

**DEPARTMENT OF AGRICULTURE  
Philippine Rural Development Project**

**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 Farm to Market Roads Subproject as found in various project documents.]*

*ADDITIONAL NOTES: Items in red are mandatory items recently required based on the comments of the World Bank. The ESMP table should form part of the write up and the signed copy of the ESMP must be included in the SES attachments.*

Name of Road:	<u>Rehabilitation of Baybayin, Barangay Ibabang Dupay to Purok Centro Itaas, Ilayang Dupay Farm-to-Market Road</u>
Location:	<u>Purok Baybayin, Ibabang Dupay and Purok Manggahan and Centro Itaas, Ilayang Dupay, Lucena City</u>
Implementing LGU:	<u>City Government of Lucena</u>
Estimated number of beneficiaries:	<u>9,390</u>
New or Rehab:	<u>Rehabilitation</u>
Estimated Total Cost:	<u>P 15,332,616.52</u>

**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]*

Issue/ Potential Impact	Assessment	Mitigation Measure	Schedule/ Duration of Mitigation Measures Implementation	Instrument of Implementation (POW, Contract, IDP, or O&M Plan)*	Responsible Unit
1. Temporary increase in sedimentation during construction	[ ] Topography of the road alignment necessitate massive earthmoving and cutting of clayey or loose topsoils [ x ] Cut materials will consist mainly of hard rocks and are unlikely to generate significant sediments	[ x ] Earthmoving/ cutting of slopes to be done during dry months [ x ] Proper disposal and compaction of spoils [ ] No measures required	As needed and necessary	DED/POW; Contract	City Engineering Office and I-BUILD, CPMIU
2. Potential contamination of surface and groundwater with oil/grease	[ x ] Waste oil and grease from equipment could contaminate surface water [ ] There will be no or insignificant amount of waste oil/grease	[ x ] Proper handling and disposal of waste oil and grease	As needed and necessary	Contract	City Engineering Office and I-BUILD, CPMIU
3. Potential contamination with human waste	[ ] Construction workers would be temporarily housed in a base camp [ x ] Workers would be mostly locals and are expected to go home to their respective houses after works	[ x ] Set up adequate latrine/toilet facility at the base camp	By start of project	Contract	City Engineering Office and I-BUILD, CPMIU, City Health Office
4. Potential disruption of traffic flow	[ x ] 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 [ x ] The construction will not affect daily movement of residents and farmers	[ x ] 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; [ x ] Undertake regular maintenance measures on the passable portions of the roads [ ] No measures needed	During mobilization of heavy equipment and whenever necessary	Contract	I-BUILD, CPMIU and Traffic Office



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5. Potential dust/mud nuisance during construction	Roads could become powdery during dry days and muddy during rainy days of the construction period [ x ] Access road and/or the construction/ rehabilitation works passes through a populated area [ ] Access road and/or construction/ rehabilitation does not pass through any populated area	[ x ] Undertake sprinkling of road (including access roads) during dry days, and filling up of potholes during rainy days, especially in residential areas [x] Set up speed limits for vehicles, especially within residential areas  [ ] No measures needed	As needed and necessary	Contract	City Engineering Office and I-BUILD, CPMIU
6. Landslide/ erosion of exposed road sides resulting in sedimentation of waterways	[ ] The road will traverse a mountainous area necessitating deep cuts on mountainsides [ ] The exposed slopes will likely consist of highly erodible loose materials [ ] The cut slopes will be hard materials that would resist erosion [ ] The road passes through a relatively benign terrain, cuts will be minimal [ x ] The rehabilitation work does not involve additional road cuts	[ ] Include slope protection works at the following stations: (Specify the type/s of slope protection to be applied at each section- Consult with the Municipal Engineer: [ ] Bioengineering with geomat and cover crop [ ] Fast growing shrub species [ ] Riprap [ ] Gabions [ ] Terracing [ ] Concrete protection wall [ ] Others _____)		DED/POW  Or (if budget does not permit) LGU Commitment Letter	City Engineering Office and I-BUILD, CPMIU
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. [ ] Drainage issues unlikely	[ x ] Installation of cross drain between stations. Please see detailed engineering design and POW.		DED	City Engineering Office and I-BUILD, CPMIU


Issue/ Potential Impact	Assessment	Mitigation Measure	Schedule/ Duration of Mitigation Measures Implementation	Instrument of Implementation (POW, Contract, IDP, or O&M Plan)*	Responsible Unit
8. Potential increase use of pesticides due to intensification of cash crop production in the area	[ ] There is an ongoing IPM program of DA in the service area [ x ] Farmers in the service area have not been trained on IPM	[ x ] DA to continue to support IPM program [ x ] LGU to Coordinate with DA on IPM training		Capacity Building Plan O&M Plan; Capacity Building Plan	City Engineering Office and I-BUILD, CPMIU, City Agriculturist Office
9. 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. [ x ] The road connects only lowland farms to the market	[ ] DA to coordinate with LGU for the introduction of sustainable upland farming systems in the area  [ x ] No measure required		O&M Plan; Capacity Building Plan	City Agriculturist Office to verify and confirm
10. Potential increase in encroachments of human activities into the nearby public forest	[ ] The proposed road will improve human access to the nearby public forest, resulting in increased 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	
11. Local employment	[ x ] Construction will provide local employment opportunities	[ x ] Hiring priority shall be given to qualified local residents; Implement RI Manual on local hiring	Prior to final award of contract	Contract	City Engineering Office and I-BUILD, CPMIU,
12. Conversion of Land-use/natural habitat due to quarry	[ ] the proposed quarry site is within a private land and need to convert existing land-use	[ x ] Quarry materials will be procured to existing quarry sites		Certification	City Engineering Office and I-BUILD, CPMIU



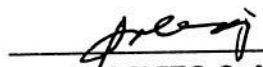
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	[x] Quarry site is existing and proven as a good source of quarry materials				
13. Potential damage to existing road due to hauling of quarry materials	[x] source of quarry materials is 15 km. Transportation of quarry materials from source to FMR will cause damage to existing FMR	[x] regular maintenance and repair of existing road	As needed and necessary	Contract; O&M Plan; Penalty clause to be included in the contract if the delivery trucks of the contractor damages any existing road or structures or once the load limit was not observed.	City Engineering Office and I-BUILD, CPMIU
14. Potential Damage to standing crops, houses and/or other properties section	[x] The proposed project is a rehabilitation of an existing barangay road, there will be no persons or properties that will be displaced or removed, as well as trees, and electric posts				CPMIU, City Engineer
15. 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	[x] Suspension of the activities and immediately report to the PLGU and RPCO SES Focal Person	During construction period	Contract	Contractor

Issue/ Potential Impact	Assessment	Mitigation Measure	Schedule/ Duration of Mitigation Measures Implementation	Instrument of Implementation (POW, Contract, IDP, or O&M Plan)*	Responsible Unit
16. Conflict between project implementers and other stakeholders/ Grievance during implementation	[x] There is an acceptable Grievance Redress Mechanism in place	[x] The project implementers to ensure that all grievances are properly addressed	Before and during project implementation	[x] Grievance Redress Mechanism Framework Contract	CPMIU/ Contractor


Prepared by:


  
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Adopted by CPMIU:

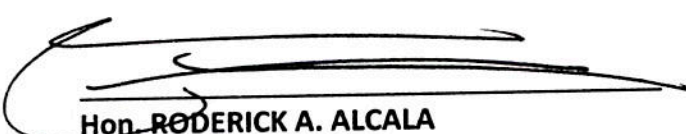
  
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Noted by the local community:

  
**Hon. JACINTO "BOY" JACA**  
 Barangay Captain, Ibabang Dupay

  
**Hon. ALEX ABADILLA**  
 Barangay Captain, Ilayang Dupay

Endorsed by:

  
**Hon. RODERICK A. ALCALA**  
 City Mayor