

d. Social Analysis

1. Project Beneficiaries

The direct beneficiaries of the 4.93-kilometers concrete Farm to Market Road comprises 1,429 households with a total population of 5,538 distributed in the influence communities as follows:

Table 7. Project beneficiaries

BARANGAY	House Hold (no)	No. of Beneficiaries	MALE	FEMALE
1. Magassi, Cabagan, Isabela	445	2,130	1098	1032
2. Mabangug, Cabagan, Isabela	65	392	191	201
3. Union, Cabagan, Isabela	156	695	346	349
4. Camasi, Tumauni, Isabela	473	2,321	1192	1129
TOTAL	1429	5,538	2,827	2,711

Prior to the conduct of the public consultation, the Social and Environmental Safeguards Team (SES) made proper coordination with government agencies specifically, Department of Environment and Natural Resources/Environmental Management Bureau, National Commission on Indigenous Peoples/Indigenous Cultural Communities and Local Government Units.

The public consultation conducted by the SES Team was held in Barangay Magassi, Cabagan, Isabela. Each of the four barangays was well represented. The Public consultation was held at Magassi Community Center. It was attended by two hundred thirty one barangay beneficiaries to include road influence areas. The activity was spearheaded by the Provincial Program Management and Implementing Unit with the assistance of municipal counterparts that began with discussion of each of the responsible units and ended with an open forum. In the end, the four attending Barangays moved for the indorsement of the project/s Carabao Dairy Farming and Magassi-Union, Tumauni, Isabela and Camasi, Tumauni, Isabela Farm to Market Road.

Executive Order No. 13, series of 2015 creating and constituting the Grievance Redress Committee for the protection of project beneficiaries for implementation under the Philippine Rural Development Project in the province of Isabela. The order is integral element to seek feedback from project

beneficiaries and as a means to resolve complaints on project activities relative to PRDP projects.

The Grievance Point Person has an organizational structure chaired by the Provincial Legal Office with representatives from identified offices and PPMIU representatives and municipal representatives. Likewise, the GRM/GPP was integrated in the PPMIU Organizational Structure under sub-component I-SUPPORT, marked as Annex "J-1"

No issues have been raised, beneficiaries were eager to accept the aforementioned projects for the community and beneficiaries. Result of the public consultation was the issuance of No Objection Certificates by the community through their Barangay Captains for the Farm to Market Road upgrading project.

2. Indigenous Cultural Community/Indigenous Peoples (ICC/IP)

In the rural appraisal conducted, it was found out that the indigenous cultural communities in the influence Barangays of the 4.93-kilometer FMR are the minority block Ibanags. It was further ascertained that the 4.93-kilometer stretch fall outside of the ancestral domain claim of the Indigenous Peoples. Majority of the beneficiaries earn a living through farming and are belonging to the indigenous cultural communities. There was no identified tribal chieftain in the communities. As such, consultative meetings were conducted which was dominated by indigenous peoples group, the Ibanags.. Refer to pictures for documentary with inscribed date. In May 5, 2014, the conduct of Pre-Field Based Investigation was attended by Indigenous Peoples representative at Ilagan City Service Center, Alibagu, City of Ilagan.

The National Commission on Indigenous Peoples, Regional Office, furnished the PPMIU, a copy of the formal endorsement for the issuance of Certificate of Non-Overlap. To date, the document is pending approval at the Office of the NCIP Commissioner for Region 02, and attached in the Feasibility Study as Annex "C"

3. Site and Right-of-Way acquisition

The proposed FMR is an open traverse all weather road connecting Barangays Magassi, and Union, Cabagan to barangay Camassi, Tumauni, Isabela. It was known from documents obtained that large portion of the area was identified as Forest Zone or an expired Pasture Lease Agreement. A Special Land Use Permit was obtained from the Office of the Regional Executive Director/Department of Environment and Natural Resources and attached as Annex "H".

4. Damage to standing crops, houses and/or properties

The 4.93-kilometer FMR upgrading poses no damage to any standing crops, houses and or properties. The required width to include provision for road shoulder is already existing along both sides of the road..

5. Physical displacement of persons

The stretch of the proposed FMR traverses large tract of agricultural land use and is a production area/s for rice, corn, sugar cane and pasture lands.. As such, physical displacement of persons and or rehabilitation/relocation of houses are unlikely.

6. Economic displacement of persons

There will be no loss of property and or livelihood within the stretch of the proposed road to be concreted. There are no traditional farm product to be displaced, nor areas that will economically displace persons with the proposed upgrading and or concreting of the proposed FMR.

e. Environmental Analysis

1. Natural habitat

The 4.93-kilometer FMR traverses a large tract of agricultural and pasture lands starting from Barangay Magassi to Sitio Buraga, Camasi, Tumauni, Isabela, via Union Cabagan, Isabela. Records from the Bureau of lands reveal, the herein lots are classified as alienable and disposable lands as evidenced by a cadastral survey identified as Group Settlement Subdivision 1722N 12149E.

On top of short term agricultural products, the common vegetative cover is identified as grassland. The highest elevation of 103 meters above sea level above sea level obtained from National Mapping and Resource Inventory Administration Map for the municipality of Tumauni, Isabela. In addition, there has been no citing of the presence of endangered species of flora and fauna.

Per projection obtained from the Department of Environment and Natural Resources Office/ Forest Management Bureau, the FMR does not encroach into protected areas of the National Protected Areas System. The 5-kilometer stretch Farm to Market Road contains 1.9-kilometer of Alienable and disposable land at station 2+280 and 3.6-kilometer stretch of Timberland (Forest Zone) Project No. 15-G, Block A, Lands Classification Map No.2298 as certified by the Lands Evaluation Party (LEP) Department of Environment and Natural Resources, Tuguegarao City, Cagayan.

With its classification as Timberland (forest Zone), the PPMIU have applied for a Special Land Use Permit (SLUP) on the sub-project 4.91-km FMR, the herein SLUP bearing FMS No: SLUP-003-10312017 was hereto attached to form part of the annexes and marked as Annex "H".

Integrated Pest Management. Diversified farming method is practiced by many farmer beneficiaries. With the advent of Republic Act 10068, otherwise known as the Organic Agriculture Act of 2010. Agricultural production was through the practice of Integrated Pest Management (IPM) to sustain biodiversity conservation practices. In addition, farm waste is turned into forage used as animal feed which is required as pesticide free organic matter. The practice of IPM in the municipality of Cabagan was certified by the Municipal Agricultural Officer, certifying among others the conduct of IPM and IPM practices attached to form part of Annex "A-2" (ESS Screening Form) of the communities mentioned along the road influence areas of the proposed farm to market road.

2. Physical Cultural Resources

The SES multi-disciplinary team conducted simultaneous mobilization and reconnaissance survey with the participation of target beneficiaries in order to ascertain presence of any cultural and historical structures, features, landscapes, archeological sites, structures or monuments and/or physical and cultural resources. Results of the survey and reconnaissance proved negative.

In the event of the discovery of artifacts, bones and other objects of interests, all diggings, drillings, and other earthmoving activities within the radius of ten meters from discovery point shall be suspended immediately per Integrated Environmental and Social Safeguards Framework (IESSF) in the Chance Archeological/Paleontological Finds Procedure for PRDP sub-projects.

Likewise, Annex H-2 of the IESSF shall be made known to all contractors, contract administrators, site engineers, Local Government Units, on-site supervisors and other personalities relative to the project implementation to include Barangay captains for their information and guidance. PPMIU Isabela have made known of the Annex H-2, forming part of Annex "A-2" (ESS Screening Form) to all concerned through a letter of information to the Local Chief Executive, copies of which has been furnished to all concerned.

Annex H-2 is hereby submitted in conformity to the IESSF as attached in the Annex A-2-Environmental and Social Safeguards Screening Form for sub-projects.

3. Terrain, Soil Types and Rainfall

The terrain along the FMR is identified in the NAMRIA topographic Map. It ranges from level to rolling with the highest elevation reading at one hundred three meters (103) above sea level.

Soil types found in the influence area are of the rocky to stony on top of ridge and clay, loamy to sandy in lower elevations.

The average monthly rainfall in the province is recorded at 151.3 mm. The highest recorded rainfall is in the month of October with 420.9 millimeters (DOST/PAGASA).

4. Hazard Risk Assessment:

Official records of flooding, the municipality of Cabagan and Tumauni are outside of the flood prone areas per geo-hazard map of the Bureau of Mines and Geo-sciences. Barangays within the FMR is identified as outside of identified flood-prone areas due to its strategic location on high elevation of 103 meters above sea level. During rain months, head waters from the watershed areas are drained into the Balasig Creek to Cagayan River as catchment basin.

Due to the its slightly rolling terrain, the area along the stretch of the proposed FMR has high potentials to sheet erosion resulting in the formation of gulleys leading to river tributaries of creeks and streams.

5. Status of Environmental Clearances:

The PPMIU-SES have filed application of Environmental Compliance Certificates to the Environmental Management Bureau as evidenced by a certification issued by the same with succeeding Certificates of No Objection from the four recipient barangays hereto attached.

Proposed dumping site or waste disposal area will be at the lots to be identified in a certification duly accepted by the lot owners hereto attached.

Transport/hauling of quarry materials from quarry source which is about 20-kilometers away will cause damage to existing FMR. In order to mitigate/minimize the adverse effects on the road during hauling of quarry materials, the volume or quantities to be transported shall conform with load limits.

Quarry resources will be sourced out from the existing quarry pit/s at Minanga and Arcon, Tumauni, Isabela. Another potential site for sources of quarry materials identified at Fugu Abajo, Tumauni, Isabela, certified by the DPWH with the herein attached certification marked as Annex "F".

In compliance to existing environmental laws, the PPMIU-SES obtained an Environmental Compliance Certificate (ECC) from the Department of Environment and Natural Resources-Environmental management Bureau for the sub-project 4.91-km Union Cabagan-Camasi, Tumauni Farm to market Road bearing ECC-R02-1410-0085 in favor of the Provincial Government of Isabela, ready for submission.

With a given timeline, the proposed FMR has a project duration of 180 calendar days. The timeline implies the use of heavy equipment to facilitate construction within the specified period of time.

Batching Plant is identified in the Program of Work as one of the equipment needed in the construction of the FMR. DENR Administrative Order No 2003-30, the Implementing Rules and Regulations of Presidential Decree 1586 (Philippine Environmental Impact Statement (EIS) System, provided in Article II, Section 4(4.3), the Batching Plant falls under Category D (Projects unlikely to cause adverse environmental impacts). However, projects under Category D may secure a Certificate of Non-Coverage (CNC). With less than a year of the construction period, the said batching plant is mobile in nature.

The Program of Work of Olango-Manano FMR indicates two hundred forty (180) working days construction period within which the winning contractor is obliged to submit to the DENR-EMB through the PPMIU the required Project Description as determinant for screening in order to obtain the CNC, thus shall be formally indorsed to the proper government agency.