

ANNEX E-1

Department of Agriculture Philippine Rural Development Project

TEMPLATE FOR RURAL/FARM-TO-MARKET ROADS ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

Name of Road: CONCRETING OF BAGUER- ULAMIAN FMR
Location: BAGUER
Implementing LGU: LIBUNGAN
Estimated number of beneficiaries: 4,885
New or Rehab: NEW
Estimated Total Cost: P 7,119,000.00

A. Site and Design Consideration

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

Issue (Potential Impact)	Assessment (Sample assessments)	Mitigation Measure	Schedule/ Duration of the Mitigation Measures	Instrument of Implementation (POW, Contract, IDP, or O&M Plan)*	Responsible Unit
1. Presence of IP/ICC in the influence area	<input checked="" type="checkbox"/> There is no IP/ICC in the area as per LGU records and on site validation and will not traverse an ancestral domain. <input type="checkbox"/> The site is inside the ancestral domain or will traverse by the project. <input type="checkbox"/> The road is not inside nor traverses any ancestral domain. However, there are IP/ICC in the area.	<input type="checkbox"/> FPIC <input type="checkbox"/> Certification from the Tribal Chieftain expressing support to the project <input type="checkbox"/> Evidence of broad-based consultation	Prior to implementation	Consultation Meeting, Documentation	LGU

		<p><input type="checkbox"/> IP/ICC are minority of the beneficiaries. An IP/ICC development plan has been established as seen in the Annex H-1. Part of the measures in supporting IP/ICC is to provide them with interventions as stated in Annex H-1.</p> <p><input checked="" type="checkbox"/> No measure required</p>			
2. Cutting of Trees	<p><input type="checkbox"/> The road construction will necessitate cutting of trees:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Coconut <input type="checkbox"/> Fruit Trees <input type="checkbox"/> Forest Species <p><input type="checkbox"/> The trees to be cut are privately owned</p> <p><input checked="" type="checkbox"/> The road construction will not necessitate the cutting of trees</p>	<p><input type="checkbox"/> Secure cutting permit from:</p> <ul style="list-style-type: none"> <input type="checkbox"/> PCA <input type="checkbox"/> DENR-CENRO <p><input type="checkbox"/> Secure permission from the owner to cut the trees</p> <p><input checked="" type="checkbox"/> No measure required</p>	Prior to implementation	<p>Tree Cutting Permit/s</p> <p>MOA with the owner/s (if he/she/they will require compensation)</p> <p>Waiver of Rights/ Quit Claim (if the trees will be donated as reflected in Form 1)</p>	LGU
3. Demolition and Reconstruction of affected structures	<p><input type="checkbox"/> Permanent structures (e.g. concrete structures) will have to be removed/demolished during road construction</p> <p><input type="checkbox"/> Temporary structures will have to be removed/demolished during road construction</p>	<p><input type="checkbox"/> Compensate the owners of the structures that will be affected</p> <p><input type="checkbox"/> Assist the owners of the structure in</p>	Prior to implementation	<p>MOA with the owner/s (if he/she/they will require compensation/ assistance)</p>	LGU

	<input checked="" type="checkbox"/> The road construction will not affect any permanent or temporary structures	relocating/rehabilitating the affected structures <input checked="" type="checkbox"/> No measure required		Waiver of Rights/ Quit Claim (if the owner/s will not require compensation as reflected in Form 1)	
4. Conversion of Land – use/natural habitat due to quarry	<input checked="" type="checkbox"/> Quarry Site is existing and proven as a good source of materials	<input type="checkbox"/> Quarry materials will be procured from existing site/s: <u>Cabaruyan</u> <u>Montay</u> which is/are in a distance of <u>7</u> km from the subproject site.	During implementation	Certificate	
5. Potential damage to existing road due to hauling of quarry material	<input type="checkbox"/> Sources of Quarry will cause damage to existing roads <input checked="" type="checkbox"/> Sources of Quarry will not cause damage to existing roads	<input type="checkbox"/> Regular maintenance and repair of existing road by the contractor <input checked="" type="checkbox"/> No measures required	During implementation	Contract	Contract or
6. Temporary increase in sedimentation during construction	<input type="checkbox"/> Topography of the road alignment necessitate massive earthmoving and cutting of clayey or loose topsoil <input checked="" type="checkbox"/> Cut materials will consist mainly of hard rocks and are unlikely to generate significant sediments <input type="checkbox"/> Topography of the road alignment requires nil earthmoving	<input type="checkbox"/> Earthmoving/cutting of slopes to be done during dry months <input type="checkbox"/> Proper disposal and compaction of spoils <input checked="" type="checkbox"/> No measures required	During implementation	DED/POW; Contract	Contract or
7. Potential	<input type="checkbox"/> Waste oil and grease from equipment could contaminate	<input checked="" type="checkbox"/> Proper handling and	During implement	Contract	Contract or

	contamination of surface and ground water with oil/grease	surface water <input checked="" type="checkbox"/> There will be no or insignificant amount of waste oil/grease	disposal of waste oil and grease	ation		
8.	Potential contamination with human waste	<input 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	During implementation	Contract	Contract or
9.	Potential dust/mud nuisance during construction	<input checked="" type="checkbox"/> Roads could become powdery during dry days and 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 type="checkbox"/> Access road and/or construction/ rehabilitation does not pass through any populated area	<input checked="" type="checkbox"/> Undertake sprinkling of road (including access roads) during dry days, and filling up of potholes during rainy days, especially in residential areas <input checked="" type="checkbox"/> Set up speed limits for vehicles, especially within residential areas <input type="checkbox"/> No measures needed	During implementation	Contract	Contract or

10. 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/s at the following stations: _____ _____ _____ _____ _____	During implementation	DED	Contract or
11. 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 _____)	During implementation	DED/POW Or (if budget does not permit) LGU Commitment Letter	Contract or

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<p>12. Presence of dangerous road sections due to road topography and elevation</p>	<p><input type="checkbox"/> Poor horizontal and vertical road alignment</p> <p><input type="checkbox"/> High road embankments pose hazard to road users</p> <p><input checked="" type="checkbox"/> No dangerous road sections</p>	<p><input type="checkbox"/> Provision of Guard Rails/Concrete Railings at the following stations</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Planting of hedgerows at the following stations</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Provision pavement markings to critical curves</p> <p><input type="checkbox"/> Installation of road signs at the following stations</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Set speed limit</p>	<p>During project implementation</p>	<p>POW</p>	<p>Contract or</p>
<p>13. Possible discovery of artefacts, bones, and other objects of interests during construction of the road</p>	<p><input checked="" type="checkbox"/> Discovery of artifacts bones and other objects of interests within 10 meter radius</p> <p><input type="checkbox"/> Discovery of artifacts bones and other objects of interests outside 10 meter radius</p>	<p><input checked="" type="checkbox"/> Suspension of the activities and immediately report to the PLGU and RPCO SES Focal Person</p>	<p>During implementation</p>	<p>Contract</p>	<p>Contract or/LGU</p>

14. Potential disruption of traffic flow	<p><input checked="" 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</p> <p><input type="checkbox"/> The construction will not affect daily movement of residents and farmers</p>	<p><input checked="" 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;</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>	During implementation	Contract	Contract or
15. Local employment	<p><input checked="" type="checkbox"/> Construction will provide local employment opportunities that will provide a standard salary wage based on RTWPB approved wage rates.</p> <p><input type="checkbox"/> Construction does not provide any local employment opportunities</p>	<p><input checked="" type="checkbox"/> Hiring priority shall be given to qualified local residents</p> <p><input type="checkbox"/> No measures required</p>	During implementation	Contract	Contract or
16. Grievance during construction	<p><input type="checkbox"/> Unclear policy on project implementation; there is no acceptable grievance redress mechanism in place.</p> <p><input type="checkbox"/> The project has already established an acceptable policy on addressing grievances</p>	<p><input type="checkbox"/> Establish an acceptable policy on project implementation and grievance redress mechanism</p>	During implementation	O&M EO creating the PPMIU	LGU and PSO /RPCO Grievance Point Person/ Grievance Officer

	<input checked="" type="checkbox"/> Access to the Grievance Redress Mechanism (GRM posters and Grievance Form Drop Boxes) is available in strategic locations at all levels of project implementation: <input checked="" type="checkbox"/> Project Site <input checked="" type="checkbox"/> Barangay Hall/s <input checked="" type="checkbox"/> Municipal Hall/s Provincial Hall	<input checked="" type="checkbox"/> Assign a Grievance Focal/Point Person <input type="checkbox"/> No further measure required			
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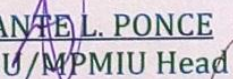
Batching Plant

17. Batching Plant Requirement	<input type="checkbox"/> The road construction requires the setting up of ____ batching plant/s <input type="checkbox"/> The batching plant/s will be mobile and operated for less than 1 year <input type="checkbox"/> There is an existing batching plant at a distance of <u>5km</u> from the project site.	<input type="checkbox"/> Contractor to comply with the succeeding requirements as applicable to the setting up/ construction of batching plant/s	During implementation	Contract	Contract or
18. 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 checked="" type="checkbox"/> The road connects only lowland farms to the market	<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	After project completion	O&M Plan; Capacity Building Plan	LGU
19. Potential increase in encroachments of human activities into the	<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 checked="" type="checkbox"/> The proposed road does not improve access to a public forest	<input type="checkbox"/> Coordinate with DENR for the enactment of ordinance deputizing the local community to enforce forestry laws <input checked="" type="checkbox"/> No	After project completion	O&M Plan; Capacity Building Plan	LGU

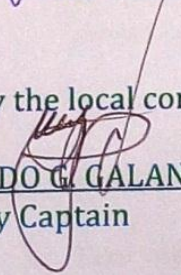
nearby public forest		measure required			
20. Potential increase use of pesticides due to intensification of cash crop production in the area	<input checked="" type="checkbox"/> There is an ongoing IPM program of DA in the service area <input type="checkbox"/> Farmers in the service area have not been trained on IPM	<input checked="" type="checkbox"/> DA to continue to support IPM program <input type="checkbox"/> DA to intensify IPM Program in the area thru: <hr/> <hr/> <hr/> <input type="checkbox"/> LGU to Coordinate with DA on IPM training	During and after project completion	Capacity Building Plan O&M Plan; Capacity Building Plan	LGU

Prepared by: _____

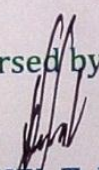
Adopted by PPMIU/MPMIU:


RENANTE L. PONCE
 PPMIU/MPMIU Head

Noted by the local community:


REYNALDO G. GALANTO
 Barangay Captain

Endorsed by :


MANUEL T. DELA SERNA
 Municipal Mayor