



Republic of the Philippines
Department of Agriculture
PHILIPPINE RURAL DEVELOPMENT PROGRAM
Province of Misamis Oriental
Municipality of SALAY

OFFICE OF THE MUNICIPAL MAYOR

NAME OF SUB-PROJECT : *Concreting of 1.800 kms. Membuli
Farm to Market Road Section*


LOCATION : *Barangay Membuli, Salay, Misamis Oriental*

TOTAL PROJECT COST : *Php*

PROJECT ID NO. :

**Folder No. 3
(Social Environmental Safeguard)**

Submitted By:


ROMEO L. GUE
Municipal Mayor

**DA-RFD 10
R. I/I-BUILD
RECEIVED**
DATE: 12/02/13
BY: 

**Mindanao Rural Development Project – Adaptable Loan Program II
Environmental Management Plan Template for Rural/Farm-to-Market Roads**

[Note: This template is designed to rapidly identify and assess the environmental issues and associated mitigation/management measures in Rural and Farm-to-Market Roads funded under MRDP2. This template consolidates all safeguards aspect of Communal Irrigation Subproject as found in various project documents. This document replaces the EMP checklist in Annex 38 of the RI Manual]

Name of Road : **CONCRETING OF 1.800 KMS. MEMBULI FARM TO MARKET ROAD**
Location : **BARANGAY MEMBULI, SALAY, MIS. OR.**
Implementing LGU : **SALAY, MISAMIS ORIENTAL**
Estimated number of Beneficiaries : **1,417 Total Population, 692 Male and 725 Female and 298 HH**
New or Rehab : **UPGRADING**
Estimated Total Cost: **Php 14,846,473,45**

A. Site and Design Consideration

[Do not proceed with the Subproject preparation including this ESMP unless all items below are confirmed true.]

1. The Road does not encroach into or traverse any declared protected area of natural habitat (c.f. Loan Agreement: MRDP2 will not fund subprojects located inside a declared Protected Area);
2. The subproject will not displace, disfigure or render inoperable/inaccessible any monument or physical structure of known cultural and historical significance.

B. Environmental Issues and Mitigation Measures *[The following are issues frequently associated with Farm to Market Roads. Issues include alleged/perceived impacts, potential impacts, health and safety and environmental risks. Entries in the “Assessment” column should describe or provide qualifications regarding the significance of the issues. Issues that are deemed critical or significant should have a corresponding entry in the “Mitigation” column. Entries in the “Instrument” column should indicate how and where in the measures will be implemented in the Subproject. Please feel free to add, delete or modify any of the items in the template. In preparing the EMP below refer to the Environmental and Social Assessment Section of the FS for specific safeguards issues and assessments]*

| Issue (Potential Impact) | Assessment | Mitigation Measure | Instrument of Implementation (POW, Contract, IDP, or O&M Plan)* |
|---|--|---|--|
| 1. Temporary increase in sedimentation during | <input checked="" type="checkbox"/> Topography of the road alignment necessitate | <input checked="" type="checkbox"/> Earthmoving/ cutting of slopes to be done during dry months | DED/POW; Contract |

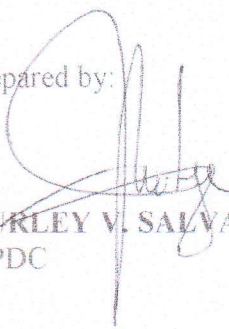
| Issue (Potential Impact) | Assessment | Mitigation Measure | Instrument of Implementation (POW, Contract, IDP, or O&M Plan)* |
|---|---|---|---|
| construction | <p>massive earthmoving and cutting of clayey or loose topsoils</p> <p><input checked="" type="checkbox"/> Cut materials will consist mainly of hard rocks and are unlikely to generate significant sediments</p> | <p><input checked="" type="checkbox"/> Proper disposal and compaction of spoils</p> <p><input type="checkbox"/> No measures required</p> | |
| 2. Potential contamination of surface and groundwater with oil/grease | <p><input type="checkbox"/> Waste oil and grease from equipment could contaminate surface water</p> <p><input checked="" type="checkbox"/> There will be no or insignificant amount of waste oil/grease</p> | <p><input checked="" type="checkbox"/> Proper handling and disposal of waste oil and grease</p> | Contract |
| 3. Potential contamination with human waste | <p><input type="checkbox"/> Construction workers would be temporarily housed in a base camp</p> <p><input checked="" type="checkbox"/> Workers would be mostly locals and are expected to go home to their respective houses after works</p> | <p><input type="checkbox"/> Set up adequate latrine/toilet facility at the base camp</p> | Contract |
| 4. Potential disruption of traffic flow | <p><input checked="" type="checkbox"/> The access road and/or segments to be rehabilitated need is vital to daily activities of the residents and farmers and need to be kept open to traffic during construction</p> <p><input checked="" type="checkbox"/> The construction will not affect daily</p> | <p><input checked="" type="checkbox"/> Keep the road open to traffic flow and minimize disruptions along the access road and/or construction area; Provide adequate warning signs and traffic personnel when necessary;</p> <p><input checked="" type="checkbox"/> Undertake regular maintenance measures on the passable</p> | Contract |

| Issue (Potential Impact) | Assessment | Mitigation Measure | Instrument of Implementation (POW, Contract, IDP, or O&M Plan)* |
|--|--|--|--|
| | movement of residents and farmers | portions of the roads <input type="checkbox"/> No measures needed | |
| 5. Potential dust/mud nuisance during construction | Roads could become powdery during dry days and muddy during rainy days of the construction period <input type="checkbox"/> Access road and/or the construction/rehabilitation works passes through a populated area <input checked="" type="checkbox"/> Access road and/or construction/rehabilitation does not pass through any populated area | <input type="checkbox"/> Undertake sprinkling of road (including access roads) during dry days, and filling up of potholes during rainy days, especially in residential areas <input type="checkbox"/> Set up speed limits for vehicles, especially within residential areas <input checked="" type="checkbox"/> No measures needed | Contract |
| 6. Landslide/erosion of exposed road sides resulting in sedimentation of waterways | <input type="checkbox"/> The road will traverse a mountainous area necessitating deep cuts on mountainsides, particularly between station ____ and ____, etc (check DED for deep cuts)... <input type="checkbox"/> The exposed slopes will likely consist of highly erodible loose materials <input type="checkbox"/> The cut slopes will be hard materials that would resist erosion <input type="checkbox"/> The road passes through a relatively benign terrain, cuts will be minimal <input checked="" type="checkbox"/> The rehabilitation work does not involve additional road cuts | <input type="checkbox"/> Include slope protection works at the following stations: _____ _____ ..etc.. (Specify the type/s of slope protection to be applied at each section-Consult with the Municipal Engineer: <input type="checkbox"/> Bioengineering with geomat and cover crop <input type="checkbox"/> Fast growing shrub species <input type="checkbox"/> Riprap <input type="checkbox"/> Gabions <input type="checkbox"/> Terracing <input type="checkbox"/> Concrete protection wall <input type="checkbox"/> Others _____) | DED/POW Or (if budget does not permit) LGU Commitment Letter |
| 7. Inadequate | <input type="checkbox"/> The road will block | <input type="checkbox"/> Installation of cross | DED |

| Issue (Potential Impact) | Assessment | Mitigation Measure | Instrument of Implementation (POW, Contract, IDP, or O&M Plan)* |
|---|---|--|---|
| drainage resulting in flooding or ponding | runoff, resulting in flooding on one side of the road during rainy days. <input type="checkbox"/> Drainage issues unlikely | drain between station ____ and ____. | |
| 8. Potential increase use of pesticides due to intensification of cash crop production in the area | <input type="checkbox"/> There is an ongoing IPM program of DA in the service area <input checked="" type="checkbox"/> Farmers in the service area have not been trained on IPM | <input type="checkbox"/> DA to continue to support IPM program <input checked="" type="checkbox"/> LGU to Coordinate with DA on IPM training | Capacity Building Plan O&M Plan; Capacity Building Plan |
| 9. Potential acceleration of denudation of the upland/hilly areas due to intensification of crop production | <input type="checkbox"/> The proposed road will connect to the market an upland/hilly area where farmers are currently practicing erosive farming techniques. The road could help accelerate the denudation of the upland/hillsides rendering them unproductive in a few years. <input checked="" type="checkbox"/> The road connects only lowland farms to the market | <input type="checkbox"/> DA to coordinate with LGU for the introduction of sustainable upland farming systems in the area <input checked="" type="checkbox"/> No measure required | O&M Plan; Capacity Building Plan |
| 10. Potential increased in encroachments of human activities into the nearby public forest | <input type="checkbox"/> The proposed road will improve human access to the nearby public forest, resulting in increase slash and burn cultivation, illegal logging and poaching. <input type="checkbox"/> The proposed road does not improve access to a public forest | <input type="checkbox"/> Coordinate with DENR for the enactment of ordinance deputizing the local community to enforce forestry laws <input type="checkbox"/> No measure required | O&M Plan; Capacity Building Plan |
| 11. Local employment | <input checked="" type="checkbox"/> Construction will provide local employment opportunities | <input checked="" type="checkbox"/> | Contract |

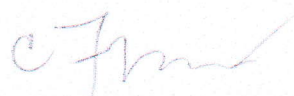
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|--------------------------|--|-------------------------------------|---|
| | opportunities | Implement RI Manual on local hiring | |
| | [] Construction does not provide any local employment opportunities | [] No measures required | |
| | | | |
| <others issues> | | | |

Prepared by:



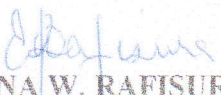
HURLEY V. SALVAÑA
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Adopted by:



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MPMIU Head

Noted by:



EDNA W. RAFISURA
Barangay Captain