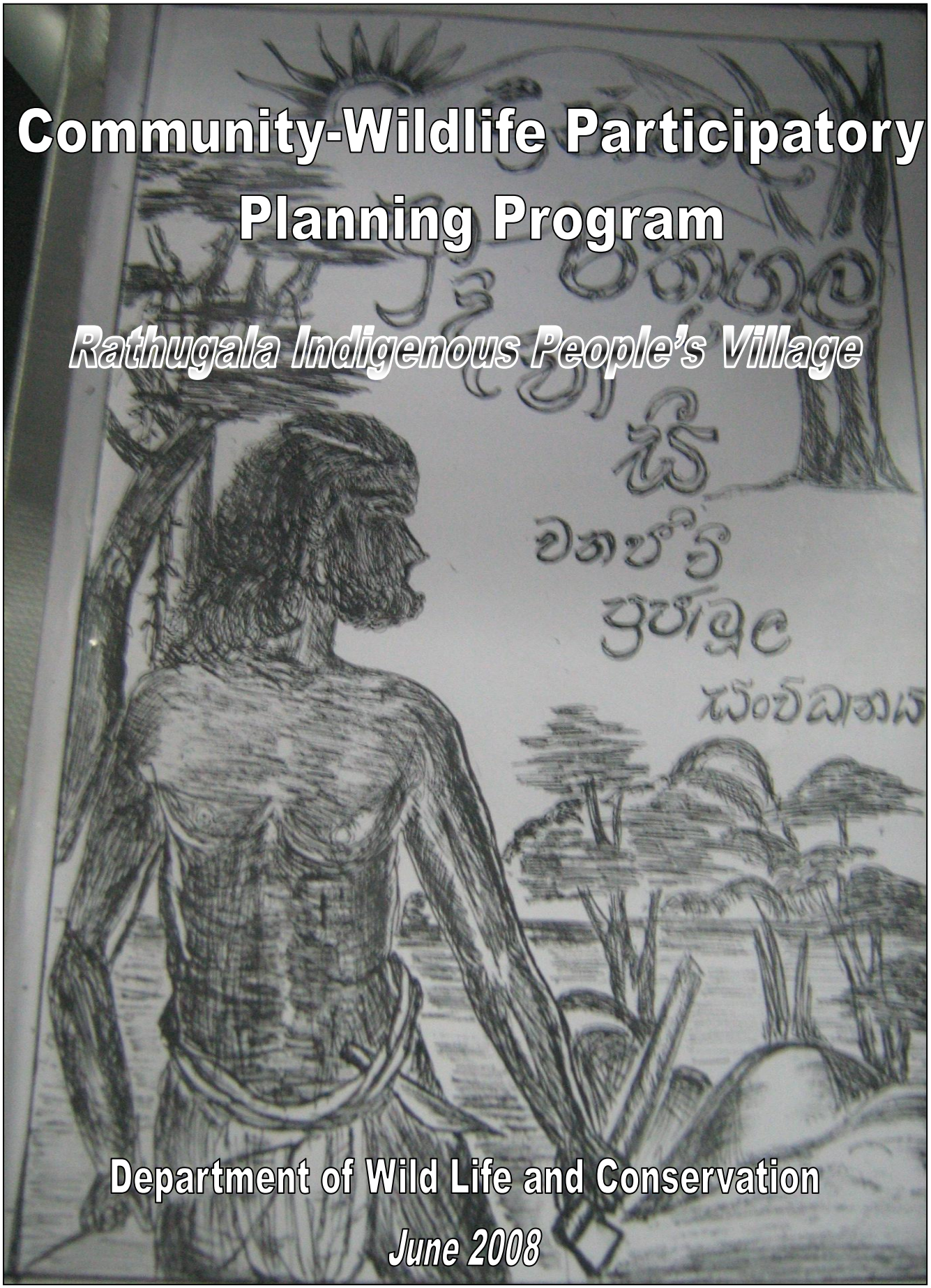
1. programs to encourage children to participate and continue their education;
2. housing facilities;
3. rehabilitation of lakes and ponds;
4. lands for new families;
5. IP participation in safeguarding the forest (employment opportunities in DWC);
6. sanitation facilities;
7. drinking water;
8. cultural center;
9. self employment opportunities;
10. electricity provision;
11. drinking water facility for the school;
12. developing a market to sell their traditional items (honey/herbal etc);
13. facilities for selling agricultural produce;
14. nutritious food for students;
15. a playground for the school; and
16. medical/health facilities in the village or a mobile clinic.

The consultation resulted in the IP community reiterating that the problems and needs identified in 2008 were virtually the same even now, except for the drinking water well for the junior school, which had been provided by DWC. However, when probed, the IP community stated that the top three priorities were:

1. Drinking water and sanitation;
2. Rehabilitation of water bodies and provision of irrigation water for the 100 acre land they had been promised; and
3. A cultural centre with a place for them to market their produce, handicrafts and non timber forest products.

Concluding the meeting the Director (Operations) of DWC, stated that the DWC being a Government agency has budgetary constraints. However, within those constraints, the DWC had managed to fund the well for the junior school. Likewise, he said that they would be able to fund some of the priority activities of the Rathugala IP community although it may take some time. He emphasized the need for a close partnership between DWC and the IP community. He appreciated the IP community's contribution to forest conservation and assistance given to DWC over the years. Finally he thanked all the participants for their active participation.

Appendix G
Sample IP Development Plan Prepared by DWC



Contents

1.0 Methodology

Rathgala is a rural and poor village which is situated closer to Galoya National Park (GNP). More than 100 families of Indigenous People (IP) live there with lot of difficulties and less facilities. Most of them are very poor and many are not educated.

By considering the education level, cultural background and social status of this IP, rural community participatory planning program was initiated by the Department of Wild Life and Conservation (DWC) on June 1-2, 2008 at Rathugala Junior School.

Information and Data was collected with small group discussions and brain storming sessions. Ideas and suggestions initiated by IP were prioritized and compiled with the support of IP.

In additions to above, some data and information were collected visiting each house by the community groups with the assistance of officers of DWC. Following table summarizes the type of data collected, methodology used and responsibility persons for data collection.

Information Required	Methodology	Responsibility	Supported by
Name of village, Historical & cultural background, Geographical layout, Management structure, population, employment data, infrastructure facilities, forest and village distribution	Semi-formal and formal discussions	Mr. Sarath Dissanayake	Mr. Nalin Jayasooriya
Social and economic background Life standards, income & expenditure style, social status	Properties, Life styles	Mr. M.G.L. Leelaratne	Mr. Ajith Wasantha Mr. Priyantha Lal
Institutional structure, Analysis of NGOs and initiation of community based organization	Diagrams analysis of institutions	Mr. U Saranga	Mr. Jananka Kulasekara
Issues and problems faced by communities, issues summarization, prioritize issues	Analysis issues	Mr. Prasanna Nilame Mr. G.M. Premaratne Mr. M.G.L Leelaratne	Mr. K. Janaka Shantha Kumara Mr. Prasad Kumara Mr. G.M. Gamini

Identify water and other resources, Agriculture, sanitation facilities, roads, forests, tourism, and areas need to be developed	Prepare social map and cross walking	Mr. G.M. Premaratne	Mr. H.W. Dayananda Mr. K.C.D. Wijesinghe Mr. W. Karunaratne
Identify weather and ..... differences, Crops, natural disaster, community employed timeframes	Discussions.....	Mr. Buddika Vidanage	Mr. V.B. Sarath de Sliva Mr. V.M. Prasad Kumara
Action plan (time frame, responsibility)	Active work plan model	Mr. Prasanna Nilame, Mr. M.G.L. Leelaratne Mr. G.M. Premaratne	Mr. T.M. Seinudeen

2.0 Introduction

Rathugala Village is situated in between Bulupitiya and Galgamuwa of Uva Province, along Bibile-Ampara road near the GNP. Community participatory development planning program was initiated by DWC on June 1-2, 2008 at Rathugala Junior School to reduce harm for forest resources by IP, to develop partnership between DWC and IP and get IP participation for wildlife conservation while improving IP's economic, social and development activities.

2.1 Geographical Information

Rathulaga village is situated in No 104C Grama Niladari Division of Madulla District Secretariat in Monaragala District of Uva Province. It is surrounded with Galgamuwa Village from the North, Bulupiitya village from the South, Beautiful green Viyanahela mountain from the West and Danigala mountain from the East.

2.2 Access Roads

- Colombo→ Kandy → Mahiyanganaya → via Bibila → Rathugala
- Colombo → Monaragala → Inginiyagala → Temple Junction → Rathugala
- Colombo → Monaragala →Damana →Ampara →via Templa Junction → Rathugala
- Colombo → Mahiyanganaya → Padiyathalawa → Mahaoya → Ampara → Via Temple Junction → Rathugala
- Colombo → Kandy → Randenigala → via Bibila → Rathugala

2.3 Information on Village's Name

According to discussions had with IP, there are two ways how the village has been named as "Rathugala"

1. Because of receiving red gems from that area
2. Because there is a red-coloured mountain in the village

2.4 Physical background of the Village

Rathugala is rich with naturally occurring medicinal plants, mountains , beautiful streams and natural water resources.

2.5 History of Rathugala Village

IP were removed from Daniyagala Mountain while constructing Senanayake Tank under Galoya low lying development project in 1940-1950. Five IP families have arrived in Rathugala and started live in a natural forest. Further, there was a possible incentive to move to Rathugala village because of heavy drought before 1940.

2.6 IP Ancestry Distribution

As the oldest member of IP Danigala Bandaralage Maha Kaira (80 years old) explained, his grandfather, the leader of IP, Mahahina Wanniya has lived in Danigala mountain area which is situated in the western border of the GNF. After the death of the leader, Poramola became the leader of IP. He also lived in Danigala mountain area with his generation. Handuna Vidane who was the leader after Poramola, had moved to Rathugala village and started their lives with his generation.

2.7 Distribution of Family arrangement

IP has a great respect to their leader who has built up good realtionship among their communities. Both males and females has equally involved in finding foods. They have spent many nights in the jungles to get their foods. Other than that they have farmed like ragi to use as food. They have walked long way from Rathugala to Bibile, Mahiyanganaya area by using elephant paths, foot paths to get other foods like salt, arecanut, etc,

Though IP are Buddhists by birth, 11 of their families were converted to Christian religion two years ago.

When IP became sick, they use their own medication. Their leader was aware of all medicine which required for each disease. Babies get delivered in the jungle and secret treatment methods were used during and after delivery.

After end of three generations, they started to use modern techniques for their day to day activities. Instead of using traps, they now use weapons and guns to kill animals. Their main cultivation is Chena cultivation which include mainly chilly, pumpkin, Indian corn, green gram, etc. They have started labour work and small enterprises as well. Further, two younger IP have joined the Sri Lanka Army. Children also now involved in education.

Handuna Vidana's generation is the first residents in Rathugala village. After the death of Handuna Vidana, Randunu Vanniya became the leader of IP. Suda Vanniya, the son of Randuni Vanniya is the present leader of IP in Rathugala Village. He is the fifth leader of their generation.

Methods of finding food in ancient era

- Hunting animals using bow and arrows
- Rooting yams
- Finding animals using position trees
- Trapping
- Booby-trapping
- Bag-netting

Main food of IP in ancient era

- Wild animals
- Honey
- Fruits
- Fish

Techniques used for finding foods

Though they were resettled indigenous people to Rathugala, they have taken care of the forests, animals and other resources with their ways of living. Female animals were never killed and only healthy males were killed for their food. However, the animal identified as the leader among a group of animals was not killed by them for any reason. Honey also had been collected without damaging trees in the forest.

IP gradually change their life styles moving away from old methods and techniques used in their day to day life.

They get marry only among blood relations. Even though there was a relationship between Rathugala IP and Pollebedda IP in ancient time, they do not have any relationship with each other right now.

Presently, IP of Rathugala village marries out of their community. Most of them have got married from nearby villages; hence existence of original IP generation is gradually diminishing.

Historical Development. of Indigenous People, Rathugala

Time Frame	Number of families	Number of Members	Population	Employment	Sanitation Facilities	Common Places	Road Facilities	Transportation Facilities	Cultivated Crops	Damages from wildlife	Emergency Deaths
1940 - 1950	06	03 - 04	10-12	Honey, Herbal plants, fruits, yams	Jungle	Forests	Elephant paths, foot paths	On foot	Manioc, Sweet potatoes, paddy	Elephant, wild boar	Snake, deceases
1950 - 1960	12	03 - 04	20 – 25	Honey, meat, Herbal plants, fruits, yams, Chena cultivation	Jungle	Forests	Elephant paths, foot paths	On foot	Ragi, Manioc, Sweet potatoes	Elephant, Wild boar	Snake, deceases, Elephant
1960- 1970	30	04 - 05	130 – 150	Honey, meat, Herbal plants, labour works, Chena cultivation	Jungle	Forests	Elephant paths, foot paths	On foot	Ragi, Manioc, Sweet potatoes	Elephant, Wild boar, porcupine	Snake, deceases, Elephant
1970 - 1980	35	08 - 10	150 – 200	Honey, meat, Herbal plants, Jack fruit labour works, Chena cultivation	Jungle	Forests	Foot paths, gravel roads	On foot	Ragi, Sweet potatoes, paddy	Elephant, Wild boar, porcupine	Snake, deceases, Elephant

1980 - 1990	52	06 - 08	250 – 300	Chena cultivation, labour work, business	Jungle	Forests	Foot paths, gravel roads	On foot, Carts	Ragi, pumpkin, Yams, beans, green grams	Elephant, Wild boar, porcupine, deer, rabbit	Snake, deceases, Elephant

Time Frame	Number of families	Number of Members	Population	Employment	Sanitation Facilities	Common Places	Road Facilities	Transportation Facilities	Cultivated Crops	Damages from wildlife	Emergency Deaths
1990 - 2000	72	03 - 04	300 – 350	Chena cultivation, vegetables, jackfruit, lemon, green grams	Jungle Toilet	Temple, Library, Community hall	Cart paths	On foot, Carts, bicycle, busses	Ragi, yams	Elephant, Wild boar, porcupine, deer, rabbit	Snake, deceases, Elephant
2000 - present	88	02 - 03	350 - 400	Chena cultivation, labour work, government & private jobs, business	Jungle Toilet	Temple, Library, Community hall	Tar roads	Bicycle, bus, tractor	Ragi, peanuts, ginger, banana, paddy, other crops	Elephant, Wild boar, porcupine, deer, rabbit, insects	Snakes

Participants :
- H.P. Piyaratne Fonseka
- D.M. B. Rammenika
- H.M. Gunabanda
- D.M.B. Wasantha Kumara
- D.M.B. Loku Menika
- H.M. Punchi Banda
- H.M. Sudumenika
- D.M.B. Kiribanda
- P.P Nandasena
- H.M. Karunaratne
- H.M. Wijesekara

Analysis of Life Status

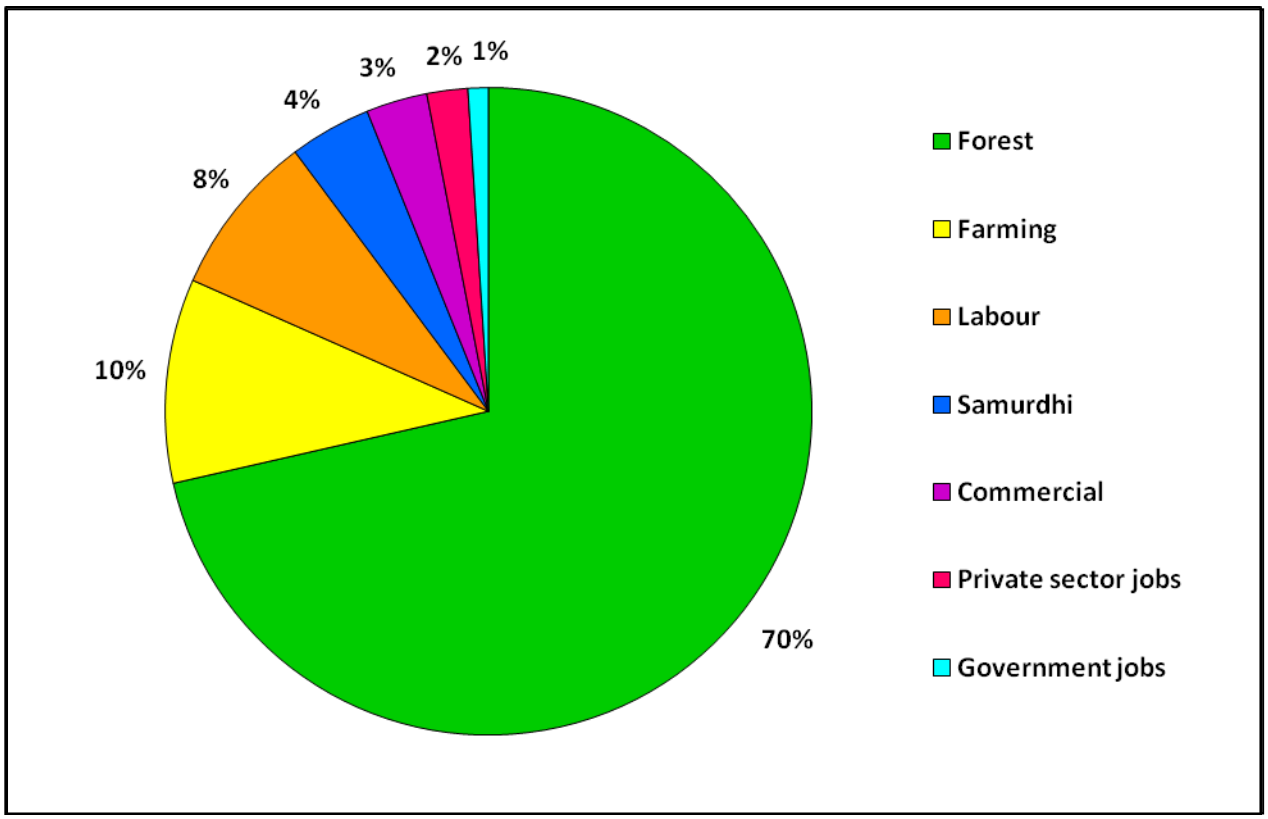
While discussing with IP, it was understood that they have involved with different employment activities and different income generation activities with their traditional habits.

Collected information and data were drafted by brain storming sessions of volunteered IP team.

3.1 Income pattern of IP

Their main income generation activity is from wild items and it is 70% of total income. From agriculture they can gain only 10% as harvesting is done only from rain water. They have not involved in agriculture using water from tanks and ponds. Few of them do paddy faming from rain water, while majority grow Indian corn, manioc, sweet potatoes, ragi, sesame, peanut, etc. and vegetables.

They involve in labour works when do not involve in agriculture and gain 8% of income. Majority of them receive "Samurdhi" aids from Sri Lanka Government. It is 4% of their total income.

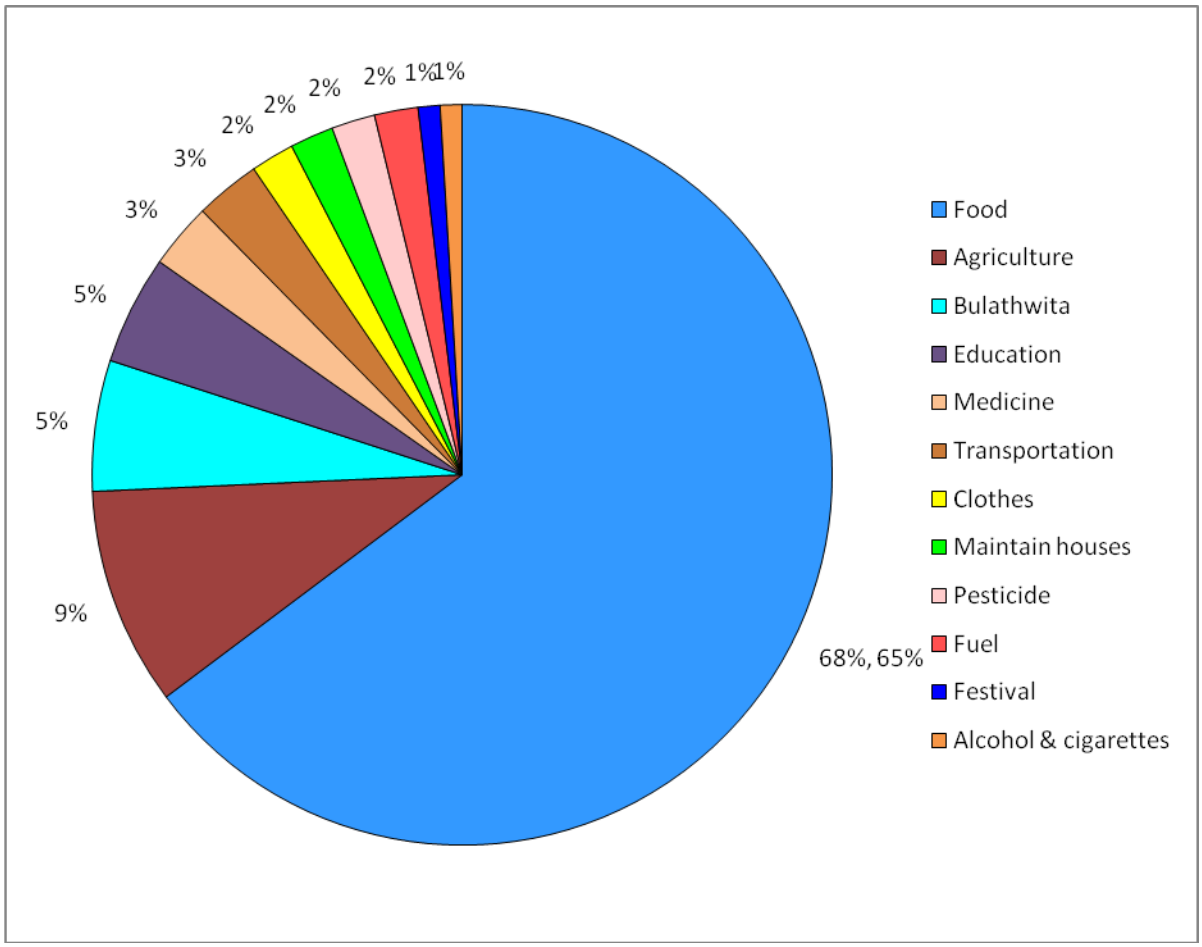


Income received from few commercial shops in the village is around 3%. Two of them who worked for Sri Lanka Army bring 2% of income to the village. Ten of them are working for garment industries outside village and the income received from them is 3%.

Expenditure of IP's of Rathugala

IP do not have complex life style and they spend 63% of their income for their food. While they spend 10% of the income for agriculture, spend 5% for education, although they expressed interest for improving education. They do not send lot of money for their clothes and purchase clothes only twice per year. As sanitation facilities are very poor in the village, they have to spend 3% of their income for medicine.

Both male and females of IP are heavily addicted in chewing betel and they spend nearly 6% of their income for purchasing betel. Most of them use kerosene oil for lighting their homes and spend 2% income for it. Further, they spend 2% of income to protect their crops from elephants.



3.3 Analysis of Social Differences

According to register of head of households in the village, only 86 families are registered. Social differences are identified by three groups who represented whole IP community. But among them, there are unregistered families as well.

By analysing collected data, it was found that there are 45 very poor families, 25 poor families, 12 medium income families and 4 rich families of IP living in Rathugala Village. Even though it was

grouped for four groups according to the data collected, there is no much difference among them when considering the social, economic and education level of the IP community.

Grade	Crucial	No of Families	Percentage (%)
Very Poor	Iluk roofed , house made of wattle and daub No sanitation facilities Receive “Samurdhi” aids Labour works Illiterate Widow	45	52.33
Poor	Plate roofed Receive “Samurdhi” aids Labour works Depend on children	25	29.06
Medium	Tile roofed permanent houses Owned retail shops, cattle farms and motor bikes	12	13.95
Rich	Water supply, electricity, telephone, permanent houses available Owned hand tractors and retailed shops Educated Employed by government or private sector Loan given for interest	04	4.66

3.4 Students Data of IP's Junior School, Rathugama

Grade	Males	Females	Total	Attendance Progress
Grade One	3	8	11	Normal
Grade Two	3	-	3	Poor
Grade Three	1	2	3	Poor
Grade Four	1	3	4	Poor
Grade Five	6	21	27	Very Poor

3.5 Relationship between Community and School

Knowledge and attention on education and relationship between community and school are very poor among IP. Due to the children's living environment is the main reason for less attention for education. Not only educational activities but also extra activities and parents' participation are very weak.

It is happy to observe that some students have special talents and willingness to engage in extra curriculum activities.

4.0 Climate Changes in Rathugala Area

In Rathugala, annual rainfall is between 1250mm- 1500mm and rainy is limited from mid of September to January. Heavy rains are experienced in November and December. Dry season is spans nearly eight months and drought is likely to take place from June to beginning of September. Due to drought many plants gets destroyed. In addition, there are heavy winds during the drought season.

There are big savannah forests in the area and dry mix evergreen forests near mountains. Canopy layers also can be observed in the forests. Some spaces are covered by large trees. Brownish soil is rich with nutrients. Most of forests have many medicinal plants.

As Rathugala village is surrounded with acres of savannah forests and dry mix evergreen forests, many animals are found in the area. Wild elephants often walk from one forest to another by crossing the village. Samburs, spotted dear, barking dear, etc. can be observed in the area.

Bear, leopard, pig, buffallo, anteater, various lizards and different type of monkeys live in near mountain areas. There are 200 different type birds and wild fowl, pintail and grey hornbill are commonly found in the area.

Climate in Rathugala has effects the IP as well. During the rainy season, they involve in paddy faming while doing Chena cultivation during the dry season. They do not have properly prepared wet paddy fields and grow paddy in the ground areas in September just before the rains. Harvest can be gained by February and March.

The biggest issues they face in the agriculture are the threat from wild animals and blights due to heavy rain. It can be also observed that many permanent crops are destroyed due to the drought in the area. Damages from wild elephants tend to be high during the crop growing season compared to the drought season. During the drought, elephants come to villages seeking water.

When rainy season starts after the drought, it is common to see the spread of deceases such as malaria and diarrhoea. The reason for this is lack of health and sanitation facilities to the community.

Most IP from Rathugala are Buddhists from birth and 2% of them believe Christian religion. Hence a temple and a church are available in the village. They believe their own gods and evils in addition to both religions. ' Kiri koraha' dance, 'Kolamaduwa' dance, incantation 'kiri amma' and offering kin-devils are main religious activities they involve with as part of rituals. They celebrate "Indigenous People's Day" in September 9th of each year.

Before drought season start in April, they dance 'Kolanetuma' to ward off. They also celebrate Sinhala Tamil New Year in April. In August, they organize a Buddhist procession from their village to Galoya temple.

At the end of March, all of them organize an alms- giving to the Gods using harvested crops. Further, they visit 'Kotabowa' procession, Katharagama and Mahiyangana stupa every year.

Few of them celebrate Christmas as well in December.

As most of IP are Sinhalese or mix of Sinhala community, they celebrate many events that are linked to Sinhala culture.

Month	Crops	Natural Disaster	Cultural/Religious Activities
January	Kawpi, Green grams, Pumpkin, Peanut, Indian corn, sesame	Destroy seeds & crops due to heavy rain and flood, Damage crops by elephants	-
February	Paddy (garden), Indian corn, ragi	Damage crops by elephants	-
March	Paddy (mud)	Damage crops by elephants	Alms giving for Gods

April	Kawpi, Green grams, Pumpkin, Peanut, Indian corn, sesame	Damage crops by elephants	'Kolamaduwa dance & Sinhala-Tamil New Year
May	-	-	Vesak Festival
June	-	Damage houses and crops due to heavy winds Damage crops due to drought	Procession to celebrate Poson festival
July	Pumpkin, Indian corn	Damage crops due to drought	-
August	-	Damage crops due to drought Minor damages from elephants	-
September	Indian corn, Ragi, Paddy(garden), Chillies, Brinjal, Pumpkin, Liva	Minor damages from elephants	Celebrate Indigenous day
October	Paddy (garden), Ragi, Pumpkin, Indian corn	-	
November	Paddy (mud)	-	
December	-	Crops destroy due to fungi deceases	Celebrate Christmas (few families)

5.0 Link between Rathugala Community & Galoya National Park

5.1 Impact from IP to GNP

As GNP situated closer to Rathugala Village, the community consider GNP as a wealth. They have strong link with GNP and therefore they put much effort to safeguard it. For the sustainability of their lives, many of their activities are attached with GNP.

Hence, there is a great impact to the forest and its resources. Few of activities IP involve are as follows;

- Hunting
- Getting timber
- Clearing forest for Chena cultivation
- Collecting fruits, medicinal plants and products, firewood, honey, yams, etc
- Use as cattle foraging ground
- Collect nests and eggs
- Cutting cane

5.2 Impact from GNP to IP

There impacts to IP community as well because GNP is situated closer to their village. As they highlighted these are the issues they face ;

- Damages from elephants and wild boar
- Restrictions to enter to the forest to collect fruits, herbal plants, firewood, honey, yams etc
- Restriction to enter the forest for fishing

6.0 Natural and Physical Resources in Rathugama

A team was initiated by representing all community groups in Rathugala, to identify existing natural and physical resources. Everyone contributed the best way possible for mapping the resources. DWC assisted them only as a supporting team.

Following resources are identified ;

Natural Resources

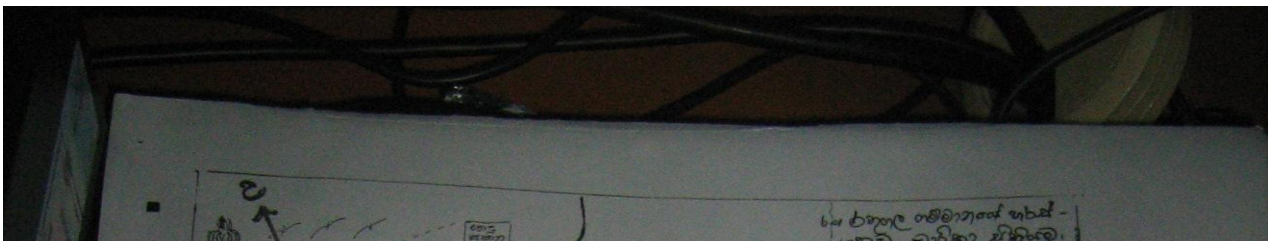
- Elephant paths
- Forest
- Rambaken Oya
- Diya kadhuru

Physical Resources

- Chena cultivations
- Houses
- houses destroyed by elephants
- Government School
- Temple
- Main and sub roads
- Well & tube wells
- Tanks and canals

All identified resources are included in the map and the houses damaged by elephants are highlighted with stars. Chena cultivation, the main livelihood activity of the area is also highlighted in the map. Rambaken Oya fulfil the water requirement of majority of IP is an important resource highlighted in the map. After mapping it was understood that 83 IP families live in Rathugala.

Physical Resource Map of Rathugala Village

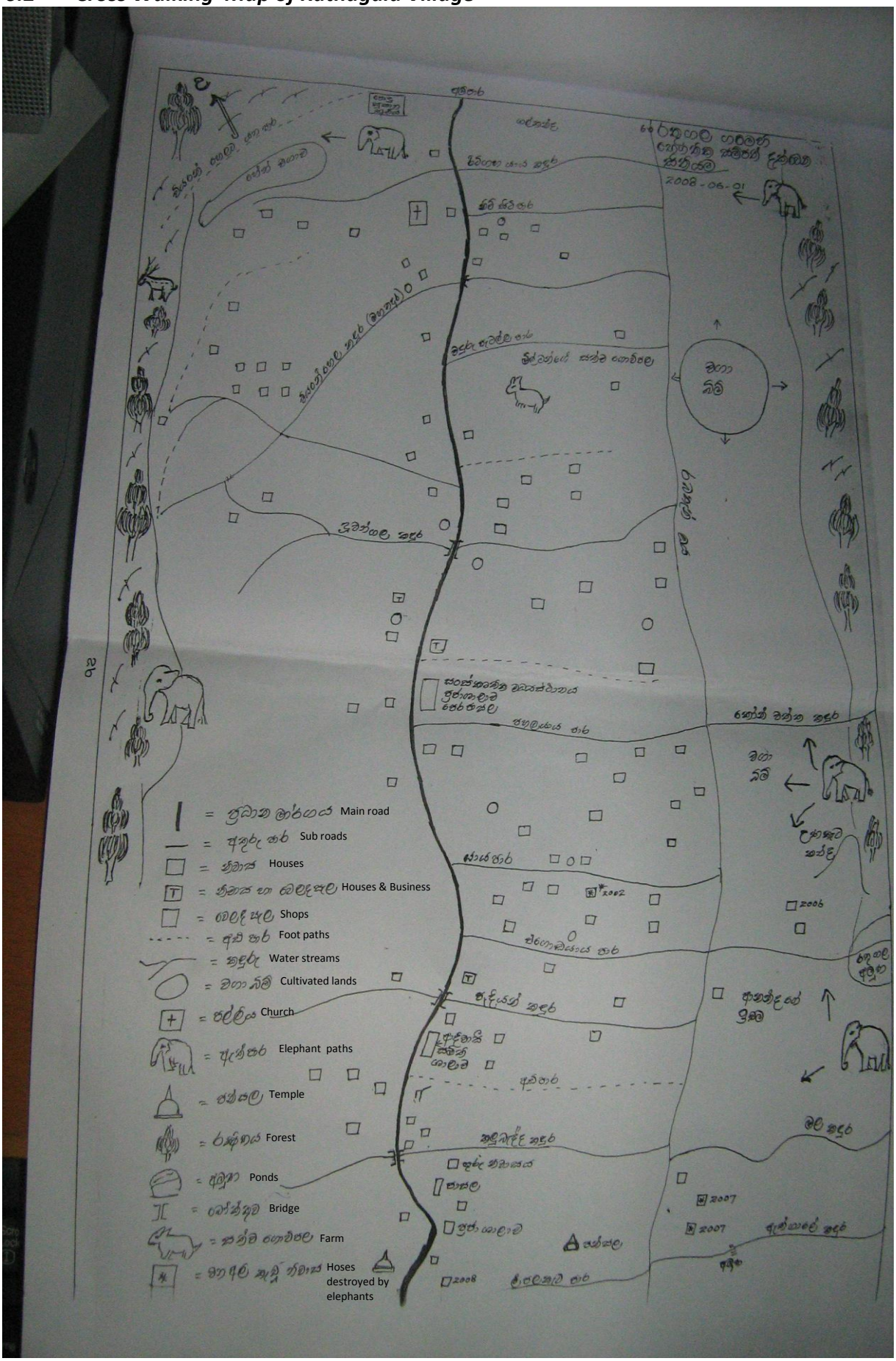


Main Road

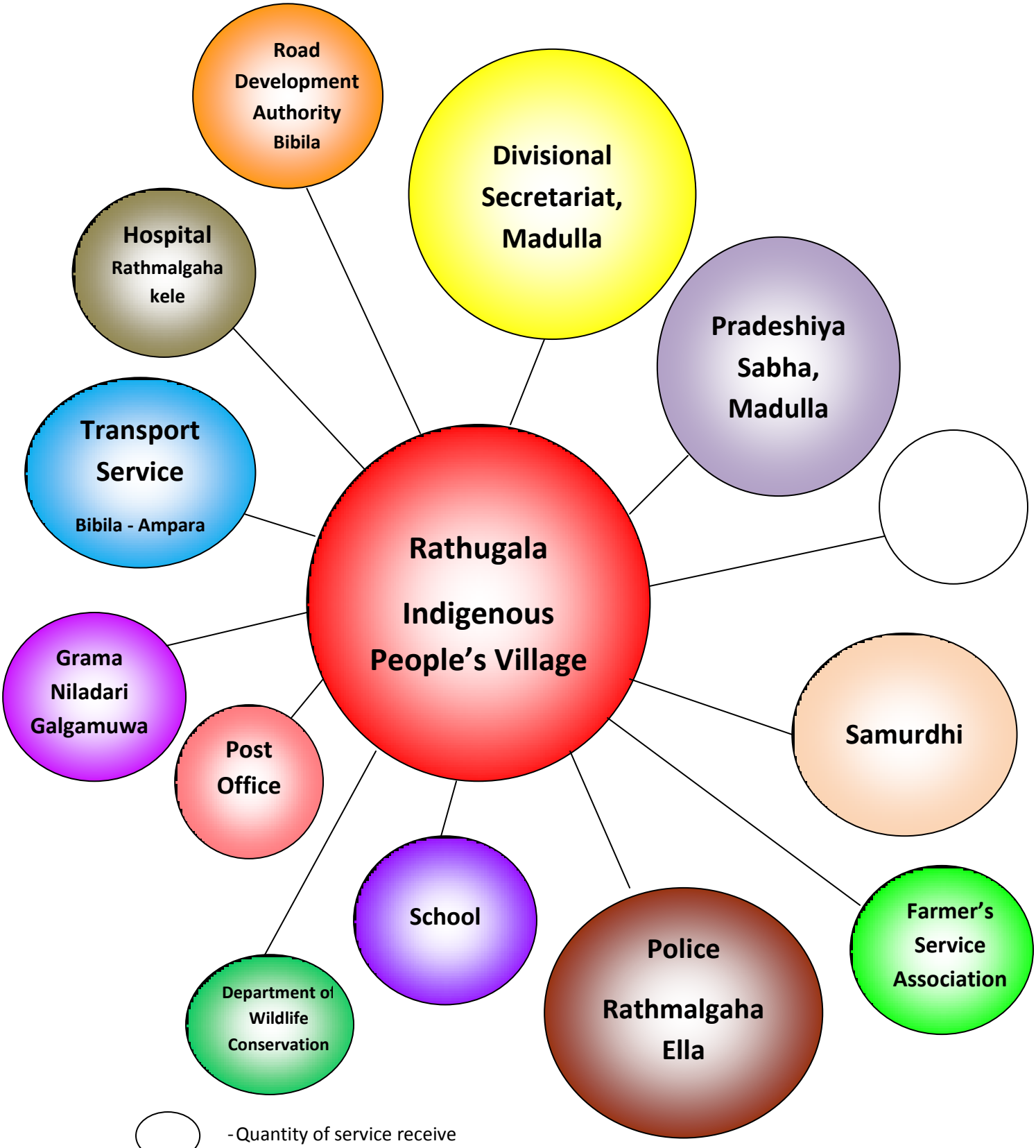
Sub roads

Ponds

6.2 Cross Walking Map of Rathugala Village



7.0 Services Received from Government Agencies



a. District Secretariat Office

All administration activities such as registration of births, marriages and deaths are done by District Secretariat Office. Further, land settlements, awarding titles, Samurdhi and other aids and many other activities are done by the DS office. Therefore this institute is know as the closest government agency to their day to day life.

b. Pradeshiya Sabha, Madulla

Though Madulla Pradeshiya Sabha (PS) is far away from Rathugala village, this PS has provided some services such as constructing and repairing houses, providing sanitary facilities, etc. with the assistance of Monaragala Provincial Council.

c. Police Station, Rathmalgaha Ella

During the war, the police put up police barrier to safeguard the community while providing service of Civil Defence. IP community appreciated the service received from the Police station.

d. Samurdhi, Galgamuwa

Preparation of Samurdhi documents, providing Samurdhi, deaths, births and other aids, Solar panels are few services received from Samurdhi through the District Secretariat Office. Therefore villages appreciated their service as well.

e. Agrarian Service Institute, Nelliyadda

This institute was established recently to assist farming community in the village. Seeds, plants, fertilizer subsidy, technical guidance are provided to improve the agriculture in the area.

f. DWC, Mullegama

DWC was established in 1954. Due to rules and strict management, DWC does not have close relationship with IP community.

g. DWC, Bibile

Due to the involvement of DWC, IPs have restrictions to do Chena cultivation in the forest. However DWC has provided plants, seeds and jobs opportunities to the community. Due to rules and regulations, relationship with community is not strong.

h. School, Rathugala

School was established in September 2007 for primary education. Students enter outside schools for their higher studies.

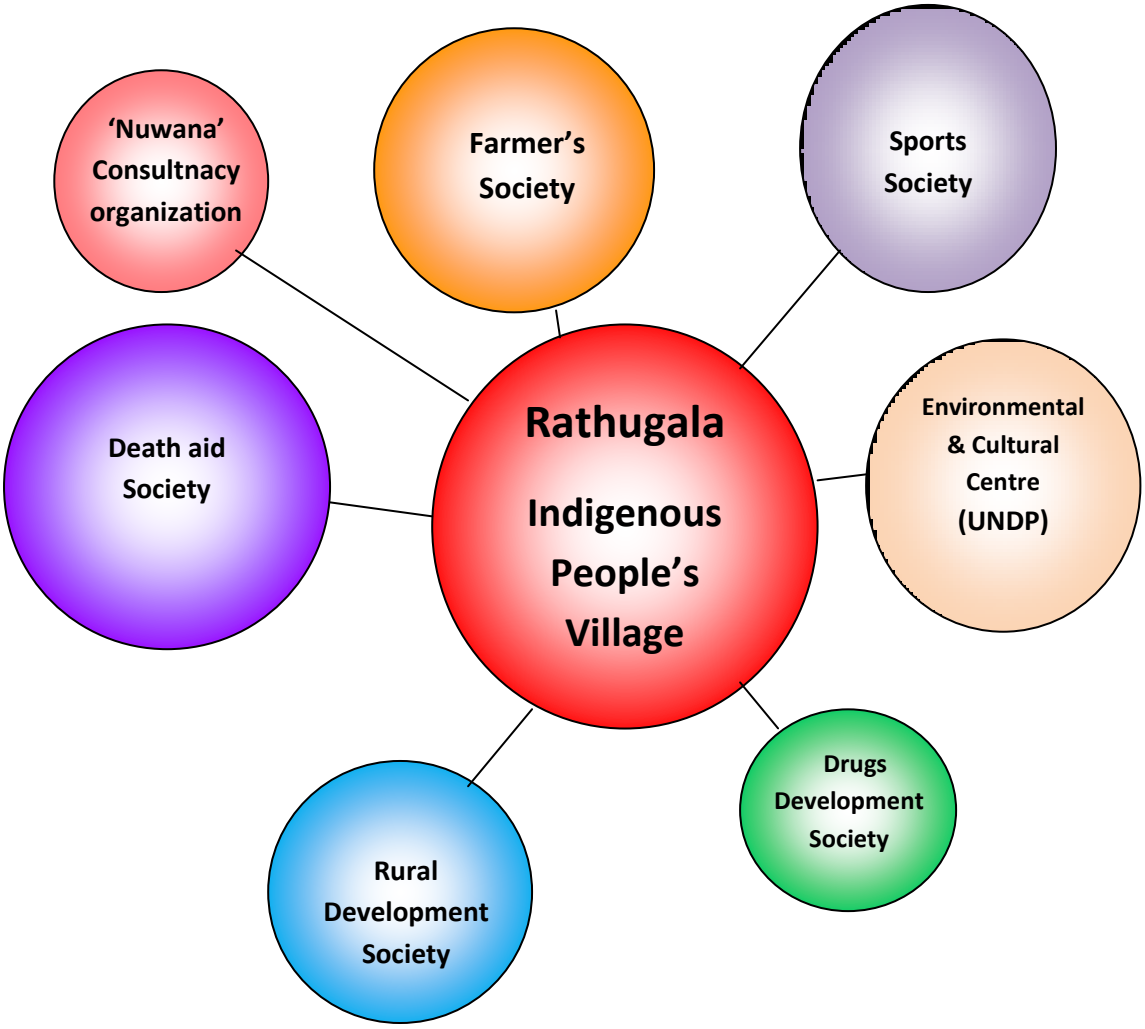
i. Death-aid Society

This is an active society which was established in 2005. Now there are 60 members and each has to pay Rs.120 per year as membership fee. The Society pays Rs.7000 for a funeral along with food, and other required items. Further, the society provides hall facilities as well.

j. Rural Development Society

This society has established in 1997 with four members and membership fee was Rs, 5 per month. The society has helped community for getting land licences, character certificates, and maintaining roads, etc. However it is inactive today.

7.1 Services received from NGOs and Voluntary Organizations



a. Farmer's Society

This society was established in 1997 with 60 members. At the beginning the society provided roofing materials, seed paddy, grains, loans, etc. Now it is inactive.

b. Drugs Development Society

In 1996, it was established with 70 members. Providing fertilizer, seed paddy, agricultural tools, Rs. 2000 loan and conducting training programs are the few activities the society involved with. Now it is also inactive.

c. Sports Society

Sports society was established in 2006 with 30 members. Receiving a football court was only service got from the society.

d. Environmental & Cultural Centre (UNDP)

This is known as CARE among the IP community. This centre has built up an Information Centre, and a meeting room while promoting home gardening among the community.

e. Nuwana Consultancy Organization

This organization has built up a library and provided books for the library and student along with school uniforms.

8.0 Prioritization of Common Issues identified by IP, Rathugala

Problems/ Issues	No lands for new families	No IP participation for safeguard the forest	No housing facilities	No cultural centre	activities identified in village	No mobile Metical clinics	No drinking water	No sanitation facilities	No rehabilitation of lakes and ponds	No market for traditional items	No self employment opportunities	No facilities for selling agricultural products	No playground in the school	No nutritious food for students	No drinking water facility in school	encourage children for education	Makes	**Rank**
No programs to encourage children for education	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	x	15	**01**
No drinking water facility to school	16	02	14	02	12	11	02	09	08	07	06	02	02	03	X		05	**11**
No nutritious food for students	16	15	14	13	12	11	10	09	08	07	06	05	03	X			02	**14**
No playground in the school	16	15	14	13	12	11	10	09	08	07	06	05	X				00	**15**
No facilities for selling agricultural products	16	15	14	13	12	11	10	09	08	05	06	X					03	**13**
No self employment opportunities	16	15	14	06	12	11	10	09	08	06	X						06	**09**
No market to sell their traditional items	16	15	14	13	07	11	10	09	08	X							04	**12**
No rehabilitation of lakes and ponds	08	08	14	08	08	08	08	08	X								13	**03**
No sanitation facilities	16	15	14	09	09	09	10	X									09	**06**
No drinking water	16	15	14	13	10	10	X										03	**07**

No mobile Metical clinics	16	15	14	13	12	X											06	**10**
No electricity generation activities identified in village	16	15	14	13	X												06	**10**
No cultural centre	16	15	14	X													07	**08**
No housing facilities	14	14	X														14	**02**
No IP participation for safeguard the forest	16	X															10	**05**
No lands for new families	X																12	**04**

8.1 Analysis of Problems and Goals

Problems faced by each community group were identified by brain storming sessions conducted with mixed community groups. These groups consisted with not only IP but also other villagers who were married to IP. As they have participated community participation programs with NGOs and other government institutions, brain storming session was not a new experience to them.

After identification of problems, those were grouped to five categories as follows;

- No educational facilities
- Poor income level
- Poor health condition
- Major impacts to community
- Issues related to rules and regulations

Among above following were discussed in detail.

- Many children do not go to schools
- Few families do not have lands
- Tanks and ponds need to be rehabilitated
- No drinking water
- No housing facilities
- No sanitation facilities
- No market for manufactured items
- No cultural centre for IP
- No electricity
- No water for agriculture

a. Prioritization of identified problems/issues

After identifying issue faced by them, all issues were prioritized with the assistance of Chief Monk of the Buddhist temple and IP community. According to the prioritization, following issues were highlighted.

1. Many children do not go to schools
2. No housing facilities
3. Tanks and ponds need to be rehabilitated

b. Analysis of Goals

Analyzing goal was also done with the same community groups. “Goal Tree” concept was used for this exercise. During the exercise, they identified the reasons for each of the issues highlighted by them and converted to goals as described below;

- Educational facilities are developed
- Income level is increased
- Health facilities are increased
- Common facilities are developed
- Support from law is received.

9.0 Project Plan

Objective	Measurement Factor	Evaluation Method	Assumptions and other factors
Long term objective - Improve the life style of IP - Mitigate impacts for Galoya National Park			
Mid term objective - Opportunities to develop both social and economical activities for IP	No of dependents from GNP are reduced by 2009	Survey reports	Benefits are properly utilized
Short tem objective - Establish a strong community based organization	- Participation for meeting is increased - Better commitment for common activities	- Attendance list - Participant's list	Community work together to implement project activities
- Exposure tour for 60 persons	-		
- Encourage children to go to school	Number of students going school will be increased	- Attendance list - Survey	
- Develop housing facilities			
- Rehabilitate tanks and ponds	More villagers involve with agricultural activities	Survey reports	
- Land for newly settled families			
- Recruit team from IP to safeguard the forests	Number of villagers who is willing to safeguard forests, will be increased	Follow up reports of CBO and National park	
- Available sanitation facilities	Expenditure for medicine will be reduced	Survey reports	
- Available drinking water			

9.1 Action Plan – Indigenous People, Rathugala

Main & Sub Activities	Time Frame																Ending factor	Responsibility		Remarks
	2008				2009				2010				2011					Main	Co-responsibility	
1. Initiate a community based organization to fulfil common objectives																				Society is established
1.1. Awareness Programs																		Department of Wild Life Conservation (DWLC)	IP Community	
1.2 Appoint officers																	Officers are appointed	do	do	
1.3 Preparation of constitution																	Constitution is prepared	Appointed Officers	DWLC	
1.4 Registration of members																	Registered members	Do	do	
1.5 Open an account for the society																	There is an Account number	Do	do	
1.6 Register the organization																	There is a registration number	Do	Park Warden	

1.7 Meetings with members																Minutes of meetings	Do	IP Community	
1.8 Prepare books for the society																	Do	Park Warden	
1.9 Implement the Action Plan																Project reports	Do	Community	
2. Organize an Exposure Tour for 60 IP																			
2.1 Select beneficiaries																Name list	DWLC	Appointed Officers	
2.2 Prepare Project reports																Project report	Park Warden	Do	
2.3 Approve cash for expenditure																	Do	Do	
Main & Sub Activities	**Time Frame**															**Ending factor**	**Responsibility**		**Remarks**
	2008				**2009**				**2010**				**2011**				**Main**	**Co-responsibility**	
3. Encourage children to go to school																			
3.1 survey to identify children																Prepare a name list	Community Based Organization	Park Warden, Principal	
3.2 Prepare a project report																Project report	Community Based Organization	Park Warden	
3.3 Approve the project																	Park Warden	Park Warden	

3.4 Implement the project																	Community Based Organization	DWLC & Department of Education	

10. Observations, Conclusions and Recommendations

The aim of the citizen participatory program was to mitigate the impacts from IP to forest resources and animals.

Even though NGOs and other government institutions has done several brain storming sessions to identify issues they faced, nothing has happened at the ground level. Hence, DWC has to put much effort to build up the confidence with IP community for data and information collection. After all efforts, many information and data could be able to collect and prepare a community development program with their assistance.

As majority of IP community (70%) survive from the forest, they need to safeguard it. When prioritizing issues, they ranked it as the 5th issue.

Not having proper shelter to live was observed while cross-walking and visiting the village for secondary data collection. Further, the team observed few houses covered only with polythene. One of the biggest issues, they face is unavailability of houses with proper sanitation facilities.

Further, they do not have a market or a centre to sell the collected medicines and fruits from the forest. Therefore, intermediary merchants purchase those items for low rates and sell for higher rates.

Though there are many children who do not go to schools, either the government or any other organization has not initiated any programs to encourage them to go to school. They are reluctant to go to other schools as the attitude of other students on IP children.

Even though there are some handicapped children in the village, none of them have the opportunity to go to a clinic and get treatment. The knowledge on poverty reduction and health is very poor. They do not have much attention on good health habits as well.

Though, Ampara –bibile main road is constructed and maintained well, all rural rads in Rathugala are in bad condition and most of them are foot paths.

Elephants and other wild animals also do lot of damages to their agricultural products.

Rathugala village is situated far away from other cities, from Ampara 40 km and from Bibile 80 km. Hence, the village is isolated and services receiveed from the government agencies is also less.

Snake bites, communal deceases and other deceases are common among IP community. As hospitals are far away from the village, they hardly visit hospital for medical treatment. During the exercise, a lady highlighted that how much suffering asthma patients in the village goes through without medical treatments.

IP community worry so much as they have lost their own traditional living rights. They requested to provide special permits or licences to access the jungles, mountains or forests to collect medicines, fruits etc and hunting animals. They strongly believe that they are the people who safeguard forests and jungles in the past. Further, they requested from DWC to get their assistance to safeguard the Forests and other natural resources.

Two teams could be observed among IP community in Rathugala. One team either involves in agricultural activities or employ in government a private sector and believe urbanization is better than their traditional life. Another team is willing to live with their traditional values by respecting to their customs and formalities. Their statement is having food once from the forest is valuable than having food 10 times from home.

Hence, development s need to be done without destroying or forgetting their cultural and traditional values. Providing and introducing a better education system, many of issues can be sorted out.

Annex 1

Population of IP Village, Rathugala

No.	Adults		Children	
	Males	Females	Males	Females
1	11	9	12	13
2	10	11	8	17
3	13	14	7	2
4	10	11	10	10
5	9	11	9	5
6	11	10	11	6
7	13	12	9	14
8	11	14	6	7
Total	88	92	72	74

Annex 2

Participated Community Groups for

Preparation of Community Participatory Rural Planning Program

Date	IP Community		Officers from Department of Wild Life Conservation
	Males	Females	
31.05.2008	40	34	20
01.06.2008	47	43	24
02.06.2008	41	32	20
Total	128	109	64

Annex

Status of Population, Occupation and lands, Rathugala Village

No	Householder's name	Adults		Children		Nature of house	Land details	Occupation	Nature of Family
		Females	Males	Females	Males				
1.	H.M.C. Ubhayawardena	1	1	1	-	house made of wattle and daub, tiled roof, one room	No licence	Chena cultivation, labour work	
2	H.M. Suraweera	-	1	2	4	house made of wattle and daub, tiled roof, 4 rooms, no water & sanitation facilities	No licence	Chena cultivation	
3	K.B. Kobra	1	1	1	1	house made of wattle and daub, tiled roof, 1 room, no water & sanitation facilities	No licence	Farming	
4	T.B. Wijepala	1	1	1	1	No house, staying in another perosn's place	No land	Farming	
5	T.B. Bandara Menika	1	-	3	2	house made of wattle and daub, Iluk roof, No sanitation facility	No licence	Labour work	
6	H.M. Siriwardena	1	2	1	1	house made of wattle and daub, 2 rooms, Iluk roof,	Licence	Labour work	

						No sanitation facility	available		
7	T.W.M. Sudukuma	-	1	-	1	house made of wattle and daub, tiled roof, 2 rooms, no water & sanitation facilities	No licence	None	
8	H.M. Siriwardena	1	2	1	1	house made of wattle and daub, no rooms, Iluk roof, No sanitation facility	No licence	Faming and labour work	
No	**Householder's name**	**Adults**		**Children**		**Nature of house**	**Land details**	**Occupation**	**Nature of family**
		Females	**Males**	**Females**	**Males**				
9	D.M. Premadasa	1	2	2	1	house made of wattle and daub, no rooms, Iluk roof, sanitation facilities available	Licence available	Labour work	
10	S.D.M. Heenkumarihamy	1	-	-	-	Tiled roof, cement floor, three rooms, No sanitation & water facilities	Licence available	no	
11	T.M. Samarasekara	1	2	1	-	Tiled roof, cement floor, three rooms, No sanitation & water facilities	No licence	Labour	
12	D.M.B. Kiribanda	1	1	1	3	house made of wattle and	Licence	Farming, Labour	

						daub, 1 room, Iluk roof	available	work	
13	H.M. Kalubanda	1	2	1	-	house made of wattle and daub, 1 room, Iluk roof, No sanitation & water facilities	Licence available	Farming, Labour work	
14	H.M. Nanapala	1	1	-	1	Plate roof, house made of wattle and daub, 2 rooms, No sanitation & water facilities	No licence	Farming	
15	D.M.D. Loku Bankda	1	1	2	-	Plate roof, house made of wattle and daub, 2 rooms, No sanitation & water facilities	No licence	Farming, Labour work	
16	D.M.B. Gnanasiri	1	1	3	1	Plate roof, house made of wattle and daub, 2 rooms, No sanitation & water facilities	No licence	Farming, Labour work	

No	Householder's name	Adults		Children		Nature of house	Land details	Occupation	Nature of family
		Females	Males	Females	Males				
17	P.P. Nandasena	1	1	3	1	Plate roof, house made of wattle and daub, 1 room, No sanitation & water facilities	No licence	Farming	
18	T.W. Jayaweera Bandara	1	1	1	-	Iluk roof, house made of wattle and daub, 1 room, No sanitation & water facilities	No licence	Farming	
19	W.M. Gunasekara	1	1	1	-	iluk, hut, No sanitation & water facilities	No licence	Farming	
20	D.M.B. Badiya	1	-	1	-	Iluk roof, house made of wattle and daub, 1 room, No sanitation & water facilities	No licence	Farming	
21	D.M.B. Ukkubanda	1	-	1	-	Plate roof, house made of wattle and daub, 2 rooms, No sanitation & water facilities	No licence	Farming	
22	H.M. Karunaratne	1	1	3	2	Tile roof, house made of wattle and daub, 2 rooms,	No licence	Farming	

						No sanitation & water facilities			
23	H.M. Banda	1	1	-	-	Plate roof, house made of wattle and daub, 2 rooms, No sanitation & water facilities	No licence	Farming	
24	P.G. Alwis	3	2	-	2	Plate roof, house made of bricks, 2 rooms, No sanitation & water facilities	No licence	Farming	
25	D.M. Ranmenika	1	1	-	-	-	No licence	-	
No	**Householder's name**	**Adults**		**Children**		**Nature of house**	**Land details**	**Occupation**	**Nature of family**
		Females	**Males**	**Females**	**Males**				
26	H.P. Priyaratne Fonseka	1	1	-	2	Plate roof, house made of wattle and daub, No sanitation & water facilities	No licence	Farming	
27	H.M. Anura	1	1	-	-	Plate roof, house made of wattle and daub, 2 rooms, No sanitation & water facilities	No licence	Farming	
28	R.M. Wicramaratne	1	2	2	1	Plate roof, house made of wattle and daub, 1 room,	No licence	Business and Farming	

						No sanitation & water facilities			
29	M.M. Somawathie	2	-	-	1	tile roof, house made of wattle and daub, No sanitation & water facilities	No licence	Farming	
30	B.M. Priyantha Chaminda Kumara	1	1	-	-	Iluk roof, house made of wattle and daub, No sanitation & water facilities	No licence	Farming	
31	J.S.D.M. Jayawardena	1	2	-	-	Tile roof, house made of brick, 6 rooms, sanitation facilities available, No water facility	No licence	Farming	
32	M.M. Thisahamy	1	1	-	1	tile roof, house made of wattle and daub, 2 rooms, No sanitation facility	No licence	Farming	
33	S.P. Karunadasa	1	1	-	-	-	-	-	

No	Householder's name	Adults		Children		Nature of house	Land details	Occupation	Nature of family
		Females	Males	Females	Males				
34	J.S.D.M. Sirinannda	1	1	-	2	-	-	-	Reside at J.S.D.M. Jayawardena na' place
35	J.S.D.M. Wijesundara	1	1	-	-	-	-	-	Reside at J.S.D.M. Jayawardena na' place
36	J.S.D.M. Sarath Dayananda	1	1	-	2	-	-	-	Reside at J.S.D.M. Jayawardena na' place
37	D.M.B. Dayawathie	1	-	3	1	Asbestos roof, 2 rooms, No sanitation & water facilities	No licence	Farming	
38	H.M. Premaratne	1	1	-	2	Tile roof, house made of wattle and daub, 2 rooms, No sanitation & water facilities	No licence	Farming	
39	S.M. Piyatissa	-	1	1	1	tile roof, house made of	No licence	Farming	

						wattle and daub, 2 rooms, No sanitation facility			
40	D.M.B. Mahakaira	2	1	1	-	tile roof, house made of bricks, 2 rooms, No water facility, sanitation facility available	No licence	Farming	
41	D.M. B. Kirimenika	1	-	3	1	plate roof, house made of wattle and daub, 2 rooms	No licence	Farming	
42	T. Jothipala	1	1	1	2	-	-	Farming	Reside with Father

No	Householder's name	Adults		Children		Nature of house	Land details	Occupation	Nature of family
		Females	Males	Females	Males				
43	D.M.B. Sudubanda	2	3	1	-	tile roof, house made of bricks, 2 rooms, No sanitation facility	No licence	Labour work	
44	D.M. B. Muthumenika	2	-	-	-	-	No licence	Farming	Reside at H.M. Kusumawathi's place
45	H.M. Gunabanda	1	1	-	-	Plate roof, house made of wattle and daub, 2 rooms,	No licence	Farming	
46	D.M.B. Heenmenika	1	-	-	-	tile roof, house made of brick, 2 rooms, No sanitation facility, water available	No licence	labour	Former IP leader Randunu Wanniya's wife
47	D.M.B. Kumara	1	1	1	-	plate roof, house made of wattle and daub, No water & sanitation facilities	No licence	labour	
48	D.M.B. Jayantha	1	1	-	1	Stay Heenmenika's place	-	-	
49	D.M. B. Sudawannila	1	1	1	2	tile roof, house made of wattle and daub, 2 rooms,	No licence	Farming	

	Eththo (IP Leader)					sanitation facility available, no water facilitiy			
50	A.M. Nimal	1	1	2	2	Covered with polythene, sanitation facility available, no water facility	No licence	Farming	
51	D.M.B. Thisahamy	1	2			tile roof, house made of brick, 2 rooms, No water sanitation facility	No licence	Farming	
52	D.M.B. Sugathapala	1	1	1	1	plate roof, house made of wattle and daub, 2 rooms, No sanitation facility	No licence	Farming	
No	**Householder's name**	**Adults**		**Children**		**Nature of house**	**Land details**	**Occupation**	**Nature of family**
		Females	**Males**	**Females**	**Males**				
53	D.M. Siripala	1	1	-	3	tile roof, house made of bricks, 2 rooms, No sanitation facility	No licence	Farming	
54	D.M.D. Heenbanda	1	2	1	1	tile roof, house made of wattle and daub, 2 rooms, No water & sanitation facility	Licence available	Farming	
55	K.M. Palitharatne	1	1	1	1	tile roof, house made of brick, 2 rooms, No water & sanitation facility	No licence	Farming	

56	D.M.B. Punchibanda	1	1	1	1	tile roof, house made of bricks, 2 rooms, No water & sanitation facility	No licence	Labour works	
57	M.M. Karunaratne	1	1	-	2	tile roof, house made of wattle and daub, No water & sanitation facility	No licence	Farming	
58	H.M. Heenbanda	1	2	-	2	tile roof, house made of bricks, 2 rooms, No water & sanitation facility, government house	Licence available	Farming	
59	D.M.B.Karunathilake	1	1	-	2	tile roof, house made of wattle and daub, 2 rooms, No water & sanitation facility	No licence	Farming	
60	H.M. Punchibanda	1	1	1	2	tile roof, house made of wattle and daub, 2 rooms, No water & sanitation facility	No licence	Labour work	
61	H.M.B. Dammika Menika	1	-	1	-	-	-	-	Reside at H.M. Punchi Banda's Place
No	**Householder's name**	**Adults**		**Children**		**Nature of house**	**Land details**	**Occupation**	**Nature of family**
		Females	**Males**	**Females**	**Males**				

62	H.M. Jayawardena	1	1	1	0	tile roof, house made of brick, 2 rooms, No water & sanitation facility	Licence available	Farming	
63	Name is not mentioned	1	1			tile roof, house made of wattle and daub, No water & sanitation facility	No licence	Farming	
64	D.G. Jayasinghe	2	-	3	2	Plate roof, house made of wattle and daub, 2 rooms, No water & sanitation facility	No licence	Business	
65	D.M.B. Kiribanda	1	2	-	3	tile roof, house made of bricks, No water & sanitation facility, Government house	Licence available	Farming	
66	H.M. Jayawardena	1	1	2	1	tile roof, house made of wattle and daub, 1 room, No water & sanitation facility	Licence available	Labour work	
67	U.G. Gunapala	1	1	1	-	Iluk roof, house made of wattle and daub, 2 rooms, No water & sanitation facility	Licence available	Labour work	
68	H.B. Gunapala	1	1	2	1	tile roof, house made of wattle and daub, 2 rooms, No water & sanitation	No licence	Farming	

						facility			
69	D.M.B. Kumarawanniya	1	1	-	-	tile roof, house made of wattle and daub, 2 rooms, No water facility, sanitation available, House is decayed	No licence	Farming	
No	**Householder's name**	**Adults**		**Children**		**Nature of house**	**Land details**	**Occupation**	**Nature of family**
		Females	**Males**	**Females**	**Males**				
70	H.M. Jayasekara	1	3	1	-	tile roof, house made of bricks, 2 rooms, No water & sanitation facility	Licence available	Farming	
71	E.K. Sisira Navaratne	1	1	1		-	-	Farming	Reside at H.M. Jayasekara's place
72	H.M. Sugath	1	1	2	1	tile roof, house made of bricks, 2 rooms, No water & sanitation facility	Licence available	Business & Farming	
73	H.P. Moris Fonseka	1	2	-	-	tile roof, house made of brick, 4 rooms, No water & sanitation facility	Licence available	Carpentry	

74	D.M.B. Hinkairi	1	-	2	1	tile roof, house made of bricks, 2 rooms, No water & sanitation facility	Licence available	Farming	
75	H. M. Sudubanda	1	1	-	-	-	-	Farming	Reside D.M.B. Hinkairi's place
76	H.M. Sarath Bandara	1	1	-	2	Plate roof, house made of wattle and daub, 1 room, No water & sanitation facility	Licence available	Farming	
77	H.M.Heenbanda	3	2	-	-	Plate roof, house made of bricks,1 room, No water & sanitation facility	No licence	Farming	
78	H.M. Seneviratne	1	1	-	1	-	-	Labour work	Reside at H.M. Heenbanda's place
No	**Householder's name**	**Adults**		**Children**		**Nature of house**	**Land details**	**Occupation**	**Nature of family**
		Females	**Males**	**Females**	**Males**				
79	R.M. Danapala	1	1	3	-	Asbestos roof, house made of brick, 2 rooms, No water & sanitation	Licence available	Farming	

						facility			
80	H.M. Danapala	1	1	1	1	tile roof, house made of brick, 2 rooms, No water & sanitation facility	Licence available	Farming	
81	D.M. Premaratne	1	1	1	-	tile roof, house made of brick, 2 rooms, No water facility, Sanitation facility available	Licence available	Farming	
82	H.M. Sumanasiri Bandara	1	1	1	-	Iluk roof, house made of wattle and daub, 1 room, No water & sanitation facility	Licence available	Farming	
83	H.M. Gunawardena	3	1	-	1	tile roof, house made of bricks, 2 rooms, No water facility, sanitation facility available	Licence available	Farming	
84	K. Milton Joseph	1	1	1	1	-	-	-	Owner of the farm