

## **Terms of Reference**

### **Hiring Individual Consultant to Prepare Environment and Social Management Plan for IWWRMP**

**Contract No: LK-MoMDE-452448-CS-INDV (Lot3)**

#### **1. Introduction**

The Government of Sri Lanka (GoSL) with financing from the World Bank (WB) has proposed to undertake an Integrated Watershed & Water Resources Management Project (IWWRMP). The development objective of the project is to improve watershed and water resources planning and enhance the functionality of water resources infrastructure. Functionality refers to improved safety of dams and improved water distribution networks for irrigation. It has been revealed through the studies that the major dams of the country are ageing and suffering from various structural deficiencies and shortcoming in the operation and monitoring facilities. This situation threatens the safety and operation efficiency of the dams and their appurtenant structures and as a result it increases the vulnerability of the downstream population and socio-economic infrastructure. As the project funds USD 69.53 Mn to be received from the donor to the project. The proposed project intends to address these issues through its dam safety and operational improvements for selected 28 dams & 21 Irrigation Tanks infrastructures. Under the above-mentioned dams & Irrigation infrastructures, following tanks and canal systems were selected from relevant implementing agencies for rehabilitation. Following sub projects have been selected for Environmental and Social Screening Report (ESSR) Environment and Social Management Plan (ESMP) preparation.

No	Name of the Site	Implementing Agency	Remarks
01	Rehabilitation of Buttala Raja Ela	Irrigation Department (ID)	
02	Rehabilitation of Hodawalpokuna Spillway	MASL	
03	Rehabilitation of Kiri ibbanwewa	MASL	
04	Improvements to Higura ara Down streams	Irrigation Department (ID)	

Table 01

#### **2. Objective of the Assignment**

In keeping with the World Bank's safeguard policies, the consultant will be required to carry out an environmental and social screening using the format provided and determine the level of safeguards analysis required with recommendations. The consultant is expected to conclude with the assignment with the preparation of a comprehensive Environmental and Social Screening Report (ESSR) and Environmental and Social Management Plan (ESMP).

### **3. Scope of Services, Tasks and Expected Deliverables**

#### **3.1 Study Area**

The study area of this assignment approximately includes the Dam, peripheral area (500 m minimum radial distance), in the case Irrigation scheme, both sides of scheme areas, any borrow sites and related irrigation infrastructure schemes, which will include the worksites and as well as the impact zone. The consultant should, after scoping the issues, determine the boundaries of the peripheral areas where the impacts will be affected.

#### **3.2 Prepare the ESSR and ESMP including the followings;**

- 1) Provide a clear description of the proposed interventions, in close consultation with the relevant implementing agencies, PMU and other stakeholders. It should include location details (provide map), design details and construction methodology including safeguard measures (if available), types and quantities of raw materials to be used and sources of such materials (especially borrow sites). This should be completed with a clear rationale for the objective and justification of the proposed investment.
- 2) The alternative analysis would be mostly related to the evaluation of construction sites and sources, as the dams are existing. Alternative sites considered for material extraction should be provided. Provide a site description, access to site, ownership, social and environmental acceptability and any other issues / concerns for each site considered.
- 3) Description of the study area should include the sites that will be directly and indirectly affected by the proposed construction activities. (This should include area of the dam work, main road haulage routes, labour camp areas and at least a 500 m radially measured impact area from the boundary of the site). In filling the Environmental Screening Report (ESR) / Social Screening Report (SSR) for this section, the consultant is expected to assess the following;
  - Topography, geology and soil types, rainfall patterns in the Project area
  - The existing hydrological regime and drainage patterns in the area (surface water bodies, groundwater levels and seasonal variations etc., any irrigation/flood protection schemes)
  - Current baseline water quality in the adjacent surface water bodies and groundwater wells & seasonal variations
  - Ecological resources within the impact zone with faunal / floral biodiversity of the different habitats including the presence of species of conservation significance
  - Presence of or proximity to areas of conservation significance
  - Details of the biodiversity of the area (main fauna and flora species)
  - Presence of any pollution sources within the project impact area
  - Presence of archaeologically significant areas
  - Economic/social infrastructure and activities within the project impact area.

- Conduct an assessment of the (i) potential and/or actual risks and impacts on community livelihoods due to proposed civil works of the subprojects; (ii) types of losses to the affected parties (e.g. full / partial loss of cultivable land, types of crop losses, seasonal production, incomes, consumption etc.); (iii) types of households to be affected (e.g. owner cultivators, tenants, share-croppers, poor who have leased / rented their land for others, women cultivators etc.); and (iv) identifying interventions required for supporting affected households for their other types of losses.
  - Prepare site-specific Livelihood Support Assistance (LSA) plans as deemed appropriate, to support the different affected parties to offset their seasonal livelihood and income losses including a realistic budget, time frame and institutional arrangements for LSA implementation
  - Consultant shall conduct a detailed discussion with relevant stakeholder agencies to identify engineering and non-engineering solutions to mitigate the negative impact under the construction phase and provide a work plan with ESSR and ESMP.
- 4) Carryout a public consultation in the locality with the key stakeholder groups and present the following aspects in the summary for
- Public consultations carried out under the project
  - Key comments received
  - Methods used to disclose information to the public
- 5) Assess anticipated environmental and social impacts against each screening criteria given in the ESR and SSR. In selecting yes / no to be confirmed for each criterion, an adequate rationale and justification for the selected answer must be provided in the remarks column. Impacts from during construction as well as operational stages should be considered. If the consultant feels that additional screening criteria are necessary, he / she is free to do so.
- 6) Based on the screening assessment, provide the followings;
- Conformity with the other projects/development /conservation plans in the area
  - Approvals needed for the proposed development from the other State Agencies
  - Key conclusions with a summary of key impacts anticipated, their nature and significance
  - Final screening decision
- 7) If the screening findings do not warrant an Initial Environment Examination (IEE), Environment Impact Assessment (EIA) or Strategic Impact Assessment (SIA), the consultant is expected to prepare an Environment and Social Management Plan along with monitoring indicators with a necessary budget for implementation.

#### 4. Sub Project Description

No	Name of the Site	Implementing Agency
01	Rehabilitation of Buttala Raja Ela <ul style="list-style-type: none"><li>• Construction of Turnout structures.</li><li>• Construction of Retaining Wall.</li><li>• Construction of causeway structure.</li><li>• Construction of canal spill.</li><li>• Construction of box culvert</li><li>• Improvements of Regulator Gates.</li></ul>	Irrigation Department (ID)
02	Rehabilitation of Sugladevi scheme Rehabilitation and Development of D3, D4 & D5 distributary canals and relevant field canals in Sugladevi scheme <ul style="list-style-type: none"><li>• Construction and Re-construction of Turnout structure and Drop Structure.</li><li>• Rehabilitation canal spill.</li></ul>	Irrigation Department (ID)
03	Rehabilitation of Ethimale Canal system <ul style="list-style-type: none"><li>• Improvement to canal bund road.</li><li>• Construction of concrete lining</li></ul>	Irrigation Department (ID)
04	Improvements to Higura ara Down streams <ul style="list-style-type: none"><li>• Construction of Canal lining</li><li>• Improvements to tank Spill Basin.</li></ul>	Irrigation Department (ID)

Table 02

#### 5. Selection Procedure

Consultant will be selected on an **Open Competitive Selection of Individual Consultants** in accordance with the World Bank Procurement Guidelines and Procurement Regulations for IPF Borrowers – July 2016 Revised November 2017 and August 2018.

#### 6. Required qualification of Key Staff.

Consultant should have B.Sc. Degree in the field of Biological Science / Agriculture / Natural Sciences and Master's Degree in the above-mentioned field and should have 10 years of post-qualified experience in the preparation of Environmental and Social Management Plans, Biodiversity survey reports, Livelihood Support Assistance Plans, Social Management plans etc. Further, he / she should have involved in similar kind of work and experienced in preparation of IEE/EIA reports. Experience as an Environmentalist / Sociologist in World Bank Projects / Foreign Funded Projects is an added advantage.

The consultant may obtain services of field assistants to collect / compile and process data and also to carry out the evaluation and produce needful reports.

## 7. Reporting Requirements and Time Schedule for Deliverables

### 7.1 Deliverables and Payment Schedule

A comprehensive Environmental and Social Screening Report (ESSR) and Environmental and Social Management Plan (ESMP) for the proposed rehabilitation schemes, summarizing the finding with the comprehensive ESMP and monitoring plan are expected to be the final output of the assignment. The report should follow the format of the screening report provided. The deadlines of submission of deliverables are tabulated as follows;

No	Description	Date of submission	Payment (% from Lump sum)
D1	Draft Inception Report	02 weeks from signing of contract	
D2	Final Inception Report	03 weeks from signing of contract	20
D3	1 <sup>st</sup> draft of ESSR and ESMP for; - Rehabilitation of Buttala Raja Ela - Rehabilitation and Development of D3, D4 & D5 distributary canals and relevant field canals in Sugladhevi scheme	05 <sup>th</sup> week from signing the contract 06 <sup>th</sup> week from signing the contract	10 10
D4	1 <sup>st</sup> draft of ESSR and ESMP for; - Rehabilitation of Ethimale Canal system - Higura ara Down streams	07 <sup>th</sup> week from signing the contract 08 <sup>th</sup> week from signing the contract	10 10
D5	Final ESSR and ESMP for; - Rehabilitation of Buttala Raja Ela - Rehabilitation and Development of D3, D4 & D5 distributary canals and relevant field canals in Sugladhevi scheme	09 <sup>th</sup> week from signing the contract 10 <sup>th</sup> week from signing the contract	10 10
D6	Final of ESSR and ESMP for; - Rehabilitation of Ethimale Canal system - Higura ara Down streams	11 <sup>th</sup> week from signing the contract 12 <sup>th</sup> week from signing the contract	10 10
			100

## 7.2 Report Reviewing Mechanism

Client / PMU will Review the Draft Reports and submit to the Consultant for the Final Submissions. The Time Schedule is tabulated as follows;

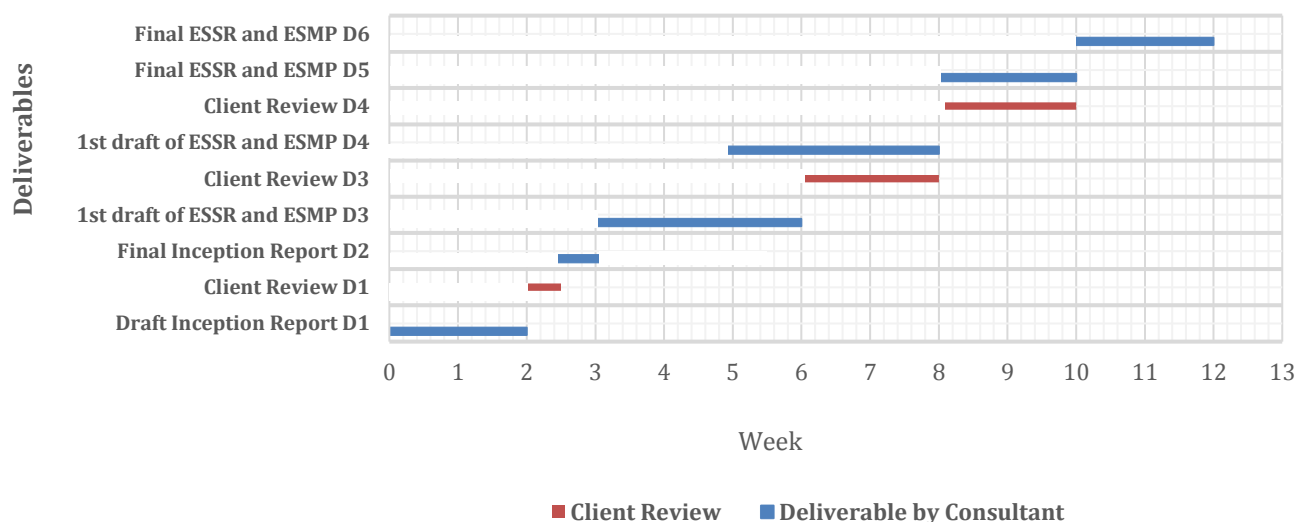
No.	Description	No.of days	Remarks
1	Draft Inception Report	3	Client Review (by the Committee appointed by Project Director, IWWRMP)
2	1st draft of ESSR and ESMP for; - Rehabilitation of Buttala Raja Ela - Rehabilitation and Development of D3, D4 & D5 distributary canals and relevant field canals in Sugladhevi scheme	14	
3	1 <sup>st</sup> draft of ESSR and ESMP for; - Rehabilitation of Ethimale Canal system - Higura ara Down streams	14	

Table 04

## 7.3 Work Plan

A comprehensive work plan for Deliverables incorporate with Client Review as follows;

Work Plan



**8. Duration**

The study is expected to be completed within 03 months' period.

**9. Working Arrangement.**

The Consultant shall submit the Work Plan considering the Deliverables and Client Review for the Client approval and conduct sufficient number of field inspections to identify the environmental and social impacts of the proposed sites. At the same time, Consultant need to conduct discussions and meetings with relevant officials and respective communities or community organizations to collect relevant data. In addition, statistical data need to be collected from relevant institutes (example – Divisional Secretariat Office). After or in paroral to field works, Consultant shall start the report preparation.

**10. Facilities to be provided by the Client**

PMU will facilitate to coordinate relevant implementing agencies and supports to get relevant information. Also, the PMU shall coordinate with relevant institutes to get necessary approvals to conduct field inspections. In addition, the PMU will support to coordinate World Bank safeguard team (if necessary). The safeguard team of the PMU will join to the field inspections with the consultant according to the time availability

## **ANNEX B**

### **REPORTING OBLIGATIONS OF THE CONSULTANT**

The Consultant will provide the following reports:

- Environmental and Social Screening Report (ESSR)
- Environment and Social Management Plan (ESMP)

Environmental and Social Screening Report (ESSR) and Environment and Social Management Plan (ESMP), Livelihood Support Assistance Plan and the Non-LSA formats are attached herewith.





# **Environmental and Social Screening Report & Environment and Social Management Plan (ESMP)**

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## **Integrated Watershed and Water Resources Management Project (IWWRMP)**



**DATE**

(Implementing Agency)  
Ministry of Irrigation

## Table of Contents

### 1. Introduction

#### a. About the IWWRMP

- Provide a brief summary to the main project and the specific sub-project
- Tender documents are expected to be ready by
- Awarding of the project
- Cost of the project
- Project management team
- Estimated labour requirements of the project

#### b. Project Description and Justification

##### Project description

- Talk about key project components – temporary and permanent works both onsite and offsite
- Dam head works – describe design levels of various parts of the dam to be achieved
- Irrigation canals, drainage canals and other irrigation structures – what does repair work entail (canal widening, dredging, gabion protection, bottom concreting etc)
- Access roads etc that will be taken up by the proposed project

##### Project justification

- Economic importance of the infrastructure considered – contribution to local/regional/national economy
- Age of the infrastructure and last time renovations took place
- Current state of the infrastructure that contributes to economic and irrigation inefficiency
- Risk of the infrastructure failing and potential damage it can cause
- Objectives of the particular project
- How much more irrigation efficiency can the scheme achieve after rehabilitations
- If after rehabilitation a larger command area and a larger population can be served, please state so.

##### Project alternatives considered

- These are existing schemes in poor states of maintenance that contribute to water use and irrigation inefficiency – hence we can state there is no alternative to maintaining the physical infrastructure.
- If information is available, alternative construction methods can be considered. Land ownership
- Consider all project components  
Dam head works, irrigation channels, access roads, burrow areas (if already identified).

**c. Project Location**

- Give specific details of the location, Village, GN Division, District Province
- Provide a clear map

**d. Project area of influence (Definition of the project area)**

- Consider all components of the proposed rehabilitation work
- The scheme in general with particular reference to sites where work will take place and the areas that are influenced by such sites – including but not limited to dam headworks, irrigation canals, access roads, burrow sites, transport routes
- Give a map with project boundary demarcated
- This area must be kept in mind when describing the environment later

**e. Objectives of the ESMP**

The objective of the Environmental and Social Management Plan (ESMP) is, proposed rehabilitate irrigation infrastructure schemes should have a site – specific and well-documented set of mitigation, monitoring and institutional actions to be taken before and during implementation of the project. These measures seek to address adverse environmental and social impacts, offset them or reduce them to acceptable levels. In addition, the ESMP also includes measures needed to implement these actions, addressing the adequacy of the monitoring and institutional arrangements for the upper and lower watersheds in the intervention site. The ESMP has been developed in accordance with the Environment and Social Management Framework (ESMF) developed for the overall Integrated Watershed & Water Resources Management Project (IWWRMP).

## **2. Legal Framework and World Bank's Safeguards Policies**

**a. National Laws, Regulations and Policies**

Provide a summary of the laws regulations and policies that directly apply to the project in terms of obtaining permits/clearances.

	Permit/Clearance		Yes	No	TBD	Remarks

## **b. World Bank's Safeguards Policies**

Provide a summary of bank policies that directly apply to this sub-project

<b>Safeguard Policies Triggered by the Project</b>	<b>YES</b>	<b>NO</b>	<b>Explanation</b>
Environmental Assessment (OP/BP/GP 4.01)			
Natural Habitats (OP/BP 4.04)			
Forests OP/BP 4.36			
Physical Cultural Resources (OP 4.11)			
Involuntary Resettlement (OP/BP 4.12)			
Safety of Dams (OP/BP 4.37)			

## **3. Environmental and Social Characteristics**

### **a. Physical Features (provide summary descriptions on the following)**

- Topography and Terrain
- Climate
- Soil Type and Quality
- Surface Water
- Ground water
- Flooding
- Air quality

### **b. Ecological Features**

- Vegetation in the area
- Proposed Gravel Exploitation Site
- Proposed Earth Exploitation Site
- Presence of wetlands
- Fish and wildlife habitats
- Birds
- Presence of special habitat areas

**c. Socio-Economic Factors**

- Landownership Patterns
- Residential/Sensitive Areas
- Traditional economic and cultural activities

**d. Archeological resources**

- Provide locations and summary details of all archaeological resources within the project's area of influence

**4. Environmental and Social Impacts**

- Provide a summary of key environmental and social issues identified (based on the findings of the screening)

**Table 7: Environmental and Social Screening Checklist**

	Screening question	Yes	No	Significance of the effect	Remarks
<b>Project Design</b>					
<b>a. General</b>					
1	Will the sub project include any physical construction work?				
2	Does the project include upgrading or rehabilitation of existing physical facilities?				
<b>b. Rehabilitation of dam head works and rip rap associated irrigation infrastructure</b>					
3	Will improvements to tank bund including the headworks and rip rap structures require the water level in the reservoir to be artificially drawn down?				
4(i)	If yes, can this lead to any alteration of water flows in surface as well as groundwater sources, especially in the dry season?				<ul style="list-style-type: none"> <li>• Has the project adequately assessed the likely availability of water to serve basic socio-economic uses if water levels need to be drawn down.</li> <li>• Has it taken into consideration dry season conditions when water scarcity is at its worst</li> <li>• Are there previous records of water levels in both surface and ground water sources during wet/dry season – it is best to use some qualitative data</li> </ul>
4(ii)	Will the water draw down affect the ecology of the tank and other important wetlands that depend on the main lake and canal system to maintain water level?				
5	Will repairs to irrigation canals require temporary suspension of water issuance in order to facilitate civil works?				<ul style="list-style-type: none"> <li>• How will canal rehabilitation be carried out</li> </ul>

	Screening question	Yes	No	Significance of the effect	Remarks
	Can this lead to diminishing of other downstream water uses that can result in social issues such as community bathing, drinking water supplies, irrigation of home gardens etc.				<ul style="list-style-type: none"> <li>• Check existence of drinking water intakes, irrigation, industrial and recreational uses along the relevant stretch and map them – attach as annex</li> <li>• Will alternative arrangements for existing water use be carried out</li> </ul>
6	Will civil works lead to diminishing of other downstream water uses as a result of water quality impairment?	√			<ul style="list-style-type: none"> <li>• Consider socio-economic impacts</li> <li>• Consider ecological impacts and issues of sedimentation</li> </ul>
7	Will there be changes to original design levels of the head works that will result in inundation of new land in the catchment		√		
8	Will the rehabilitated scheme serve new areas of paddy under its command?		√		<ul style="list-style-type: none"> <li>• Please provide existing command area and any increases</li> </ul>
<b>c.</b>					
9	Will there be construction of new irrigation or drainage canals or widening of existing canals?		√		<ul style="list-style-type: none"> <li>• Consider the entire trace</li> <li>• See if any ecological areas are crossed</li> <li>• If any of these are encountered, see how sensitive they are and if the area is protected under SL law</li> <li>• Perhaps an alternative trace can be suggested if serious impacts are foreseen</li> </ul>
9(i)	If yes, will new/modified canal trace/alignments interfere with existing land uses (habitats, home gardens) in a negative way?		N/A		<ul style="list-style-type: none"> <li>• Consider the entire canal trace (new and expanded if any)and see what water crossings are there.</li> </ul>
9(ii)	If yes, will the trace interfere with other sensitive infrastructure such as roads, pedestrian paths, schools and temples?		√		<ul style="list-style-type: none"> <li>• Consider the entire canal trace (new and expanded if any)and see what water crossings are there</li> </ul>



	Screening question	Yes	No	Significance of the effect	Remarks
<b>Project Construction</b>					
10	Will construction and operation of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in waterbodies, etc)				<ul style="list-style-type: none"> <li>• Yes, it will but rehabilitation projects don't have severe physical changes</li> <li>• Changes to waterbody will need to be considered, such as concrete surfacing</li> </ul>
11	Will construction of the project cause soil erosion within the site due to steep grade or soil content?				<ul style="list-style-type: none"> <li>• Describe soil type and construction activities</li> <li>• Are there inherent erosion issues in the area?</li> <li>• Look for erosion symptoms in the area</li> <li>• Get feedback from community</li> </ul>
12	Will the Project involve dredging and disposal of dredge material as well as other solid wastes during construction?				<ul style="list-style-type: none"> <li>• Dredging will generate large quantities of silt and debris, others will be mostly earth and rubble.</li> <li>• The dredged material must have a proper drying and disposal plan</li> </ul>
13	Will the Project release pollutants or any hazardous, toxic or noxious substances to air?				<ul style="list-style-type: none"> <li>• What is the risk? Think about the machinery that will be deployed to the site for the proposed work</li> </ul>
14	Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?				<ul style="list-style-type: none"> <li>• Noise and vibration likely but impact depends on the receptors of the environment, so you need to assess risk with construction activity and receptors in the area</li> </ul>
15	Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater?				<ul style="list-style-type: none"> <li>• Irrigation rehab projects generally do not have much waste water discharges (other than irrigation drainage)</li> <li>• Sanitation units can cause pollution if they are poorly sited, constructed and are leaking. But this risk can be mitigated with good planning and supervision</li> <li>• Servicing of construction vehicles can lead to release of pollutants</li> </ul>

	Screening question	Yes	No	Significance of the effect	Remarks
16	Will the project cause localized flooding and poor drainage during construction?  Is the project area located in a flooding location?				<ul style="list-style-type: none"> <li>Is any of the construction site has in a low lying area where it can cause further flooding and poor drainage?</li> <li>Or if any of the project components is blocking a natural drainage paths.</li> <li>Proper site selection and good construction practices can avoid these issues.</li> </ul>
17	Are there any areas or features of high landscape or scenic value on or around the location which could be affected by construction activity?				Provide site specific answers
18	Are there any other areas on or around the location which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other waterbodies, the coastal zone, mountains, forests which could be affected by the project?				Need to get appropriate maps and check
19	Are there any areas on or around the location which are used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, migration, which could be affected by the project?				<ul style="list-style-type: none"> <li>This information may be not readily available. But if there are ecologically sensitive areas being crossed by any of the project activities we should mention.</li> <li>Projects are unlikely to have a major impact on these, once construction is over</li> <li>However, need to see site specific requirements</li> </ul>
20	Will any part of the project's construction activities be located in a previously undeveloped area where there will be loss of greenfield land?				
<b>d. Land related impacts</b>					
21	Will the sub-project require acquisition of land and or other assets?				

	Screening question	Yes	No	Significance of the effect	Remarks
22	Is land for material mobilization or transport for the civil work available within the identified work site / Right of way?				
23	Is the site chosen for this work free from any encumbrances (e.g. squatters, encroachers)?				
24(i)	If the land parcel is to be acquired, is the actual plot size and ownership status known? If so, how much?				
24(ii)	Will the affected land/structure owners likely to lose less than 10% of their land/structures area?				
24(iii)	If any land required for the work is privately owned, will this be purchased or obtained through voluntary donation?				
24(iv)	Are the land/structure owners willing to voluntarily donate the required land for this sub-project?				
25	Is the project likely to cause partially or fully damage to, or loss of housing, shops, or other resource use?				
26	Are there any routes or facilities on or around the location which are used by the public for access to recreation or other facilities, which could be affected by the project?				
<b>e.</b>					
27	Are there any non-titled people (squatters) who are living/ or doing business who may be partially or fully affected because of the civil works?				

	Screening question	Yes	No	Significance of the effect	Remarks
28	Will there be damage to agricultural lands, standing crops, trees, etc.?				
29	Will there be any permanent or temporary loss of income and livelihoods as a result of the civil works? If so, for what period?				
29(i)	Have these people/ businesses who may suffer temporary loss of incomes or livelihoods been surveyed and identified for payment of any financial assistance?				
29(ii)	Are there any vulnerable households affected?				
29(iii)	Will people permanently or temporarily lose access to facilities, services, or natural resources?				
<b>f. Impacts on community resources, public services, cultural/historical sites, etc</b>					
30	Are there any areas on or around the location which are densely populated or built-up, which could be affected by the project?				
31	Are there any areas or features of historic or cultural importance on or around the location which could be affected by the project?				
32	Are there any areas on or around the location which are occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project				
33	Are there any areas on or around the location which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?				

	Screening question	Yes	No	Significance of the effect	Remarks
34	Will the project cause the removal of trees in the locality?				Pl. consider the historical or religiously important trees, threaten / endemic/ rare tree species in project area. Pl. Consider on trees supporting as nesting sites and rusting sites for birds in project area.
35	Are there existing land uses or socio-economic activities on or around the location which could be affected by the project?				
35(i)	Are there bathing spots that will be unusable during the construction period?				g. Often people use these canals for bathing in 'nana thotupola' h. During dredging and canal rehab WQ may turn poor and it may be risky for public safety
35(ii)	Is there subsistence fishing taking that will get disturbed due to canal rehabilitation				<ul style="list-style-type: none"> <li>Canals are used for subsistence fishery – these activities may get disturbed</li> </ul>
35(iii)	Are there any home gardening and other industrial, agricultural activities that will get disturbed due to construction activity				
35(iv)	Are there drinking water supply sources located in the project area that may be rendered unusable during construction period?				
35(v)	Are there tourism activities taking place in the project area that will get disturbed by construction activity?				
<b>i. Construction related impacts (labor influx, community health and safety, etc)</b>					
36	Will there be any risks and vulnerabilities to public safety due to physical hazards during construction of the Project?				

	Screening question	Yes	No	Significance of the effect	Remarks
37	Are there local village roads that will become unsafe due to contractor's usage				Consider main material haulage routes
38	Are there any transport routes on or around the location which are susceptible to congestion or which cause social and environmental problems, which could be affected due to construction work?				
39	Will the project require significant number of workers (skilled and unskilled)				
39(i)	Will the project attract significant number of migrant workers to the area?				
40	Will construction activity lead to burrowing of earth, gravel and sand? And/or quarrying for rock?				
41	Will the project increase the risk of introduction of alien invasive species to the locality				
<b>Operational Impacts</b>					
42	Will the project lead to stagnant water and drainage problems causing increased mosquito breeding				
43	Will the project involve removal and disposal of aquatic invasive species?				
44	Will the project involve regular maintenance dredging of the canal network				
45	Will the scheme after rehabilitation serve a larger command area?				

Significance of impact = Low, Moderate, High

## 5. Public Consultation and Disclosure

Public consulted/ Location	Consultation method	Date	Details/Issues raised

### Notes:

- Plan public consultation together with the social team
  - Informal group meeting
  - A few interviews with a cross section of potentially affected and benefitted community
- For the purpose of these screening it does not have to be extensive but should informally talk to the beneficiary as well as affected group.
- Public consultation for environmental screening should have a focus on environmental issues.

## 6. Conclusions

Conclusions		
Summary of key environment and social issues	High/Medium	Rating
N/S - Effect not significant, or can be rendered insignificant with mitigation SP - Significant positive effect SN - Significant negative effect U - Outcome unknown or cannot be predicted, even with mitigation		

## 7. Screening Decision and Recommendation

Project Safeguard Category	
	All potentially adverse effects can be classified as general construction related impacts and are mitigatable with known technology. Public concern does not warrant further assessment.

