

## i. Social Analysis

Table 16. Project Beneficiaries

BARANGAY	MAL E	FEMA LE	TOTAL POPUL A-TION	NO. OF HOUS E-HOLD	AVE HH SIZE	Area (ha.)	% Share to Mun. Area
<b>Sub-Project Area</b>							
San Isidro	1,794	1,693	3,487	740	4.71	453.50	3.57
Pag-oring Nuevo	765	722	1,487	296	5.02	326.16	2.57
Pag-oring Viejo	226	214	440	90	4.89	668.93	5.27
Malinao	964	909	1,873	387	4.84	499.12	3.93
<b>Sub-Total</b>	<b>3,749</b>	<b>3,538</b>	<b>7,287</b>	<b>1,513</b>	<b>19.46 (4.86)</b>	<b>1,947.71</b>	<b>15.34(3.84)</b>
Tanag	836	788	1,624	314	5.17	1,197.54	9.43
Villasocorro	485	457	942	180	5.23	1,203.39	9.47
Caima	620	585	1,205	271	4.44	329.29	2.60
Cambalidio	1,499	1,414	2,913	613	4.75	940.44	7.40
Cawayan	506	480	986	195	5.07	2,248.05	17.70
Villadima	672	633	1,305	281	4.64	504.10	3.97
Salvacion	513	484	997	211	4.72	992.67	7.82
Tinalmud Viejo	342	323	665	125	5.32	1,166.42	9.18
Tinalmud Nuevo	430	406	836	150	5.57	1,150.46	9.06
Bahao	1,800	1,697	3,497	651	5.37	1,037.13	8.17
<b>Sub-Total</b>	<b>7,703</b>	<b>7,267</b>	<b>14,970</b>	<b>2,991</b>	<b>50.28(5.03)</b>	<b>10,753.53</b>	<b>84.8(8.48)</b>
<b>Total</b>	<b>11,452</b>	<b>10,805</b>	<b>22,257</b>	<b>4,504</b>		<b>12,701.24</b>	<b>100.00</b>
<b>% to Mun. Total</b>	<b>21.27</b>	<b>21.30</b>	<b>21.28</b>	<b>20.86</b>		<b>36.12</b>	
<b>Libmanan</b>	<b>53,845</b>	<b>50,730</b>	<b>104,595</b>	<b>21,590</b>	<b>5.0</b>	<b>35,162.80</b>	

Source: NSO 2010 Survey & MPDC Libmanan & DENR Survey

The four barangays comprising the project sites including those that will be indirectly affected by the subproject have a total population of 22,257, of which 11,452 are males and 10,805 are females (Table 16). San Isidro is the biggest among the barangays in the project sites in terms of population with about 16% share while Bahao and Cambalidio with 15.71% and 13.09 % share, respectively dominates the area indirectly influenced by the subproject. In terms of area, Pag-oring Viejo is the biggest at 699 hectares in the sub-project area while Cawayan with 17.70% share or 2,248.05 hectares is the biggest in the influence barangays. It is followed by Villasocorro, Tanag, Tinalmud Viejo and Tinalmud Nuevo contributing 9%.47%, 9.43%, 9.18 % and 9.06%, respectively.

The project beneficiaries have been consulted regarding the proposed project through barangay consultations (Annex A. Minutes of Meeting). During said consultations, almost all

sectors of the residents, particularly the affected ones, were represented, i.e. farmers, fishermen, barangay officials, women, senior citizens and the education sector. These activities were given importance to ensure total acceptance and cooperation of all concerned.

#### Consultative meetings with PAPs

Barangay	Date of meeting	No. of attendees
Pag-oring Nuevo & Pag-oring Viejo (Joint)	5: 00 PM, July 31, 2014	76
San Isidro	3:00 PM, July 31, 2014	73
Total		149

There were positive responses over the proposed subproject. Stakeholders expressed their concern regarding the structures that will be affected by the road rehabilitation. The PLGU gave the assurance that it will shoulder the costs that will be incurred in relocating the structures that will be affected.

Necessary measures have been taken to ensure smooth implementation and prevent untoward incidents during construction. Nevertheless, the Grievance Redress Mechanism (GRM) to be formulated by the Provincial LGU shall consider resolving conflicts that may arise unexpectedly. The mechanism shall cover all other subprojects of the PRDP in the Province of Camarines Sur. A Grievance Provincial Person (GPP) shall be appropriated or designated for the operation of the GRM.

*Table 17. Records and Feedbacks of Grievances and Appeal*

<i>Level</i>	<i>Responsible Office/Persons</i>	<i>Appeal Procedures</i>	<i>Content &amp; Means of Reply to Complaint</i>	<i>No. of Days to Resolve Grievance</i>
Barangay	LGU {BLGU – PRDP (SES)}	- Feedback/complaint accomplishment by the complaint - Recording of complaints and validity assessment	- meeting scheduling of all concerned - meeting documents & provision of minutes to parties involved	- Issues (complaints Resolution must be within 10 working days
Municipal/ Provincial	LGU (sB), PPMIU – PLGU (SP)	- If amiable settlement didn't prosper, within 15 days, complaint can be elevated to SB or SP - If complaint was settled...complaint form must be duly signified by the complainant and other concerned parties	- Appropriate council's consensus is material & formulate conciliatory measures - Responsible office/persons will annotate every stage of the process copy furnished the RPCO	- One month after receipt of the appeal  - One (1) week

Regional	RPCO	<ul style="list-style-type: none"> <li>- If no favorable solution was considered within the reglamentary period of 15 days, same can be filed at RPCO.</li> <li>- If appeal/ complaint was resolved, pertinent documents must be prepared must be prepared &amp; duly signed by all parties involved</li> </ul>	<ul style="list-style-type: none"> <li>- RPCO to decide and take any possible mitigating measures</li> <li>- Same documents must be annotated at every stage of the process.</li> </ul>	<ul style="list-style-type: none"> <li>- Within 1 month upon receipt of appeal</li> </ul>
Sub-National (cluster Level)	NPCO	<ul style="list-style-type: none"> <li>- If in case, complaint still reached the cluster level, same shall be elevated to PSO</li> <li>- If resolved and procedures will be instituted</li> </ul>	<ul style="list-style-type: none"> <li>- If RPCO didn't arrive at a consensus within 15 days, PSO to establish a decision</li> <li>- same process will be done</li> </ul>	<ul style="list-style-type: none"> <li>- Within 1 month upon receipt of appeal</li> </ul>

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

The identified project sites are not within any ancestral domain claim. Also, there are no indigenous cultural communities/indigenous people present within the project sites. Actually, some of the residents emanated from the provinces of Region 4 and permanently settled in the aforesaid barangays. Certification of Non-Overlap from the National Commission on Indigenous Peoples (NCIP) was secured and herein attached.

ii. Site and Right-of-Way acquisition

The proposed project site will have a carriage way of five meters, 1.5 meters shoulders on both sides with 0.9 m line canal. As the proposed sub-project has been in existence for more than 30 years already, there is no more problem when it comes to the five meters right of way and on the 1.5 meters shoulders and 0.9 m for line canal. There will be no residential houses to be displaced but there will be 9 sheds, 6 fence/steel gates, 1 porch, and other structures that will be affected. (Annex B). The owners are aware that they have encroached into the RROW and have agreed to remove or relocate structures will be affected by the road construction.

The existing road is concrete road but its surface is badly damaged already. The land use is agricultural, mostly planted with coconut. Land ownership is either through transfer, inheritance or sold by original and existing heirs.

The people affected were interviewed and have manifested their approval and consent to the construction/implementation of the sub-project. In support to the project, they signed waiver of rights for the damaged/lost portion of properties/structures.

Table 18 shows the affected persons of the sub-project for each barangay in the sub-project area.

*Table 18. The Project Affected Persons (PAPs) in the Subproject Area of Libmanan, Camarines Sur*

<b>LANDOWNER</b>	<b>OCCUPANTS</b>	<b>TDN/A RP</b>	<b>TOTAL LAND HOLDINGS (sq. m.)</b>	<b>TOTAL AREA AFFECTED (sq.m)</b>	<b>REMARKS</b>
<b>San Isidro, Libmanan</b>					
Abay, Fidela (Heirs of)		97-056- 00462	261		
Abay, Marciano	Biluan, Homer		150	5	waived
Abay, Socorro					
Abay, Leonor					
Abay, Pedro/Socorro					
Alfelor, Amancio					
Alfelor, Hilario	Capin, Rosita		200	10	waived
Palo, Benigno	Paloma, Estefania		150	10	waived
Palo, Domingo	Aducal, Analyn/Gil		25	3	waived
Palo, Purificacion	Palo, Purificacion		100	5	waived
Palo, Milagros					
Bgy Site San Isidro		97-056- 00209	2410		
	Mirando, Ronnie		100	5	Waived
	Fresco, Joel/Lucia		105	7	Waived
<b>No identified land owners</b>					
	Mirando, Pacita		340	5	waived
	Abay, Ernesto		121	5.5	waived
	Calixtro, Ma. Teresa/Gilbert		165	5.5	waived
	Hermosa, Leonora		200	3.5	Waived
	Benamira, Joel		100	20	Waived

	Pascuhin, Geronimo		400	10	Waived
	Llamas, Raul		200	5	Waived
	Taperla, Asuncion/Isidro		105	4	Waived
	Madriaga, Jomar/Marina		200	4	Waived
	Grandia, Joseph		200	5	Waived
	<b>Sub-Total</b>		<b>5532</b>	<b>122.5</b>	
<b>Pag Oring Nuevo, Libmanan</b>					
Milano, Mariano		97-046- 00033	3788		
	Milano, Preciosa		200	9	Waived
<b>No identified land owners</b>					
	De Leon, Romeo		42	9	waived
	Bejerano, Arnulfo/Marilou		100	5	waived
	Lasalita, Enrico/Mary Joy		15	2.5	waived
	Royales, Joelito/Emily		1249	7	Waived
	Boticario, Rolando/Shirley		150	4	Waived
	Bello, Manuel/Erlinda		60	3.5	Waived
	Reotiquio, Cerelo/Shirley		150	8	Waived
	Camacho, Teofilo Jr.		168	12	Waived
	Milano, Louie/April		28	4	Waived
	Sisno, Flaviano/Elizabeth		200	19.5	Waived
	Polvoriza, Antonio/Maricel		200	19.5	Waived
	Perit, Daniel		100	7.5	Waived
	Mirando, Efren		150	10	Waived
	Balmes, Norberto		400	17	Waived
	Omlan, Pedro/Amie		60	3	Waived
	Embudo, Ruben/Maria Isabel		7500	3	Waived
	Muceros, Mateo/Helen		375	10	Waived

	Ascaraga, Dante/Virgie		70	3.5	Waived
	Pena, Patricia		100	5	Waived
<b>Sub-Total</b>			<b>15105</b>	<b>162</b>	
<b>Grand Total</b>			<b>20637</b>	<b>284.5</b>	

Source: PPMIU Survey, 2014

Also, the landowners who were not present during the consultation were sent letters informing them of the road right way that will traverse them properties and requesting them to sign deeds of donation, if not, occupants/next of kin who were present during the consultation may be authorized by them to sign in their behalf.

### iii. Damage to standing crops, houses and/or properties

As the proposed road segment is already constructed more than three decades already, damage to standing crops, houses and/or properties is minimal as the right of way has been considered already in the previous feasibility study conducted. The minimal damages identified during the ocular survey and interview of household residents includes portion of the structures/properties such as wall/canopy, shed, wall of bodega, fence, steel gate, porch, steel post, water meter etc. as listed in Table 19. There are also some public facilities affected such as 3 electrical posts, 3 public faucets and 1 boundary marker in Pag-orinig Nuevo and 3 electrical posts, 2 public faucets and 1 boundary marker in San Isidro that need to be relocated.

The PLGU has expressed its willingness to compensate the affected persons for the structures that will be damaged by the road works. The residents showed understanding and affirmation. Their only request is to relocate the public faucet immediately or if possible prior road upgrading as it's the only source of water for the majority of residents.

Cutting permit for 1 coconut tree from PCA is secured likewise for trees to be cut from DENR Based on ocular survey and interview of household residents, a total of 5 trees in the barangay will have to be cut (Please see Table15). Permit to cut from DENR was secured (on process) and the fees for permit and cost for every tree shall be shouldered by the PLGU Camarines Sur. The owners of the trees are not asking for any compensation for the trees to be cut. Their only request is to cut the trees if the road construction has been started and is already near their properties.

For every tree cut, the PCA will provide five (5) coconut seedlings for the beneficiary to plant. Forest trees and fruit trees to be cut, seedlings from the provincial nursery (capitol) shall also be given to the beneficiaries.

Table 19. Inventory of properties, standing crops and other structures

Barangay	Trees (No.)			Other Structures (No.)								Post		Public Faucet	Boundary Marker
	Coco nut	Talisay	Mango	Shed	Wall/Canopy	Fence	Steel Gate	Porch	Water meter	Gate	Bodega Wall	Steel Post	Electric Post		
San Isidro	1	1	2	0	0	2	1	1	1	1	0	1	1	2	1
Pag-orong Nuevo	1		3	1	12	3	1	0	0	1	1	0	3	3	1
Pag-orong Viejo				0											
Malinao	0		0	0											
<b>Total</b>	<b>2</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>12</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>2</b>

Source: PPMIU Survey, 2014

i. Physical displacement of persons

There is no identified physically displaced person along the road influence area. The owners are aware that they have encroached into the RROW and have agreed to remove/relocate their structures that will be affected by the road construction. Likewise, temporary fences, public faucets and electric posts will have to be relocated. Since it is an existing road network, all the residents are aware of its existence. They understand the merits brought about by road and are grateful for the improvement of the road. They signed the waiver of right and quit claims.

ii. Economic displacement of persons

There will be no major economic displacement in the project sites, only minor damage/loss of part or portion of some economic establishments that were affected like canopy or wall of some sari-sari stores and wall of bodega. This minor loss on the part of the affected persons can be overshadowed by the benefits of the project as this will practically assure the residents an effective and efficient conveyance facility for their daily livelihood and timely delivery of goods and services to and from the trading centers.

More so, economic activities will be enhanced and will proliferate in the barangays because travel time for marketing will be shortened and procurement of goods and household products will increase whereby business transactions will be financially viable.

## F. Environmental Analysis

i. Natural habitat

The proposed sub-project is not within the protected area of the municipality of Libmanan. Its physical location assures that the proposed sub-project will not in any way affect wildlife, nor endangered species of fauna and flora.

The dominant vegetations in the area are coconut, banana, fruit trees, and root crops. Grasses abound as natural pasture feed for carabaos, cattle, horse and goats.

The promotion of environmental preservation or regeneration of natural fauna and flora in order to prevent depletion or destruction of the natural habitats for bio-diversity has been considered in this sub-project. This is in consonance with the Regional AFMP.

## ii. Physical Cultural Resources

There is no existing cultural structure, such as monuments, or the like in the sub-project area. Hence, it is assured that none such structure will be affected. This was thoroughly validated in the surveys and ocular inspections and walkthroughs conducted by the I-BUILD Team both from the Provincial and Regional Offices.

Similarly, the project site is not being considered part of an important natural feature or landscape nor a potential archeological site. Nonetheless, should there be archeological finds during construction, civil works shall be suspended and report shall be submitted to the National Museum immediately. (refer to Anex \_\_ on Chance Finds Procedure)

## iii. Terrain, Soil Types and Rainfall

Generally, the terrain of the sub-project is rolling with road gradients ranging from, 8-10%, though there are sections exceeding 10% but none exceeds 15%. Some tributary service roads though pass through mountainous areas of Tankong Vaca Mountain Range.

The soil type of the subproject area is Balongay Clay and very hazardous to traverse during rainy days because of its uneven surface. There is however, a very little chance of erosion since soil structure is compact.

As in other parts of the province, the climate in the area is tropical. There is significant rainfall throughout the year even in the summer months with a monthly average rainfall of 18.5 mm in 2013. During summer months, the average rainfall ranges from 10mm to 15mm with April as the driest month at 10 mm. For rainy months, from October to January, the average rainfall ranges from 22mm to 26mm with the highest rainfall registered at 26 mm in the months of November and December. For the average annual temperature in Libmanan, it registered at 27.75 with the high average temperature of 31 degrees Centigrade, the highest of which registered at 33 degrees Centigrade in the months of May and June. For the annual average low temperature, the lowest registered temperature is 23 in the month of February or an annual average of 24.5 degrees Centigrade.

The wind direction in the area varies from season to season. From June to December, the wind follows a northeasternly course where tropical depressions usually occur. A gradual shift to the southwesternly wind direction occurs in the month of December only.

Notwithstanding the erratic weather, almost all types of crops may be grown because the rainfall is more or less evenly distributed throughout the year.



iv. Hazard/risk assessment (Drainage Situations, Erosion, Flooding Potential)

- Flooding potential

The Flood Hazard Susceptibility Map of Libmanan, Camarines Sur shows that the road sub-project passes through non-flood prone areas.

- Erosion

The Erosion Map of Libmanan shows that the entire stretch of the sub-project passes through slight erosion, no apparent erosion and very light erosion areas. There are existing slope protection structures, some of which need to be repaired in the proposed road segment for upgrading.

- Existing drainage situations

At present, there are existing cross drainage structures in the sub-project area which appear to be sufficient for the road needs. There are also existing side ditches, some of which should also be rehabilitated. Additional side ditches will be constructed.

v. Impacts during construction

a. Temporary Erosion and Sediment Control

Soil is the main material during excavation and is unlikely to generate significant sediments that can impede construction works due to accumulation which may clog certain areas. Sand bags maybe used as erosion control measures on both sides of the road to contain any eroding embankment.

b. Construction Noise Mitigation

The sub-project FMR will eventually be constructed with houses nearby. Thus, construction operations will entail a lot of noise. It will involve the operation of heavy equipment creating a large volume of noise. If possible work activities will be confined to daytime which will be stipulated in the contract between PLGU and contractor.

c. Safety

“Safety first” This will be the tagline at the construction site. Workers and public safety must always be given priority to avoid any untoward incidents. Safety gears should be provided as part of the protocol as well as road signs and provisions of traffic personnel at both ends of the FMR.

d. Monitoring and Maintenance of Sub-projects

PLGU personnel from the Monitoring and Evaluation with civil engineers and the barangay councils are tasked to oversee in the maintenance of the sub-project especially after occurrences of force majeure (typhoons, floods, earthquake), fortuitous events. If there is a need for physical assessment, the Monitoring and Evaluation Team of the I- Support group should be notified to make necessary damage assessment reports.

e. Waste Disposal Management

The contractor of this subproject road shall be advised to identify sites for waste disposal of excavated materials that can either be re-used as filling materials or disposed to dumpsites. However, sites should not in any way affect existing bodies of water nor clog any drainage facilities and will be emphasized in the contract agreement.

Total volume of waste materials from removed structures and excavations is 12,729cu.m. There are identified persons who intend to accommodate the excess excavation (Annex I). Signed authorizations by these land owners have been secured.

vi. Status of environmental clearances

The Environmental Clearance Certificate (ECC) was secured from the Environmental Management Bureau of the Department of Environment and Natural Resources.

With PRDP programmed work, it is recommended that the contractor should employ utmost environmental safeguard from the construction activities, setting up of barracks for equipment, materials and personnel and work treatment to affected coconut, trees and vegetation. Sanitary toilets and wash area will be established and consider local residents listed by the Department of Social Welfare and Development (DSWD) on their Listahanan in hiring laborers both for skilled and unskilled labor for the project. A total of 60 skilled workers will be involved in the project which includes heavy equipment operators and foreman and an estimated 122 unskilled laborers will be needed for the implementation of the project. Thus, implement a SAFETY FIRST construction protocol.

As to the trees to be cut, a cutting permit was secured from CENRO and the beneficiaries will be given seedlings (forest and fruit trees) coming from the provincial nursery. Also, for every coconut tree that will be cut, a corresponding five (5) coconut seedlings will likewise be given in return as part of PCA Coconut Rehabilitation Program.

A section of the contract will stipulate that batching plant will be established with in the vicinity of the proposed subproject. Measures such as minimal noise, waste management and the like shall also be part of the contract. Quarry sites had been identified and authorization from landowners had been secured for excess materials such as soil, rocks, etc. Certificate of non-over quarrying was also secured.