

**Philippine Rural Development Program  
Environmental and Social 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 PRDP. This template consolidates all safeguards aspect of Communal Irrigation Subproject as found in various project documents. This document replaces the ESMP checklist in Annex \_\_\_\_\_ of the I-BUILD Manual]*

Name of Road : **Concreting of Manggagawa-Capuluan Farm-to-Market Road**  
Location : **Brgy. Manggagawa, Himbubulo Este, Dancalan Central,  
Dancalan Caimawan, Arbismen, Capuluan Tulon, Capuluan Central**  
Implementing LGU : **Municipality of Guinayangan, Quezon**  
Estimated number of beneficiaries: **2,877 Households**  
New or Rehab : **Rehabilitation - Concreting**  
Estimated Total Cost : **Php 119,670,615.82**

**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: PRDP 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 ESMP below refer to the Environmental and Social Assessment Section of the FS for specific safeguards issues and assessments]*

<b>Issue (Potential Impact)</b>	<b>Assessment (Sample assessments)</b>	<b>Mitigation Measure</b>	<b>Instrument of Implementation (POW, Contract, IDP, or O&amp;M Plan)*</b>	<b>Schedule of Implementation</b>	<b>Responsible Unit</b>
1. Temporary increase in sedimentation during construction	Topography of the road alignment necessitate massive earthmoving and cutting of clayey or loose topsoils	Proper disposal and compaction of spoils	DED/POW; Contract	Construction Phase	Contractor,  Mun. Engineering Office/I-BUILD Team
2. Potential contamination of surface and groundwater with oil/grease	Waste oil and grease from equipment could contaminate surface water	Proper handling and disposal of waste oil and grease	Contract	Construction Phase	Contractor,  Mun. Engineering Office/I-BUILD Team
3. Potential contamination with human waste	Workers would be mostly locals and are expected to go home to their respective houses after works	Set up adequate latrine/toilet facility at the base camp	Contract	Construction Phase	Contractor,  Mun. Engineering Office/I-BUILD Team
4. Potential disruption of traffic flow	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 and farmers	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;	Contract	Construction Phase	Contractor,  Mun. Engineering Office/I-BUILD Team



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4. Potential dust/mud nuisance during construction	Roads could become powdery during dry days and muddy during rainy days of the construction period  Access road and/or the construction/rehabilitation works passes through a populated area	Undertake sprinkling of road (including access roads) during dry days, and filling up of potholes during rainy days, especially in residential areas  Set up speed limits for vehicles, especially within residential areas	Contract	Construction Phase	Contractor,  Mun. Engineering Office/I-BUILD Team
5. Landslide/erosion of exposed road sides resulting in sedimentation of waterways	The rehabilitation work does not involve additional road cuts	No measures needed	DED/POW	Construction Phase	Contractor,  Mun. Engineering Office/I-BUILD Team
6. Inadequate drainage resulting in flooding or ponding	Drainage issues unlikely	No measures needed	DED	Construction Phase	Contractor,  Mun. Engineering Office/I-BUILD Team
7. Potential increase use of pesticides due to intensification of cash crop production in the area	Only a few Farmers in the service area have been trained on IPM	[x] LGU to Coordinate with DA on IPM training	Capacity Building Plan O&M Plan; Capacity Building Plan	Post-Construction Phase	Mun. Agriculture Office

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8. Potential acceleration of denudation of the upland/hilly areas due to intensification of crop production	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.	DA to coordinate with LGU for the introduction of sustainable upland farming systems in the area	O&M Plan; Capacity Building Plan	Post construction Phase	Municipal Agriculture Office
9. Potential increased in encroachments of human activities into the nearby public forest	The proposed road does not improve access to a public forest	No measure required	O&M Plan; Capacity Building Plan	Post construction Phase	MENRO
10. Local employment	Construction will provide local employment opportunities	Hiring priority shall be given to qualified local residents; Implement RI Manual on local hiring	Contract	Construction Phase	Contractor,  Mun. Engineering Office/I-BUILD Team
11. Conversion of Land-use/natural habitat due to quarry	Quarry site is existing and proven as a good source of quarry materials	Quarry materials will be procured to existing quarry sites	Certification	Construction Phase	Contractor,  Mun. Engineering Office/I-BUILD Team


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12. Potential damage to existing road due to hauling of quarry materials	Source of quarry materials is <u>37</u> km from project site. Transportation of quarry materials from source to FMR will cause damage to existing FMR	Regular maintenance and repair of existing road	Contract	Construction Phase	Contractor,  Mun. Engineering Office/I-BUILD Team
13. Dangerous curve having vertical ascend of around 28 percent	A portion of the existing FMR located at Segment "A" Sta. 2 + 225 to Sta. 2 + 470 in Brgy. Himbubulo Este has a vertical ascend around 28%	<p>Identified portion located at "A" Sta. 2 + 267.5 to Sta. 2 + 380 having an ascend around 28% will be down-graded to 18% thru reblocking and embankment works</p> <p>Installation of road safety warning signs which include: "dangerous curve ahead", "no over speeding", "give way to upcoming vehicle", "blow your horn" etc,</p> <p>Provision of slope protections on both sides of the identified section of the road</p>	<p>Contract</p> <p>Annual Investment Plan</p> <p>Contract</p>	<p>Construction Phase</p> <p>Construction Phase</p> <p>Construction Phase</p>	<p>Contractor,</p> <p>Municipal Engineering Office/I-BUILD Team</p> <p>MPDC/ Municipal Engineering Office/I-BUILD Team</p> <p>Contractor,</p> <p>Municipal Engineering Office/I-BUILD Team</p>



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14. Potential road hazards of road section with spillways and bridge	The proposed road will traverse 2 spillways and a 52 km. bridge	Both existing spillways at Segment "A" Sta. 0 + 840 and Sta. 6 + 625 will be rehabilitated due to signs of deterioration  Installation of road safety warning signs and bridge tonnage capacity on appropriate sections of the road	Contract  Annual Investment Plan	Construction Phase  Construction Phase	Contractor,  Municipal Engineering Office/I-BUILD Team  MPDC/ Municipal Engineering Office/I-BUILD Team
15. Environmental conservation and protection	Presence of mangroves within the road influence area  Presence of rural folks engaged in charcoal making	Strict implementation and enforcement of existing environmental laws and regulations on mangrove protection and conservation  Strict implementation and enforcement of appropriate environmental laws and regulations regarding charcoal making	Sangguniang Bayan Ordinance  Sangguniang Bayan Ordinance and Resolutions	Whole year round  Whole year round	MENRO, Office of the Mayor, concerned Sangguniang Barangays  MENRO, Office of the Mayor, concerned Sangguniang Barangays

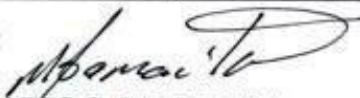
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16. Possible discovery of artifacts, bones and other objects of interest during construction of the processing plant	Discovery of artifacts, bones and other objects of interest within the 10 meter radius  Discovery of artifacts, bones and other objects of interest outside the 10 meter radius	Suspension of the activities and immediately report to the PLGU and RPCO SES Focal Person	Contract	During construction period	Contractor
17. Conflict between project implementers and other stakeholders/ Grievance during implementation	There is an acceptable Grievance Redress Mechanism in place	The project implementers to ensure that all grievances are properly addressed	Grievance Redress Mechanism Framework Contract	Before and during project implementation	PPMIU/ Contractor


Prepared by:

  
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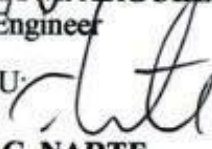
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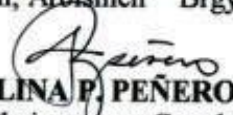
  
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Brgy. Chairman, Arbismen

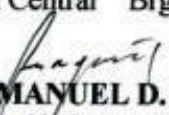
  
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Brgy. Chairman, Manggagawa

Adopted by MPMIU:

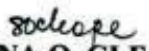
  
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