

Environmental Management Plan Template for Rural/Farm-to-Market Roads

Name of Road : **BATUCAN-MALIHAI-DEL MONTE FMR**
Location : **BRGY. BATUCAN & BRGY. DEL MONTE TALACOGON, AGUSAN DEL SUR**
Implementing LGU : **LGU TALACOGON, AGUSAN DEL SUR**
Estimated No. of beneficiaries : **9,064**
New or Rehab : **NEW**
Estimated Total Cost : **PhP 26,877,780.83**

Table 9. Environmental Management Plan

Issue (Potential Impact)	Assessment	Mitigation Measure	Instrument of Implementation (POW, Contract, IDP, or O&M Plan)*
1. Temporary increase in sedimentation during construction	<input checked="" type="checkbox"/> Topography of the road alignment necessitate massive earthmoving and cutting of clayey or loose topsoils <input type="checkbox"/> Cut materials will consist mainly of hard rocks and are unlikely to generate significant sediments	<input checked="" type="checkbox"/> Earthmoving/ cutting of slopes to be done during dry months <input type="checkbox"/> Proper disposal and compaction of spoils <input type="checkbox"/> No measures required	DED/POW; Contract
2. Potential contamination of surface and groundwater with oil/grease	<input type="checkbox"/> Waste oil and grease from equipment could contaminate surface water <input checked="" type="checkbox"/> There will be no or insignificant amount of waste oil/grease	<input 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 disruption of traffic flow	<input 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 <input checked="" type="checkbox"/> The construction will not affect daily movement of residents and farmers	<input 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; <input checked="" type="checkbox"/> Undertake regular maintenance measures on the passable portions of the roads <input type="checkbox"/> No measures needed	Contract
5. Potential dust/mud nuisance during	<input checked="" type="checkbox"/> Roads could become powdery during dry days and	<input checked="" type="checkbox"/> Undertake sprinkling of road (including access	Contract

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construction	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	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	
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 drainage resulting in flooding or ponding	<input type="checkbox"/> The road will block runoff, resulting in flooding on one side of the road during rainy days. <input checked="" type="checkbox"/> Drainage issues unlikely	<input type="checkbox"/> Installation of cross drain between station ____ and _____.	DED
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 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

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	[✓] The road connects only lowland farms to the market		
10. Potential increased in encroachments of human activities into the nearby public forest	[] The proposed road will improve human access to the nearby public forest, resulting in increase slash and burn cultivation, illegal logging and poaching. [✓] The proposed road does not improve access to a public forest	[] Coordinate with DENR for the enactment of ordinance deputizing the local community to enforce forestry laws [✓] No measure required	O&M Plan; Capacity Building Plan
10. Local employment	[✓] Construction will provide local employment opportunities [] Construction does not provide any local employment opportunities	[✓] Hiring priority shall be given to qualified local residents; Implement RI Manual on local hiring [] No measures required	Contract
<others issues>.			