Sri Lanka: Puttalam Housing Project
Environmental and Social Assessment and Management Framework
Ministry of Resettlement

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SRI LANKA: Puttalam Housing Project

Environmental and Social Assessment and Management Framework

1. Purpose

The twenty year civil conflict in Sri Lanka has led to a loss of 65,000 lives, the displacement of 800,000 persons at different times during the conflict and the widespread destruction of infrastructure. A cease-fire agreement was signed in February, 2002 and over 60% of the 180,754 families who were displaced at that point subsequently returned to their homes in the conflict-devastated North East. Many refugee camps/welfare centers were closed. Of the remaining refugee camps, the largest number that account for almost 50% of the camp population today is located in Puttalam. Notwithstanding the cease-fire, an IDA-financed and United Nations High Commission for Refugees (UNHCR) supervised Survey of Refugee Camps in Puttalam in 2004 reported that 14,493 IDP families (61,763 persons) in 123 refugee camps in the Puttalam district had not returned to their original homes in the North given security concerns. The same survey revealed that 98.8% of the IDPs in Puttalam were Muslim. Although the majority in Puttalam is Sinhalese by ethnicity, two of the four divisions where the IDPs currently reside are Muslim majority areas.

The National Survey of IDPs in 2002 and the Survey of Refugee Camps in Puttalam in 2004 revealed that many IDPs in Puttalam have expressed willingness to settle down in Puttalam and integrate with the local communities given the current uncertainty with regards to the peace process and the increase in violence. The Social Assessment carried out by an independent consultant across the refugee camps/welfare centers in 2006 documented that many IDPs have already bought their own land and many others are in the process of acquiring legal ownership of the land they are living in or buying land elsewhere in Puttalam. The Government is increasingly of the view that these IDPs are unlikely to return to the North. The IDA-financed and UNHCR-supervised Survey of Refugee Camps in 2006 indicated that 24.8% of the IDP families lived in partially completed houses while 62.9% live in temporary thatched houses. Also, 58% of IDP families lived in their own houses be they temporary, partially completed or completed. The rest are dependent families. The basic infrastructure facilities in the IDP settlements are also found to be at a very low level. Given this backdrop, the GOSL has requested financial assistance from the World Bank to meet the housing needs of the poor IDPs without a fully completed permanent house along with basic infrastructure facilities within the settlements in Puttalam district.

Projects and Programs financed with IDA resources need to comply with World Bank Operational Policies. Therefore, all IDP settlements in the Puttalam district eligible for funding under this project will be required to satisfy the World Bank’s safeguard policies, in addition to conformity with environmental legislation of the Government of Sri Lanka (GOSL). Activities to be financed by the project have the potential to trigger negative environmental impacts, which will vary in nature and extent depending on the location and type of intervention proposed for housing and infrastructure development. From an environmental point of view, broadly, the project will provide housing assistance under three scenarios (a) permanent housing on the present site of the camp (b) in the adjacent camp to the existing camp (c) relocation in completely new sites. These three scenarios present different cases in terms of application of environmental safeguards. In addition, water supply and sanitation in settlements, although will largely be beneficial from a health and environment point of view, can have potential negative effects such as conflicts over water use, over exploitation etc if not properly investigated and carefully planned out.

This document is an Environmental and Social Assessment and Management Framework (ESMF) for the proposed project. The ESMF has been developed to ensure compliance with the World Bank’s environmental and social safeguard policies and the relevant provisions under the National Environmental Act (NEA) and associated regulations. The document provides the necessary background for environmental and social dimensions to be built into the design of the project in order...
to ensure that project implementation will take place in an environmentally and socially sustainable manner. To aid this process, the ESMF sets a framework of guidelines and procedures, which is intended to direct the process of planning and managing environmental and social concerns of project activities.

**Environmental Safeguards**

The World Bank’s environmental safeguards policy that may require consideration under this project is OP/BP/GP 4.01 on Environmental Assessment.

The purpose of conducting an environmental assessment (EA) is to identify environmental and social consequences of the proposed sub-projects or components, in order to:

- Ensure the identification of potential environmental issues and social concerns early in the implementation of a proposed project to incorporate necessary safeguards in project design in order to prevent potential adverse impacts by determining appropriate mitigation and compensation measures;
- Minimize risks and enhance positive impacts/benefits;
- Avoid delays and extra costs which may subsequently arise due to unanticipated environmental and social problems;
- Ensure that the concerns of residents and affected communities are addressed; and
- Identify the potential for maximizing environmental resources management and socio-economic benefits to local communities within the scope of the sub-project.

The EA should cover physical-chemical, biological, socio-economic and cultural issues that are likely to arise during construction and operation activities as appropriate.

The proposed Putalam Housing Project would provide permanent houses and upgrade partially built houses in selected IDP camps. As of this stage, details of the final sites are not available. The GOSL is currently in the process of identifying the final sites, which will be based on criteria that reflects social and environmental sustainability. Detailed environmental analysis based on this framework has been undertaken in 111 out of the 141 IDP sites. Upon finalisation of the list of eligible sites, a site specific EMP will be prepared. Since the framework was prepared as a guidance document for undertaking environmental analysis, the issues identified is based on generic issues that are typically associated with housing and other infrastructure development activities, as proposed under the project. In such circumstances, OP 4.01 requires that arrangements be made whereby the project implementing institutions undertake the functions of conducting site-specific EAs, EA review and implementation of mitigation and monitoring plans. Therefore the purpose of this document is to outline a framework for environmental assessment and management, giving details of potential environmental issues and guidelines on how to prepare Environmental Management Plans (EMP), which will serve as the basis for undertaking site specific environmental analyses. It is being submitted in lieu of a project EA and has formed the basis for appraising the environmental aspects of the project. It has also been made available for public review and comment in appropriate locations in Sri Lanka and in IDA’s Public Information Center in accordance with BP 17.50 requirements of disclosure. Detailed environmental analyses for individual housing sites will be carried out (in accordance with this Framework) by the implementing agency and will be reviewed and cleared by the GOSL, as applicable, under prevailing national environmental legislation in the country and by IDA prior to the approval of disbursement of funds.

**Social Safeguards**

World Bank policies and guidelines, pertaining to social safeguards that may require consideration under this project are as follows:

- OP/BP 4.11 Physical Cultural Resources
- OP/BP 4.12 Involuntary Resettlement
Overall, the program is expected to have limited negative social impact. None of the PHP components include activities that trigger a drastic change in the local economic infrastructure with adverse social consequences. The housing assistance will provide support for the construction or upgrading of already existing temporary or semi-permanent housing units of those IDP families with uncontestable land title deeds. This is a socially feasible program targeted at generally poor IDP families who have been forcibly displaced and lived in temporary shelters for up to 16 years.

The Social Assessment has identified a number of potential social risks, longer term social concerns, and local social integration issues. These include issues of inter-community tensions, gender equity, complexities in land ownership and tenure, community absorptive capacity and social capital. In order to mitigate these risks, PHP has incorporated the relevant IDA Operational Policies (OP) into the social safeguards framework. The Framework will serve as a template to undertake specific social audits, monitoring and evaluation in the locations identified for housing reconstruction. A continuous social impact assessment forms part of the program design.

2 Project Description
The project consists of the following components;

Component 1- Housing
The Project will provide permanent houses and upgrade partially built houses for all IDP households without a completed house and with land, in selected refugee camps at an estimated investment cost of US $ 16 million. The IDA-financed and UNHCR-supervised Survey of Refugee Camps in 2006 indicated that 24.8% of the IDP families lived in partially completed houses while 62.9% live in temporary thatched houses. 58% of IDP families lived in their own houses be they temporary, partially completed or completed. The rest are dependent families. Since most of the homeowners were originally displaced families, nearly 2230 families currently live in partially completed houses and 5650 families live in temporary shelter. The housing support cash grant provided would be of two categories: (a) Rs.250,000 for the construction of a permanent house, and (b) Rs.100,000 to upgrade a partially-completed house to the level of a completed ‘core house’. Selection of IDP camps for housing and infrastructure assistance will be based on criteria that reflect aspects such as economic vulnerability, possession of secure land titles by IDPs, environmental suitability of site assessed through site EAs, preference to stay permanently in Puttalam etc. Feedback from social and environmental assessments carried out at camp level will be key to finalizing the selection criteria.

Component 2- Physical Infrastructure:
Roads: The project would finance the construction of 100 kilometers of internal roads for the selected refugee camps. All existing internal roads within IDP settlements come under the purview of the local authority but are in a state of poor maintenance due to poor technical and financial capacity of the responsible institutions. The condition of the roads that connect the adjacent non-IDP villages is not significantly different. The main objective of the internal road component is to improve the road access of both IDP and non-IDP communities, and better integrate the two. Hence, resources would be equally apportioned between IDP and non-IDP settlements based on actual need. The program may include both new roads and improvement of existing roads with shoulder, drainage and topping. The total cost of the road component is estimated at US$ 2 million.
Water and Sanitation: The project will finance drinking water supply and sanitation to all IDPs in selected camps as well as non-IDPs in identified sites. The investment cost of this component is estimated at US $ 7 million with a target of 14,800 beneficiaries. Good quality water is a scarce resource in the project area due to either non-availability and/or contamination of existing sources. Development of water supply schemes will involve source identification through existing or new technical feasibility studies, development of source, treatment of water, storage and pumping of treated water, piped gravity distribution systems, piped pumping schemes (with distribution through
gravity flow), dug wells with and without hand pumps, shallow and deep tube wells with and without hand pump, deep tube well with pump and cistern, and rain water harvesting.

Wherever required, the population in the area where the drinking water source is located (for off-campus source), and/or villages en route the transmission pipeline are to be also included under the project’s coverage essentially to ensure wider community participation for sustainable water supply operation. With regard to sanitation, the project will support the construction of appropriate sanitation facilities and rehabilitation of existing ones with the objective to achieve 100% sanitation coverage in the selected sites in a manner that does not impair the environment, especially, the aquifer which is generally the source of drinking water in Puttalam. For areas where on-site disposal is feasible, the project will encourage the households to construct and use latrines with on-site disposal arrangements. For areas where on-site disposal is not feasible, the project will encourage the community to have water borne sewerage system with suitable treatment and disposal arrangement.

As a general principle and to be consistent with the National Policy for Rural Water Supply and Sanitation Sector, the proposed water and sanitation services are to be community based and are to be operated and maintained by the community. The choice of technology for water and sanitation solutions will depend on (i) technical feasibility, and (ii) community preference. However, exceptions will be considered, if technical and operational sustainability considerations for water supply and sanitation situations require greater technical and operational expertise.

3 Government of Sri Lanka Environmental Regulations and Procedures

3.1 National Environmental Act

In 1981 GOSL passed the National Environmental Act (NEA) and in 1982, created the Central Environmental Authority (CEA) as a regulatory and enforcement agency. The CEA’s statutory and enforcement powers were strengthened significantly in 1988, by an amendment to the NEA. A cabinet level ministry to handle the subject of environment was created in 1990, with the appointment of a Minister of Environment to ensure that environmental issues will be given the required attention.

Under provisions of Part IV C of the NEA No. 47 of 1980 as stipulated in Gazette (Extra Ordinary) No. 772/22 dated June 24, 1993 GOSL made Environmental Assessment (EA) a legal requirement for a range of development projects. The list of projects requiring an EA are prescribed in the above Gazette notification. In addition, the Gazette notification includes a list of line ministries and agencies that are designated as Project Approving Agencies (PAA), with environmental assessment clearance functions delegated by the CEA. With the change of government in August 1994, and the resulting re-allocation of Ministries, a new list of PAAs were specified—under subject area rather than with the name of the Ministry, as listed originally—in Gazette (Extra Ordinary) No. 859/14 dated February 13, 1995.

Relevance of the proposed project to the NEA regulations can be considered under three sections (a) Housing and Building (b) Water Supply and (c) Disposal of Waste. According to the prescribed project categories falling under these three sections, none of the project activities would be required to undergo an IEE/EIA. However, other prescribed projects requiring environmental assessments, listed in the same regulations that may have a relevance to the proposed project include; (i) Reclamation of land, wetland area exceeding 4 hectares; (ii) Conversion of forests covering an area exceeding 5 hectares; (v) clearing of land areas exceeding 50 hectares; and (vi) All projects and undertakings irrespective of their magnitude, if located partly or wholly within 100 meters from the boundaries of or within any area declared under the National Heritage Wilderness Act; the Forest Ordinance; 60 meters from a river or stream bank and having a width of 25 meters or more at any point of its course; any archeological reserve, ancient or protected monument as defined or declared under the Antiquities Ordinance (Chapter 188); any areas declared under the Botanical Gardens Ordinance; and within 100 meters from the boundaries of or within any areas declared as a Sanctuary under the Fauna and Flora Protection Ordinance.
The EIA approval/disapproval can be granted by the PAA with jurisdiction over the project activity, only with the concurrence of the CEA. However, the project proponent is not permitted to perform the functions and duties of a PAA. Therefore, in the event of a PAA becoming the project proponent, the CEA will designate an appropriate PAA. In instances where the project would fall within the purview of more than one PAA, the CEA will determine an appropriate PAA or serve as the PAA. Any functions of the PAA related to the approval of the project can be devolved to a Provincial Council only with written concurrence of the Minister in charge of the subject of Environment. Considering the scope of activities supported under this project, the most likely PAA’s would be the CEA, Ministry of Highways or Ministry of Provincial Councils and Local Government. The CEA will formally decide on the PAA depending on the scope and location of the project on a case by case basis.

According to GOSL procedure, all development activities require environmental clearance. In order to obtain such clearance, the project proponent has to fill in a Basic Environmental Information Questionnaire. The questionnaire requires information from the project proponent to enable the CEA to determine the level of environmental analysis required prior to providing approval for the project. Upon reviewing the questionnaire, the CEA determines whether the project requires an Initial Environmental Examination (IEE), or an Environmental Impact Assessment (EIA), or whether no further environmental analysis is required, depending on the nature of the potential impacts. The CEA review is based on the list of prescribed projects listed under provisions of Part IV C of the NEA No. 47 of 1980 as stipulated in Gazette (Extra Ordinary) No. 772/22 dated June 24, 1993. All prescribed projects have to be subjected to environmental assessments, either through IEEs or EIAs. The CEA also determines the PAA for the specific project.

3.2 Other Acts relevant for Environmental Assessment

In addition to the National Environmental Act, which is the most important legislation governing the process of EA, there are three other legislations under which EA can be required.

Coast Conservation Act (CCA) No.57 of 1981 implemented by the Coast Conservation Department (CCD) and applicable to the coastal zone as defined in the Act. The coastal zone as it pertains to this project is considered to be 300 meters inland from the high water mark. Therefore, any road works within this zone falls under the jurisdiction of CCD. Director of the CCD has the discretion to request for an EIA/IEE from the project proponent if the initial screening reveals significant impacts in the coastal areas by the project. Once the type of environmental analysis required is decided, a scoping committee comprising of the relevant stakeholder agencies meet to discuss issues of the project after which a draft ToR is prepared for review by the Coast Conservation Advisory Council. The EA prepared accordingly by the project proponent is subsequently reviewed by a Technical Evaluation Committee based on whose assessment the Director can grant approval/disapproval for the project. The public consultation process is similar to that of the NEA where the public has the opportunity to comment on the proposed development within a period of 30 days from time of notification, if it is an EIA.

Fauna and Flora Protection Ordinance (FFPO) No.2 of 1937 (amended in 1993) implemented by the Department of Wildlife Conservation. This act specifies that any development activity that takes place within one mile of the boundary of a National Reserve declared under the Ordinance require an EIA/IEE. The FFPO follows a similar process as the NEA in conducting scoping, setting the ToR, preparation of EA, review of EA and public consultation and disclosure. The decision of project approval or disapproval is finally granted by the Director of the Department of Wildlife Conservation.

Provincial Environmental Act (PEA) of 1991 implemented by the North Western Provincial Council for areas coming under the North Western Province. Environmental Assessments are required for prescribed projects that have been gazetted in Gazette Extraordinary 1020/21 of 27th March, 1998. It specifies two lists of project types (a) where EIA/IEE is mandatory and (b) where the EA can be requested if the PAA decides so. The scoping process is similar to that of the NEA and will be headed by one of the two listed PAAs; (a) Provincial Environmental Authority and (b) Provincial Ministry of
Fisheries and Aquaculture. For the proposed project, the most relevant and likely PAA would be the Provincial Environmental Authority. Representation of the CEA and the Ministry of Environment in the scoping committee is a mandatory requirement. Setting up of the ToR, preparation of the EA, review and public disclosure and consultation, granting of the project decision are the same as specified in the NEA. Puttalam district falls within the North Western Province and hence the PEA will be the most relevant piece of legislation in terms of determining GOSL’s requirement for an EA for the proposed project. The procedures to be followed by the project proponent in obtaining a determination from the Provincial Environmental Authority are similar to what is explained under the NEA.

3.3 Adequacy of GOSL Environmental Clearance

The composite GOSL environmental clearance process, in principle, is consistent with World Bank environmental and public disclosure requirements. The exception being the screening criteria adopted in the GOSL process under the NEA, where project thresholds are used to determine the type of clearance required and the content of public consultation. However, under the PEA the PAA can take a decision based on anticipated impacts even if the project does not fall into the listed categories and under the CCA and the FFPO the director has the discretion to request for an EA. However, all activities under the proposed project will be subjected to the EA process regardless of the project threshold, prior to disbursement of funds. Although the country’s experience on regulated EA procedure is still young, substantial progress has been made with regard to conducting and evaluating EIAs, in which the CEA has played a lead and commendable role. The EA regulatory function of the North Western Provincial Environmental Authority also has been quite satisfactory and is only provincial environmental authority functioning in the country. The country has also gained much through institutional strengthening (mainly the CEA) supported by the financial assistance from a number of bi-lateral and multi lateral donors. Therefore, no additional technical assistance is deemed necessary to build the capacity of the CEA or the Provincial Environmental Authority of the North Western Province for environmental clearance relevant to this project.

4 World Bank Environmental and Social Safeguard Policies and its Relevance to the Puttalam Housing Project

Projects financed with IDA resources normally need to comply with World Bank Operational Policies. World Bank OP 4.01 requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that these projects are environmentally sound and sustainable. EA is a process whose breadth, depth and type of analysis depends on the nature, scale and potential environmental impact of the proposed project. A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas including wetlands, forests, grasslands and other natural habitats are less adverse than those of Category A projects. These impacts are site specific; few if any are irreversible; and in most cases mitigatory measures can be designed more readily than for Category A projects. The scope of an EA for Category B projects may vary from project to project, but it is narrower in scope when compared with Category A projects.

World Bank OP 4.01 is very clear that for all Category A, Category B and Category FI projects proposed for financing under an IDA Credit, the developer must consult project affected groups and local non-governmental organizations (NGOs) about the projects environmental aspects and take their views into account in the design and implementation. The EA should particularly incorporate such comments to improve social acceptability and environmental sustainability. Such consultations should be initiated as early as possible, in the Project cycle. For Category A projects, such consultations should occur at least twice: (a) Shortly after environmental screening and before the TOR for the EIA.
are finalized; and (b) Once the draft EIA report is prepared. In addition, the developer is expected to consult with such groups throughout project implementation as necessary to address EIA related issues that affect them. The OP 4.01 also highlights the importance of analyzing alternative designs, technologies and operational strategies systematically in terms of their potential environmental impacts in order to select the most environmentally friendly and economically viable option.

Although the GOSL’s clearance procedure is adequate and fairly reliable, IDA will still review all Environmental Analyses and a sample of EMPs prepared for each housing site and other proposed activities and will then provide necessary concurrence for the approval of disbursements of funds. World Bank OP/BP 4.12 applies the term "involuntary resettlement" to the involuntary taking of land resulting in: (i) relocation or loss of shelter; (ii) loss of assets or access to assets; (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location; or (iv) the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.

Involuntary resettlement may cause severe long-term hardship, impoverishment, and environmental damage unless appropriate measures are carefully planned and carried out. The ESMF has been developed using the OP/BP 4.12, Sri Lankan National Involuntary Resettlement Policy (NIRP), as well as the Social Impact Management Framework approved by GoSL under the Road Sector Assistance Project for addressing impacts land acquisition issues.

**Applicability and Scope.** In keeping with the project objectives, the proposed principles and guidelines will also apply to PAPs, who may be impacted through impacts on private land or other assets due to minor realignment.

## 5 Anticipated environmental impacts and mitigation

### 5.1 Environmental Profile of the Project Area

**Location and climate:** Puttalam is a coastal district situated in the North-western dry zone of Sri Lanka. Topographically, the study area is rather flat to slightly undulating and comprises of two broad regions, namely the Kalpitiya peninsula and the Puttalam mainland. The area has a dry climate with an annual rainfall of about 1000mm, which is mainly received between November-January.

**Land use:** The land in the project area is primarily used for agriculture. Approximately 75% of the lands in Puttalam and 60% of the lands in Kalpitiya (this includes areas under commercial vegetable cultivation, paddy, coconut, chena etc) are used for agricultural purposes. Fishing and prawn farming are also prominent economic activities in the lagoon and coastal strip of Kalpitiya. Mangroves and marshes occupy less than 2% of the total land area in each division. The sandy areas in the Kalpitiya peninsular, is recorded to be about 12.2% while scrubland constitutes about 15% in Kalpitiya and 10% in Puttalam.

**Water resources:** Mi-Oya is the only main surface water resource bordering the Puttalam DS division. It originates in the dry zone itself and hence has a very low water flow. Water extracted from the Mi-Oya basin is currently being used to fulfill the water requirements of the Putalam town. However, it is the groundwater that is the most important resource on which people depend on for domestic and agricultural supplies.

**Ecological resources:** The area has a characteristic combination of natural ecological features such as lagoon, marsh, sand spit, peninsular and dune landforms. Puttalam lagoon is the most prominent feature in the project area and is considered the largest saline to brackish water body in the country with rather shallow depths ranging from 1.5 –2 meters. In addition to its hydrological and ecological value, the lagoon contributes significantly to the socio-economy of the area. The peripheral areas of the lagoon comprises of critical coastal habitats that include wetlands such as mangroves, salt marshes, sea grasses etc. Mangroves in the Puttalam lagoon occur in interspersed stretches at several locations along its coastline and are often associated with salt marsh communities. The construction of salt pans and prawn farms has reduced the area of mangrove and salt marsh vegetation.
considerably. In addition, usage of mangroves for firewood, fishing gear, house construction etc also has intensified with increasing population pressure and has brought this eco-system under threat. The shallow areas of the lagoon (up to approximately about 1 meter depth) are covered with sea grasses and the seaweed beds, which are important feeding grounds for a variety of aquatic fauna. Commercial trawling and drift netting carried out in the lagoon are common causes of sea grass bed destruction.

On the landside, sand dunes are a striking feature in the Kalpitiya peninsular and extend up to 4-6 meters or more in certain cases. These play an important role in protecting and recharging the shallow aquifers that lie underneath. Much of the dune vegetation has been destroyed due to expansion of commercial vegetable gardens. In certain areas construction of houses on the sand dunes has been carried out which has had a destabilizing effect on the dunes and the dune vegetation. Patches of dry zone forests occur in the Puttalam DS division but this is not as extensive as in the adjoining Wanathavillu DS area. Various studies done in the past has reported of illicit timber feeling taking place in the forests of Puttalam and Wanathavillu.

**Socio-economy:** According to the 2001 census data, the population in the Kalpitiya and Puttalam Ds areas is 151,173. The population is multi-ethnic and consists of majority Singhalese, Muslims and Tamils. Three types of families live in the area that include resident, migrant and refugees from the war torn North and East Province. The 2001 census shows population by sector in the Puttalam DS division as 58% urban and 42% rural while in Kalpitiya 99% is rural and 1% is urban. The most important employment sectors are agriculture, fisheries, aquaculture and trade. There is also a high level of unemployment in the area. Facilities for drinking water and sanitation are generally poor while other infrastructure services in the rural areas such as roads, health and education also need to be much improved.

**Summary of main environmental issues in the area**
- Loss of natural cover and habitat change due to human settlements and cultivations
- Destruction of mangroves for collection of firewood, construction of houses and fishing crafts
- Site destruction and pollution caused by aquaculture ponds
- Destructive fishing in the lagoon and estuary
- Contamination of groundwater due to intensive vegetable cultivation and poor drainage within the settlements
- Flooding of settlements due to poor drainage
- Lack of acceptable water quality and quantity; sanitation issues

5.2 Preliminary Assessment of Environmental Issues Relevant to this Project

The purpose of this section of the report is to identify the possible environmental impacts that one needs to take into consideration in relevance to the project. The relevant information from this section should be extracted and applied when the area specific environmental analysis is conducted to determine the type of impacts and the degree of severity.

The Puttalam Housing Project aims to upgrade the living standards of IDPs in Puttalam who have been living in under-served welfare camps for many years, through the provision of housing and ancillary facilities. In addition, the project also intends to assist the non-IDP communities whose living conditions are comparable to those of the IDPs, or even worse in certain cases, through the provision of basic ancillary facilities offered by the project.

The physical environment of the project area, as stated in the preceding section, is one that presents many challenges for human habitation. The siting of IDP camps has clearly not been based on grounds of physical suitability of the land but rather on availability of vacant space and livelihood opportunities at the time people arrived in Puttalam as refugees. This is evident through some of the IDP camps, which are located in harsh environments with very poor conditions for living. Therefore, it is necessary to examine environmental issues/impacts of developing the project under the following
two broad categories: (a) impacts on the human environment (the way the existing natural environment affects quality of life) (b) impacts on the natural environment.

5.2.1 Impacts on the human environment
This section is a broad and general presentation of the environmental issues/problems present in the project area, which will need to be studied in a site-specific way once the camp sites are selected by the project.

5.2.1.1 Availability of drinking water
Water is a scarce resource in the project area for a number of reasons. Availability of drinking water of acceptable quality and quantity is one of the serious limitations encountered in the project area.

In Kalpitiya, people depend entirely on groundwater reserves as the only source of freshwater, which is present in both shallow coastal aquifers and underlying deep Miocene limestone. Kalpitiya has well developed shallow aquifers which are recharged with rain water during the periods of November – December. This represents the most important source of water as it is easier to access, amply available and cheaper to exploit. At present, the shallow groundwater resource is tapped through hand-dug wells for both irrigation and domestic use. However, the quality of water is found to be highly variable in the peninsula, which is closely linked with the land use changes that have occurred in the past 10-15 years with the onset of intensive agricultural activities. These agricultural fields are located mostly on sandy regosol (main soil type found in the peninsula) and to compensate for the rapid loss of water through infiltration, continuous irrigation along with high rate of fertilizer application is used. This process has led to a gradual build-up of nitrate concentrations in the shallow aquifers, which underlies the agricultural fields. Various studies have shown that nitrate concentration in many of the irrigation dug wells and domestic wells close to cropped areas has far exceeded the limit recommended by the WHO. The people, especially those living in close proximity to cultivated areas as in the case of many IDP settlements in the Kalpitiya peninsula, face a serious health risk of consuming nitrate contaminated water, as there is no other alternative source of water available.

The aquifers in the area are also known to be affected with salinity intrusion due to large-scale abstraction of water for irrigation and aquaculture purposes. Aquaculture industry is one of the largest consumers of ground water, both deep and shallow, in the coastal areas of the North-Western Province. In Puttalam, prawn farms are mainly found skirting the lagoon and in the areas near the Dutch canal. Local residents have complained of water in the domestic wells turning saline after the establishment of aquaculture ponds in the vicinity, most likely caused by a lowering in the local water table resulting in salinity intrusion. Occurrence of saline water is also a natural phenomenon in certain areas, especially in certain parts of the Puttalam mainland due to the soil type, proximity to the lagoon and salt pans etc. There are number of IDP settlements located very close to the lagoon area in the Puttalam mainland which are presently served by bowser supplies from the NWSDB. These supplies are often inadequate and the people have to undergo much hardship to fulfill their drinking water requirements. It is thus imperative to ensure that housing settlements supported by the project also have good source of water for drinking purposes in case the water already available at the selected sites are inappropriate for consumption.

5.2.1.2 High density settlements
Refugee camps/welfare centers are not well planned settlements although often they carry urban population densities due to lack of land and expansion of population over time. It is known that most of the IDP camps in Puttalam and Kalpitiya are over-crowded settlements with very low levels of services reaching them. Under such circumstances, a critical factor that will need close examination is sanitation. The most likely scenarios to be encountered are either the lack of sanitary facilities where people are bound to use open spaces for defecation or inappropriately designed sanitary facilities which in areas of high water table and sandy soil can easily lead to cross contamination resulting in
bacteriological pollution of water sources. Both these scenarios, given the high population densities in the camps, pose a huge health risk. Possible contamination of groundwater due to sewage poses another serious limitation on the potential of this scarce resource. Hence, it is very important that the project considers sanitation as an integral part of housing development of the IDPs in Puttalam and Kalpitiya and give clear guidelines on selection and construction of appropriate latrine types giving due consideration to local environmental factors.

Another issue possibly affecting the environmental quality in these over crowded settlements is the inappropriate dumping of solid wastes in open areas. Given the high population numbers living in the camps significant quantities of solid wastes is expected to be generated every day. It is unlikely that the local authorities in the area have the capacity to ensure regular collection and safe disposal of solid wastes generated in the IDP settlements in the areas under their jurisdiction. Wastes dumped in open grounds within or in the vicinity of the camps pose a serious health hazard as well as a possible source of groundwater contamination. The nature and extent of the solid waste problem within camps should be identified through the site specific EAs, once the camp sites are known, and an appropriate action plan should be implemented by the project which involves the community as well as the local authority. Techniques such as waste minimization, composting etc could be easily introduced the community combined with a proper awareness strategy as ways and means of tackling the problem.

5.2.1.3 Environmental pollution – health & hygiene

Exposure to sources of environmental pollution such as agro-chemicals and waste discharged by prawn farms can be critical factors affecting suitability of a given locality in the project area where permanent housing for IDPs are planned. Frequent exposure to agro-chemicals spreading through air in areas adjacent to agricultural fields where many IDP settlements are located could have serious health implications. Inhalation and direct contact of agro-chemicals is known to cause various skin ailments and even more serious conditions that could be life threatening if exposed over a long period. However, agricultural activities provide a prime source of income for the poor IDPs and being closely located to the fields is certainly an advantage. It is perhaps one of the reasons that attracted the displaced communities to the area originally despite its harsh physical conditions.

Waste channels originating from prawn farms carry significant amounts of pollutants, which are often discharged to the environment without treatment, or any other method of proper disposal. Vulnerable IDP communities, who live adjacent to areas where prawn farming is practiced, especially along the coast of the lagoon, could be exposed to pollution as a result of waste channels passing through or near the settlements. The wastewater from prawn ponds are loaded with suspended solids, pathogens, nutrients and other contaminants and can be harmful if the wastewater finds it way to drinking water sources within settlements or villages close by. The project should, through site specific EAs, carefully assess the environment within and in the immediate surroundings of the proposed sites for housing in order to identify existing sources of pollution that are a health hazard to the people and recommend appropriate measures for mitigation.

5.2.1.4 Flood prone areas

IDP camps that are located in low-lying areas near the lagoon and saltpans or other natural wetlands and drainage pathways could potentially face a risk of flooding during the rainy season. It has been observed that some of the sites in the Puttalam mainland are badly affected by this problem where the soil is largely clayey and hence impermeable. It is necessary to find out if a particular site is affected by poor drainage and water stagnation and if so to what degree the problem exists. Land filling and drainage may be required prior to constructing new houses in these sites. However, the decision to improve the current site through land filling and drainage should be based on an economic feasibility as in some cases the substantive effort and finances required would justify relocation as a more viable option given it is acceptable to the community.
5.2.2 Impacts on the natural environment

5.2.2.1 Raw material extraction

The proposed project aims to construct new houses and complete partially built houses for approximately 7885 IDP households in the Puttalam district during the project period. In addition to this project, the country is currently supporting two of the largest reconstruction efforts it has ever undertaken with the post-war reconstruction in the North and East and the post-tsunami reconstruction in the tsunami affected areas together accounting for more than 150,000 new houses. As a result, the housing sector alone has placed a sharp increase in the demand for construction material such as sand, timber, rocks and tiles, which are essentially extracted from the natural environment. The increased demand for raw material has invariable intensified mining and extraction from the environment but due the lack of a consolidated plan for sustainable harvesting of the required quantities of these raw materials, it is difficult to assess the resultant environmental damage of possible unsustainable operations. Therefore, in assessing the impact of increased extraction of natural resources caused by the project, it is important to consider the cumulative impact within the framework of the country’s limited resource base.

Sand

Sand is a key resource that is needed by the construction industry and is extracted on a commercial scale mainly from the country’s major rivers. The unregulated exploitation that has continued for long years has taken a heavy toll on the environment of some of the major rivers in the country such as Kelani, Mahaweli, Kalu, Deduru etc where seawater intrusion, collapse of river banks and sea erosion caused by reduced replenishment to beaches has caused serious repercussions leading the government to place a ban on sand mining in the western river basins. In addition to river sand, inland sand deposits, sand dunes and in a limited way beach sand deposits are used as other sources for extraction of sand in various parts of the country. The shortage of sand has been reported in many instances in the post-conflict and post-tsunami housing reconstruction. As can be seen, river sand is becoming scarce and it is important for the country to explore and develop offshore sand mining as an alternative to relieve the stress on rivers and inland deposits. Kalpitiya peninsula has well developed inland sand dunes and other sand deposits, which could be potential sources of sand for the construction of houses. As it is, sand mining from sand dunes and other deposits for construction of houses is taking place in the area. However, it is important to note that the coastal sand dunes in Kalpitiya play an important role in protecting and recharging the coastal sand aquifers, which is a main source of water in the peninsula. Therefore, it would be necessary to make a careful determination as to what sources available within district can be sustainably exploited without causing any irreversible impact on the valuable water resource. The project may seek the intervention of the GSMB, which regulates all mining activities in the country, for the identification of such sources within the district and for determining the extractable quantities from each source.

Clay

Consumption of clay also has increased significantly with the increased demand for bricks and tiles. The tile manufacturers that supply most of the industry’s market requirement are located south of Puttalam in the Chilaw District. Clay mining requires a license from the GSMB or the DS in the area to whom GSMB has delegated powers, depending on the scale of operation. Approval from the Central Environmental Authority (CEA) is also needed in certain cases for clay mining. The environmental impacts of clay mining can be quite significant if post-mining rehabilitative work is not properly carried out. The mining pits destroy the landscape, cause erosion and provide breeding grounds for many disease causing pests. The tile kilns also use large amounts of firewood. Tile production in the country is limited and is confined to a few areas where the clay with the required quality is available. In the last 2 years there has been a sharp and sudden increase in the demand for clay tiles as roofing material (as Asbestos is not a preferred option although it is still being used) with the commencement of post-war and post-tsunami reconstruction. The use of the cement blocks
instead of clay bricks has reduced the pressure on the natural resource. However, in the absence of a national plan to sustainably source the required amount, the impact of increased production on the environment is not known, as it has not been documented.

The project should take these aspects into consideration and ensure that material sourcing is facilitated through suppliers who are operating with the required licensing. Since the project cannot have a direct control on the off-site impacts, this would be one way in ensuring that a certain level of environmental standards are maintained with regard to material extraction.

**Timber**

Sri Lanka’s limited and fast declining forest resource base is inadequate to meet the total timber requirements of the country. As a result, large amounts of imported timber are used in the local construction industry, originating mainly from countries in the Far East. There is also considerable amount of illegal logging taking place in our local forests as documented by various studies and raids carried out by the police and the Forest Department. The danger in sudden and large demand for a limited commodity such as timber, as created by the on-going huge reconstruction work in the country, which is invariably accompanied with significant price escalations, is that it puts pressure on the local forests and often paves the way for illegal supplies. To leave such a situation unchecked could prove to be environmentally disastrous. The real impact on the local forest resources due to the large consumption of timber in the post-tsunami and post-war re-building is unknown as there has been no system of monitoring and documenting the sources and quantities supplied.

The project must ensure that timber for the use of project work must be supplied through registered distributors and that if any person wishes to use trees in the home garden, such as Palmyra, Coconut, Jack etc., proper approvals must be obtained from the local administration or other relevant authority. Use of cost-effective imported timber should be promoted and facilitated by the project through the registered suppliers in the district. As an alternative, the project should also evaluate the possibilities of using pre-stressed aluminium or concrete frames for doors and windows if it proves to be more cost effective.

**Coral**

The project should not use lime produced from coral as this is prohibited and environmentally damaging. Alternatives such as dolomite should be used where necessary.

**Rubble**

Quarry mining can be an environmentally damaging process if the necessary mitigatory measures are not adopted. Commercial scale quarry mining requires a license from the GSMB while smaller scale operations are regulated through licenses issued by the DS in the area. The project must ensure that rubble is sourced from approved quarries where one could reasonably assume that the licensing process ensures that the environmental concerns are taken into consideration.

5.2.2.2 **Impacts on environmentally sensitive sites**

The location of housing sites is crucial in determining the nature and magnitude of human-environment interaction. Site finalisation has not yet been carried out. While in some cases construction will take place on-site where the IDPs live at present, some will move into newly bought land in different locations. With regard to selection of new locations for new IDP settlements, the EA must ensure that encroachment on environmentally sensitive areas such as mangroves, lagoon, marshes, archeological reserves etc will not take place. In the Puttalam lagoon, several mangrove sites have been declared as special management areas managed by the Forest Department. Mangroves in the Puttalam lagoon have come under considerable threat due to various human activities such as aquaculture, encroachment, and firewood collection. It is also observed that some of the IDP settlements in the Kalpitiya division have destroyed mangroves and that people continue to cut mangroves as firewood. Where destruction has already taken place due to settlements being paced in
sensitive areas, options may be limited for on-site remediation. However, the EA can propose ways and means of mitigating or enhancing other sites as a compensatory measure.

6 Methodologies and guidelines to assess impacts under different components
Assessment of the level of analysis required
The proposed project consists of primarily two components that have the potential to trigger negative environmental impacts; the housing component and the infrastructure component. In order to determine the depth of environmental analysis required for activities supported under each component, it is necessary to look at the nature and magnitude of the issues that would possibly have to be addressed in terms of project implementation. This section will discuss the different scenarios under which the housing and infrastructure activities will be developed upon and accordingly recommend the level of environmental analysis & treatment that would be needed to ensure environmental sustainability of the project. The guidelines are in accordance with the policies and regulations of both the GOSL and the World Bank.

Housing component
On-site environmental impacts of house construction will largely be determined by the final sites selected for the permanent houses. Although the identification of the final sites where the new houses will be constructed is yet to be completed, three broad scenarios are being discussed at present. The project will finance houses that will be built either on the (a) present site of the camp (b) adjacent land to the existing camp or (c) in a completely new site involving relocation of beneficiary IDP families, all of which present different situations under which environmental safeguards can be applied.
(a) Construction of a new house at the present site of the camp is not expected to cause serious negative environment impacts on-site as the site has already been altered by the IDPs at the time the settlement was originally established. In fact the environmental impacts would be off-site where the raw materials for the construction work are sourced. Therefore, a detailed environmental analysis will not be needed for those settlements where the new houses will be built at the same location where the present living quarters of the people exist. An environmental questionnaire that could perform a rapid scoping of the anticipated and existing environmental concerns within and in the surrounding of the site with the subsequent preparation of a simple Environmental Management Plan (EMP) would suffice. It is recommended that the environmental questionnaire is designed based on observations captured through a pilot field visit to a representative sample of sites within the project area.
(b) Construction of houses in the adjacent block of land to the existing camp also is unlikely to raise significant environmental concerns. The adjacent land could be one large block or several small blocks of land between the camp and the next camp/village or in some cases an open space that is only bordered from one side by the existing camp. High human activity is generally observed in and around the IDP settlements, which often tend to be present in clusters rather than as stand-alone settlements. Therefore, it is assumed that the surrounding land of IDP settlements have been subjected to a certain degree of human presence for the past 10-15 years and that the environmental issues would not be significantly different. A questionnaire based quick environmental assessment with an EMP to address the site-specific issues identified would suffice in most cases. However, if a particular sensitivity of a given site provides justification for more in depth analysis, a full EIA or a detailed assessment of the identified issue will be carried out.
(c) Environmental implications of site development in totally new locations could prove to be more significant than scenarios discussed in (a) and (b). Since it is not yet known where the new relocation sites are, it is not possible to anticipate the scope and significance of the likely environmental issues that will have to be encountered. Therefore, it is recommended that all sites be subjected to a quick scanning of potential issues with the EQ and then based on the information an EIA or a less detailed EA focusing on the identified aspects be carried out.
With regard to off-site impacts of raw material extraction, it is recommended that the project prepare a plan for sustainably acquiring/harvesting the required quantities of each construction material. The
plan should take stock of material that is available within the project area that could be sustainably harvested, its sources and extractable quantities with the help of the relevant regulatory authority, identify potential sources for material that needs to be facilitated from other parts of the country, establish procedures to ensure that the necessary licenses and approvals are in place or ensure that supply sources are approved/licensed from the relevant regulatory authority. The project management unit should take on the responsibility of ensuring that the administrative and logistical aspects of implementing/facilitating this plan are taken care of.

Infrastructure component

Water supply and sanitation – The project intends to provide good quality drinking water and improve the sanitary facilities for selected IDP and non-IDP communities. In terms of water supply, the options can range from simple on-site extraction from hand-dug wells or tube wells, with or without pumping, to more complex piped water systems with treated water from a source off-site. The choice of technology will primarily depend upon the availability of an adequate water source and the quality of water, which will need to be determined by a technical feasibility study. Similarly, the type of sanitation for a given location will be identified through a feasibility study, which could range from simple on-site disposal to water borne sewerage systems with suitable treatment and disposal depending on the environmental conditions of the area.

In general, improvement to rural water supply and sanitation together are expected to generate positive health and environmental impacts through increased hygiene and protection of water sources from bacterial contamination. However, one main environmental concern in developing water resources is the possible shortages that can result through over-exploitation of the resource and the resultant long-term implications on competition for water between the domestic, agricultural and commercial sectors. Therefore, it is necessary to ensure that water resources management will form an integral component of the planning and implementation process of water supply sub-projects. Apart from this, water supply and sanitation sub-projects are expected to be environmentally beneficial and hence separate environmental assessments will not be required. Furthermore, the technical feasibility studies that will be carried out prior to planning and designing sub-projects are expected to address some of the issues such as source sustainability, quality and possible user conflicts. However, it is recommended that Environmental Management Plans (EMPs) for watershed management are prepared and implemented to protect and manage the water sources. In addition, environmental codes of best practice should be introduced for all civil work that is involved.

Internal roads – Upgrading of existing internal roads (class D and E) is not expected cause significant environmental impacts and hence will not require a separate environmental assessment. Construction of new internal roads, if undertaken, will involve more impacts than upgrading although they are still expected to be localized and not significant enough to require a separate environmental assessment. Therefore, development of environmental management plans which includes environmental codes of practice (ECOPs) to be carried out by the selected contractor, for each settlement that will have an internal road/s built/upgraded would be considered sufficient.

7 Guidelines for preparation of Environmental Management Plans

Having identified the potential impacts of the proposed project activities, the next most important step of the Ea process is the identification and development of measures aimed at eliminating, offsetting and/or reducing impacts to levels that are environmentally acceptable during implementation and operation of the project. EMPs provide an essential link between the impacts predicted and mitigation measures specified within the EA and implementation and operation activities. World Bank guidelines state that detailed EMP’s are essential elements for Category A projects, but for many Category B projects, a simple EMP alone will suffice. While there are no standard formats for EMPs, it is recognized that the format needs to fit the circumstances in which the EMP is being developed and the requirements, which it is, designed to meet. EMPs should be prepared after taking into account comments from both the GOSL (if relevant) and IDA as well as any clearance conditions.
Annex C of OP 4.01 of the World Bank safeguards outlines the important elements of the EMP and guides its preparation. Given below are the important elements that constitute an EMP.

a. Identification of impacts and description of mitigation measures
Firstly, Impacts arising out of the project activities need to be clearly identified. Secondly, feasible and cost effective measures to minimise impacts to acceptable levels should be specified with reference to each impact identified. Further, it should provide details on the conditions under which the mitigatory measure should be implemented (ex; routine or in the event of contingencies) The EMP also should distinguish between type of solution proposed (structural & non structural) and the phase in which it should become operable (design, construction and/or operational).

b. Enhancement plans
Positive impacts or opportunities arising out of the project need to be identified during the EA process. Some of these opportunities can be further developed to draw environmental and social benefits to the local area. The EMP should identify such opportunities and develop a plan to systematically harness any such benefit.

c. Monitoring programme
In order to ensure that the proposed mitigatory measures have the intended results and complies with national standards and donor requirements, an environmental performance monitoring programme should be included in the EMP. The monitoring programme should give details of the following:
• Monitoring indicators to be measured for evaluating the performance of each mitigatory measure (for example national standards, engineering structures, extent of area replanted, etc).
• Monitoring mechanisms and methodologies
• Monitoring frequency
• Monitoring locations

d. Institutional arrangements
Institutions/parties responsible for implementing mitigatory measures and for monitoring their performance should be clearly identified. Where necessary, mechanisms for institutional co-ordination should be identified as often monitoring tends to involve more than one institution.

e. Implementing schedules
Timing, frequency and duration of mitigation measures with links to overall implementation schedule of the project should be specified.

f. Reporting procedures
Feedback mechanisms to inform the relevant parties on the progress and effectiveness of the mitigatory measures and monitoring itself should be specified. Guidelines on the type of information wanted and the presentation of feedback information should also be highlighted.

g. Cost estimates and sources of funds
Implementation of mitigatory measures mentioned in the EMP will involve an initial investment cost as well as recurrent costs. The EMP should include costs estimates for each measure and also identify sources of funding.

h. Contract clauses
This is an important section of the EMP that would ensure recommendations carried in the EMP will be translated into action on the ground. Contract documents will need to be incorporated with clauses directly linked to the implementation of mitigatory measures. Mechanisms such as linking the payment schedules to implementation of the said clauses could be explored and implemented, as appropriate.

Consultation with affected people in preparing the EMP will be an integral part of all Category A projects and is recommended for Category B projects.

8 Institutional Arrangements for conducting the Environmental Assessment

It is expected that each housing site will be subjected to a separate environmental analysis as described in section 7.0. The type of housing criteria discussed in the same section will determine the institutional input that is required to manage and clear the environmental assessments. However, the PMU will need to forward the project information to the Project Approving Agency (PAA), which in this project would be the North Western Provincial Environmental Ministry and/or the Coast Conservation Department (for coastal areas) as described in section 3.0 of the document. On examination of the preliminary information submitted, the PAA will determine the type of assessment required and furnish the project proponent with the necessary ToR to conduct the impact assessment. World Bank approval of the ToR is required as well.

The project proponent through hired consultants will carry out the EA and submit the report to the PAA for review and subsequent approval. Approval from the PAA will be subject to certain conditions, which will have to be implemented and monitored over the lifetime of the project. Upon receiving approval from the PAA, the EA will be forwarded to the World Bank for concurrence, prior to disbursement. Once the project is approved and implemented, monitoring of implementation progress of each sub-project will be carried out periodically by the project proponent, the PAA and the World Bank. Monitoring carried out by the project proponent will be more frequent and the progress will be fed back to the PAA and the World Bank. This type of frequent monitoring is very important for mid-course correction.

According to GOSL regulations, on-site housing reconstruction will not require an environmental assessment. Similarly construction on the adjacent land and totally new relocation sites will require an environmental assessment only if it falls into one of the prescribed categories. Since the sites are not yet known as yet, it is too early to comment on the level of analysis that the PAA will recommend. However, IDA safeguard policies require that all sites be subjected to an environmental assessment (as recommended in this document) and be cleared before fund disbursement takes place. The Environmental Specialist at the PMU will be directly responsible for all environment related work, take the lead role in initiating the processes described above and for obtaining GOSL and IDA concurrence for each site-specific EA, as relevant. The PMU will also ensure that the participation and involvement of the District/divisional Environmental Officers in the project environmental work is facilitated with the objective of building capacity in the region as well as for ensuring that monitoring activities are carried out as part of their routine work.

9 Social Safeguards and other Social Issues

The proposed program is expected to have considerable positive impact by permanently settling the IDPs in Puttalam through the housing grant and upgrading of water supply and roads. The better living conditions will help the IDPs to upgrade their socioeconomic status and integrate into the Puttalam society. The IDP camps already display strong social cohesion, and they will develop even stronger social capital as communities plan and execute their own housing projects in conjunction with Government, partner NGOs and international agencies.

Negative social impact is expected to very limited. None of the Puttalam Housing Project (PHP) components include activities that trigger a drastic change in the local economic infrastructure with adverse social consequences. There will be no involuntary settlement under PHP, but minor land
acquisition may be required for the Infrastructure component for realignment and improvements and temporary impacts on private assets along the ROW due to construction activities during implementation phase. These minor impacts are not known at this stage, hence the need for the ESMF to screen for land acquisition through the EA mechanism.

**IDA Operational Policies and Mitigation Measures**
There will be no involuntary settlement under PHP, as the whole project is designed around the idea of voluntary resettlement of IDPs, who can document uncontested landownership and are fully informed through a communication campaign about the consequences and implications of opting for a housing grant for resettlement in Puttalam. Support for resettlement is furthermore contingent upon documentation of legitimate ownership of land. According to the UNHCR-supervised survey, 74% of IDP families indicated that they own land of whom 72% purchased land. Of those landowners with documentation, 97% have outright deeds, whereas only a small proportion have permits (1.5%), grants (1%) or leases (0.5%). 55% of families with land already had documentation, while others are in the process of obtaining land title deeds.

This ESMF includes guidelines and tools to screen activities for their social impact and the methodology for addressing OP 4.12 if the need arises. The operational policy on Involuntary Resettlement (OP 4.12) may apply if the needed land for the resettlement of landless IDPs is alienated by the Government. This is not expected to take place during the first phase of the project – and the alienated land in question should in any event only be government land, since GoSL policies on Prescriptive Titles are incompatible with OP 4.12. Furthermore, alienating private lands on the basis on ordinance on Prescriptive Titles would furthermore greatly increase the risks of inter-community tensions and conflicts.

Minor land acquisition may be required for the Infrastructure component for realignment and improvements and temporary impacts on private assets along the ROW due to construction activities during implementation phase. These minor impacts are not known at this stage, hence the need for the ESMF to screen for land acquisition through the EA mechanism.

There are no Indigenous Peoples among the IDPs, who comprise 98.8% Muslims and the rest being Sinhalese.

**Mitigation Principles**
- Absence of legal title will not be considered a bar to compensation for non-land assets created by the public land users. Vulnerability of the project-affected persons, 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, etc. the project will rebuild such facilities and provide for alternative access.
- The project executing agency and GoSL will bear the costs of implementing the ESMF

**Impact Mitigation Modalities**
The following types of losses may result from Project intervention and will be mitigated:
- Temporary displacement of mobile vendors and other vulnerable encroachers: The project will ensure that their livelihood is not affected by helping to relocate them during construction phase.
- 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. Any claim for compensation by affected people after the cut-off date will be ineligible for compensation.
- If there is acquisition of small pieces of land for realignment and improvements, the land acquisition process of the government will be followed and compensation paid at market rates.
• For impacts on fixed physical assets of affectees including structures, walls, gardens, gates, etc., located in the ROW and impacted by the project’s construction intervention, the owners will be compensated at replacement cost.

• Encroacher-owners of the affected businesses will be compensated for temporary loss of income based on net income, or an one-time lump sum grant

• 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.

• In the situation of voluntary land donation, the Project will ensure the verification of voluntary nature of donation; that the land is unencumbered, that community based mitigation measures are acceptable, that a grievance redressal system is in place, that the person(s) give up all claim to the donated land and that the land is transferred in the name of the Government /Department.

Impacts and PAPs Eligible for Compensation Assistance
The mitigation principles and impact mitigation modalities are operationalized by defining and categorizing the potential impacts/losses which will qualify for mitigation. Besides these, any unforeseen impact, as and when encountered, will be mitigated with appropriate measures. The following will qualify for compensation:

• 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.

• Business and Wage Income/ informal Users of public land: Vulnerable squatters and encroachers residing on public lands and undertaking income earning activities in the ROW will be assisted to cope with the change.

• Provision of alternative permanent place: Temporary encroachers who have been provided with a permanent place for business earlier will not be eligible for assistances.

• Structures on Public Lands: All built structures would be compensated at replacement cost.

• Unforeseen losses/impact including: All other losses/impacts that are not known but may get identified in PAP census will be mitigated with appropriate measures (where they qualify).

• For adverse impacts on community facilities, such as educational institutions, places of worship, graveyards, cremation grounds etc., no financial compensation will be paid directly to affectees, furthermore, Project Approving Authority will rebuild the affected facilities, or provide alternatives in consultation with the user communities. Similarly for loss of income earning opportunities or access to crucial common property resources, the project will provide alternatives to restore and improve their livelihood.

Compensation Payment
PHP with financial support from GOSL and implemented through the Divisional Secretary will pay all non land compensations/entitlements as laid out in the entitlement framework to all eligible affected persons/households. Furthermore, all compensations and assistance to PAPs must be paid in full prior to dispossession of affected assets in the project. For any land related impact (although not envisaged) compensation will be paid under the Land Acquisition Act and payments be made at market rates.

Mitigation Entitlement Policy Matrix
For addressing potential impact/loss categories, entitlement and entitled persons, a Compensation Entitlement Policy Matrix has been developed and included in Annex 1 (same as the Entitlement Matrix used by the ADB projects and accepted by the GOSL).

Temporary loss of private land to obtain materials for fill and embankment during construction
Temporary occupation contract between owner/title-holder and contractor will specify the period of occupancy, terms and conditions, payment for material losses and other disturbances or damages to property and rehabilitation and restoration measures agreed upon between both parties. Land should
be returned to the owner at the end of temporary acquisition period, restored to its original condition or improved as agreed with the AP. Project and the contractor to ensure that persons other than the owner affected as a result of temporary acquisition are compensated for the temporary period. Extreme care shall be taken by contractors to avoid damage to public or private property and where damages to public or private property occur as a result of construction works, the AP (individual, household, authority, community or utility or service provider) shall be compensated for damages to structures.

**Consultation & Information Dissemination**

The project executing agency will ensure that all stakeholders are consulted and informed about the project’s expected impacts, proposed impact mitigation policies, and implementing process that would be followed. Stakeholder consultations will be an on-going activity during the planning and implementation stages of the project/sub project. Stakeholder consultation will be inclusive of all groups (particularly gender and vulnerable groups), participatory and transparent. The consultations will be aimed at seeking feedback on project design and its implication. In addition the following topics will be discussed in greater details:

- Principles and modalities adopted for mitigation
- Affected persons/households and assets eligible for compensation
- Grievance redressal mechanism – its function, procedure to lodge grievances, etc
- PAA’s role in facilitating shifting of informal business located in ROW
- Any other issues/topic deemed useful to explain the entitlement framework

The process will be documented with minutes of the meetings, dates, venues, number of participants, issues/topics discussed, major feedback which may have policy implications for project design considerations, and any agreements that may have been reached. Documentations will be available to all stakeholders including IDA supervision missions.

**Concerns on Other Social Impacts and Mitigation Measures**

Besides the safeguards issues, a number of concerns of potential reputational character for the PHP and the WB were raised during (i) the Social Assessment, (ii) the Household Survey conducted by UNHCR to update their 2004 HH Survey to capture current IDP socioeconomic conditions, land ownership, types of current housing, and attitudes towards permanent settlement vis-à-vis return; (iii) several field visits by WB teams to the area over the past year, and (iv) consultations with the various government institutions over the past months, notably with the Ministry of Housing and Reconstruction, Ministry of Resettlement, Ministry of Nation Building and Resettlement, the District Secretariat of Puttalam, and the Muslim Peace Secretariat. Areas of concern included identification of beneficiaries, land ownership, conflict potential, Grievance Redressal, Communications Campaign, Continued Social Impact Assessment, Gender Equity and Village Social Profile. These concerns have been largely addressed in the design of the program.

**Conflict Mitigation**

The main risk of negative social impact is in the form of increased social tensions between the IDPs and permanent residents of Puttalam. The evicted Northern Muslims were initially seen as temporary IDPs and were provided considerable support by local residents of Puttalam. Gradually, IDPs have purchased land in and outside the camps. Over time, it became clear that the IDPs were not in Puttalam on a temporary basis since it was not possible for them to return to their place of origin given the security environment. Subsequently, the positive attitudes of the host community (or non-IDPs) underwent changes. The IDPs in the camps are residing in four divisions of Puttalam district: Kalpitiya DS Division (58%), Puttalam DS Division (30%), Mundel DS Division (8%) and Vanathavilluwa DS Division (3%). In some areas, relations between IDPs and non-IDPs have manifested in open conflict (few cases), underlying tensions, and segregation, i.e. no interaction. In
many cases, the non-IDPs are at the same level of poverty as the IDPs; consequently struggles for access to limited services (water, health, education) have multiplied.

The Social Assessment of the IDP camps, conducted in 2006, raised concerns that housing assistance for IDPs may increase resentments towards them, and even lead to latent conflicts turning openly violent. In order to mitigate these actual and potential risks, the project includes support to the permanent residents in terms of water supply and improved roads, according to a combination of criteria of need and actual conflict mitigation. Additionally, the continuous process of social impact analysis will be commissioned for the duration of the IDA financed program to ensure that social issues, particularly inter-community conflict issues are promptly and adequately addressed.

Another way of addressing these latent tensions is to ensure that the employment opportunities generated by the project will go almost entirely to the local citizens, IDPs and permanent residents alike. Laborers, contractors, sourcing material required by the project should to the extent possible, be drawn from the local economy. Thus reconstruction of houses will have a multiplier effect in the form of increased employment and economic activity throughout the district. In addition to income generation activities, the project may also help in the creation of a sense of community given that different sets of groups will work together.

In order more directly to contribute towards preventing the emergence of hostilities between IDPs and non-IDPs, the PHP has allocated budget for access to ancillary infrastructure (only water and internal roads) by non-IDPs, in order to address a number of their valid concerns. However, it is possible to cover only a certain number of non-IDP communities under this credit.

**Communication Campaign**

The PRP will constitute the first voluntary resettlement project of displaced people in Sri Lanka, and it will thus set a precedent for future resettlement of any category of displaced peoples anywhere in the country. A communication campaign will ensure that the IDPs be informed about their key issues of concern (listed below) along with information regarding the beneficiary identification criteria to be applied in the project, strategy (e.g. owner-built houses), size of housing grant, grievance redressal mechanism, in order to be able to make informed decision regarding their inclusion in the project or not. The communication campaign should preferably be implemented by a third party and ensure wide coverage both among IDPs, host community and civil servants to ensure clarity and transparency in project policies and implementation, which will be a precondition for minimizing false rumors and anxieties which may otherwise cause increased inter-community tensions.

**- The Right to Return.** The UNHCR survey indicates that over 95% of IDPs in refugee camps show a preference to permanently reside in Puttalam given the uncertainty with regards to the peace process and security situation. This willingness to reside in Puttalam however is, according to UNHCR, predicated on the understanding that the IDPs right to return to place of origin at some future point will be preserved.

**- The Right to Compensation.** The potential beneficiaries are uncertain whether they by accepting housing assistance in Puttalam thereby forego the right in the future to claim compensation for losses and the rights to property claims in their place of origin.

**- Residency and Political Rights.** According to the UNHCR survey, almost 95% of registered voters among the IDPs are still registered in their place of origin rather than in their place of displacement, and accessing IDP dry rations rather than being covered by e.g. the poverty alleviation schemes of the given locality. There are also lack of clarity regarding (i) whether recipients of housing assistance will be de-registered as IDPs, and instead become regular residents of Puttalam with equal access to social services, poverty alleviation programs and so forth, without any restrictions based on their displaced status. (ii) whether recipients of housing assistance no long will be registered as voters in their place of origin but instead be added to the voter registration list of their place of permanent settlement, and whether such a transfer will be optional or mandatory as is the case of other Sri Lankan citizens.

The surveys and consultations of the IDP camps and among the surrounding host community demonstrated considerable anxiety and confusion regarding what is the government policy on all the
above issues. The present situation is thus one of considerable anxiety and plenty of rumors across the IDP camps in Puttalam and among the settled population of that district, which adds to tensions in an already politically volatile situation.

**Gender Equity Issues**

Special provisions will be introduced to ensure gender equity. All recipient bank accounts set up under the project will be joint accounts in the name of both spouses unless it is a single-headed household. Prevalence of women-headed households (and other vulnerable groups) is given special weightage under the selection criteria for camps.

**Continuous Social Impact Assessment**

The continuous social impact assessment (CSIA) will facilitate the articulation of community perceptions, grievances and feedback vis-à-vis the selection of IDP camps, the identification of beneficiaries and the mobilization of resources. The CSIA will help monitor the social dimensions of the Puttalam Resettlement Project and flag potential inter-community conflict issues and reputational risks. Through direct interaction with beneficiary communities it will carry out an independent evaluation of the project implementation and distribution of program benefits. The CSIA study will gauge the impact of the program and help to undertake necessary mitigation measures. In terms of its reporting, the CSIA will bypass the parallel divisional and district level monitoring mechanisms and report directly to the PPU, which in turn would table its report to the project steering committee. This is anticipated to have two benefits. The CSIA will offer an opportunity for residents to flag possible instances of a misappropriation of funds at the divisional level and enable marginalized members of the community to articulate their grievances outside the administrative framework for corrective action under the Puttalam Housing Project.

The CSIA will review the camp selection procedure, the identification of beneficiaries and housing needs assessment, grievance redressal mechanisms and other social safeguard issues on an ongoing basis. It will assess impact after the completion of the construction of houses each year. It will include the annual social audit and impact assessment aimed at highlighting implementation weaknesses, social issues and grievances and provides feedback with specific recommendations for actions to district and provincial level authorities. Some of the specific objectives of are as follows:

- Record public opinion, concerns and grievances and present them in formal decision making forums such as the Project Steering Committee.
- Identify social risk mitigation measures.
- Guide and conduct independent social and community audit to mitigate any possible negative effects and enhance positive effects.
- Review social safeguard issues and prepare checklists to ensure social soundness to minimize social exclusion.

The Social Assessment of the IDP camps (2006) and the update of UNHCR’s Household Survey (2006) will provide baseline data for the continuous social impact assessment.
### Annex 1: Compensation/Entitlement Matrix of the Project

<table>
<thead>
<tr>
<th>Type of loss</th>
<th>Entitled Persons</th>
<th>Entitlements</th>
<th>Intent/Requirement</th>
<th>Responsibility</th>
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</thead>
<tbody>
<tr>
<td><strong>A. AGRICULTURAL LAND</strong></td>
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<tr>
<td>Loss of Agricultural land</td>
<td>Owner with title deed or registration certificate</td>
<td>All (cash) payments for land will be at replacement costs. Cash payment for loss of standing crops and trees at market prices. In case the AP loses 10% or more of their productive, income generating assets and / or remaining portion is economically not viable for continued use as determined by LARC, these options will be available: - If opted by AP, the remainder land will be acquired at replacement cost if economically not viable. Reasonable time will be given to harvest perennial crops if not payment will be made at market value. Preference will be given to APs for land for land option (similar location and productive quality, subject to availability OR cash payment for loss of land at full replacement costs. Rehabilitation package – Items G2, G3 i, G 3 iii, if staying on the land and G3 ii if required. Cash Payment for loss of income for portion of land as per the land acquisition Act or as determined by the chief valuer.</td>
<td>Payment for lost assets and restoration of livelihood. Payment for loss of income based on entitlement under Land Acquisition Act [46 1 (iii)] or as determined by the chief valuer.</td>
<td>Project Approving Authority (PAA), Divisional Secretary (DS), LARC.</td>
</tr>
<tr>
<td>Type of loss</td>
<td>Entitled Persons</td>
<td>Entitlements</td>
<td>Intent/Requirement</td>
<td>Responsibility</td>
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<tr>
<td>Loss of access to agricultural land</td>
<td>Tenant, user with lease</td>
<td>No payment for land. Cash payment for loss of standing crops and trees at market prices, if cultivated by tenant or user with lease; AND Cash payment for loss of net income for portion of land affected for the remaining leased/assigned period; OR Cash payment for loss of future production for the lease period from the portion of land affected equivalent to average annual income from the portion of land affected in preceding three years, whichever is the higher. Assistance in negotiating a new lease agreement on alternative land if the AP does not wish to continue to cultivate land of reduced area. In case remaining portion is not physically possible for cultivation economically not viable for continued use as determined by CV, then assistance in negotiating a new lease agreement on alternate land of similar size and productive value if the AP cannot remain on the land AND Rehabilitation package — Items G2, G3 i, G 3 iii, if staying on the land and G3 ii if required.</td>
<td>Payment to cover lost crops and restoration of livelihood</td>
<td>PAA, DS, LARC.</td>
</tr>
<tr>
<td>Type of loss</td>
<td>Entitled Persons</td>
<td>Entitlements</td>
<td>Intent/Requirement</td>
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<tr>
<td>Loss of access to agricultural land</td>
<td>Ande farmer (sharecropper)</td>
<td>No payment for land. Cash payment for loss of standing crops and trees at market prices; AND Transition subsistence (in cash or kind) allowance equivalent to loss of crop or harvest for portion of land affected for the remaining period of sharecropping agreement; OR Cash payment for loss of future production equivalent to average production from the portion of land affected in preceding three years, whichever is higher; AND Assistance in negotiating a new sharecropping agreement on alternative land if the AP does not wish to continue to sharecrop land of reduced area. Assistance in negotiating a new sharecropping agreement on alternate land of similar size and productive value if the AP cannot remain on the land AND Rehabilitation package - Items G.2, G.3 i, G.3 iii if staying on the land or G3 i if required.</td>
<td>Payment to cover lost crops and restoration of livelihood</td>
<td>RDA, CV, DS, LARC.</td>
</tr>
<tr>
<td>Type of loss</td>
<td>Entitled Persons</td>
<td>Entitlements</td>
<td>Intent/Requirement</td>
<td>Responsibility</td>
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<tr>
<td>Loss of access to agricultural land</td>
<td>Non-titled user or squatter on private land or state land</td>
<td>No payment for land. Cash payment for loss of standing crops and trees at market prices, if cultivated by him; AND Cash Payment for loss of future production from the portion of land affected equivalent to average annual income from the portion of land affected in preceding three years; If the AP has no other land or cannot remain on the land, the AP will receive the following: - Cash payment for loss of standing crops and trees at market prices to the squatter. The project will provide if available an alternative plot of land for cultivation of equal productive value under rental / lease arrangements. Rehabilitation package - Items G.2, G.3i, G.3 iii if staying on the land or G3 ii if required.</td>
<td>Payment to cover lost crops and restoration of livelihood.</td>
<td>RDA, CV, DS, LARC.</td>
</tr>
</tbody>
</table>

**B. RESIDENTIAL LAND AND STRUCTURES**
<table>
<thead>
<tr>
<th>Type of loss</th>
<th>Entitled Persons</th>
<th>Entitlements</th>
<th>Intent/Requirement</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of Residential land and structure</td>
<td>Owner with title deed or registration certificate</td>
<td>All (cash) payments for land and structure will be made at replacement costs. All payments at replacement cost in material, cash, or a combination of both according to the actual loss to repair or rebuild the structure to original or better condition when remaining land sufficient to rebuild upon; For structures not having sufficient land to rebuild upon will be entitled to the following: All (cash) payments for land and structure at full replacement cost (for materials and labour) in material, cash, or a combination of both, WITHOUT deduction for depreciation or salvageable materials; Assistance from LARC to locate alternative plot for relocation; OR relocation to a resettlement site developed by the project if opted by AP. Rehabilitation package G 2. Shifting allowance see G1.</td>
<td>Payment for lost assets, assistance to reorganize on existing land or relocate on alternate land and support for transition period.</td>
<td>PAA, DS, LARC.</td>
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</tbody>
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<thead>
<tr>
<th><strong>Type of loss</strong></th>
<th><strong>Entitled Persons</strong></th>
<th><strong>Entitlements</strong></th>
<th><strong>Intent/Requirement</strong></th>
<th><strong>Responsibility</strong></th>
</tr>
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<tbody>
<tr>
<td>Loss of rental accommodation</td>
<td>Tenant, user with lease</td>
<td>If there is partial loss of rental accommodation, AP has the option to stay with the owners agreement OR if AP choses to move out, cash assistance for 6 months rental allowance AND Assistance in finding new affordable rental accommodation AND Shifting assistance (Item G1 i) If there is complete loss of rental accommodation, AP has the option of cash for the value of the remaining lease OR Cash assistance to cover rental arrangements for minimum period of 6 months of equivalent standard and advance payments as determined by the chief valuer to owner on a case to case basis which ever is higher. Assistance in finding new affordable rental accommodation AND Shifting allowance and Rehabilitation package – Items G.1 ii and G.2.</td>
<td>Cash payment for rental allowance or cash value of remaining lease, assistance for finding alternate rental accommodation and support during transition period.</td>
<td>PAA, DS, LARC.</td>
</tr>
<tr>
<td>Type of loss</td>
<td>Entitled Persons</td>
<td>Entitlements</td>
<td>Intent/Requirement</td>
<td>Responsibility</td>
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</tr>
<tr>
<td>Loss of residential structure</td>
<td>Non-titled user, non-permitted user or squatter</td>
<td>No payment for land. All payments for structure at replacement costs in materials, cash or a combination of both according to the actual loss for repairing or rebuilding the structure; AND If affected land is state land AP may rebuild on the remaining land, and if affected land is private land the project will encourage AP to relinquish the land and relocate on alternate land or resettlement site provided by the project; If APs can rebuild on existing land then shifting assistance G 1 i. If AP has to relocate then Rehabilitation package – G 1 ii and G 2.</td>
<td>Payment for lost assets, assistance to reorganize on land or provision of alternate site if choosing to relocate and support for transition period.</td>
<td>PAA, DS, LARC.</td>
</tr>
</tbody>
</table>

C. COMMERCIAL LAND AND STRUCTURE
<table>
<thead>
<tr>
<th>Type of loss</th>
<th>Entitled Persons</th>
<th>Entitlements</th>
<th>Intent/Requirement</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of commercial land and structure</td>
<td>Owner/operator of registered business</td>
<td>All (cash) payments for land lost at full replacement cost; Payment at replacement cost in material, cash, or a combination of both according to the actual loss to repair or rebuild the structure to original or better condition when remaining land sufficient to rebuild upon; Payment for any associated loss of income while commercial structure is being rebuilt. For structures not having sufficient land to rebuild upon will be entitled to the following: All (cash) payments for structure lost at full replacement cost (for materials and labour) in material, cash, or a combination of both, WITHOUT deduction for depreciation or salvageable materials; Assistance from LARC to locate alternative plot for relocation; OR relocation to a resettlement site developed by the project if opted by AP on recovery of the undeveloped value of the plot. For income losses cash payment not exceeding three times the average annual net profits from business, as shown by the books of accounts, for three calendar years immediately preceding acquisition or livelihood restoration grant, which ever is higher Rehabilitation Package – G 2 and G3 ii if required. Shifting allowance see G1.</td>
<td>Project shall give reasonable time for APs to continue their business operation while rebuilding their structures. APs will rebuild their structure as soon as payment is released and clear the area in the agreed timeframe. Transition assistance and income restoration.</td>
<td>PAA, DS, LARC.</td>
</tr>
<tr>
<td>Type of loss</td>
<td>Entitled Persons</td>
<td>Entitlements</td>
<td>Intent/Requirement</td>
<td>Responsibility</td>
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</tr>
<tr>
<td>Loss of commercial Structure</td>
<td>Tenant/operator of registered business</td>
<td>If there is partial loss of structure, AP has the option to stay with the owners agreement OR if AP choses to move out, cash assistance for 6 months rental allowance AND Assistance in finding new affordable rented premises to re-establish business AND Payment for any associated loss of income while commercial structure is being rebuilt. If there is complete loss of structure, AP will be entitled to the following:- Cash for the value of the remaining lease OR Cash assistance to cover rental arrangements for minimum period of 6 months of equivalent standard and advance payments as determined by the chief valuer to owner on a case to case basis which ever is higher AND Assistance in finding new affordable rental premises to operate business. For income losses cash payment not exceeding three times the average annual net profits from business, as shown by the books of accounts, for three calendar years immediately preceding acquisition or livelihood restoration grant, which ever is higher Rehabilitation Package – G 2 and G3 ii if required. Shifting allowance see G1.</td>
<td>Cash payment for rental allowance or cash value of remaining lease, assistance for finding alternate rental accommodation and support for income losses and during transition period.</td>
<td>PAA, DS, LARC.</td>
</tr>
<tr>
<td>Type of loss</td>
<td>Entitled Persons</td>
<td>Entitlements</td>
<td>Intent/Requirement</td>
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<tr>
<td>Loss of commercial Structure</td>
<td>Owner or operator of non-registered business / squatter</td>
<td>For structure – all payments for structure lost at replacement cost in material, cash, or a combination of both according to the actual loss; AND For income - cash payment equivalent to 6 months income OR Livelihood assistance grant, whichever is the higher; AND If affected land is state land AP may rebuild on the remaining land, and if affected land is private land the project will encourage AP to relinquish the land and relocate on alternate land or resettlement site provided by the project subject to availability; AND Rehabilitation package – Items G.2, and G.3 ii if required. Shifting allowance see G1.</td>
<td>Payment for lost assets, transition assistance and income restoration</td>
<td>PAA, DS, LARC.</td>
</tr>
<tr>
<td>D. OTHER PRIVATE PROPERTIES OR SECONDARY STRUCTURES</td>
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<tr>
<td>Partial or complete loss of other property or secondary structure (i.e. shed, outdoor latrine, rice store, animal pen etc)</td>
<td>Owners of structures (regardless if the land is owned or not)</td>
<td>All (cash) payments for affected structure at replacement cost; OR Cost of repair of structure to original or better condition; OR Cash assistance for relocation of structure.</td>
<td>Payment for loss and relocation if required</td>
<td>PAA, DS, LARC.</td>
</tr>
<tr>
<td>Loss of tombs or graves</td>
<td>All owners</td>
<td>All (cash) payments an amount of Rs. 2000 up to Rs. 15,000 to cover the cost of exhumation (including any religious ceremonies if required) and relocation</td>
<td>Payment for loss and relocation if required</td>
<td>PAA, DS, LARC.</td>
</tr>
</tbody>
</table>

**E. LOSS OF INCOME OF EMPLOYEES OR HIRED LABORERS**

**E.1 Temporarily Affected**
<table>
<thead>
<tr>
<th>Type of loss</th>
<th>Entitled Persons</th>
<th>Entitlements</th>
<th>Intent/Requirement</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>While business re-establishes (i.e. reorganizing on remaining land or relocating in the same area)</td>
<td>All affected employees, wage or daily labourers in private or government businesses</td>
<td>Cash payment for lost salary/wages for each month AP can not work; OR Assistance in securing new employment including relevant skills training if required; AND Rehabilitation package – Items G.2 and G.3 ii if required by AP</td>
<td>Businesses will be encourage to retain existing employees Payment for lost income during business re-establishment</td>
<td>PAA, LARC</td>
</tr>
<tr>
<td>E.2 Permanently Affected</td>
<td>All affected employees, wage or daily labourers in private or government businesses</td>
<td>Cash payment for 6 months salary/wages and Project will encourage employers to provide severance pay for employees; AND Preferential access to project construction employment opportunities; AND Rehabilitation package – Items G.2 and G.3 ii</td>
<td>Payment for lost income, rehabilitation package to provide support and income restoration</td>
<td>PAA, LARC</td>
</tr>
</tbody>
</table>

F. TREES & STANDING CROPS (already included under A)
<table>
<thead>
<tr>
<th>Type of loss</th>
<th>Entitled Persons</th>
<th>Entitlements</th>
<th>Intent/Requirement</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of crops and trees</td>
<td>Person who cultivates crops and/or owns trees (regardless if the land is owned or not)</td>
<td>For owner, payment for crops and trees at market prices; For tenant, payment for crops shall be paid to tenant; For sharecropper, payment for crops shall be shared between owner and sharecropper according to the sharecropping agreement; For all - advance notice to harvest crop; AND Payment for net value of crops where harvesting is not possible; AND Cash payment for loss of trees and standing crops at market prices; AND Rights to resources from privately owned trees (i.e. timber or firewood)</td>
<td>Payment for losses calculated on market value on the basis of land productivity, type, age, and productive value of affected trees</td>
<td>PAA, DS, LARC</td>
</tr>
</tbody>
</table>

G. LIVELIHOOD RESTORATION & REHABILITATION ASSISTANCE

G.1 Materials Transport Allowance

i. Reorganization of residential or commercial structure APs reorganizing or rebuilding on same plot Cash assistance (shifting allowance) of Rs 5000 AP/household | Payment for disturbance and to assist in rebuilding | PAA, LARC |

ii. AP requiring relocation for housing or business Relocating APs Cash assistance (relocation allowance) of Rs. 5000 up to an amount of Rs 15,000\(^1\) AP/household for transportation to new location or site based on floor area of the house in occupation before relocation. | Allowance to cover transport of household or commercial effects, salvaged and new building materials | PAA, LARC |

G.2 Transition Subsistence Allowance

Severe or significant impact (including relocation) Each member of severely affected household Subsistence allowance\(^2\) for the transition period for EACH member of severely affected household of Rs 400/month/person for a minimum period of 3 months and similar assistance will be further extended as assessed on a case to case basis. | To provide support, based on Rs. 400 per month per person. | PAA, LARC |

\(^1\) Material transportation allowance rates include labor and transportation costs to another site and as determined by PAA based on the floor area of the house in occupation before relocation.

\(^2\) As determined through discussions with various relief agencies and social welfare organizations, the allowance has been based on a minimum number of kilocalories per month derived from different foods. For rice the minimum requirement will be derived from between 98 and 105 Kg per person per year or an average of 8.5 kg per person per month or about Rs.400/month/person.
<table>
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<tr>
<th>Type of loss</th>
<th>Entitled Persons</th>
<th>Entitlements</th>
<th>Intent/Requirement</th>
<th>Responsibility</th>
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<td>G.3 Livelihood Restoration (Grant &amp; Training)</td>
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<tr>
<td>i. Permanent effects on livelihood</td>
<td>APs/household</td>
<td>Livelihood restoration grant - as cash assistance of Rs 15,000³ per household (plus professional assistance and advice, if required, to invest funds or to set up a business at a commercially viable location). Linked with skill training (as provided in item G.3 ii) and as far as practicable shall be provided in the form of productive assets.</td>
<td>Cash sum to offset income losses not directly paid for, to provide support while business re-establishing or as start-up investment for new business if AP has to change livelihood</td>
<td>PAA, LARC</td>
</tr>
<tr>
<td>ii. Permanent effects on livelihood</td>
<td>Two members of APs/household</td>
<td>Training for up to two members (male and female where applicable) of AP households to receive skills and vocational training, to an amount of Rs 4,000⁴ per member; AND Transition subsistence allowance (see Item G.2 above)</td>
<td>Linked with need to start new business, access to existing or development of new training courses depending on the needs of the APs</td>
<td>PAA, LARC</td>
</tr>
</tbody>
</table>

³ A grant amount to support business re-establishment or start up of new business linked to skill training. Rates determined through discussions for road projects currently under implementation for similar impacts and activities.

⁴ Rates determined through discussion with road projects currently under implementation and relevant departments for similar activities.
<table>
<thead>
<tr>
<th>Type of loss</th>
<th>Entitled Persons</th>
<th>Entitlements</th>
<th>Intent/Requirement</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>iii. Permanent effects on livelihood</td>
<td>Severely affected farmers remaining on affected land</td>
<td>Assistance to increase productivity on remaining land (i.e. increasing cropping intensity, use of high yielding seeds, diversification and introduction of new seeds or crops etc) and assistance to access existing subsidies. The project will fund two agricultural extensions officers for 18 months, the cost is estimated at Rs 24,000 per road plus assistance to APs of Rs 3,000 each for fertilizers and seeds</td>
<td>Access to existing agricultural extension services and development of new services as per the specific needs of APs as identified through consultation with them, support for access to existing subsidies, development and training from Department of Agriculture, Tea Smallholding Authority, Agrarian Services Department, Coconut Development Board, and Rubber Control Department</td>
<td>RDA, CV, LARC</td>
</tr>
</tbody>
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5 Rates determined in consultation with Department of Agriculture.
<table>
<thead>
<tr>
<th>Type of loss</th>
<th>Entitled Persons</th>
<th>Entitlements</th>
<th>Intent/Requirement</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>G.4 Special Assistance</td>
<td>Vulnerable APs including the poor, elderly APs, ethnic minority households, female-headed households, and disabled</td>
<td>A special grant of Rs 15,000 per AP/household to improve living standards of vulnerable APs and households. Assistance to vulnerable households in finding suitable land for relocation and shifting OR provision of resettlement sites if opted by the AP.</td>
<td>Assistance, over and above payment for lost assets, to reduce impacts of resettlement which can disproportionately effect the already vulnerable and to ensure that the project does not simply re-establish levels of poverty, vulnerability or marginalization.</td>
<td>PAA, LARC</td>
</tr>
</tbody>
</table>

**H. COMMUNITY ASSETS**

| Loss of buildings and other structures (schools, temples, clinics, walls etc), infrastructure (local roads, footpaths, bridges, irrigation, water points or communal hand pumps etc), common resources (such as water supply, community forests) | Divisional Secretary division, urban ward, village, local community or local authority owning or benefiting from community property, infrastructure or resources | Restoration in existing location of affected community buildings, structures, infrastructure and common property resources to original or better condition; OR Replacement in alternative location identified in consultation with affected communities and relevant authorities; OR (Cash) Payment at full replacement cost; AND Restoration of access to community resources. | Full restoration of buildings, structures, infrastructure, services or other community resources by contractor (costs to be borne by project) or payment for such if agreement for local authority or community to undertake the restoration works. | PAA, LARC |

| Any unanticipated adverse impact due to project intervention | Any unanticipated consequence of the project will be documented and mitigated based on the spirit of the principles agreed upon in this policy framework. |

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6 Assistance to cover, over and above compensation for lost assets. As determined through discussions for road projects currently under implementation for similar impacts.