

**Philippine Rural Development Project  
Environmental and Social Management Plan**

Name of Road : Rehabilitation/Upgrading of Manano-Olango FMR  
 Location : Brgys. Olango, Siyempre Viva Sur, Trinidad and Manano, Mallig, Isabela  
 Implementing LGU : Provincial Government of Isabela  
 Number of beneficiaries : 8,517 population  
 1,898 household  
 Road Status ; Existing Gravelled Road with 440 meters road opening  
 Estimated Total Cost : Php 62,493,982.25

**A. Site and Design Concept**

1. The FMR is an existing road and does not encroach into or traverse any declared protected area of natural habitat and or ancestral domain claims of Indigenous Cultural Communities
2. The subproject have no recorded and or assessed any monument or physical structure of known cultural or historical significance.
3. That the sub-project does not displace any person, or property o cultural communities. any individual or of indigenous

**B. Environmental Issues and Mitigation Measures:**

<b>Issue (Potential Impact)</b>	<b>Assessment (Sample assessments)</b>	<b>Mitigation Measure</b>	<b>Schedule or duration of Mitigation Measures</b>	<b>Instrument of Implementation (POW, Contract, IDP, or O &amp;M Plan)*</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 top soil	Proper disposal and compaction of spoils	Upon implementation to completion of project	DED/POW; Contract	Contractor PEO ENRO/SES M & E
2. Potential contamination of surface and groundwater with oil/grease	There will be no or insignificant amount of waste oil/grease	Proper handling and disposal of waste oil and grease	During construction period	Contract	Contractor M & E
3. Potential contamination	Workers would be mostly locals and	Set up adequate	From start to finish	Contract	ENRO/SES

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with human waste	are expected to go home to their respective houses after works	latrine/toilet facility at the base camp			M & E
4. Potential disruption of traffic flow	The construction will not affect daily movement of residents 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;	From the beginning of construction until formal turn over	Contract	PEO Contractor
5. 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 construction/rehabilitation does not	Undertake sprinkling of road (including access roads) during dry days, and filling up of potholes during rainy days, especially in residential areas	During excavation periods from the beginning of construction period or upon completion of sub-project.  Put up sinages at strategic points.	Contractor  And  Monitoring and Evaluation Unit	PEO  PPDO  Contractor

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	pass through any populated area	[x]Set up speed limits for vehicles, especially within residential areas			
6. Landslide/ erosion of exposed road sides resulting in sedimentation of waterways	The road passes through a relatively benign terrain, cuts will be minimal	Include slope protection works at the following stations: Sta. 4+25; 4+602; 5+485; 6+414; 6+815; 7+198	During construction period	DED/POW  LGU Commitment Letter  Monitoring and Evaluation team of the PPMIU	
7. Inadequate drainage resulting in flooding or ponding	Drainage issues unlikely but for future flooding issues, drainages are to be installed.	Sta. 4+25; 4+602; 5+485; 6+414; 6+815; 7+198	Proposed location of box culverts	DED	Contractor  OPE  ENRO-SES  M & E
8. Potential increase in encroachments of human activities into the nearby public forest	The proposed road does not improve access to a public forest	Identified headwaters of Casili creek and Mallig River to be subject to reforestation	From the start of project and to extend for a period of ten years to sustain rehabilitation efforts	O&M Plan; Capacity Building Plan;.ESMP	Malaya Dev. Coop  ENRO-SES  PPDO/M7E  LGUs
9. Local employment	Construction will provide local employment opportunities	Hiring priority shall be given to	During construction	Contract/POW Labor Cost of project	Contractor  PEO

Issue (Potential Impact)	Assessment (Sample assessments)	Mitigation Measure	Schedule or duration of Mitigation Measures	Instrument of Implementation (POW, Contract, IDP, or O & M Plan)*	Responsible Unit
		qualified local residents; Implementation Manual on local hiring		(skilled and Unskilled) =Php 1,194,420.80.	
10. 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 at Aurora, Isabela and or Cabatuan, Isabela.  Attached certification that quarrying has no adverse impacts to the environment.	Schedule of volume of quarry materials needed as computed in the Programs of Work for the 9.17-km FMR	Programs of Work	PEO Contractor
11. Potential damage to existing road due to hauling of quarry materials	[ x] source of quarry materials is 20 km. Transportation of quarry materials from source to FMR will cause damage to existing FMR	[x] regular maintenance and repair of existing road from national road to the project site is more or less 2-kilometers	During construction period	Contract	PEO ENRO

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12. Conflict between members of the organization/Grievance during operation	Grievance investigation and resolution process	Review of policies instituted in the IESSF	Before, during and decommissioning process	Operations Manuel/Executive Order No. 13, s. 2015	Project proponent/LGUs
13. Possible discovery of artifacts, bones and other objects of interests during construction of the farm to market road	Discovery of artifacts, bones and other objects of interests within the 10 meter radius	Suspension of the activities and immediately report to the PLGU and RPCO-SES Focal Person	Submission of ECC to the PPMIU-SES Focal person	Contract	Contractor
14. BATCHING PLANT operability	Dust emissions/noise pollution	Daytime Operations only/use of water on dust elimination	During construction/operation/ECC submission prior to operation.	Contract	Contractor

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