

Philippine Rural Development Project Environmental and Social Management Plan

Name of Roads: Rehab. Of PRJ – Manion FMR
 Location: Parang, Maguindanao
 Implementing LGU: LGU Parang
 Estimate number of beneficiaries: 1,806
 New or Rehab: Rehabilitation
 Estimated Total Cost: P 21,810,624.98


Issue	Assessment	Mitigation Measure	Instrument of Implementation (POW, Contract, IDP, or O&M Plan)*
1. Temporary increase in sedimentation during construction	<input type="checkbox"/> Topography of the road alignment necessitate massive earthmoving and cutting of clayey or loose top soils <input checked="" type="checkbox"/> Cut materials will consist mainly of hard rocks and are unlikely to generate significant sediments	<input type="checkbox"/> Earthmoving/cutting of slopes to be done during dry months <input checked="" type="checkbox"/> Proper disposal and compaction of spoils <input type="checkbox"/> No measures required	DED/POW: Contractor
2. Potential Contamination of surface and groundwater with oil/grease	<input checked="" type="checkbox"/> Waste oil and grease from equipment could contaminate surface water <input type="checkbox"/> There will be no or insignificant amount of Waste oil/ grease	<input checked="" type="checkbox"/> Proper handling and disposal of waste oil and grease	Contract
3. Potential contamination with human waste	<input checked="" type="checkbox"/> Construction workers would be temporarily housed in a base camp <input checked="" type="checkbox"/> Workers would be mostly locals and are expected to go home to their respective houses after works	<input checked="" type="checkbox"/> Set up adequate latrine/toilet facility at the base camp	Contract
4. Potential description of traffic flow	<input checked="" type="checkbox"/> The access road and/or segments to be rehabilitated need is vital to daily activities of the residents and	<input checked="" type="checkbox"/> Keep the road open to traffic flow and minimize disruptions along the access road	Contract

	<p>farmers needs to be kept open to traffic during construction</p> <p><input checked="" type="checkbox"/> The construction will not affect daily movements of residents and farmers</p>	<p>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 portions of the roads</p> <p><input type="checkbox"/> No measures needed</p>	
5. Potential dust/mud nuisance during construction	<p>Roads could become powdery during dry days and muddy during rainy days of the construction period</p> <p><input type="checkbox"/> Access road and/or the construction/ rehabilitation works passes through a populated area</p> <p><input type="checkbox"/> Access road and/or construction/ rehabilitation does not pass through any Populated area</p>	<p><input checked="" type="checkbox"/> Undertake sprinkling of road (including access road) during dry days , and filling up of potholes during rainy days, especially in residential areas</p> <p><input checked="" type="checkbox"/> Set up speed limits for vehicles, especially within residential areas</p> <p><input type="checkbox"/> No measures Needed</p>	
6. Landslide/ erosion of exposed roads sides resulting in sedimentation of waterways	<p><input type="checkbox"/> The road will traverse a mountainous area necessitating deep cuts on mountainsides, particularly between station (pls refer to the DED for deep cuts)...</p> <p><input type="checkbox"/> The Exposed slopes will likely consist of highly erodible loose materials</p> <p><input type="checkbox"/> The cuts slopes will be hard materials that would resist erosion</p> <p><input type="checkbox"/> The road passes through a relatively</p>	<p><input type="checkbox"/> Include slope protection works at the following station: (pls refer to the DED) ..etc.. (Specify the type/s of slope protection to be applied at each section-Consult with the Municipal Engineer:</p> <p><input type="checkbox"/> Bioengineering with geomat and cover crop</p> <p><input checked="" type="checkbox"/> Fast growing shrub species</p>	<p>DED/POW</p> <p>Or (if budget does not permit) LGU Commitment Letter</p>

	benign terrain, cuts will be minimal [x] The rehabilitation work does not involve additional road cuts	<input type="checkbox"/> Riprap <input type="checkbox"/> Gabions <input type="checkbox"/> Terracing <input type="checkbox"/> Concrete protection wall <input type="checkbox"/> Others _____)	
7. Inadequate drainage resulting in flooding or ponding	[x] The road will block runoff, resulting in flooding on one side of the road during rainy days. <input type="checkbox"/> drainage issues unlikely	[x] installation of cross drain between station are in the following stations, sta 0+225, sta.0+615, sta.0+770, & sta. 0+995, all are consist of 7 pcs tube each of 910 mm dia.	DED
8. Potential increase use of pesticides due to intensification of cash crop production in the area	[x] There is an ongoing IPM program of DA in the service area <input type="checkbox"/> Farmers in the service area have not been trained on IPM	[x] DA to continue to support IPM program <input 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. [x] The road connects only lowland farms to the market	[x] DA to coordinate With LGU for the introduction of sustainable upland farming systems in the area <input type="checkbox"/> No measure required	O&M Plan: Capacity Building Plan
10. Potential increase 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 increased slash and burn cultivation, illegal logging and poaching.	<input type="checkbox"/> Coordinate with DENR for the enactment of ordinance deputizing the local community to enforce forestry laws	O&M Plan; Capacity Building Plan

	<input type="checkbox"/> The proposed road does not improve access to a public forest	<input type="checkbox"/> No measure required	
11. Local employment	<input checked="" type="checkbox"/> Construction will provide local employment opportunities	<input checked="" type="checkbox"/> Hiring priority shall be given to qualified local residents; Implement RI Manual on local hiring	Contract
	<input type="checkbox"/> Construction does not provide any local employment opportunities	<input type="checkbox"/> No measures required	

Prepared by:


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