E4135

ENVIRONMENTAL MANAGEMENT FRAMEWORK

Thailand: JSDF Grant for Community-Based Livelihood Support For The Urban Poor Project

1. INTRODUCTION

The proposed project aims to provide at least 3,000 beneficiaries in 5 urban areas with bridging income support and improved living conditions. The grant objectives will be achieved through a small-scale community basic infrastructure rehabilitation program in five Provinces where the impacts of the economic crisis have been aggravated by the recent floods. The proposed project, to be implemented by Community Organization Development Institute (CODI), includes three components:

Component 1: Community mobilization and capacity building – covering the cost of a community-based communication strategy, social preparation activities by trained facilitators and the training of community groups on how to implement the selected sub-projects.

Component 2: Community grants – Community grants will be allocated to poor urban communities for rehabilitation activities that will generate income for the most vulnerable households. Community grants (two cycles) will be provided to 50 urban poor communities. The average size of the grants is expected to be around US$23,300 per community, per cycle (based on an average of 500 beneficiary households). The average amount to be allocated per community is an indicative planning figure. The overall envelope of resources will be managed by CODI and the exact amount to be allocated per community will be determined through a community-based planning process that will identify: (i) rehabilitation needs, and (ii) eligible number of beneficiaries. Examples of typical rehabilitation activities include housing reconstruction/repair, drainage maintenance, access path or road upgrading/maintenance, water supply system construction/maintenance, flood protection upgrading/maintenance etc. Rehabilitation interventions will be preceded by a simplified community mobilization process outlined in Component 1. Rehabilitation activities will have as one their key objectives to provide affected households with additional income that would help minimize negative coping strategies and levels of indebtedness. This will be done primarily through the reconstruction of basic community infrastructures or individual housings, which were damaged by the floods. The subprojects will therefore have a strong paid labor component with a recommended labor intensity of 50%. Daily wage rates will be determined by CODI in line with existing legislation and governmental rates used for Cash for Work Programs. Each sub-project to be prepared by community groups will clearly outline the wage component, as well as other inputs (construction materials, technical assistance) that will be required for project implementation.

Component 3: Project Management, Monitoring and Evaluation and Knowledge Dissemination – will include the establishment of an Management Information System (MIS), the implementation of a qualitative impact evaluation (baseline and end-line) and the dissemination of lessons-learned.

It is anticipated that the project will create positive impacts on improving quality of life/living conditions of the participating communities. However, as it involves small-scale civil works for rehabilitation of community infrastructure and housing, due considerations on environmental impacts and mitigation measure should be provided to ensure that adverse impacts are adequately identified and managed.

2. POLICY AND REGULATIONS

a. World Bank's Environmental Safeguard Policies

The World Bank has a number of safeguard policies, which includes among others environmental protection. The objective of these policies is to prevent and mitigate undue harm to people and their environment in the development process. These policies provide guidelines for the World Bank and the implementing agency staff in the identification, preparation, and implementation of programs and projects. A safeguard screening for this project shows that the World Bank's Operational Policy (OP)/Bank Procedure (BP) 4.01 - Environmental Assessment (EA) is triggered. EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project's potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation.[1]

The project will fund small-scale rehabilitation of individual housing and basic community infrastructure e.g. drainage maintenance, access path or road upgrading/maintenance, water supply system construction/maintenance, flood protection upgrading/maintenance etc. Such rehabilitation work may result in minor and site-specific adverse impacts on the environment during construction e.g. disposal of construction waste, dredged materials/spoil from drainage maintenance, dust dispersion, nuisance noise etc. Given that: (i) the size of infrastructure rehabilitation to be financed under the project will be small (US$23,500 per community); (ii) there will be a strong paid labor component to the rehabilitation work; (iii) given the location of the project that will be in poor urban communities it is anticipated that the impacts will be short-term (i.e will cease after construction completion), site-specific and can be mitigated through good planning and environmental management practices. The Bank environmental screening of the project determined that this project classified as *Category B project*. Similar to other CDD type projects, location and design of the eventual sub-projects are not known at project appraisal. As a result, framework approach has been adopted and Environmental Management Framework (EMF) has been prepared as environmental safeguard instrument for an effective management of environmental issues inline with OP/BP 4.01.

b. Environmental Regulations

The project will finance small-scale rehabilitation of infrastructure and housing in poor urban communities. It is highly unlikely that regulatory full Environmental Impact Assessment (EIA) and Initial Environmental Evaluation (IEE) would be required. However, sub-project that require full EIA will not be funded and this measure included in the "Negative List" of sub-projects to be specified in the project's Operations Manual.

Activities carried out in sub-project infrastructure / housing construction and/or rehabilitation shall comply with applicable domestic laws and regulations.

3. OBJECTIVES OF THE ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)

This Environmental Management Framework aims to:

- Ensure that all Project executors have the same understanding on the World Bank's Policy on Environmental Safeguard and its application;

[1]http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:20064724~menuPK:64701637~pagePK:64709096~piPK:64709108~theSitePK:502184,00.html

- Provide all involved executors at all levels with adequate guidance for effectively identifying and addressing environmental safeguard issues that may arise from project development.

This document describes an environmental safeguard screening and reviewing process. It also outlines safeguard actions to be carried out and applied to all sub-project investments. The screening and reviewing will take place prior to submission of sub-project proposals for approval. The document also includes a set of simple mitigation measures for typical CDD project rehabilitation works.

4. SUB-PROJECT ENVIRONMENTAL SAFEGUARDS SCREENING AND REVIEW PROCESS

To avoid potential negative impacts on the environment, a **list of prohibited activities/items (Negative List)** that cannot be financed by the project has been developed as follows:

- Purchase of pesticide, herbicide and prohibited substances;
- Damage or loss to cultural property, including sites having archeological (prehistoric); paleontological, historical, religious, cultural and unique natural values;
- Sub-projects that require full Environmental Impact Assessment (EIA) given estimated potential negative impacts on the environment;
- Communities on-going land tenure disputes

This will be integrated in the full list of negative projects to be developed as part of the project's Operations Manual. The Operations Manual is a dated covenant in the Grant Agreement (GA) for the present project and will be developed and sent to the World Bank for review within 2 months of GA signature.

Environmental safeguards requirements haves been integrated into overall sub-project planning and approval process to minimize adverse impacts. This is to ensure that screening and assessing the potential impacts of a proposed sub-project will be undertaken before sub-project approval and that measures are in place to mitigate possible negative impacts. Key steps in the process are described below:

Step 1: Sub-project identification

Presentation of negative list: Before a sub-project's approval, CODI's local staff will inform the communities of potential environmental risks of the sub-project, raise awareness of communities about the need for protection of the environment, and gather information on areas where the sub-project will be implemented. If the sub-project is found to include activities specified in the negative list, it will be ruled out.

Step 2: Sub-project design

Once sub-projects that may be part of the negative list have been ruled out, sub-project proposals are then development by the community with the technical support of the CODI team. Sub-project proposals format will be used to document the design and include a quick assessment of the potential negative impacts and mitigation measures to be out in place using the environmental screening checklist *(Annex 1)* or environmental assessment (EA) (if required). Annex 1 contains an environmental screening checklist for the typical small-scale infrastructure and building rehabilitation sub-project. For sub-projects with infrastructure rehabilitation not include in the checklist, the typical environmental screening checklist may be used. Example of good environmental management practices and mitigation measures for typical CDD project rehabilitations works presented in *Annex* 2 may be applied to mitigate the negative impacts as appropriate. However, the measures are not limited to what is described in the annexed check-lists. Additional measures can be proposed and implemented using the best technology locally available or

specified by Thai Law and Regulations. The environmental screening shall be done simultaneously with the sub-project proposal development and their respective outputs simultaneously submitted to the CODI approval committee. Once the project proposal is approved, CODI will brief the community as to the condition attached to the approved proposal and suggest ways on how to comply with the requirements.

If needed, an Environmental Management Plan (EMP) for the sub-project shall be done by the Proponent (community), and this document is to be part of the total sub-project proposal and cost. This EMP should include costs of the mitigation measures to be applied as well as the staff responsible staff for its implementation. The items and cost of the EMP should be included as part of the total project cost and cost items in the sub-project proposal documentation and any subsequent contracts for works (where relevant). Construction works shall be in accordance with the plans and specifications, and requirement of the regulatory units of the government. The EMP shall be followed strictly. CODI will do regular monitoring during the implementation period.

Step 3: Sub-project implementation

The implementation of mitigation measures as well as the monitoring and inspection of potential environmental risks is the responsibility of CODI staff. Training and awareness raising activities will be conducted to ensure that communities are aware of sub-projects environmental risks and to ensure they will take actions to mitigate these risks and to increase their capacity to ensure that contractors are respecting their obligations in terms of environmental protection. Training sessions on environmental protection will be conducted by the CODI team at the inception and during the implementation of the sub-projects.

Monitoring arrangements will be developed as part of the project's Operations Manual.

ANNEX 1

Form 1: Typical Environmental Screening Checklist

Name of the Sub-Project: _____

Location: _____

Potential Impacts	**Assessment** {Put only one tick (√) in each row}		**Mitigation Plans**
	NO Negative Impact or <u>NOT Significant</u>	**Significant Impact requires <u>Mitigation</u> Measures**	
Need for land acquisition through (i) donation, (ii) purchase			
Loss of homes, other assets or land			
Damage to cultural/archaeological sites/properties			
Removal of vegetation			
Increased soil erosion/landslides during and after construction			
Risk in the contamination of drinking water			
Dust generation during construction activities			

Potential Impacts	**Assessment** {Put only one tick (√) in each row}		Mitigation Plans
	NO Negative Impact or <u>NOT Significant</u>	**Significant Impact requires <u>Mitigation</u> Measures**	
Increased noise due to construction activities			
Generation of solid waste during construction			
Obstruct or cause poor water drainage and increase the risk of water related diseases such as malaria, dengue and schistosomiasis			
Traffic disruption or temporary blockage of access during construction			
Risk of accidents/Safety hazards during construction			
Impact on the quantity and quality of surface water (canal, river, stream etc.), or groundwater			
Disruption of aquatic ecosystem during construction due to excessive sediment, discharge of waste concrete or accidental spillage of oil & grease to nearby water bodies			
Negative reaction to public due to poor information.			

Prepared by (Community Representative):

Name

Signature

Date

Reviewed by (CODI Representative):

Name

Signature

Date

Form 2: Environmental Screening Checklist for

Access Path or Tracks

(For use of pedestrians and light vehicles including motorbike)

Name of the Sub-Project: _____

Location: _____

Potential Impacts	**Assessment** {Put only one tick (√) in each row}		**Mitigation Plans**
	NO Negative Impact or <u>NOT Significant</u>	**Significant Impact requires <u>Mitigation</u> Measures**	
Need for land acquisition through (i) donation, (ii) purchase			
Loss of homes, other assets or land			
Damage to cultural/archaeological sites/properties			
Increased soil erosion/landslides during and after construction			
Dust generation during construction activities e.g. earth moving, stock piling, haul truck, etc.			
Noise due to increased traffic			
Generation of solid waste during construction			
Pollution from ancillary activities like preparation of asphalt, crushing of aggregate, concrete mixing, etc.			

Potential Impacts	**Assessment** {Put only one tick (√) in each row}		Mitigation Plans
	NO Negative Impact or <u>NOT Significant</u>	**Significant Impact requires <u>Mitigation</u> Measures**	
Obstruct or cause poor water drainage and increase the risk of water related diseases such as malaria, dengue and schistosomiasis			
Involve the disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies			
Risk of accidents/safety hazards during construction			
Traffic disruption or temporary blockage of access during construction			
Increase in suspended sediments in streams affected by access cut erosion, decline in water quality and increased sedimentation downstream			
Disruption of aquatic ecosystem during construction due to excessive sediment, discharge of waste concrete or accidental spillage of oil & grease to nearby water bodies			
Increased risk of accidents due to increased and faster traffic			
Negative reaction to public due to poor information.			

Prepared by (Community Representative):

Name

Signature

Date

Reviewed by (CODI Representative):

Name

Signature

Date

Form 3: Environmental Screening Checklist for

Housing or Building

Name of the Sub-Project: _____

Location: _____

Potential Impacts	**Assessment** {Put only one tick (√) in each row}		**Mitigation Plans**
	NO Negative Impact or <u>NOT Significant</u>	**Significant Impact requires <u>Mitigation</u> Measures**	
Need for land acquisition through (i) donation, (ii) purchase, (iii) government approval			
Loss of homes, other assets or land			
Removal of vegetation			
Damage to cultural/archaeological sites/properties			
Dust generation during construction activities			
Increased noise due to construction activities			
Generation of solid waste during construction			
Obstruct or cause poor water drainage			
Traffic disruption or temporary blockage of access during construction			

Risk of accidents/safety hazards during construction			
Impact on the quantity and quality of surface water (canal, river, stream etc.), or groundwater			
Disruption of aquatic ecosystem during construction due to excessive sediment, discharge of waste concrete or accidental spillage of oil & grease to nearby water bodies			
Public and property damage due to structural damage caused by substandard materials or nonconformance to project design			
Negative reaction to public due to poor information.			

Prepared by (Community Representative):

Name

Signature

Date

Reviewed by (CODI Representative):

Name

Signature

Date

Form 4: Environmental Screening Checklist for

Water Supply System

Name of the Sub-Project: _____

Location: _____

Potential Impacts	**Assessment** {Put only one tick (√) in each row}		**Mitigation Plans**
	NO Negative Impact or <u>NOT Significant</u>	**Significant Impact requires <u>Mitigation</u> Measures**	
Need for land acquisition through (i) donation, (ii) purchase, (iii) govt.?			
Loss of homes, other assets or land			
Damage to cultural/archaeological sites/properties			
Risk of accidents/safety hazards during construction			
Increased breeding of mosquito in case of inadequate drainage near water abstraction point / locations			
Obstruction of natural flow of water			
Removal of vegetation			
Increased soil erosion/landslides during and after construction			
Dust generation during construction activities			

Potential Impacts	**Assessment** {Put only one tick (√) in each row}		Mitigation Plans
	NO Negative Impact or NOT Significant	**Significant Impact requires Mitigation Measures**	
Increased noise due to construction activities			
Generation of solid waste during construction			
Traffic disruption or temporary blockage of access during construction			
Impact on the quantity and quality of surface water (canal, river, stream etc.), or groundwater			
Disruption of aquatic ecosystem during construction due to excessive sediment, discharge of waste concrete or accidental spillage of oil & grease to nearby water bodies			
Water supply disruption during construction			
Illness or disease related to poor source water quality or from contaminants entering water supply system			
Negative reaction to public due to poor information.			

Prepared by (Community Representative):

Name

Signature

Date

Reviewed by (CODI Representative):

Name

Signature

Date

Form 5: Environmental Screening Checklist for

Rehabilitation/Construction of Drainage

Name of the Sub-Project: _____

Location: _____

Potential Impacts	**Assessment** {Put only one tick (√) in each row}		**Mitigation Plans**
	NO Negative Impact or NOT Significant	**Significant Impact w/ Mitigation Measures**	
Need for land acquisition through (i) donation, (ii) purchase, (iii) govt.?			
Loss of homes, other assets or land			
Reduced downstream water availability			
Pollution from disposal of sediment accumulated in channels/structures e.g. unpleasant odor from sediment, wastewater/leachate from sediment etc.			
Damage to cultural/archaeological sites/properties			
Use of water channels as wastewater drains			
Incidence of diseases such as Dengue, Malaria, etc.			
Obstruction of natural flow of water			
Increased soil erosion/landslides during and after construction			
Dust generation during construction activities			

Potential Impacts	**Assessment** {Put only one tick (√) in each row}		Mitigation Plans
	NO Negative Impact or NOT Significant	**Significant Impact w/ Mitigation Measures**	
Increased noise due to construction activities			
Generation of solid waste during construction including sediment from drainage cleaning/ spoil, construction waste etc.			
Traffic disruption or temporary blockage of access during construction			
Risk of accidents/safety hazard during construction			
Impact on the quantity and quality of surface water (canal, river, stream etc.), or groundwater			
Disruption of aquatic ecosystem during construction due to excessive sediment, discharge of waste concrete or accidental spillage of oil & grease to nearby water bodies			
Negative reaction to public due to poor information.			

Prepared by (Community Representative):

Name

Signature

Date

Reviewed by (CODI Representative):

Name

Signature

Date

ANNEX 2

Example of good environmental management practices and mitigation measures

Impacts	Mitigation Measures
Need for land acquisition through (i) donation, (ii) purchase or loss of assets	• Consultation with affected people, communities and local authorities to seek a mutual agreement from all parties.
Damage to cultural/archaeological sites/properties	• Ensure all such finds are reported and discussed with representatives of the local people *(See more details in Annex 3 - Chance Find Procedures for Culturally Significant Artifacts)*
Removal of vegetation	• Minimize site clearance and removal of vegetation as possible • Re-vegetation after construction completion
Increased soil erosion/landslides during and after construction	• Proper design and layout of furrows or field avoiding a too steep gradient • Land leveling • Install and maintain an adequate drainage system to prevent erosion on the site during and after construction • Erect erosion control barriers around perimeter of cuts, disposal pits, and roadways • Maintain vegetation cover
Dust generation during construction activities	• Control contractors' vehicle speeds • Maintain good house keeping practices e.g. keep an area free from unnecessary clutter or debris, maintain a site daily clean up, try to minimize material store onsite, etc. • Spray water as needed on dirt roads, cut areas and soil stockpiles or fill material • Load cover and bed liner are used to prevent spillage from haul truck • Site access/exit is stabilized through gravel pad or similar mean • Vehicle wheels are washed or brushed prior to leaving the site • Material spills on roads and pathways are cleaned up immediately
Increased noise due to construction activities	• Control contractors' vehicle speeds and noise in residential areas

	• Limited working hour during the day time to minimize impact from noise generated from construction activities.
Generation of solid waste during construction	• Provide appropriate waste collection and disposal e.g. place trash/garbage in the proper receptacles, frequently remove garbage for disposal to prevent over accumulation onsite, prohibit garbage open dumping on site, encourage waste reuse/recycling etc. • Dispose solid waste using municipality service or dispose at the government or approved site • Do not allow waste oil drain into soil or canal/river
Obstruct or cause poor water drainage	• Install and maintain an adequate temporary drainage system • Ensure culvert, bridge and road are suitably designed to minimize effects on hydrology.
Borrow pit/Construction materials	• Identify and demarcate locations for stockpiles and borrow pits, ensuring that they are 15 meters away from critical areas such as steep slopes, erosion-prone soils, and areas that drain directly into sensitive water bodies • Limit extraction of material to approved and demarcated borrow pits
Increase the risk of water related diseases such as malaria, dengue and schistosomiasis	• Install and maintain an adequate temporary drainage system
Traffic disruption or temporary blockage of access during construction	• Use safe traffic control as necessary and causes the minimum possible disruption to all traffic. • Use locally available construction material wherever possible to minimize transport distances.
Safety hazards during construction	• If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours • During heavy rains or emergencies of any kind, suspend all work • Limited working hour during the day time • Wear protective equipment e.g. grove, helmet, safety shoes etc. that appropriate

	for type of activity to be carried out • Provide warning sign at an unsafe location e.g. open hole etc.
Affect the quantity and quality of surface water (canal, river, stream etc.), or groundwater	• Erect erosion control barriers around perimeter of cuts, disposal pits • Do not allow waste oil drain into soil or canal/river
Disruption of aquatic ecosystem during construction due to excessive sediment, discharge of waste concrete or accidental spillage of oil & grease to nearby water bodies	
Negative reaction to public due to poor information.	• Inform the population about construction and work schedules, interruption of services and traffic, as appropriate • Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures.

ANNEX 3

Chance Find Procedures for Culturally Significant Artifacts

In case culturally valuable materials are uncovered during excavation, the following Chance Find Procedures shall be followed:

- Stop work immediately following the discovery of any materials with possible archeological, historical, paleontological, or other cultural value, announce findings to CODI representative and notify relevant authorities;
- Protect artifacts as well as possible using plastic covers, and implement measures to stabilize the area, if necessary, to properly protect artifacts;
- Prevent and penalize any unauthorized access to the artifacts; and
- Restart construction works only upon the authorization of the relevant authorities.