

Road Network Development Project
in Conflict-Affected Areas
in Mindanao

Sub Project-9

Manuangan-Parang Road
Resettlement Action Plan



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EXECUTIVE SUMMARY

The Proposed 16.80-kilometer road access Manuangan – Parang Road was one of the contemplated top priority projects of the Duterte’s Administration for the improvement of road access and stimulation of long-lasting peace and order in the conflict-affected areas.

This Draft Resettlement Action Plan (RAP) is prepared for the proposed project and was guided by the World Bank’s Policy on Involuntary Resettlement, particularly O. P. 4.12, World Bank’s Involuntary Resettlement Sourcebook (2004), JICA Guidelines for Environmental and Social Considerations (March 2010), and Philippine Government Laws relating to the Acquisition of Right-of-Way.

The RAP was composed of five sections strategically crafted to comprehensively cover the process that includes the identification of the possible resettlement impacts of the proposed project, the determination of compensations and entitlements and the formulation of procedures that can facilitate the implementation of the project. This document also included a section on the procedures for monitoring and evaluation to check whether the compensation and entitlements have been properly determined and delivered on time and the living standards have been restored or improved.

The Project Area

The Manuangan – Parang Road Project will traverse in the municipalities of Parang and Sultan Kudarat in Maguindanao and Pigcawayan in North Cotabato. Specifically, the alignment will pass through barangays Gadungan, Orandang, Cabuan, Olas, Nekitan, and Matengen in Maguindanao and North Manuangan and New Culasi in North Cotabato.

Scope of Work

In preparing the RAP the following activities were undertaken:

- Public Consultations - conducted to the affected areas to inform and generate awareness and understanding as well as encourage participation of the Project affected persons to participate in the decision-making;
- Inventory of Losses (IOL) – through Geo-tagging and field reconnaissance to the entire affected areas;
- Socio-economic Survey – a house-to-house interview that will be done to profile the socio-economic status of the possible project affected persons;
- Land Value Assessment – the determination of the current land value based from BIR Zonal Values, Landbank of the Philippines, Current market price;
- Structures Value Assessment – determination of the affected structure value based on the current prices of the construction materials; and
- Trees and Crops Value Assessment – determination of the value of the affected trees and crops based from the current market values of trees and crops as provided by the Department of Agriculture.

Summary of Impacts

	Item	Total
House is Affected	No. of <u>Houses</u> Affected	11
	No. of <u>Households/Families</u> Affected	11
	No. of <u>People</u> Affected (by Losing House)	76
Land is Affected	No. of Land Lots Affected	32
	No. of Structures Affected	11
	No. of Improvements Affected	
	<i>Electric posts</i>	17
	<i>Water system</i>	0
	No. of Trees Affected (by kinds of tree)	
	<i>Fruit bearing trees</i>	659
	<i>Non-fruit bearing trees</i>	190
	<i>Plant/Cash trees</i>	132
	Others	
	<i>Cemetery</i>	0
	<i>School</i>	0
	<i>Mosque</i>	2

Status of Land Ownership

Type	Definition	No. of Lots (People)				Total (A)+(B)
		Lots with House			Lots without House (B)	
		Lot owned	Lot not owned	Total (A)		
Case A	Land claimant has a land titled and paying taxes	0	5	5	9	14
		(0)	(35)	(35)	(70)	(105)
Case B	Land claimant has a land title but not paying taxes	0	2	2	4	6
		(0)	(14)	(14)	(31)	(45)
Case C	Claimant has no land title but paying taxes (Tax Declaration)	0	4	4	8	12
		(0)	(27)	(27)	(63)	(90)
Case D	No land title and No Tax Declaration	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)
TOTAL		0	11	11	21	32
		(0)	(76)	(76)	(164)	(240)

Note: Upper figure is number of houses; lower figure with parenthesis is number of people

Summary Breakdown of Funds for Affected Properties

Description	Cost Item	Amount	Remarks
Land Acquisition and Structures	Land	12,702,430.00	Estimated based on the current fair market value of Land
	Structures	1,231,324.00	Estimated based the replacement cost
	Subtotal A	13,933,754.00	
Compensation	Trees and Cash crops	428,250.00	Estimated based on the current market values of the Maguindanao Provincial Assessor's Office and North Cotabato
	Damaged crops	532,231.77	Estimated based on the current market value of the Philippine Statistics Authority
	Subtotal for B	960,481.77	
External Monitoring		1,000,000.00	Estimated at PhP 1,000,000 per SP
	Subtotal for C	1,000,000.00	
Subtotal (A+B+C)		15,84,235.77	
Contingency	10%	1,589,423.58	
Admin Cost	5%	794,711.79	
GRAND TOTAL		18,278,371.14	

Implementation Schedules

The following implementation schedule will be followed:

- First Disclosure – 2nd quarter of 2020
- Parcellary Survey – 2nd to 4th quarter of 2020
- Updating of RAP – 4th quarter of 2020
- Formulation of MRIC – 4th quarter of 2020
- Disclosure of updated RAP to APs – 1st quarter of 2021
- Notification of PAPs – 2nd quarter of 2021
- Compensation – mid 2nd to mid 3rd quarter of 2021
- Income Restoration – mid 2nd to mid 3rd quarter of 2021
- Detailed Design – 4th quarter of 2019 to 3rd quarter of 2020
- ROW Acquisition and RAP – 2nd quarter of 2020 to 2nd quarter of 2021
- Procurement of Contractor – 3rd quarter of 2020 to mid-4th quarter of 2021
- Construction – mid 3rd quarter of 2021 to 1st quarter of 2024
- Civil Works – mid 3rd quarter of 2021 to 1st quarter of 2024

Monitoring and evaluation:

- Internal monitoring – mid 3rd quarter of 2021 to 1st quarter of 2024
- External Monitoring and Evaluation – mid 3rd quarter of 2021 to 1st quarter of 2024

1. INTRODUCTION

1.1 Rationale

Mindanao for decades has lagged from the rest of the country in terms of economic development. This is despite its natural advantages such as fertile land, presence of natural resources, outside of typhoon belt, and human resource potentials. However, in recent years the region has been showing faster economic growth than the rest of the country. For instance, while the country has registered an average annual growth of 5.9% in the last five years (2010-2015), Mindanao's 6.2%. Within Mindanao, the Autonomous Region in Muslim Mindanao (ARMM) remains the poorest region with poverty incidence of 55.8% in 2012. Likewise, the region's GRDP in 2015 accounts for only 0.7% of the Philippines' GDP with annual average growth in the last five years of merely 1.13% which is the smallest among the regions. Similarly, economic structure of the region reflects its position as less developed where agriculture accounts for more than half (59.1%) of the GRDP with industry accounts only for 2.7% and services accounts for 38.2%.

The road infrastructure of ARMM is less developed as well compared to other regions. While the country and Mindanao has an average road density of 0.25 and 0.17 respectively, ARMM has only 0.10. This means that for the ARMM to close the gap and reach the Mindanao average, at least 800 km of new roads should be constructed. The signing of the Comprehensive Agreement on Bangsamoro (CAB) between the government and the Moro Islamic Liberation Front (MILF) in March 2014 however is expected to provide extra push for social and economic development of ARMM. The project area is characterized by the following: (1) the project area has favorable natural conditions for agriculture – i.e. high temperature, plenty of rainfalls distributed throughout the year, dominant fertile soil and outside of the typhoon belt, (2) despite this natural advantage, poverty incidence is very high at 55.8% in 2012; (3) infrastructure supply is also limited – ARMM for instance needs 800km of new roads to close the gap with other regions in Mindanao; (4) one of the reasons for delay of development is the presence of protracted armed conflict between the government and different armed groups (particularly MILF); (5) in recent years however, efforts toward securing peace is gaining momentum. FB (Framework on the Bangsamoro) was signed in 2014; BBL (Bangsamoro Basic Law) was submitted to Congress in August; (6) for the region to recover, there's a need to complement the progress of the peace process by way of addressing the shortage of infrastructure supply in the region.

Recognizing the above, the Government of the Philippines (GOP) through the Department of Public Works and Highways (DPWH) has made a request to the Government of Japan (GOJ) to undertake feasibility study of nine (9) priority roads and two (2) bridges identified in the 2016 JICA-assisted Bangsamoro Development Plan-II. Part of the tasks is to study the possibility of utilizing Yen loan as one of Mindanao for decades has lagged from the rest of the country in terms of the possible sources of fund to implement the identified projects. This Preparatory Survey started in August 2017 and is expected to complete in May 2018.

1.2 Objectives

The objectives of this Resettlement Action Plan (RAP) are as follows:

- i) To determine the number of PAPS and properties/assets affected by the project;
- ii) To identify the extent of impacts of the project on their properties/assets and the measures to mitigate these impacts;
- iii) To determine the compensation and entitlements to PAPs for their affected properties/assets;
- iv) To determine the budget estimate for compensation and entitlements, relocation and resettlement, information dissemination, public consultation, monitoring and other activities for the RAP implementation;
- v) To provide the timetable, manner of payment and institutional arrangements for RAP implementation; and
- vi) To ensure that public participation in the implementation and monitoring of RAP.

All the above objectives will be done in accordance with the appropriate and applicable Philippine laws, policies and/or guidelines with consideration of policies and guidelines of the International Financing Institutions, particularly of World Bank and JICA's Guidelines for Environmental and Social Considerations.

1.3 Methodology

During the conduct of RAP for the project, series of activities were undertaken which involves the following:

a) Meeting with Local Officials before conducting the survey

- i. The team arranged a meeting with the LGU Officials, particularly the City/Municipal Mayor, Assessor, and Barangay Chairpersons to be traversed, before conducting the survey.
- ii. Prepared and provided invitation letters signed by the project proponent.
- iii. During the meetings/consultations, the team explained the purpose of the survey, the activities that will be undertaken, and the data requirements. The Survey Team emphasized to the Barangay Chairpersons that cooperation of the possible PAPs is necessary to expedite the process and help attain higher accuracy in the preparation of RAP.
- iv. Cut Off date was scheduled from November 28, 2017 to December 8, 2017.

b) Data Gathering

- i. Based on the proposed alignment of the Project, the team conducted an inventory of possible PAPs and all assets within the 30 meters width ROW using a handheld GPS with photo capacity.

The inventory includes:

- a. Number and names of barangays to be traversed/affected
- b. Number of structures that will probably be affected
- c. Type of land use (agricultural, residential, commercial, etc.)
- d. Most common type of structures (concrete, wood, light materials)

- e. Type of plantations/orchards (mango, banana, etc.)
- ii. Validation undertaken at DENR-ARMM to obtain the cadastral map and at the Registry of Deeds for title numbers. However, cadastral map and title numbers were not provided due to ongoing finalization of the said data.
- iii. The team proceeds to Assessors Offices of covered Municipalities to validated data through Tax Mapping Index and list of land ownership.
- iv. Those potential PAPs without titles and tax declarations were validated through actual interviews.
- v. For the classified agricultural lands, the team coordinated Network of Protected Agricultural Areas (NPAAs) to obtain plans on agricultural lands, however, they only provided boundary maps.
- vi. The team also gathered the latest applicable established market values of the Department of Agriculture (DA), Philippine Coconut Authority (PCA), Department of Environment and Natural Resources(DENR), Department of Finance (DOF), or Local Government Unit (LGU), and Government Financial Institutions (GFI) for cost estimations.

c) Profiling

- i. Due to security issues on affected areas and in availability of some PAPs during the visits/ inventory, socioeconomic profiling of PAPs was conducted on February 21, 22 and 25, 2018.
- ii. During the profiling, socio-economic data of the possible PAPs were gathered including their perception towards the project. Possible affected properties, lands, crops, structures and other improvements and preference for compensation, relocations sites and rehabilitation assistance were gathered were also discussed. Queries of the PAPs were also addressed by the team. Right after the interview a photograph of the household and owner was also taken.

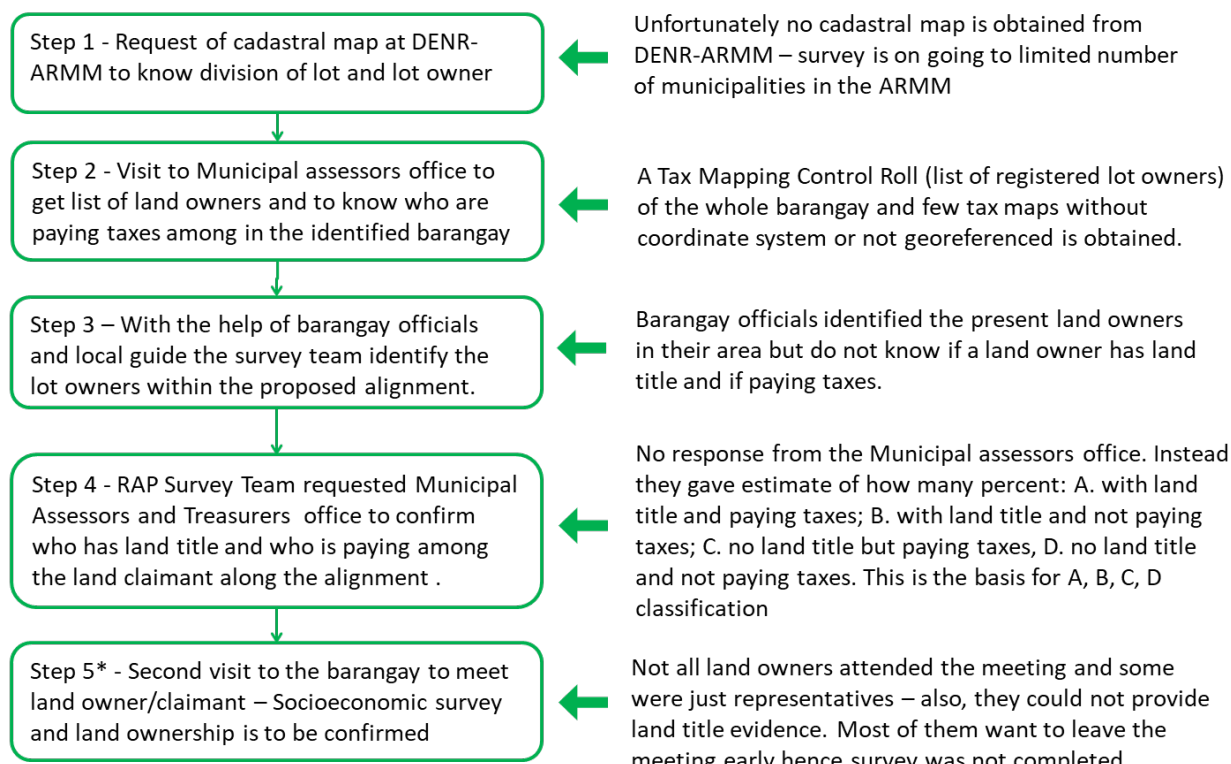
Table 1.3-1 Summary of Methodology

Main activity	Purpose	Done through	Responsible Person	Materials used
Public Consultations	To inform and generate awareness and understanding, encourage participation of the Project affected persons to participate in the decision-making	1 st round of Public Consultation	Persons and assets within the scope of thirty (30) meters width ROW	Information materials
		Barangay Meetings		
Inventory of Losses (IOL)	Identification of persons and assets that can be affected in the implementation of the project	Geo-tagging	Persons and assets within the scope of thirty (30) meters width ROW	Handheld GPS with photo capacity
		Ground Reconnaissance		Digital camera, appraisal forms
Socio-economic Survey	Profiling of the Socio-economic status of the possible project affected persons	House to house interview		Survey form

Main activity	Purpose	Done through	Responsible Person	Materials used
Land Value Assessment	Determination of the current land value	Actual land valuation conducted by a private value appraiser	Assets within the scope of thirty (30) meters width ROW	BIR Zonal Values, Landbank of the Philippines, Current market price
Structures Value Assessment	Determination of affected structure value	Actual structure valuation conducted by an engineer	Structures within the scope of thirty (30) meters width ROW	Current prices of the construction materials
Trees and Crops value assessment	Determination of the value of the affected trees and crops	Actual reconnaissance survey	Trees and crops within the scope of thirty (30) meters width ROW	Current market value of the trees and crops with reference from the Department of Agriculture

Source: RAP Study Team

Figure 1.3-1 the process flow on lot identification while **Figure 1.3-2** presents the procedure of identification of affected people (land owners + their household members).



* Not recommended, only assessors can certify land ownership

Figure 1.3-1 Process Flow on Lot Identification

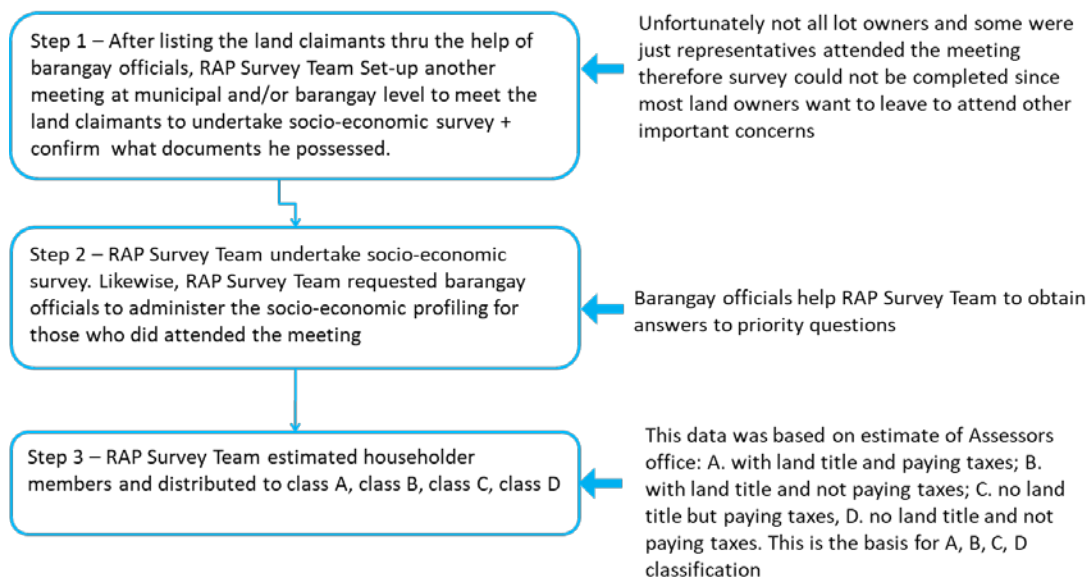


Figure 1.3-2 Process Flow on Identification of Project Affected People

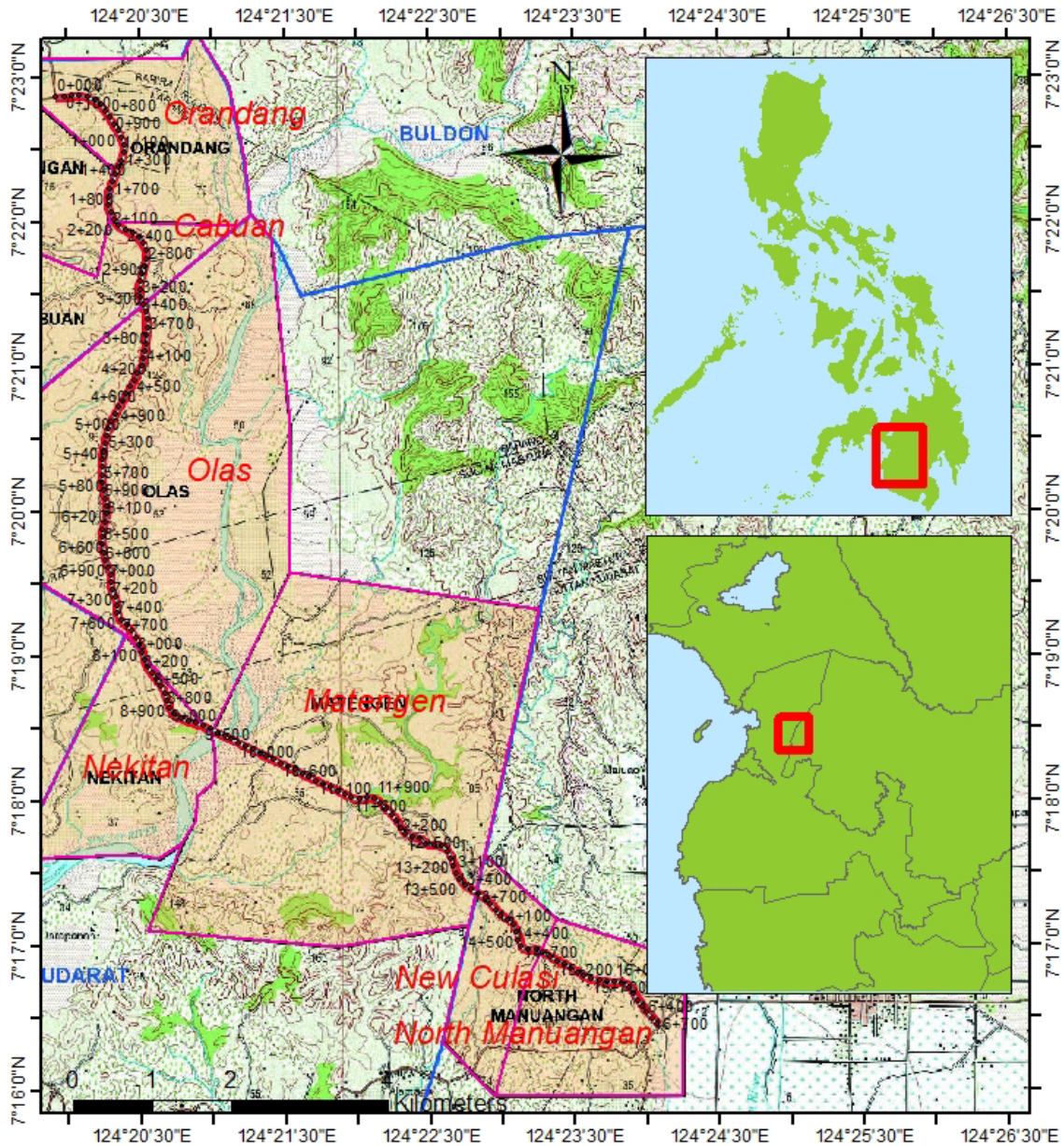
1.4 Project Description

The **Manuangan – Parang Road–SP9** covers 16.80 km length and traverses the municipality of Parang, Sultan Kudarat, and Pigcawayan in the provinces of Maguindanao and North Cotabato, respectively. The alignment passes through barangays Gadungan, Orandang, Cabuan, Olas, Nekitan, Matengen, North Manuangan, and New Culasi (**Figure 1.4-1**). This road segment aims to increase connectivity by linking three primary inter-city roads of Cotabato-Marawi Road, Cotabato-Davao Road, Cotabato-Gen. Santos Road. As such it will support/enhance economic productivity along these areas with high agri-industrial activities and quarrying industry as the primary source of income among the people. Furthermore, the construction of this road will support by providing better access to the markets.

Table 1.4-1 Details of Manuangan – Parang Road Alignment and Road Length

Province	Municipality	Barangay	Road Length (km)
Maguindanao	Parang	Gadungan	0.3
		Orandang	1.9
		Cabuan	1.3
	Sultan Kudarat	Olas	1.3
		Nekitan	4.8
		Matengen	4.2
North Cotabato	Pigcawayan	North Manuangan	1.8
		New Culasi	1.2
Total			16.8

Source: JICA Study Team

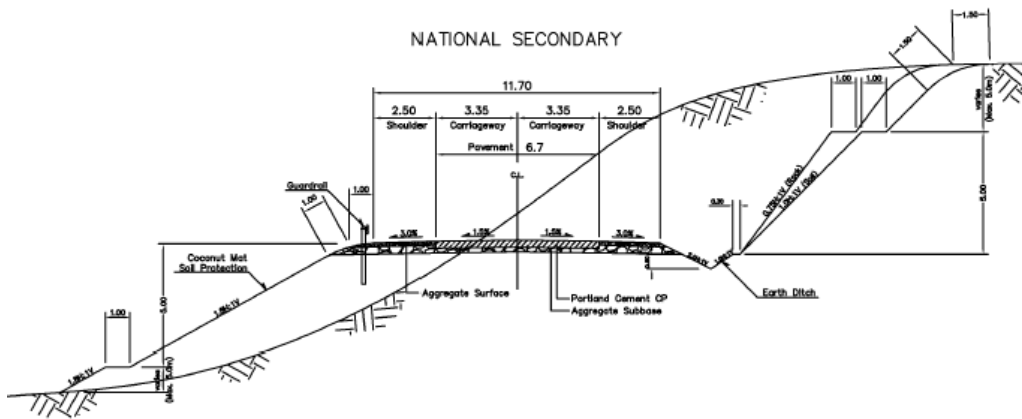


Source: JICA Study Team

Figure 1.4-1 Location Map of Manuagan- Parang Road – SP9

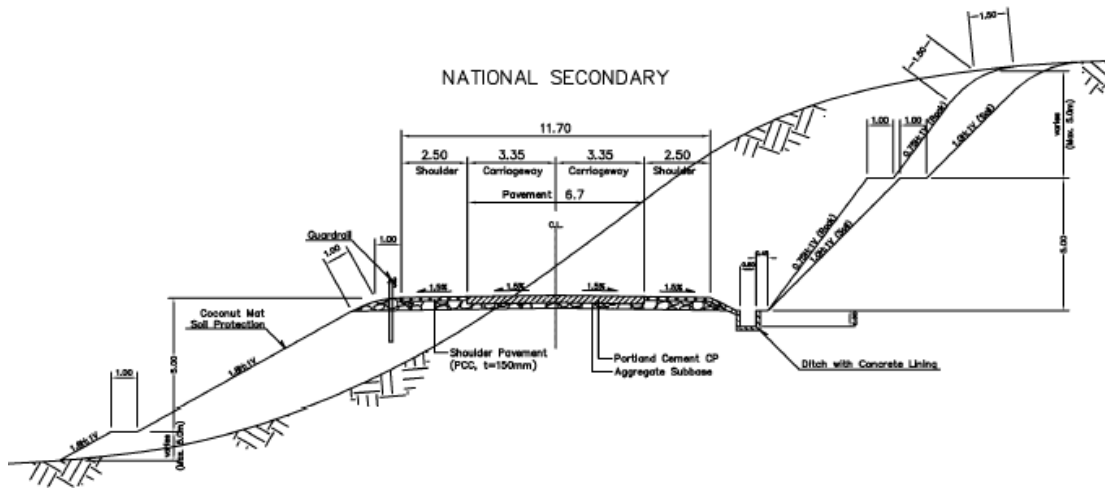
Based on DPWH classification, the project is a secondary road for rural areas. The typical road cross section for the Manuagan – Parang Road has the following description:

- 1.5% of cross-fall for pavement;
- 3% of cross-fall for shoulder;
- a carriage width of 3.35m;
- a shoulder width of 2.5m;
- a right of way of 30m; and
- a maximum super elevation of 6%.



Source: JICA Study Team

Figure 1.4-2 Typical Cross Sections of Road with Vertical Grade Less than 4%



Source: JICA Study Team

Figure 1.4-3 Typical Cross Sections of Road with Vertical Grade More than 4%

1.5 Right-of-Way Limits

The implementation of the project is expected to cause physical and economic displacement within the 30m (15 meters from each side of the center line) width Road Right-of-Way (RROW), which is in accordance with the updated DPWH Design Guidelines, Criteria and Standards (DGCS, 2015 Edition). The project could potentially cause various impacts, ranging from the Involuntary Impact of the Project, Permanent loss of land along the 30m RROW, Permanent damages to structures, crops and trees; Temporary loss or disruption of land use and from work sites.

2. FIELD WORK AND DATA COLLECTION

2.1 Field work undertaken

The following fieldworks were undertaken:

Table 2.1-1 Method of Data Collection

No.	Type of Work	Method
1	Identification of affected houses	<ul style="list-style-type: none">• By field reconnaissance
2	Identification of land lots affected	<ul style="list-style-type: none">• Collection of cadastral map was not successful. It was not provided by the DENR due to the on-going updating of cadastral map• Land lot was identified by interviewing barangay captains and barangay residents
3	Status of land ownership	<ul style="list-style-type: none">• By interviewing Municipal Assessors Office
4	Identification of trees, crops, and others	<ul style="list-style-type: none">• By field reconnaissance
5	Identification of improvement	<ul style="list-style-type: none">• By field reconnaissance
6	Land values	<ul style="list-style-type: none">• Data on BIR Zonal Value was collected from Municipal Assessors Office• Evaluated by Independent Property Assessor

Source: RAP Survey Team

2.2 Public Consultation Meetings

In order to ensure public participation and involvement in accordance to the best practices of involuntary resettlement, stakeholder consultation/public consultation meetings were conducted. These activities aimed to inform and generate awareness and understanding as well as to consult and encourage the participation of PAPs in the decision-making that may have significant impact on their lives. These activities served as avenues for the PAPs to express their concerns, issues, ideas and recommendation on the proposed project.

The affected LGUs, including municipalities and barangays, were informed on the date and venue of the public consultation meetings through a letter from the JICA Study Team. Following the protocol of the local process, a letter of invitation for public consultation meetings was handed down to the office of the Mayor for proper dissemination of information to the barangay level (refer to **Table 2.2-2**).

The RAP team conducted a consultation meeting with Project-Affected-Persons in Manuangan – Parang Road (SP9) dated February 21-22, 2018 and February 25, 2018 with the Barangay Officials and Project Affected Persons (PAPs). An invitation letter was sent through an email addressed to the Municipal Major stipulating the activities to be conducted and one of which is the consultation meeting with PAP's and socioeconomic profiling right after the consultation.

The PAPs raised major issues in the implementation of the project which includes: a) compensation – the PAPs inquired about the inclusion of improvements in the affected areas

like planted crops, and payment guarantees for land, structures, improvements, trees and crops, (ii) lot ownerships which required complete documents and titles, and (iii) appropriate notice and provision of adequate time for compensation (refer **Table 2.2.4**).

Table 2.2-1 Public Consultation Meetings conducted

Activity	Objective	Venue	Date	Participants	No. of participants	
					M	F
1 st Round Meeting	Provide information to the possible Affected households regarding the: <ul style="list-style-type: none"> • project background • scope • objectives • benefits • update • basic resettlement policies (Philippines and JICA), • Cut-off-date and announcement of succeeding resettlement activities such as conduct of perception, census, socioeconomic survey and inventory of losses. 	Parang Municipal Hall	Dec.7, 2017	LGU, DPWH, Project affected persons, Tourism and Barangay Officials	66	8
		Sultan Kudarat Conference Room	Dec.12, 2017	LGU, Project affected persons and Barangay Officials	23	14
		Pigcawayan Municipal Gym	Dec.13, 2017	LGU, Project affected persons; farmer and fisherman; and Barangay Officials	18	12

Table 2.2-2 Summary of Main Opinions and Concerns raised during the First Public Consultation

Major opinions/concerns	Reflections/countermeasures
i. Parang Municipality	
Compensation for land owners who don't have land title.	DPWH will compensate the affected land owner but for those who don't have land/lot title or other supporting documents to prove their ownership, no payment or compensation from DPWH will be made. Land owners were reminded to secure their documents.
Compensation for trees	All affected trees within the project will be paid or compensated as long as it is included in the inventory within the cut-off date.
Compensation for structures	DPWH will pay the acquisition of all affected structures.
Road alignment and PWD friendly	The road is for everyone, designed for vehicles. It has signage and will always consider the needs of PWD but with limitations as compared to other countries.
Shifting of road alignment	For areas with Muslim cemetery, shifting of road alignment will be considered. Respect for cultural heritage The PAPs were asked to provide right information for smooth implementation of the project.
ii. Sultan Kudarat Municipality	
Affected areas are mostly agricultural land	The issue can be controlled and negotiated. Request will be made to all barangay officials to help since this project is for the development and may attract business investors.

Major opinions/concerns	Reflections/countermeasures
Rerouting road alignment instead of relocating the affected households	The initial road alignment is still subject for evaluation and assessment together with the gathered data of affected features (i.e. cost estimates, transportation costs). Thus, could still be changed depending on the implementing agency.
Landslide-prone barangays	Landslide will be included in the study. Mine and Geo-Sciences Bureau (MGB) maps are gathered for assessment of the hazard. Engineering measures will be done before the construction stage to prevent future damages.
Forester policies to protect perennial trees and areas with wild animals	A comprehensive study is being done such as flora and fauna. This will be included in the EIA study.
Affected owner will fail to issue clearance	Hopefully this will not happen to avoid complications regarding the RROW.
Support of barangay captains for the project	The barangay captains of Matengen, Olas and Nekitan expressed their full support and participation for the road project.
iii. Pigcawayan Municipality	
Compensation for private property	All affected properties will be included in the inventory and cost will be estimated. Data will be gathered from the assessor's office (regional and municipal level). DPWH will make a compensation plan and validate in the barangay level. They will determine the true cost.
Local laborers	As per requirement of DENR, local laborers will be from the barangay and will help the community while the project in the area is on-going. (Based on DPWH Department Order No. 130, Series of 2016 states that: The mandatory minimum percentage of 50% of the unskilled labor requirement and minimum of 30% skilled labor shall be recruited and be equally accessible to both men and women)
Temporary canteens during construction	This is possible since the workers/laborers will need this the most.

Source: RAP Survey Team

Table 2.2-3 Barangay Consultations Conducted

Activity	Objective	Venue	Date	Participants	No. of participants	
					PAPs	Non PAPs
2 nd Round Meeting Provide information to the possible Affected households regarding the: <ul style="list-style-type: none"> Proposed Projects 	<ul style="list-style-type: none"> To elicit further opinions from PAPs themselves about the project To obtain the basic socioeconomic data from PAP's and to allow them to express their ideas, apprehensions, concerns and objections. 	Parang Municipal Conference Room	Feb 21, 2018	Barangay Officials and PAPs	3	2
		Pigcawayan Municipal Conference Room	Feb 22, 2018	Barangay Officials and PAPs	5	1
		Sultan Kudarat Municipal Conference Room	Feb 25, 2018	Barangay Officials and PAPs	21	3

Table 2.2-4 Summary of Main Opinions and Concerns raised during Barangay Consultations

Major opinions/concerns	Reflections/countermeasures
<p>i. Parang Municipality</p> <p>PAPs who are entitled for the compensation</p>	<p>Specific to the project, the various types of PAPs are qualified, as follows:</p> <ul style="list-style-type: none"> (i) Landowners and Land Users <ul style="list-style-type: none"> a. Legal owners (e.g., agricultural, residential, commercial and institutional) who have full title, tax declaration, or who are covered by customary law (e.g. possessory rights, usufruct, etc.) or other acceptable proof of ownership over the affected land. b. Users or occupants that have no land title or tax declaration over the affected land. c. Renters of the affected land. (ii) PAPs with Structures <ul style="list-style-type: none"> a. Owners of structures who have full title, tax declaration, or other acceptable proof of ownership (e.g. possessory rights, usufruct, etc.) b. Owners of structures, including shanty dwellers, who have no land title or tax declaration or other acceptable proof of ownership c. Renters (iii) PAPs with Crops, Fruit Trees, and other Perennials <ul style="list-style-type: none"> a. Owners of affected crops, fruit trees and perennials who have full title, tax declaration, or other acceptable proof of ownership (e.g. possessory rights, usufruct, etc.) b. Owners of affected crops, fruit trees and perennials who have no land title or tax declaration or other acceptable proof of ownership. (iv) PAPs Affected by the Loss of Livelihood and Sources of Income <ul style="list-style-type: none"> a. Owners of registered or unregistered shops, regardless of land tenure status, whose business operation will be interrupted temporarily or permanently due to the project. b. Hired labor (e.g., farm worker, house help, and store helper) who will lose their work temporarily or permanently due to the project.
<p>Payment for tree or the unit for costing of crops and the basis for compensating the properties which will be affected.</p>	<ul style="list-style-type: none"> • The DPWH will disclose the compensation for trees and crops after the detailed engineering and it will be discussed in the next public consultation • Section 4 of the R.A 10752 clearly states that the modes of acquiring real property are: (i) donation, (ii) negotiated sale, and (iii) expropriation. Property valuation is market-based and undertaken using Government Financial Institutions (GFIs) or Independent

Major opinions/concerns	Reflections/countermeasures
	Property Appraisers which help promotes unbiased property valuation. The assumption by the IA of the capital gains tax also provides supplementary incentive to the lot owners to negotiate with government. All these things will be further discussed by DPWH representatives and consultant in the second public consultation.
Valid proof of ownership for land and how they will be paid.	PAP with Transfer/ Certificate of Title or tax Declaration (Tax declaration legalized to full title). The following topics are also discussed to them: <ul style="list-style-type: none"> • Holders of free or homesteads patens and Holders of Certificates of Land Ownership (CLOA) under CA 141. Public Lands act will be compensated on land improvements only. • Public Lands Act will be granted under Comprehensive Agrarian Reform Act shall be compensated for the land at Zonal value. • If granted under Voluntary Offer to sell by the Landowner. CLOA issued under CA 141 shall be subject to the provisions of Section 112 of Public Lands Act shall receive compensation for damaged crops at market value at the time of taking.
ii. Pigcawayan Municipality	
The process of compensation if is it directly given to the beneficiary or through LGU.	<ul style="list-style-type: none"> • The DPWH will discuss this matter in the second public consultation as to how PAPs will receive the compensation
iii. Sultan Kudarat Municipality	
Concerns if the lot owners are not paying taxes.	If requested by the property owner, the implementing agency shall remit to the LGU concerned the amount corresponding to any unpaid real property tax, subject to deduction of this amount from the total negotiated price: provided that the said amount is not more than the negotiated sale. This will be further discussed in the next public consultation.

*Interview was administered by the help of Barangay Officials for those PAPs who were not able to attend during the consultation meeting.

2.3 Socio-Economic Profile of the Project-affected Persons

Based on the conducted socio-economic survey, **a total of eleven (11) affected household heads (AHHs) and Thirty-two (32) affected land lot owners were interviewed** as shown in **Table 2.3-1.**

Table 2.3-1 Summary of Potential Number Affected Structures and Land Lots

Loss category	Parang	SultangKudarat	Pigcawayan	Total
Affected House Heads	8	3	0	11
Affected Structures	8	3	0	11
Affected Land Lot Owners	4	20	8	32

Source: RAP Survey Team

A total of 504,343 sq. m of land with crops and trees will be affected by the alignment as summarized in **Table 2.3-2** and **Table 2.3-3**. Majority of the cultivated crops that will be affected are corn and palay.

Table 2.3-2 Summary of Affected Land and Types of Cultivated Crops

Loss category	Unit	Parang	Sultan Kudarat	Pigcawayan	Total
Affected agricultural lands with corn	m ²	8,092	34,582	16,929	59,603.00
Affected agricultural lands with palay	m ²	24,524	16,152	5,282	45,958.00
Total affected land area (sq. m.)	m ²	105,209	307,642	91,492	504,343

Source: RAP Survey Team

Table 2.3-3 Summary of Affected Trees

Loss category	No. of Trees			Total
	Parang	Sultan Kudarat	Pigcawayan	
Affected Fruit bearing trees	408	197	54	659
Affected trees (Timber / non-fruit bearing)	151	21	18	190
Plant/Cash Trees	2	9	121	132

2.3.1 Household Size

Majority or 8 (72.73%) of the AHHs' size ranges from 1-5 members followed by 6-10 members while there are no HHs' in 11-above.

Table 2.3-4 No. of Affected Household Heads by Household Size

Household Size	Affected House				
	Parang	Sultan Kudarat	Pigcawayan	Total	
				No.	%
1-5	7	1	0	8	72.73
6-10	1	2	0	3	27.27
11-above	0	0	0	0	0
Total	8	3	0	11	100

Source: RAP Survey Team

Majority or 14 (43.75%) of the affected land lot owners' size ranges from 6-10 members while 11 (34.38%) and 7 (21.88%) for 1-5 members.

2

Table 2.3-5 No. of Affected Land Lots by Household Size

Household Size	Affected House				
	Parang	Sultan Kudarat	Pigcawayan	Total	
				No.	%
1-5	3	8	0	11	34.38
6-10	1	5	8	14	43.75
11-above	0	7	0	7	21.88
Total	4	20	8	32	100

Source: RAP Survey Team

2.3.2 Household Structure

The common family structure that can be observed along the Manuangan-Parang Alignment was composed of extended family structure (63.64%) followed by nuclear structure (27.27%). The remaining 9.09% of the affected HHs have a single structure.

Table 2.3-6 No. of Affected Household Heads by Household Structures

Household Structures	Affected House			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Single	1	0	0	1	9.09
Nuclear	1	2	0	3	27.27
Extended	1	6	0	7	63.64
Joint	0	0	0	0	0
Total	3	8	0	11	100

Source: RAP Survey Team

In terms of family structure of the affected land lot owners, majority have household structure type of nuclear with 59.38% while 18.18% have an extended structure in which relatives are also leaving together with the parents and children.

Table 2.3-7 No. of Affected Land Lots by Household Structures

Household Structures	Affected House			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Single	2	3	0	5	15.63
Nuclear	1	10	8	19	59.38
Extended	1	5	0	6	18.75
Joint	0	2	0	2	6.25
Total	4	20	8	32	100

Source: RAP Survey Team

2.3.3 Gender Distribution

In terms of gender distribution, majority of PAPs with affected houses and land lots are headed by female 7 (63.64%). Likewise, on the affected land lots, out of 32 AHHs, 18 (56.25%) are headed by female.

Table 2.3-8 No of Affected Household Heads by Gender

AHHs	Affected Household Head			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Male	2	2	0	4	36.36
Female	6	1	0	7	63.64
Grand Total	8	3	0	11	100

Source: RAP Survey Team

Table 2.3-9 No of Affected Lands/Lots Ownersby Gender

AHHs	Affected Land / Lots			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Male	2	9	3	14	43.75
Female	2	11	5	18	56.25
Grand Total	4	20	8	32	100

Source: RAP Survey Team

2.3.4 Civil Status

The civil status of most or 10 (90.91%) AHHs are married followed by widowed with 1 (9.09%) as shown in **Table 2.3-10**.

Table 2.3-10 No. of Affected Household by Civil Status

Civil status	Affected households			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Single	0	0	0	0	0
Married	8	2	0	10	90.91
Widowed	0	0	0	0	0
Live-in	0	1	0	1	9.09
Single parents	0	0	0	0	0
No Response	0	0	0	0	0
Total	8	3	0	11	100

Source: RAP Survey Team

On the other hand, majority of the land lot owner's civil status are married 27 (84.38%) followed by Live-in with 5 (15.63%) as shown in **Table 2.3-11**.

Table 2.3-11 No. of Lands/Lots by Civil Status

Civil status	Affected households			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Single	0	0	0	0	0
Married	4	15	8	27	84.38
Widowed	0	0	0	0	0
Live-in	0	5	0	5	15.63
Single parents	0	0	0	0	0
No Response	0	0	0	0	0
Total	4	20	8	32	100

Source: RAP Survey Team

2.3.5 Age Distribution

Majority of the AHHs' age ranges from 25-29 years old followed by 40-44 years old, 45-49 years old, and 50-54 years old, while only 1 AHH with age ranges 35-39 years old and 60-61 years old.

Table 2.3-12 No. of Affected Households by Age

Age	Affected Houses			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
15-19	0	0	0	0	0
20-24	0	0	0	0	0
25-29	3	0	0	3	27.27
30-34	0	0	0	0	0
35-39	1	0	0	1	9.09
40-44	1	1	0	2	18.18
45-49	1	1	0	2	18.18
50-54	1	1	0	2	18.18
55-59	0	0	0	0	0
60-64	1	0	0	1	9.09
65-69	0	0	0	0	0
70-74	0	0	0	0	0
75-79	0	0	0	0	0
80+	0	0	0	0	0
No response	0	0	0	0	0
Total	8	3	0	11	100

Source: RAP Survey Team

Majority or 25% of the affected land lot owners age ranges 50-54 years old followed by 35-39 years old (21.38%), 45-49 years old (15.63%), 30-34 years old (12.50%), 60-64 years old (9.38%) and 40-44 years old (6.25%), and the remaining have ages 55-59, 65-69 and 70-74 years old. This indicates that most of the land lots owners have no land ownership due to the old titling of practiced.

Table 2.3-13 No of Affected Land Lots Owners by Age

Age	Affected Houses			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
15-19	0	0	0	0	0
20-24	0	0	0	0	0
25-29	0	0	0	0	0
30-34	0	1	3	4	12.50
35-39	1	1	5	7	21.88
40-44	1	1	0	2	6.25
45-49	0	5	0	5	15.63
50-54	1	7	0	8	25.00
55-59	0	1	0	1	3.13
60-64	1	2	0	3	9.38
65-69	0	1	0	1	3.13
70-74	0	1	0	2	6.25
75-79	0	0	0	0	0
80+	0	0	0	0	0
No response	0	0	0	0	0
Total	4	20	8	32	100

Source: RAP Survey Team

2.3.6 Religious Affiliation

Majority or 4 (36.4%) of the affected HHs' are Roman Catholic followed by Born Again Christian and Islam (27.3%), while other religious sector has only 1 (9.09%).

Table 2.3-14 No. of Affected Household Heads by Religion

Religion	Affected House			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Roman Catholic	4	0	0	4	36.36
Iglesiani Cristo	0	0	0	0	0
Baptist	0	0	0	0	0
Born Again Christian	3	0	0	3	27.27
Islam	0	3	0	3	27.27
Others	1	0	0	1	9.09
No Response	0	0	0	0	0
Grand Total	8	3	0	11	100

Source: RAP Survey Team

Majority or 25 (78.13) of the affected HHs' are Islam followed by Roman Catholic (15.63%), and other religious sectors (3.13%).

Table 2.3-15 No. of Affected Land Lots Owner by Religion

Religion	Affected House			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Roman Catholic	2	0	3	5	15.63
Iglesiani Cristo	0	0	0	0	0
Baptist	0	0	0	0	0
Born Again Christian	1	0	0	1	3.13
Islam	0	20	5	25	78.13
Others	1	0	0	1	3.13
No Response	0	0	0	0	0
Grand Total	4	20	8	32	100

Source: RAP Survey Team

2.3.7 Educational Attainment

Majority or 5 (45.45%) of the respondents attended high school education but were not able to finish, both high school graduate and vocational/technical with 18.18%, and certificate of courses and college undergrad with both 9.09%. This indicates that remote communities were having difficulties in going to school due to access and expensive transportation.

Table 2.3-16 No. of Affected Household Heads by Educational Attainment

Educational Attainment of AHHs	Affected House			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
No formal education	0	0	0	0	0
Pre-school	0	0	0	0	0
Elem. Grad	0	0	0	0	0
HS Under grad	5	0	0	5	45.45
HS grad	1	1	0	2	18.18
Vocational/Technical	2	0	0	2	18.18
Certificate Courses	0	1	0	1	9.09
College Under grad	0	1	0	1	9.09
College grad	0	0	0	0	0
No response	0	0	0	0	0
Total	8	3	0	11	100

Source: RAP Survey Team

Majority or 14 (43.75%) of the affected HHs' have attained the highest educational degree of high school graduate only followed by high school under grad (21.88%), elementary graduate (18.75%), college graduate (6.25%), while both no formal education and pre-school has only 3.13%.

Table 2.3-17 No. of Affected Land Lots by Educational Attainment

Educational Attainment of AHHs	Affected House			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
No formal education	0	1	0	1	3.13
Pre-school	0	1	0	1	3.13
Elem. Grad	1	5	0	6	18.75
HS Under grad	1	3	3	7	21.88
HS grad	1	8	5	14	43.75
Vocational/Technical	1	0	0	1	3.13
Certificate Courses	0	0	0	0	0
College Under grad	0	0	0	0	0
College grad	0	2	0	2	6.25
No response	0	0	0	0	0
Total	4	20	8	32	100

Source: RAP Survey Team

2.3.8 Ethno-Linguistic Profile

In terms of the ethno-linguistic profile of the affected household heads, majority of the affected HHs' belonged to the Cebuano Tribe (45.45%) followed by Ilonggo (27.27%), and Iranun (18.18%). The ethno-linguistic data can further support the claim that there are no indigenous people present within the proposed alignment.

Table 2.3-18 No. of Affected Household Heads by Ethno-Linguistic

Ethno-Linguistic Affiliation	Affected House			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Maranao	0	0	0	0	0
Iranun	0	2	0	2	18.18
Maguindanaon	0	1	0	1	9.09
Ilocano	0	0	0	0	0
Cebuano	5	0	0	5	45.45
Ilonggo	3	0	0	3	27.27
Teduray	0	0	0	0	0
Lambangian	0	0	0	0	0
Dulangan Manobo	0	0	0	0	0
Higaonon	0	0	0	0	0
IP	0	0	0	0	0
Others	0	0	0	0	0
Total	8	3	0	11	100

Source: RAP Survey Team

Majority or 19 (59.38%) of the affected land owners are Iranun followed by Maguindanaon (25.00%), Cebuano (9.38%) and the remaining are Ilonggo and others with both 3.13%.

Table 2.3-19 No. of Affected Land Lots Heads by Ethno-Linguistic

Ethno-Linguistic Affiliation	Affected House			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Maranao	0	0	0	0	0
Iranun	0	16	3	19	59.38
Maguindanaon	0	3	5	8	25.00
Ilocano	0	0	0	0	0
Cebuano	3	0	0	3	9.38
Ilonggo	1	0	0	1	3.13
Teduray	0	0	0	0	0
Lambangian	0	0	0	0	0
Dulangan Manobo	0	0	0	0	0
Higaonon	0	0	0	0	0
IP	0	0	0	0	0
Others	0	1	0	1	3.13
Total	4	19	8	32	100

Source: RAP Survey Team

2.3.9 Occupation

Majority or 4 (36.36%) of the affected HHs' were engaged in business while others were engaged in other work such as farming (18.2%), driving and daycare staff with both 9.09%.

Table 2.3-20 No. of Affected Household Heads by Occupation

Occupation	Affected House			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Farmer	1	0	1	2	18.18
Fisherman	0	0	0	0	0
Businessman	3	1	0	4	36.36
Govt. Employee	0	0	0	0	0
Driver	1	0	0	1	9.09
Teacher	0	0	0	0	0
Daycare Staff	0	1	0	1	9.09
Brgy. Official	0	0	0	0	0
Others	3	1	0	4	36.36
Total	8	2	1	11	100

Source: RAP Survey Team

Majority or 17 (53.13%) of the affected land lot owners were engaged in farming followed by others occupation of the affected land owners with 7 (21.88%) while the remaining lot owners engaged in business, government, driving, day care staff, barangay officials and other works.

Table 2.3-21 No. of Affected Land Lots Heads by Occupation

Occupation	Affected House			Total	
	Parang	Sultan Kudarat	Pigcawayan	No.	%
Farmer	1	11	5	17	53.13
Fisherman	0	0	0	0	0
Businessman	1	2	0	3	9.38
Govt. Employee	0	2	0	2	6.25
Driver	0	1	0	1	3.13
Teacher	0	0	0	0	0
Daycare Staff	0	1	0	1	3.13
Brgy. Official	0	1	0	1	3.13
Others	2	2	3	7	21.88
Total	4	20	8	32	100

Source: RAP Survey Team

2.3.10 Family Income

Majority or 4 (36.36%) of the affected HHHs' have an estimated family income ranges Php 10,001 to 20,000. Income bracket of 3 ranges from Php20,001 to 30,000 and the remaining are with family income of 10,000 and below, 30,001 to 40,000, 50,001 to 60,000 and 70,001 to 80,000.

Table 2.3-22 No. of Affected Household Heads by Monthly Income Bracket

Monthly Income Bracket (Php)	Affected House				
	Parang	Sultan Kudarat	Pigcawayan	Total	
				No.	%
10,000 and Below	1	0	0	1	9.09
10,001 to 20,000	3	1	0	4	36.36
20,001 to 30,000	2	1	0	3	27.27
30,001 to 40,000	0	1	0	1	9.09

Monthly Income Bracket (Php)	Affected House				
	Parang	Sultan Kudarat	Pigcawayan	Total	
				No.	%
40,001 to 50,000	0	0	0	0	0.00
50,001 to 60,000	1	0	0	1	9.09
60,001 to 70,000	0	0	0	0	0.00
70,001 to 80,000	1	0	0	1	9.09
80,001 to 90,000	0	0	0	0	0.00
90,001 to 100,000	0	0	0	0	0.00
100,001 to 200,000	0	0	0	0	0.00
200,001 and above	0	0	0	0	0.00
No Response	0	0	0	0	0.00
Total	8	3	0	11	100.00

Source: RAP Survey Team

Majority or 19 of the affected land lot owners have an estimated family income ranges Php 10,000 and below. Income bracket of 4 ranges from Php 10,000 to 20,000 and 40,001 to 50,000 followed by Php 20,001 to Php 30,000 ranges 3, 60,001 to 70,000 ranges 2, while bracket ranges 1 are 30,001 to 40,000, 50,001 to 60,000, and 70,001 to 80,000.

Table 2.3-23 No. of Affected Land Lots by Income Bracket

Monthly Income Bracket (Php)	Affected House				
	Parang	Sultan Kudarat	Pigcawayan	Total	
				No.	%
10,000 and Below	1	8	5	14	43.75
10,001 to 20,000	2	2	0	4	12.50
20,001 to 30,000	1	2	0	3	9.38
30,001 to 40,000	0	1	0	1	3.13
40,001 to 50,000	0	1	3	4	12.50
50,001 to 60,000	0	1	0	1	3.13
60,001 to 70,000	0	2	0	2	6.25
70,001 to 80,000	0	1	0	1	3.13
80,001 to 90,000	0	2	0	2	6.25
90,001 to 100,000	0	0	0	0	0.00
100,001 to 200,000	0	0	0	0	0.00
200,001 and above	0	0	0	0	0.00
No Response	0	0	0	0	0.00
Total	4	20	8	32	100.00

Source: RAP Survey Team

2.3.11 Willingness to relocate

In instances that there is a need to relocate the affected HHs, hundred percent (100%) of the households expressed their willingness to be displaced/ relocated for this project.

Table 2.3-24 Willingness to Relocate

Willingness to Relocate	Affected House				
	Parang	Sultan Kudarat	Pigkawayan	Total	
				No.	%
Yes	8	3	0	11	100
No, but will consider	0	0	0	0	0
No	0	0	0	0	0
Don't know	0	0	0	0	0
No Response	0	0	0	0	0
Total	8	3	0	11	100

Source: RAP Survey Team

2.3.12 Site Preference for Relocation

Preference of affected households for site relocation is shown in **Table 2.3.25**. One hundred percent of affected households expressed their willingness to be relocated in the same lot areas which were not affected by the alignment.

Table 2.3-25 Site Preference for Relocation

Site Preference	Affected House				
	Parang	Sultan Kudarat	Pigkawayan	Total	
				No.	%
Same Lot	8	3	0	11	100
Same Barangay	0	0	0	0	0
Other Barangay	0	0	0	0	0
Other Municipality	0	0	0	0	0
Relocation Site	0	0	0	0	0
Other Site	0	0	0	0	0
No Response	0	0	0	0	0
Total	8	3	0	11	100

Source: RAP Survey Team

2.3.13 Length of Residence

It was commonly observed that most of the affected HHs' were staying in the area since birth as well as the affected land lot owners as shown in **Table 2.3.26** and **Table 2.3.27**, respectively.

Table 2.3-26 No. of Affected Household Heads by Length of Residence

Length of Residence of Sample AH heads	Affected House				
	Parang	Sultan Kudarat	Pigcawayan	Total	
				No.	%
Less than 1 year	0	0	0	0	0
1 - 5 years	0	0	0	0	0.00
6 - 10 years	1	0	0	1	9.09
Since birth	7	3	0	10	90.91
No response	0	0	0	0	0.00
Total	8	3	0	11	100

Source: RAP Survey Team

Table 2.3-27 No. of Affected Land Lots by Length of Residence

Length of Residence of Sample AH heads	Affected House				
	Parang	Sultan Kudarat	Pigcawayan	Total	
				No.	%
Less than 1 year	0	0	0	0	0.00
1 - 5 years	0	1	0	1	3.13
6 - 10 years	0	1	0	1	3.13
Since birth	4	18	8	30	68.75
No response	0	0	0	0	0.00
Total	4	20	8	32	100

Source: RAP Survey Team

2.3.14 Project Acceptability

In terms of project acceptability, one-hundred percent (100%) were infavor of the proposed road alignment in their area. They were able to see more potential benefits in the onset of the project than with the negative effects. However, worries on inconvenience and displacement also surfaced in the survey.

Table 2.3-28 Project Acceptability

Project Acceptability	Affected House				
	Parang	Sultan Kudarat	Pigcawayan	Total	
				No.	%
Yes	8	3	0	11	100
No	0	0	0	0	0
Don't know	0	0	0	0	0
No response	0	0	0	0	0
Total	8	3	0	11	100

Source: RAP Survey Team

Table 2.3-29 No. of Affected Land Lots by Project Acceptability

Project Acceptability	Affected House				
	Parang	Sultan Kudarat	Pigcawayan	Total	
				No.	%
Yes	4	20	7	31	96.88
No	0	0	1	1	3.12
Don't know	0	0	0	0	0
No response	0	0	0	0	0
Total	4	20	8	32	100

Source: RAP Survey Team

2.4 Focus Group Discussions among Women and Youth

In order to ensure public involvement, through the process of resettlement planning, Notre Dame University (NDU) conducted the focus group discussions (FGDs) for the vulnerable groups or persons, such as women and youth.

The date and venue of the FGD meetings was informed to the affected LGUs such as municipalities and barangays by the official request letter from NDU. In order to gather and reflect public opinions of the affected PAFs.

2.4.1 Awareness of the Project

It is apparent in **Table 2.4-1** that majority of the participants are not aware of the road project. Accordingly, few road construction surveys were done in the past yet no road was ever constructed.

Table 2.4-1 Awareness of Road Constructions

Municipality	Barangay	Groups	
		Women	Youth
Parang	Orandang	(3) Aware (7) Not aware	Not aware
	Gadungan	Not aware	Not aware
	Cabuan	Not aware	Not aware
Sultan Mastura	Bungabong	Not Aware	Not Aware
Sultan Kudarat	Nekitan	Aware	Not Aware
	Matengen	Not aware	Not aware
Pigcawayan	Olas	Not aware	Not aware
	North Manuangan	Nit isot aware	Aware

Source: Social Survey of NDU

2.4.2 Impact of Poor Road

Lack of road and the deplorable condition of the existing roads are causing various discomfort to the communities in the project area. These unfavorable realities are laid out in **Table 2.4-2** and are summed up into the following categories:

In socio-economic aspect, the most common responses center on the difficulty in transporting farm produce from farm to identified market locations. The present road situation negatively

affects farm income because of exorbitant transport and labor costs that are attributable to poor access to transport facilities and very distant farm lots. This also leads to slow movement or delays in the delivery of harvested crops. Albeit the lack of post-harvest facilities, harvested crops are spoiled by bad weather conditions. Provision of post-harvest facilities are close to becoming impossible because local governments are incapacitated by the lack of road that leads access to the barangays. Farm income is also adversely affected by the very rough roads because spillage during transport is higher.

Family members are likewise separated because some school children are forced to stay in boarding houses in the Poblacion area or at Parang, Maguindanao. Rental payments and living allowances in this arrangement also adds to the costs incurred by families.

Access to social services is also dampened by lack and/or poor road. People are having a hard time in manually carrying to nearest hospitals the sick persons, pregnant women, mothers who are about to deliver their babies (especially the high-risk cases) and the elderly needing medical attention.

In the aspect of education, many children are discouraged to attend school because of the physical stress that they had to endure to going to and from school. In addition, the existing few school buildings in the areas already need major repair yet cannot be materialized because of difficulty in transporting construction materials.

In terms of health, there are no good sources for drinking water for the greater majority of people in the communities. Water sources are quite hard to build due to poor road access. Moreover, private sellers of water (water tankers) sometimes refuse to go to the barangay fearing that the rough roads will damage the trucks.

Aside from the foregoing, skin diseases are frequent in adults and children because to microbial infections borne to walking in knee-deep muddy roads especially during rainy season. And in the summer season, the excessive heat and dust are causing respiratory problems such as asthma, rhinitis and other allergies.

Table 2.4-2 Impact of Road to the Community

Municipality	Barangay	Groups	
		Women	Youth
Parang	Orandang	<ul style="list-style-type: none"> •Difficulty in transporting agricultural products to market; increase spillage •Spoilage of products due to delays brought about by poor transport •Slippery and muddy roads cause itchiness and skin diseases •Difficulty in bringing sick family members to nearby clinic/hospital •Children gets late in going to school •Mechanized vehicles such as motorcycles are often damaged due to bad road conditions 	<ul style="list-style-type: none"> •Difficulty in product transport •Hardly passable during rainy days •Even with horses and carabaos, road transport is still hard
	Gadungan	<ul style="list-style-type: none"> •Lower (net) income from farm and livelihood activities •Poor access to basic services such 	<ul style="list-style-type: none"> •Difficulty in transporting goods to market •Slow movement in production (planting

		<p>as hospitals, school, etc.</p> <ul style="list-style-type: none"> • Increased number of accidents due to bad physical condition of the road as well as landslides 	<p>and harvesting)</p> <ul style="list-style-type: none"> • Students are discouraged to go to school • Cause of skin diseases, accidents. Road is slippery and muddy and prone to landslide during rainy days. While on sunny days, road dusts triggers asthma
	Cabuan	<ul style="list-style-type: none"> • Physical stress in manual carrying of product packages; or even with horseback ride • Difficulties encountered particularly during emergency situations • Delay in product movement especially during rainy days 	<ul style="list-style-type: none"> • Longer travel time; very unproductive • Reluctance of public motorized vehicles to serve the transport needs of the community • Most sick persons can't go to the nearest health facility at the earliest time for treatment • Product spoilage
Sultan Mastura	Bungabong	<ul style="list-style-type: none"> • Triple handling of farm products before it reaches the market • Difficulty in accessing buyers for agricultural products 	<ul style="list-style-type: none"> • Low productivity due to delays in transactions/transportation • Expensive transport services • Difficulty going to hospitals during health emergencies • Only few engage in transportation service business.
Sultan Kudarat	Nekitan	<ul style="list-style-type: none"> • Roads are muddy and flooded during rainy days; hardly passable • Poor access to drinking water supply • Late in coming to community activities • Difficult to transport products 	<ul style="list-style-type: none"> • Difficult to go to school • (Their) parents are having a hard time to transport farm products to the market • Expensive/costly fare • Low income opportunities and possibilities
	Matengen	<ul style="list-style-type: none"> • Emergency response is slow • Unsafe water sources • High cost of available transport • Difficulty in bringing products to the market 	<ul style="list-style-type: none"> • Difficulty in transporting products to market • Increased hassle during emergency situations • Late/ delay in attending community meetings and functions • Walking on foot during rainy days is hard
Pigcawayan	Olas	<ul style="list-style-type: none"> • Very expensive transport fare • Difficult route in transporting products via crossing the river to Darapanan then to the public market in Pigcawayan Poblacion • Accident prone • Poor water source 	<ul style="list-style-type: none"> • Vehicle damage • Very high cost of fare • Community don't go out of the barangay during rainy days because travel even by foot is so inconvenient
	North Manuangan	<ul style="list-style-type: none"> • Difficult to transport goods to market • Difficult for children to go to school 	<ul style="list-style-type: none"> • Uneasy to travel to main barangay for particular transactions • Difficult to transport products • Hesitation to establish business activities • Burden for students going to school

Source: Social Survey of NDU

2.4.3 Main Source of Economic

The main sources of income of the people in the barangays can be categorized into the following sets:

The first set of income source are on-farm activities. On farm sources refer to livelihood activities that directly involves actual tilling of farmlands. In the project area, on-farm activities are identified as follows: corn farming, palay farming, coconut farming, banana production, vegetable farming as well as growing fruit trees and other minor crops.

There are also off-farm income sources. The identified off-farm activities are copra processing, vegetable selling, fish vending, renting-out uncultivated lands to private companies, as well as providing farm labor services (hired labor) during planting and harvest seasons in other municipalities.

Lastly, the non-farm sources. The participants have income sources such as driving, sari-sari store (home-based variety stores), construction work, carpentry, quarrying, carenderias (food stalls) and employment either in the government or private sector.

Details of these income sources per barangays can be seen in **Table 2.4-3**.

Table 2.4-3 Main Source of Economic Means

Municipality	Barangay	Main Source of Income		
		women	youth	Fourth
Parang	Orandang	Farm Labor during planting and harvest season	Coconut farming	Sari-sari Store (Small-scale variety stores)
	Gadungan	Employment in government or private service	Buying and selling of agricultural products	Growing vegetables and milkfruit
	Cabuan	Upland rice farming	Vegetable farming	Growing peanuts and other rootcrops
Sultan Mastura	Bungabong	Corn farming	Rice farming	Small-scale quarrying; driving; sari-sari store
Sultan Kudarat	Nekitan	Farm Labor during planting and harvesting	Driving and carpentry	Wage labor; sari-sari store
	Matengen		Paid Manual and farm labor	Construction work; driving; sari-sari store
Pigcawayan	Olas	Coconut farming	Land for lease (rental income from Lamsan Trading) which rented their lands for sugarcane plantation	Growing and selling banana, sugarcane and cassava
	North Manuangan	Farm labor	Fish vending and sari-sari store	Carpentry and Carenderia

Source: Social Survey of NDU

2.4.4 Negative Impact of Road Construction and Proposed Solutions

Table 2.4-4 shows that women and youth are apprehensive that the road construction might generate negative effects. The utmost concerns are the possible occurrence of drag racing, vehicular accidents particularly involving children, corruption during the construction phase and increased military access which might instigate resistance from anti-government groups and lawless element. This might undermine peace and stability in the area.

However, the participants also mentioned particular solutions to these perceived negative eventualities. According to them, these may be resolved by immediately reporting to the proper authorities any suspicious activities that happen in the area; moreover, for matters over which the community seem powerless, the participants just lobby on trust that the LGU will do their jobs well.

As to the perceived occurrence of vehicular accidents, the participants are quick to specify placing road signs and warnings; not to allow drag racing and most importantly, not to allow children to play alongside the road.

Despite the mention of these perceived negative impacts, the participants still hope that the road project will push through.

Table 2.4-4 Negative Impact of Road Constructions

Municipality	Barangay	Negative Impact of Road Construction and Proposed Solutions			
		Women		Youth	
		Negative Impact	Solution	Negative Impact	Solution
Parang	Orandang	<ul style="list-style-type: none"> motor racing/ drag racing may occur vehicular accidents involving children 	increase community vigilance	<ul style="list-style-type: none"> none 	report to barangay authorities any incidence of drag racing
	Gadungan	<ul style="list-style-type: none"> more vehicular accidents military access to the barangay 	place reminder and warning signs	<ul style="list-style-type: none"> corruption disturbance in the smooth flow of traffic when road construction is not finished on time 	corruption cannot be addressed at their level possible traffic disturbance can be tolerated in exchange of convenience in the immediate future
	Cabuan	<ul style="list-style-type: none"> vehicular accidents may occur 	parents should be more watchful of their children	<ul style="list-style-type: none"> road/vehicular accidents may increase noise pollution 	keep watch
Sultan Mastura	Bungabong	<ul style="list-style-type: none"> None 		<ul style="list-style-type: none"> expect more road accidents increase competition among motor drivers; lower income from driving 	warning signals must be placed

Sultan Kudarat	Nekitan	<ul style="list-style-type: none"> • none 		<ul style="list-style-type: none"> • increase barangay population • drag racing may occur • terrorism 	report to barangay drag racing
	Matengen	<ul style="list-style-type: none"> • outlaws or fugitives can easily enter the barangay to hide • accidents due to reckless driving 	be watchful and report to authorities	<ul style="list-style-type: none"> • vehicular accidents involving children and animals • bad elements who are threats to the society can easily enter the barangay 	place road signs be more vigilant
Pigcawayan	Olas	<ul style="list-style-type: none"> • None 		<ul style="list-style-type: none"> • road accidents • military forces can easily enter the barangay 	
	North Manuangan	<ul style="list-style-type: none"> • vehicular accident • noise 	road signs and warning signs	<ul style="list-style-type: none"> • barangay population growth • road accidents • lawless elements will use the road as exit point 	trust authorities that they will do their jobs

Source: Social Survey of NDU

2.4.5 Perception towards DPWH as Road Contractor

In general, the entire community affirms having DPWH as the contractor for the road project. To them, having it handled by DPWH is more appropriate because it is the government agency tasked to develop roads and by that, they are seen as experts in road construction projects.

2.4.6 Community Support to DPWH

Most women in all barangays highly prefer involving their husbands in paid labor. According to them, hiring locals for paid labor would be better. Women participants were generally willing to offer food and water services; some are even willing to offer extra spaces in their homes as sleeping quarters for the construction team.

Youth in general see worthy support in the form of fetching water, offering food and water, help locate areas, attend to errands and help out in watching over equipment and construction materials.

2.4.7 Summary

The major source of income, according to the participants, is farming. This conforms to the results in the survey. They also said that the major cash crops are indeed the yellow and white corn, irrigated and upland palay, as well as coconut. Other crops mentioned are banana and coconut.

It transpired in the FGD that the greatest majority of the participants are not aware of the current plan for a road development project. Some are quite apprehensive because accordingly, a number of surveys were done in the past but no road ever materialized. People since then have long endured the disheartening roads which are either too muddy or too dusty depending on the day's weather. The major struggle encountered by people relative to the existing poor road condition is the difficulty in product transport. Bad roads lead to delays in transport, increased spillage and spoilage particularly in bad weather conditions, and most importantly the high cost of transportation via horseback and mechanized vehicles. Manual labor is likewise expensive. Transportation costs, purely shouldered by the farmers, dampens the profitability of their farming activity.

In addition, basic social services are also dampened by the lack of road. Children's education is affected due to difficulty in travel. According to the participants, they encounter difficulties in taking the sick people and other needing immediate medical attention to nearest healthcare facilities mainly due to lack of road. Moreover, post-harvest facilities are not adequate and cannot accommodate the volume of harvest that is why farmers are forced to sell their harvest fresh, unable to dry or semi-process it. Dried and semi-processed crops would have commanded greater market price and are a value-added to the profits of the farmers.

This conforms to the survey findings as that which suggests that the greatest manifestation of the benefit or positive impact of the road development project is when transportation costs are lowered with better roads, access to transportation services increases thereby lowering labor costs, and opening avenues for increased market options. This will all promote farm profits. This positive impact will feedback on others, encouraging more farmer to engage in farming and the same time moving existing tillers to intensify farm activity, higher agricultural productivity will be achieved in the influence area. A positive economic indicator for the province of Maguindanao.

Access to basic social service is likewise seen as a positive impact of the road development project. FGD participants said that foremost, access to safe drinking water might improve. This will greatly benefit the community. There might be more teachers in the barrio in the same way that health workers will finally conduct frequent visits to the influence area if a concrete road is developed in the influence area. In general, the participants are seeing better lives with better roads.

Indeed, some participants see unfavorable consequences when a road is developed. They foresee corruption, road extortion by the enemies of the state, vehicular accidents involving children and incidence of drag racing. However, these consequences cannot outweigh the aforementioned benefits that the road development project will bring to agriculture and social services. And to address the foreseen unlikely consequences, the community had identified, and vowed to implement, community measures to suppress these negative expectancies.

Finally, the participants are one in proclaiming support to DPWH as the contractor for the road project. The participants are willing to assist the DPWH team in terms of labor, food and water provision, errands, directions, and most importantly assuring security and safety for the team and the equipment. There was even one participant who specifically mentioned that it no longer matters who implements the road construction project, what truly matters is a road will be provided so that their lives will improve and agricultural potential will be promoted.

2.5 Cadastral Maps

The team requested copy of the cadastral map at the DENR ARMM. However, cadastral map was not obtained due to ongoing finalization (digitizing) of the said data. Instead, barangay boundary map was provided.

In the absence of cadastral map, the team proceeded to Assessors Offices of the covered Municipalities to validate data through Tax Mapping Index and list of land ownership. Those PPAPs without titles and tax declarations were validated through actual interviews.

2.6 Barangays Affected

Table 2.6-1 shows the list of affected barangays and properties within the proposed 30 meters road alignment. In terms of the estimated land area per barangay, Orandang, Cabuan, Olas, Nekitan, and Matengen of Maguindanao and North Manuangan, and New Culasi, North Cotabato with 504,343 sq.m.

Barangay Matengen in Sultan Kudarat recorded the highest affected land lots with 11 owners while barangay Orandang and Cabuan has the highest recorded affected household heads with a total of 8 owners.

Table 2.6-1 Affected Properties by Barangay

Municipality	Name of Barangay	Estimated Affected Land Area (sqm.)	No. of Affected Property			
			Affected Land Lots Owner	Affected Houses / Structures		
				*Affected Structures	Affected HH Heads	Affected PAPs
Parang, Maguindanao	Gadungan	8,365				
	Orandang	58,841	2	4	4	32
	Cabuan	38,003	2	4	4	22
	Sub-total	105,209.00	4	8	8	54
Sultan Kudarat, Maguindanao	Olas	144,614	9	1	1	7
	Nekitan	39,433	0	0	0	0
	Matengen	123,595	11	2	2	15
	Sub-total	307,642.00	20	3	3	22
Pigcawayan, North Cotabato	North Manuangan	55,352	7	0	0	0
	New Culasi	36,140	1	0	0	0
	Sub-total	91,492.00	8	0	0	0
Total		504,343.00	32	11	11	76

Source: RAP Survey Team

2.7 Land Use and Areas Affected

The land uses along the proposed alignment are classified into agricultural and residential areas. The estimation and delineation of land areas was based on the Comprehensive Land Use Plan (CLUP) provided by the Local Government Units (LGUs) of Parang, Sultan Kudarat, and Pigcawayan.

Table 2.7-1 Land Use (sq. m)

Municipalities	Barangays	Residential Area	Agricultural Area	Total
Parang, Maguindanao	Gadungan	0	8,365	8,365
	Orandang	2,522	56,319	58,841
	Cabuan	774	37,229	38,003
	Sub-total	3,296	101,913	105,209
Sultan Kudarat, Maguindanao	Olas	659	143,955	144,614
	Nekitan	0	39,433	39,433
	Matengen	0	123,595	123,595
	Sub-total	659	306,983	307,642
Pigcawayan, North Cotabato	North Manuangan	0	55,352	55,352
	New Culasi	0	36,140	36,140
	Sub-total	0	91,492	91,492
TOTAL		3,955.00	500,388.00	504,343.00

Source: RAP Survey Team

2.8 Structures and Improvements Affected

The structures that will be affected by the alignment are 11 houses made up of concrete, semi-concrete, and shanty materials.

Table 2.8-1 Affected structures in the area

Municipalities	Affected Barangays	No. of House	No. of Commercial Structures	Total
Parang	Orandang	4	0	4
	Cabuan	4	0	4
Sultan Kudarat	Olas	1	0	1
	Nekitan	0	0	0
	Matengen	2	0	2
Pigcawayan	North Manuangan	0	0	0
	New Culasi	0	0	0
Total		11	0	11

Source: RAP Survey Team

2.9 Crops and Trees Affected

Affected crops are summarized in **Table 2.9-1**. Most farmers in the area adapted the multi-storey cropping (coconut-corn) and rice fields were supported by irrigation.

Table 2.9-1 Affected Area Cultivated with Crops

Municipalities	Barangays	Affected area of crops (sq.m.)		Total
		Corn	Palay	
Parang	Orandang	8,092	0	8,092

	Cabuan	0	24,524	24,524
Sultan Kudarat	Olas	0	14,990	14,990
	Nekitan	2,503	0	2,503
	Matengen	32,079	1,162	33,241
Pigcawayan	North Manuangan	0	0	0
	New Culasi	16,929	5,282	22,211
Total		59,603	45,958	105,561

Source: RAP Survey Team

Affected trees along the proposed alignment were inventoried; most of the tree species planted are fruit bearing and harvestable timber as shown in **Table 2.9-2**.

Table 2.9-2 Affected Trees

Municipality	Trees (Fruit Bearing *)	Trees (Timber/Non-fruit Bearing **)	Plant/Cash Trees ***	Total
Parang	408	151	2	561
Sultan Kudarat	197	21	9	227
Pigcawayan	54	18	121	193
Total	659	190	132	981

Source: RAP Survey Team

Note:

* Fruit Bearing Trees: Mango, Coconut/ Buco, Jackfruit/ Langka, Santol, Kamatchile, Duhat, Tamarind/ Sampaloc, Aratiles/ Mansanitas, Guava/ Bayabas, Macopa, Kaimito, Avocado, Atis, Casoy/ Kasuy

** Timber, Non-fruit Bearing Trees: Narra, Acacia, Talisay, Bangkal, Balite, Gmelina, Falcata, Mahogany

*** Plant, Cash Trees: Banana, Papaya, Atsuete, Cassava, Cacao

2.10 Land Valuation Map

The Local Government Units of Parang and Sultan Kudarat, Maguindanao and Pigcawayan, North Cotabato had no available Land Valuation Map. Land valuation will be based on the Section 6 of RA 10752: Standards for Assessment of the Value of the Property subject to negotiated sale.

2.11 Pricing of Land Based on BIR Zonal Values

Shown in the **Table 2.11-1** is the Zonal Values of Land taken from the Bureau of Internal Revenue website by Municipality. In Pigcawayan, lots located along the national road have the highest zonal value compared to lots located distance away from the existing road. In Sultan Kudarat and Parang, lots along the existing roads has also the higher zonal value compared to others which has the same zonal value regardless of its location.

Table 2.11-1 BIR Zonal Values of Land

Municipality	Barangay	Location	Classification	***Zonal Value Php/sq.m
Parang	Gadungan, Orandang, and Cabuan	*Along the Road	RR Residential Regular	99.00
			CR Commercial Regular	165.00
			I Industrial	149.00
		**Interior Lots	RR Residential Regular	83.00
			CR Commercial Regular	149.00
			I Industrial	132.00
			A1 Riceland Irrigated	4.55
			A2 Riceland Unirrigated	3.55
			A3 Upland	2.30
			A4 Coco Land	3.05

Municipality	Barangay	Location	Classification	***Zonal Value Php/sq.m	
			A16 Corn Land	2.00	
			A50 Other Agricultural Lands	2.00	
Sultan Kudarat	Olas, Nekitan, and Matengen	*Along the Road	RR Residential Regular	99.00	
			CR Commercial Regular	165.00	
			I Industrial	149.00	
			RR Residential Regular	83.00	
		**Interior Lots	CR Commercial Regular	149.00	
			I Industrial	132.00	
			A1 Riceland Irrigated	4.55	
			A2 Riceland Unirrigated	3.55	
			A3 Upland	2.30	
			A4 Coco Land	3.05	
			A16 Corn Land	2.00	
			A50 Other Agricultural Lands	2.00	
			Along National Highway	CR Commercial Regular	380.00
				X Institutional	380.00
RR Residential Regular	350.00				
Along Provincial Road	RR Residential Regular	260.00			
Along Barangay Road	RR Residential Regular	170.00			
Pigcawayan	North Manuangan and New Culasi	**Interior Lots	RR Residential Regular	110.00	
			A1 Riceland Irrigated	21.00	
			A2 Riceland Unirrigated	17.00	
			A3 Upland	12.5	
			A4 Coco Land	11.05	
			A6 Fishpond	5.50	
			A7 Swamp	4.00	
			A10 Cogon	5.50	
			A11 Abaca Land	4.50	
			A12 Orchard	9.50	
			A13 Pineapple Land	4.00	
			A14 Banana Land	12.50	
			A15 Pasture Land	4.50	
			A16 Corn Land	11.50	
			A17 Sugar Land	15.50	
			A18 Tobacco Land	5.50	
			A19 Cacao	7.00	
			A20 Lanzones	15.00	
			A21 Durian	19.00	
			A22 Rambutan	16.00	
			A23 Mango	14.50	
			A25 Camote/Cassava	6.50	
			A26 Bamboo Land	5.50	
			A34 African Oil Land	9.00	
			A35 Rubber Land	16.50	
			A36 Forest Land/Timber Land	3.50	
			A37 Horicultural Land	8.00	
A44 Ipil-ipil	5.50				
A48 Coffee	10.50				
A50 Other Agricultural Lands	3.00				

Source: RAP Survey Team

Note: *Along the Road- adjacent to the existing road

**Interior Lots- Are those lots located right after the along the road lots

*** Information presented can be accessed through the BIR website

2.12 Pricing on Land Based on Tax Declaration

The documents for the Pricing on Land Based on Tax Declaration were not obtained from the Municipal Assessor Office.

2.13 Recent Prices of Comparable Properties in the Area

Several sources of information were gathered from the bank records through their online websites and through online postings to obtain the recent market value of comparable properties in affected Municipalities. This information will be used in calculating the negotiated sale of DPWH for compensation at replacement cost as per land property types (Commercial, Residential and Agricultural).

Under commercial land, lot owners selling price ranges from 850 pesos per sq. meter to 2,200 per sq. meter.

Table 2.13-1 Comparative Prices of Commercial Land by Banks

No.	Date	Classification	Location	Price (Php)	Lot Area (sq.m)	Asking Price / sq.m. (Php)	Sources
1	Feb. 15, 2009	Commercial-Improvements	Poblacion, Lake Sebu, South Cotabato	3,417,645.00	2,423	1,410.50	Landbank Data
2	Feb. 15, 2009	Commercial-Vacant Lot	Poblacion, Tacurong City, Sultan Kudarat	3,343,000.00	698	4,789.40	Landbank Data
3	Feb. 15, 2009	Commercial-Improvements	Kalawag 3, Isulan, Sultan Kudarat	2,837,100.00	1,750	1,621.20	Landbank Data
4	Feb. 15, 2009	Commercial-Improvements	Poblacion 3, Lebak, Sultan Kudarat	1,700,878.00	222	7,656.09	Landbank Data
5	March 22, 2018	Commercial-Improvements	Tacurong City, Sultan Kudarat	2,903,962.44	500	5,805.00	Metrobank
6	March 22, 2018	Commercial-Vacant Lot	Polomolok, South Cotabato	920,000.00	578	1,591.70	OLX Philippines
7	March 22, 2018	Commercial-Vacant Lot	Kalandagan/ New Carmen, Tacurong City, Sultan Kudarat	2,625,000.00	525	5,000.00	Dotproperty, Part of Mitula Group

Source: Research by RAP Team

For residential land, comparative prices are presented in **Table 2.13-2**. Recent selling prices for residential land ranges from Php450.00/sq.m to Php550.00/sq.m.

Table 2.13-2 Comparative Prices of Residential Land by Banks

No	Date	Classification	Location	Price (PHP)	Lot Area (Sq.m)	Asking Price /sq.m(Php)	Source
1	March 22, 2018	Residential - Vacant Lot	Dadiangas, General Santos City, South Cotabato	1,810,000.00	905	2,000.00	Metrobank
2	March 22, 2018	Residential - Vacant Lot	Dadiangas, General Santos City, South Cotabato	1,722,000.00	3,000	574.00	Metrobank
3	March 22, 2018	Residential - With Improvement	Tacurong City, Sultan Kudarat	1,289,000.00	1,849	697.00	Metrobank

No	Date	Classification	Location	Price (PHP)	Lot Area (Sq.m)	Asking Price /sq.m(Php)	Source
4	March 22, 2018	Residential - Vacant Lot	Dadiangas, General Santos City, South Cotabato	300,000.00	300	1,000.00	OLX Philippines
5	March 22, 2018	Residential - Vacant Lot	Poblacion, Tacurong City, Sultan Kudarat	621,600.00	518	1,200.00	Dotproperty, Part of Mitula Group
6	March 22, 2018	Residential - Vacant Lot	Poblacion, Tacurong City, Sultan Kudarat	468,000.00	390	1,200.00	Dotproperty, Part of Mitula Group

Source: Research by RAP Team

For agricultural land selling price ranges from Php20.00/ sq.m to Php30.00/ sq.m as shown in **Table 2.13-3**.

Table 2.13-3 Comparative Prices of the Agricultural Land by Banks

No	Date	Classification	Location	Price (PHP)	Lot Area (Sq.m)	Asking Price / Sq.m (Php)	Source
1	Feb. 15, 2009	Agricultural	Apopong, General Santos City	1,224,270.00	13,603	90.00	Landbank Data
2	Feb.15, 2009	Agricultural	Brgy.Sinawal, General Santos City	1,500,000.00	10,000	150.00	Landbank Data
3	Feb.15, 2009	Agricultural	Brgy.Lamcaliaf, Polomolok, South Cotabato	300,000.00	20,000	15.00	Landbank Data
4	Feb. 15, 2009	Agricultural	Brgy.Kablon, Tupi, South Cotabato	2,500,300.00	100,012	25.00	Landbank Data
5	Feb.15, 2009	Agricultural-Improvements	Mamali 2, Lambayong, Sultan Kudarat	410,000.00	5000	82.00	Landbank Data
6	Feb.15, 2009	Agricultural	Daguma, Bagumbayan, Sultan Kudarat	150,000.00	10000	15.00	Landbank Data

Source: Research by RAP Team

2.14 Possible Relocation Sites

If relocation is necessary to be undertaken during the implementation of the project, the municipality of Parang, Maguindanao committed five (1) hectare of land just across 37th IB Army Battalion Camp dedicated to the affected households. **Table 2.13-1** shows are proposed relocation sites with the corresponding land areas.

Table 2.14-1 Proposed Relocation sites in Parang, Maguindanao

Barangay	Land Area
Barangay Nituan	1 hectare

Source: Mayor, Municipality of Parang

2.15 Status of Land Ownership of Affected Lots

Shown in **Table 2.14-1** is the status of land ownership by category and the possible mitigating/ legal remedies/ options that may help implement the Task Force responsible for Right-of-Way Acquisition of DPWH (Unified Project Management Office). Number of lots shown in the matrix was identified through local guides such as Barangay Officials that helped the RAP team during the inventory. The final list of identified lots are submitted to the Municipal Assessor's Office for verification whether the identified land claimants can be found in their records either they have title or with tax declaration.

Table 2.15-1 Status of Land Ownership

Type	Definition	No. of Lots (People)				Total (A)+(B)
		Lots with House			Lots without House (B)	
		Lot owned	Lot not owned	Total (A)		
Case A	Land claimant has a land titled and paying taxes	0	5	5	9	14
		(0)	(35)	(35)	(70)	(105)
Case B	Land claimant has a land title but not paying taxes	0	2	2	4	6
		(0)	(14)	(14)	(31)	(45)
Case C	Claimant has no land title but paying taxes (Tax Declaration)	0	4	4	8	12
		(0)	(27)	(27)	(63)	(90)
Case D	No land title and No Tax Declaration	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)
TOTAL		0	11	11	21	32
		(0)	(76)	(76)	(164)	(240)

Source: RAP Survey Team

Note:

- Upper figure is number of houses; lower figure with parenthesis is number of people
- But in case the land to be acquired for ROW is classified as public land, concerned PAP/Ps will need to provide equity contribution for the purchase of land replacement; such equity contribution for a period of time (15-25 years). In the same manner claims related to resettlement or compensation of the agrarian reform under RA 3844, RA 6389 and RA 6657, the latter is also applicable.

2.16 Conditions to Satisfy if ROW Acquisition is by Donation

As stipulated in Section 7 of RA 10752 (Guidelines for Expropriation) whenever it is necessary to acquire real property for the ROW, site or location for any national government infrastructure through expropriation, which includes, among others, within thirty (30) days, the property owner refuses or fails to accept the price offer of the IA for negotiated sale or fails and/or refuses to submit the documents necessary for payment, or when negotiation is not feasible, then the appropriate IA, through the Office of the Solicitor General (for national agencies), the Office of the Government Corporate Counsel (for government -owned and controlled corporations), or their deputized government or private legal counsel, shall initiate the expropriation proceedings by filing a verified complaint before the proper court.

In this case, land donation is the mode for acquisition of Road Right-of-Way is pursued, "informed consent" and "power of choice" shall be the operative principles and the following criteria below must be satisfied (see Figure and Table below).

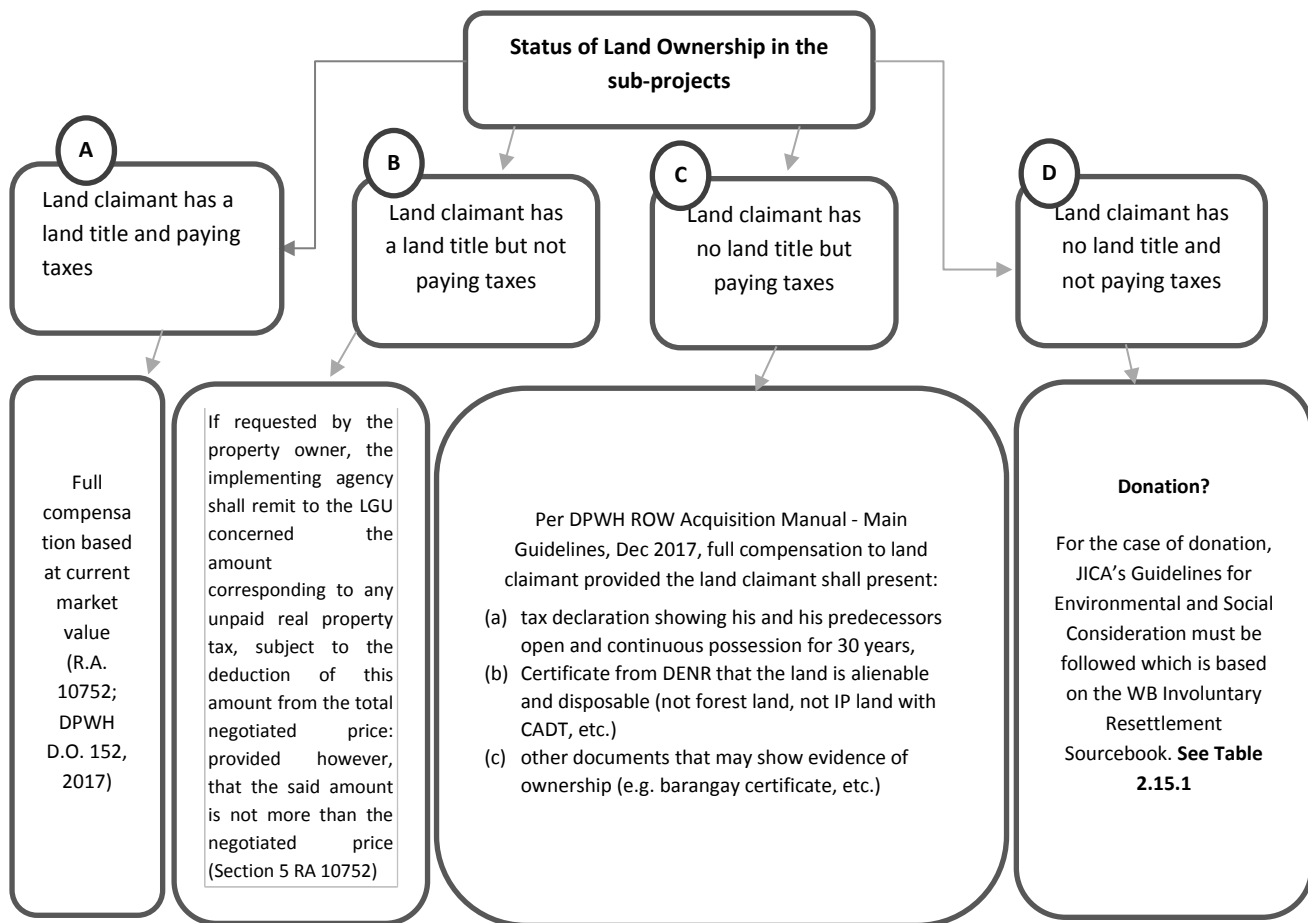


Figure 2.16-1 Different conditions of land ownership

When donation is carried on, the criteria to satisfy is shown in Table 2.16.1

Table 2.16-1 Criteria to satisfy for Informed Consent when land donation is pursued

Criteria for Informed Consent	Remarks by JICA Study Team
1. The infrastructure must not be site specific.	The project is not site specific. Changes of alignment during detailed design (DD) in response to residents will are still possible. The current alignment is selected upon technical study and in consultation with LGUs and barangay people during public consultation held at least six times (twice in Metro Manila for local mayors, twice at municipal level, twice at barangay level).
2. The impacts must be minor, that is, involve no more than 10 percent of the area of any holding and require no physical relocation.	At this stage, it is difficult to confirm if impact to potential land donor is more than 10% of his/her land holding due to absence of cadastral map. This should be addressed during DD stage where parcellary survey is undertaken. In case during the survey, it turns out that more than 10% of the area of the donor is affected, road alignment will be modified.
3. The land required to meet technical project criteria must be identified by the affected community, not by line agencies or project authorities (nonetheless, technical authorities can	Depending on the topography of the area, 2 to 4 alternative alignments were presented to the LGUs and barangay people. They were informed that the JICA Study Team will study the optimum alignment

Criteria for Informed Consent	Remarks by JICA Study Team
<p>help ensure that the land is appropriate for project purposes and that the project will produce no health or environmental safety hazards).</p>	<p>considering social and environmental impacts, economic impacts, project costs and other indicators. After optimum alignment was selected, this was presented again to mayors who expressed their consent to the project. It was also presented to the concerned barangay people and obtain their consent. Changes of alignment during DD to reflect residents will is still possible.</p>
<p>4. The land in question must be free of squatters, encroachers, or other claims or encumbrances.</p>	<p>The basic policy of selecting alignment is to avoid houses and other structures to minimize social impact while satisfying the established design criteria. At this FS stage, it is not yet determined who among the affected lot owners will pursue donation mode. Nonetheless, if such mode is pursued, the present condition of said land will be confirmed by municipal office if it is free from squatters, encroachers or other claims.</p>
<p>5. Verification (for example, notarized or witnessed statements) of the voluntary nature of land donations must be obtained from each person donating land.</p>	<p>For the case of donation, it was explained to LGUs and barangay people that the person has “right of choice” (i.e. the concerned parties, without pressures from the authority, can be for or against land acquisition). At this FS stage, it is difficult to identify land owners who will pursue land donation. This option should be pursued during the DD stage.</p>
<p>6. If any loss of income or physical displacement is envisaged, verification of voluntary acceptance of community-devised mitigatory measures must be obtained from those expected to be adversely affected.</p>	<p>Socio-economic profile of the affected families along the alignment (meaning those houses needs to be relocated) has been compiled through interview survey. Most of them are farmers hence mitigation measures should take into account their access to their source of livelihood, training to increase their production, and other legally entitlement assistance.</p>
<p>7. If community services are to be provided under the project, land title must be vested in the community, or appropriate guarantees of public access to services must be given by the private titleholder.</p>	<p>The Project is construction of new national roads hence public access is guaranteed.</p>
<p>8. Grievance mechanisms must be available.</p> <p>9. In case the owner of property cannot be found, unknown or deceased</p>	<p>Grievance mechanism will be established for the project.</p> <p>In case the owner of the property cannot be found, is unknown, or is deceased in cases where the estate has not been settled, after exerting due diligence, or there are conflicting claims over the ownership of the property and improvements and/or structures thereon, the IA shall deposit the amount equivalent to the sum under items (a)(1) to (a)(3) of Section 7 of this IRR to the court, for the benefit of the person to be adjudged in the same proceeding as entitled thereto.</p> <p>Upon compliance with the above guidelines, the court shall immediately issue to the IA an order to take possession of the property.</p>

Criteria for Informed Consent	Remarks by JICA Study Team
	<p>If within seven (7) working days after the deposit with the court of the amount equivalent to the sum under items (a)(1) to (a)(3) of Section 7 of this IRR, the court has not issued to the IA a writ of possession for the affected property, the counsel of the IA shall immediately seek from the court the issuance of the writ of possession.</p> <p>The court shall release the said amount to the person adjudged in the same expropriation proceeding as entitled thereto.</p>

Source: Involuntary Resettlement Sourcebook, World Bank, 2004, RA 10752 Section 7

3. IMPACTS AND MITIGATION MEASURES

The preferred sub-project alignment is carefully selected based on an alignment study conducted by the JICA study team. Indicators are evaluated based on cost and construction period, economic and environmental impact as well as the technical features of the alignment. The result of the evaluation has been presented after consultations with relevant stakeholders during the project preparation and appropriate technical investigation for the project. While considerable effort had been exerted to further minimize or avoid involuntary resettlement, detailed engineering activities necessitate realignment of a few sections to consider community safety and applicable geometric improvements.

The Manuangan – Parang Road will involve road concreting that will require acquisition of some public land like military reservation and mostly are private land. The improvement of this land will trigger physical and economic displacement requiring resettlement impacts assessment within 30m width of Road Right-of-Way (RROW). The DPWH Design Guidelines, Criteria and Standards (DGCS, 2015 Edition) is used in the design of the subproject.

3.1 Expected Impacts

The potential impact of the proposed alignment for Manuangan – Parang Road Project is shown in **Table 3.1-1**. All the land, houses, sari-sari stores, crops and trees situated in the alignment were noted, listed and were geo-tagged using a GPS during the field reconnaissance. Any changes or variation from this RAP Report will be validated during the detailed engineering design.

Table 3.1-1 Summary of expected impacts

Loss category	Parang	Sultan Kudarat	Pigcawayan	Total
House/Structure	8	3	0	11
Affected HHs	8	3	0	11
Affected PAPs	54	22	0	76

Affected Land lots owner	4	20	8	32
Total Land area affected	105,209	307,659	91,492	504,360

Source: RAP Survey Team

Table 3.1-2 shows the summary of expected impacts on land with cultivated crops such as corn and palay.

Table 3.1-2 Summary of expected impacts on land with cultivated crops

Loss category	Unit	Parang	Sultan Kudarat	Pigcawayan	Total
Affected agricultural lands with corn	m ²	8,092.00	34,582.00	16,929.00	59,603.00
Affected agricultural lands with palay	m ²	24,524.00	16,152.00	5,282.00	45,959.00

Source: RAP Survey Team

As shown in **Table 3.1-3**, a total of 659 fruit bearing trees will be affected, 190 timber trees and 132 plant/cash trees.

Table 3.1-3 Summary of expected impacts on affected trees

Loss category	Unit	Parang	Sultan Kudarat	Pigcawayan	Total
Affected Fruit bearing trees	No. of trees	408	197	54	659
Affected trees (Timber / non-fruit bearing)	No. of trees	151	21	18	190
Plant/Cash Trees	No. of trees	2	9	121	132

Source: RAP Survey Team

3.2 Avoidance / Preventive Measures

Basic policies for selecting optimum alignment in connection with existing road utilization were established as follows:

3.2.1 Policy on utilizing existing road

- i. The proposed alignment shall utilize the existing road as much as possible in order to minimize land acquisition.
- ii. The proposed alignment shall avoid relocation of the houses/buildings as much as possible to minimize social impacts to people.
- iii. The proposed alignment should follow the existing road elevation as much as possible.
- iv. The proposed alignment shall satisfy the established design criteria.

3.2.2 Policy on selection of new alignment

Basic policies for selecting optimum alignment of new roads were established as follows:

- i. The alignment shall avoid affecting existing houses/buildings as much as possible to minimize social impacts.

- ii. The alignment shall meet the established design criteria.
- iii. The alignment shall basically follow the topography as much as possible to minimize cutting and filling.
- iv. Tunnel structure shall be avoided in consideration of local of contractors' capability of tunnel construction.

3.3 Mitigating Measures

It is anchored in the following provisions of the law the mitigating measures that may be applied during the acquisition of land and implementation of resettlement action plan to achieve the optimum goals of this project. It is provided in the Philippine Constitution and its existing laws and JICA Resettlement Guidelines the manner, by which these goals can be achieved: The following policy frameworks are reviewed as the basis for this project implementation.

Table 3.3-1 Matrix of Laws and Guidelines as basis for Mitigating Measures to be Undertaken

JICA / World Bank Guidelines	Laws of the Philippines
1. Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives.	No person shall be deprived of life, liberty, or property without due process of law, nor shall any person be denied the equal protection of the laws (Constitution of the Republic of the Philippines, Article III, and Section 1). Land Acquisition, Resettlement, Rehabilitation and Indigenous Peoples' Policy, 2007 (LARRIPP, 2007)
2. When population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken.	Private property shall not be taken for public use without just compensation. (1987 Constitution of the Republic of the Philippines, Article II. Section 9) LARRIPP
3. People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels.	Monetary compensation is provided for the PPAPs who have legal rights to land and structures (RA10752). For informal settlers, relocation site and socialized housing program is developed by the National Housing Authority (NHA) and LGUs (RA 7279). LARRIPP, 2007
4. Compensation must be based on the full replacement cost as much as possible.	Republic Act 10752, Section 4 clearly states that the modes of acquiring real property are through: a) donation, b) negotiated sale, c) expropriation, d) and any other mode of acquisition as provided by law Property valuation is market-based and undertaken using Government Financial Institutions (GFIs) or Independent Property Appraisers which help promotes unbiased property valuation. The assumption by the IA of the capital gains tax also provides supplementary incentive to the lot owners to negotiate with government, (DPWH, Dept. Order, No. 124, series of 2017)
5. Compensation and other kinds of assistance must be provided prior to displacement.	DO No. 5 (2003): unless ROW is purchased project notice of award to contractor cannot be issued, i.e. all kind of compensation is paid before project is launched
6. For projects that entail large-scale involuntary	The LARRIP, 2017 spells out the legal framework and

JICA / World Bank Guidelines	Laws of the Philippines
resettlement, resettlement action plans must be prepared and made available to the public.	<p>donors’ policies governing instances when infrastructure projects implemented by the DPWH cause the involuntary taking of land, structures, crops, and other assets resulting in some cases in the displacement and resettlement of affected persons.</p> <p>It enumerates the entitlements and benefits that Project Affected Families (PAPs) or Persons (PAPs) should rightfully receive under the law based on the Project’s adverse impacts on their assets, livelihood, and lives.</p>
7. In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance.	DPWH, LARRIPP, 2017 Policy Framework Operations Manual incorporates the procedures that the National Commission on Indigenous Peoples (NCIP) has issued concerning the formulation of the Ancestral Domains Sustainable Development and Protection Plan (ADSDPP) and obtaining the Free and Prior, Informed Consent (FPIC) of Indigenous Peoples (FPIC). It also relates the requirements demanded by the NCIP with the requirements of multilateral lending agencies.
8. When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people.	DENR Administrative Order No. 96-37 (To Further Strengthen the Implementation of the Environmental Impact Statement System), requires under Section 2 that “All information about the proposed project or undertaking shall be presented by the proponent to the public in a language and manner that are easily understood. LARRIPP, 2007
9. Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans.	RA 7279 Sec. 23 requires LGUs in coordination with Presidential Commission for the Urban Poor (PCUP) and concerned government agencies, to enable program beneficiaries “to be heard and to participate in the Decision-making process over matters involving the protection and promotion of their legitimate collective interests which shall include appropriate documentation and feedback mechanisms.”, LARRIPP, 2007
10. Appropriate and accessible grievance mechanisms must be established for the affected people and their communities (WB OP 4.12 Para. 6).	<p>LARRIPP, 2017 adopted the same procedure which states that: Grievances related to any aspect of the project or sub-project will be handled through negotiations and are aimed at achieving consensus following the procedures outlined below:</p> <ol style="list-style-type: none"> a) The grievance shall be filed by the PAP with the Resettlement Implementation Committee (RIC) who will act within 15 days upon receipt thereof, except complaints and grievances that specifically pertain to the valuation of affected assets, since such will be decided upon by the proper courts. b) If no understanding or amicable solution can be reached, or if the PAP does not receive a response from the RIC within 15 days of registry of the complaint, he/she can appeal to the concerned Regional Office, which should act on the complaint/grievance within 15 days from the day of its filing; c) If the PAP is not satisfied with the decision of the Regional Office, he/she, as a last resort, can submit the complaint to any court of law.

JICA / World Bank Guidelines	Laws of the Philippines
<p>11. Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advance of such benefits (WB OP 4.12 Para. 6).</p>	<p>There is a recognized provision under RA 7279 and its IRR where LGUs must conduct inventory of their ISFs.</p> <p>The conduct of survey and tagging are reputable practice by the Urban Poor Affair Office (UPAO). LARRIP, 2007 states the cut-off date as the date of commencement of the census. Resettlement project conducted by LGUs nationwide notifies to public the last day of the census work, and use the date as the cut-off date, so that no eligible PPAPs are left uncounted.</p>
<p>12. Eligibility of benefits include, the PPAPs who have formal legal rights to land (including customary and traditional land rights recognized under law), the PPAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PPAPs who have no recognizable legal right to the land they are occupying (WB OP 4.12 Para. 6).</p>	<p>Professional Squatters (as defined by Republic Act 7279) also refers to individuals or groups who occupy lands without the express consent of the landowner and who have sufficient income for legitimate housing, as defined by the proper Local Inter-Agency Committee (LIAC) with the assistance of the Urban Poor Affairs Office (UPAO).</p> <p>Squatting Syndicates (as defined by Republic Act 7279) refers to groups of persons who are engaged in the business of squatter housing for profit or gain. Those persons are ineligible for structure compensation, relocation, and rehabilitation/ inconvenience/income-loss assistance in case their structures are to be demolished in resettlement project according to Republic Act 7279. This definition disregards individuals or groups who simply rent land and housing from professional squatters or squatting syndicates.</p>
<p>13. Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based (WB OP 4.12 Para. 6).</p>	<p>A property needed for exchange with other government property near the project site (RA 10752).</p> <p>If reasonable, land for land will be provided in terms of anew parcel of land of Equivalent productivity, at a location acceptable to PAPs. (LARRIP, 2007)</p>
<p>14. Provide support for the transition period (between displacement and livelihood restoration) (WB OP 4.12 Para. 6).</p>	<p>* Income Loss. For loss of business/income, the PAP will be entitled to an income rehabilitation assistance to be based on the latest copy of the PAPs' Tax record for 3 months, or not to exceed P 15,000 for severely affected structures. Further, Informal Settlers Families (ISFs) are not entitled for compensation on loss of income as per RA 7279 r the Urban Development and Housing Act (UDHA) while qualified formal settlers are entitled for loss of income assistance</p> <p>*Inconvenience Allowance The amount of P10,000 shall be given to PAPs with severely affected structures, which need relocation and new construction.</p> <p>*Rehabilitation assistance Skills training and other development activities equivalent to P 15,000 per family will be provided in partnership with other government agencies, if the present means of livelihood is no longer viable and the PAP will have to engage in a new income activity. This will be given to qualified Informal Settler Families (ISFs)</p> <p>*Transportation Allowance or assistance. If relocating, PAPs to be provided free transportation. Also, informal settlers in</p>

JICA / World Bank Guidelines	Laws of the Philippines
	urban centers who choose to go back to their place of origin in the province or be shifted to government relocation sites will be provided free transportation. This will be given to qualified Informal Settler Families (ISFs) (LARRIP (April, 2007, p. 18, 19)
15. Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc. (WB OP 4.12 Para. 6).	RA 8972 provides assistances and privileges to solo parents and their children (solo parents include unmarried mother/ father, widow/widower, abandoned/separated). Under this law, they are given allocation in housing projects with liberal payment terms (Sec. 10), medical assistance (Sec. 11) and educational scholarship benefits (Sec. 9). RA 7279, for informal settlers below the poverty line and landless, requires preparation of relocation sites. Additional related laws of the Philippines address needs of vulnerable groups: <ul style="list-style-type: none"> a) RA 8425 (Social Reform and Poverty Alleviation Program Act) b) RA 9710 (Magna Carat of Women) c) RA 8371 (Indigenous Peoples Rights Act) d) RA 7277 (Magna Carta for Disabled Persons)

Source: RAP Survey Team

Compensation and assistance are aimed to improve or at least restore the livelihoods of all displaced persons in real terms relative to pre-project levels and to enhance the standards of living of the displaced poor and other vulnerable groups. DPWH will deal to the property owner concerned, as compensation price (DPWH, Dept. Order No. 124, 2017), the sum of:

- i. the current market value of land
- ii. the replacement cost of structures and improvements and
- iii. the current market value of crops and trees.

Replacement Cost — refers to the cost necessary to substitute the affected structure or improvement with a similar asset based on current market price.

Compensation and assistance are designed to improve or at least restore the livelihoods of all displaced persons in real terms relative to pre-project levels and to improve the standards of living of the displaced poor and other vulnerable groups.

3.4 Entitlement Matrix

Compensation and assistance are designed to improve or at least restore the livelihoods of all displaced persons in real terms relative to pre-project level and to improve the standards of living of the displaced poor and other vulnerable groups.

Table 3.4-1 Compensation and Entitlement Matrix

Type of Loss	Application	Entitled Person	Compensation/ Entitlements	Responsible Organization
A) Lands (Classified as Agricultural, Residential, Commercial, Institutional)	More than 20% of the total landholding lessor where less than 20% lost but the remaining land holding become economically unviable.	PAF with Transfer Certificate of Title or tax declaration (Tax declaration legalized to full title)	<ul style="list-style-type: none"> • PAF will be entitled to cash compensation for loss of land at 100% replacement cost at the informed request of PAFs. If feasible, land for land will be provided in terms of a new parcel of land of equivalent productivity, at a location acceptable to PAFs, or Holders of free or homesteads patens and Holders of Certificates of Land Ownership (CLOA) under CA 141 Public Lands Act will be granted under Comprehensive Agrarian Reform Act shall be compensated for the land at zonal value. • If granted under Voluntary Offer to Sell by the Landowner. CLOA issued under CA 141 shall be subject to the provisions of Section 112 of Public Lands Act shall receive compensation for damaged crops at market value at the time of taking. Rehabilitation assistance in the form of skills training equivalent to the amount of P000 (non-cash), per family, if the present means of livelihood is no longer viable and the PAF will have to engage in a new income activity. 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)
		PAF without TCT	<ul style="list-style-type: none"> • Cash compensation for damaged crops at market value at the time of taking. • Agricultural lessors are entitled to disturbance compensation equivalent to five times the average of the gross harvest for the past 3 years but not less than PhP 15,000. 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)
	Less than 20% of the total land holding or where less 20% lost or where the remaining land holding still	PAF with TCT or lost tax declaration or declarations that are legalizable to full title	<ul style="list-style-type: none"> • PAF will be entitled to (Tax Cash compensation for loss of land at 100%) replacement cost at the informed request of PAFs. 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)

Type of Loss	Application	Entitled Person	Compensation/ Entitlements	Responsible Organization
	viable for use		<ul style="list-style-type: none"> • Holders of free or homesteads or patents and CLOAs under CA 141 Public Lands Act will be compensated on land improvements only. • Holders of Certificates of Land Ownership Award (CLOA) granted under the Comprehensive Agrarian Reform Act shall be compensated for the land at Zonal value. • If granted under Voluntary Offer to sell by the Landowner. CLOA issued under CA 141 shall be subject to the provisions of Section 112 of the Public Land Act. • Cash compensation for damaged crops at market value at the time of taking. 	
		PAF without TCT	<ul style="list-style-type: none"> • Cash compensation for damaged crops at market value at the time of taking. • Agricultural lessors are entitled to disturbance compensation equivalent to five times the average of the gross harvest for the past 3 years but not less than PhP 15,000. (Computation Pro-rata) 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)
		Vulnerable People (All PAPs with children, 1 HH with PWD) children, pregnant women, persons with disabilities (PWD) and illnesses.	<ul style="list-style-type: none"> • On top of assistance depending on which options they chose (housing or cash compensation), welfare agency additional support will be provided to ensure that vulnerable people are assisted as needed in resettlement transition. E.g. Vans provided for women and children; special assistance for pregnant women, PWDs, etc. 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)
B) Structures (Classified as Agricultural, Residential, Commercial, Institutional)	More than 20% of the total land holding lost or where less than 20% lost but the Remaining structures no longer function as intended or no longer viable for continued use.	PAF with TCT or tax declaration (Tax declaration legalized to full title)	<ul style="list-style-type: none"> • PAP will be entitled to cash compensation for loss of entire structure at 100% of replacement cost. • Rental subsidy for the time between the submission of complete documents and the release of payment on land. 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)
		PAF without Transfer Certificate of Title	<ul style="list-style-type: none"> • PAF will be entitled to cash compensation for loss of entire structure at 100% of replacement cost. • Rental subsidy for the time between the submission of complete documents and the release of payment on land. 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)

Type of Loss	Application	Entitled Person	Compensation/ Entitlements	Responsible Organization
	Less than 20% of the total landholding or where less 20% lost or where the remaining structure can still function and is viable for continued use.	PAF with Transfer Certificate of Title or lost tax declaration or declarations that are legalizable to full title	<ul style="list-style-type: none"> • Compensation for affected portion of the structure. 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)
		PAF without TCT	<ul style="list-style-type: none"> • Compensation for affected portion of the structure. 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)
C) Improvement	Severely or marginally affected	PAF with or without Transfer Certificate of Title, tax declaration, etc.	<ul style="list-style-type: none"> • Cash compensation for the affected improvements at replacement costs 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)
D) Crops, Trees, Perennials	Severely or marginally affected		<ul style="list-style-type: none"> • Cash compensation for the affected crops, trees, perennials at current market value as prescribed by DENR and LGUs. 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)
E) Commercial and Including Commercial Establishment	Severely affected 10% or more of the total landholding/ productive asset lost or where less than 10% lost but the remaining land holding become economically unworkable	Land owner, Agricultural tenants/settlers/lessees with title, tax declaration and other proof of ownership or in compliance with RA 10752	<ul style="list-style-type: none"> • Rehabilitation assistance (skills training and other development activities) the same to P15, 000 per family will be provided in coordination with other government agencies, if the present means of livelihood is no longer viable and the PAP will have to engage in a new income activity. Department Order (DO) No.5, s. of 2003 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH) • TESDA-ARMM • CDA-ARMM • DSWD-ARMM • DOLE-ARMM • DTI-ARMM • LGU • NGO
F) Agricultural land	Severely affected Loss 20% and above of the total area of the land holding or where less than 20% loss but the remaining become economically unworkable	Agricultural Lessee	<ul style="list-style-type: none"> • Disturbance Compensation the same to five (5) times the average gross harvest for the past three (3) years but not less than 15,000.00. Department Order (DO) No.5, s. of 2003 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)
		Agricultural tenants and settlers	<ul style="list-style-type: none"> • Financial assistance the same to the average gross harvest for the last three (3) years and not less than P15,000 per hectare (EO 1035), Department Order (DO) No.5, s. of 2003 	<ul style="list-style-type: none"> • UPMORMC II - Multilateral (DPWH)
G) Commercial/ Business Structure	Severely affected Loss 20% and above of the total area of the commercial structure or where less than 20% loss but the remaining	PAPs with latest copy of PAPs tax record for the period corresponding to the stoppage of business	<ul style="list-style-type: none"> • Income rehabilitation assistance not to exceed ₱15,000.00. Department Order (DO) No.5, s. of 2003 	<ul style="list-style-type: none"> • UPMO-RMC II - Multilateral (DPWH)

Type of Loss	Application	Entitled Person	Compensation/ Entitlements	Responsible Organization
	Become economically Unworkable	activities		
H) Sever loss of residential structure	Severely affected Loss 20% and above of the total area of the main structure or where less than 20% loss but the remaining become economically unworkable	PAPs that needs relocation and new construction	<ul style="list-style-type: none"> Inconvenience Allowance in the amount of ₱10,000.00 Department Order (DO) No.5, s. of 200 	<ul style="list-style-type: none"> UPMO-RMC II - Multilateral (DPWH)
			Transportation Allowance or Assistance. <ul style="list-style-type: none"> If relocating, free transportation will be provided to PAPs to include informal settlers in urban centres who choose to go back to their places of origin in the provinces or be shifted to government relocation sites. Department Order (DO) No.5, s. of 2003 	<ul style="list-style-type: none"> UPMO-RMC II - Multilateral (DPWH)
			<ul style="list-style-type: none"> For relocation (in coordination with the LGUs and NHA) or should relocation not be possible within the said period financial assistance in the amount the same to the prevailing minimum daily wage multiplied by six (6) months shall be extended to the affected families by LGUs concerned (RA 7279) PAPs will be provided with relocation options suitable to their preference. Alternatives are <ol style="list-style-type: none"> Self- relocation, On-site relocation, and Relocation to project-sponsored resettlement sites in cooperation with key actors – local governments and other entities as mandated by law. 	<ul style="list-style-type: none"> LGUs NHA

Source: LARRIPP (2007), Department Order (DO) No.5, s. of 2003, R.A 7279, Executive Order No. 1035

4. COST ESTIMATES, COMPENSATION AND ENTITLEMENTS

The following cost estimates provided under this section is based on the provisions of DPWH-LARIPP, 3rd Edition Manual, 2017 and Pursuant to RA 10752 which states that DPWH will deal to the property owner concerned, as compensation price, the sum of: (i) the current market value of land (ii) the replacement cost of structures and improvements and (iii) the current market value of crops and trees. Replacement Cost refers to the cost necessary to replace the affected structure or improvement with a related asset based on current market price. The Detailed Unit Price Analysis obtained from the DPWH which price are certified by the Municipal Engineers Office was used to derive the current price of materials in coming up with Bill of Materials for both residential and other structures.

To determine the suitable price offer for the acquisition of ROW through negotiated sale, DPWH will employ the services of a government financial institution (GFI) with adequate experience in property appraisal or an independent property appraiser (IPA) accredited by: (1) the Bangko Sentral ng Pilipinas (BSP) or (2) a professional association of appraisers recognized by BSP.

4.1 Preliminary ROW Cost Estimates for Land

The current fair market values from the BIR Zonal Computation and an independent property appraiser (IPA) were compared (**Table 4.1-1**) to determine the Estimated ROW Cost of Land. To compute for the total ROW Cost of Land, the highest market value (which in this case was seen to be the current value by the independent property appraiser) was then multiplied by the total affected land area.

Table 4.1-1 Comparison of Current Market Value and BIR Zonal Value

Municipality	BIR Zonal Value (Php)		Current Market Value by IPA (Php)	
	Residential	Agricultural	Residential	Agricultural
Parang	83.00	4.55	450.00*	20.00*
Sultan Kudarat	83.00	4.55	450.00*	30.00*
Pigcawayan	350.00	21.00	500.00*	30.00*

Source: RAP Survey Team

Note:

* The current market value that was set by the independent property appraiser was used for the computation of the estimated market values of the affected land.

Estimated market values of affected land in the assumption that all affected land owners have the complete land title is presented in **Table 4.1-2**.

Table 4.1-2 Estimated Market Values of Affected Land

Municipality	Land Classification	Affected Land (sq.m)	Unit Price (Php)	Total Cost (Php)
Parang	Agricultural	101,913.00	20.00	2,038,260.00
	Residential	3,296.00	450.00	1,483,200.00
Sultan Kudarat	Agricultural	306,983.00	20.00	6,139,660.00
	Residential	659.00	450.00	296,550.00
Pigcawayan	Agricultural	91,492.00	30.00	2,744,760.00
Total		504,343.00		12,702,430.00

Source: RAP Survey Team

Note:

The estimated market values of affected land were computed in the assumption that all claimants were qualified for the compensation, provided that they have the Original Certificate of Title and Tax Declarations, or any of the two.

4.2 Preliminary ROW Replacement Cost Estimates for Structures and Improvements

Compensation for structure at replacement cost, defined as cost required replacing the affected structure or improvement with a similar asset based on current market. The following applies in compensation for other improvements on the affected land:

- i. Cash compensation at replacement cost for the affected structures owned by the government or non-government agencies or the community.
- ii. Cash compensation to include the cost of reconnecting damaged facilities, such as water, power and telephone lines.

The replacement cost of the affected structures, in this case were referred to the affected houses, was shown in **Table 4.2-1**. The computation of individual dwellings was based on the current unit price of materials and estimated for each reconstruction of building according to type of the building part and kind of materials used.

Table 4.2-1 Replacement Cost of Residential houses

Municipality	No. Of Houses	Total
Parang	8	823,241.00
Sultan Kudarat	3	408,083.00
Total	11	1,231,324.00

Source: RAP Survey Team

4.3 Preliminary Cost Estimates for Crops and Trees

The following applies in compensation for affected crops, fruit trees, and perennials:

- i. Cash compensation for perennials at current market value;
- ii. PAPs will be given enough time to harvest crops on the subject land;
- iii. Compensation for damaged crops (i.e palay and corn) at existing market value at the time of taking (compensation will be based on the cost of production per hectare pro-rata to the affected area); and
- iv. Cash compensation for fruit trees will be based on current market value.

The current market values provided by the Department of Agriculture (DA) for crops and perennials, and Department of Environment and Natural Resources (DENR) for the trees were used in the valuation of the trees and crops of affected areas. The computation for the total cost will be computed using the following: *yield x area x unit price*.

Table 4.3-1 Replacement Cost for crops

Municipality	Crops	Area (sq. m.)	Annual Yield (kg/sq.m.)	Unit Price (Php)	Total Cost (Php)
Parang	Corn	8,092.00	0.28	14.00	31,720.64
	Palay	24,524.00	0.36	16.01	141,346.53
Sultan Kudarat	Corn	34,582.00	0.28	14.00	135,561.44
	Palay	16,152.00	0.36	16.01	93,093.67
Pigcawayan	Corn	16,929.00	0.29	18.26	89,645.83
	Palay	5,282.00	0.42	18.42	40,863.66
Grand Total		105,561.00			532,231.77

Source: RAP Survey Team

Table 4.3-2 Replacement Cost for trees

Commodity	Municipality						Total Estimated Value
	Parang	Total Cost	SK	Total Cost	Pigcawayan	Total Cost	
Fruit bearing trees	408	191,760	197	92,590	54	25,380	309,730.00
Timber / Non-fruit bearing trees	151	57,380	21	7,980	18	6,840	72,200.00
Plant/Cash Trees	2	420	9	1,890	121	44,010	46,320.00
Total							428,250.00

Source: RAP Survey Team

4.4 Preliminary Estimates of Other Entitlements of Project affected persons.

Pursuant on the provisions cited above, the following are mandated:

- a) **Disturbance Compensation** - For agricultural land severely affected, the lessees are eligible to disturbance compensation equivalent to five times the average of the gross harvest for the past 3 years but not less than PhP15, 000.
- b) **Income Loss.** For loss of business/income, the **AF** will be eligible to an income rehabilitation assistance not to exceed **P 15,000** for severely affected structures, or to be based on the latest copy of the AFs Tax record for the period corresponding to the stoppage of business activities. Further, Informal Settlers Families (ISFs) are not entitled for compensation on loss of income as per RA 7279 r the Urban Development and Housing Act (UDHA) while qualified formal settlers are entitled for loss of income assistance.
- c) **Inconvenience Allowance** in the amount of **P 10,000.00** shall be provided to AFs with severely affected structures, which require relocation and new construction.
- d) **Rehabilitation assistance** (skills training and other development activities) equivalent to PhP15, 000 per family per municipality will be provided in partnership with other government agencies, if the present means of livelihood is no longer viable and the AF will have to engage in a new income activity. This will be given to qualified Informal Settler Families (ISFs)
- e) **Rental Subsidy.** Will be provided to AFs without sufficient additional land to allow the reconstruction of their lost house under the following circumstances:
 - The concerned properties are for residential use only and are considered as severely affected.
 - The concerned AFs were physically residing in the affected structure and land at the time of the cut-off date.
 - The amount to be given will be equivalent to the prevailing average monthly rental for a similar structure of equal type and dimension to the house lost.
 - The amount will be given for the period between the delivery of house compensation and the delivery of land compensation.
- f) **Transportation allowance or assistance.** If relocating, AFs are to be provided free transportation. Also, informal settlers in urban centers who choose to go back to their place of origin in the province or be shifted to government relocation sites will be provided free transportation. This will be given to qualified Informal Settler Families (ISFs)

The estimate values for the other entitlements were not determined in this report since there is a need to conduct a Parcellary survey which will happen during the second phase of the project implementation which will be conducted by the Department of Public Works and Highways.

5. CONCLUSIONS AND RECOMMENDATIONS

The RAP will be implemented by various government agencies in partnership with the Project affected persons and road concessionaire. In this section, the various players involved in the RAP implementation are named together with their respective defined roles. While this project is pursued under the Japan ODA Loan arrangements, the implementation of the project is primarily a responsibility of the government, specifically the DPWH agency. Discussed under this section is based on the Department Administrative Order (DAO) D.O.5, Series of 2003 and the DPWH LARRIPP 3rd Edition.

5.1 Recommended Preliminary Compensation and Entitlement Packages

The recommended budget for RAP Implementation of SP-9 is PhP **18,,278,371.14** and is part of government counterpart, however the amount is exclusive of other entitlements that are yet to be determined after the completion of the Parcellary survey of the DPWH. The indicative budget items covering land acquisition and replacement cost of structures, and cost for external monitoring. Contingencies and admin cost are also included. **Table 5.1-1** shows the details of the indicative budget to implement this RAP.

Table 5.1-1 Indicative Budget for RAP Implementation

Description	Cost Item	Amount	Remarks
Land Acquisition and Structures	Land	12,702,430.00	Estimated based on the current fair market value of Land
	Structures	1,231,324.00	Estimated based the replacement cost
	Subtotal A	13,933,754.00	
Compensation	Trees and Cash crops	428,250.00	Estimated based on the current market values of the Maguindanao Provincial Assessor's Office and North Cotabato
	Damaged crops	532,231.77	Estimated based on the current market value of the Philippine Statistics Authority
	Subtotal for B	960,481.77	
External Monitoring		1,000,000.00	Estimated at PhP 1,000,000 per SP
	Subtotal for C	1,000,000.00	
Subtotal (A+B+C)		15,84,235.77	
Contingency	10%	1,589,423.58	
Admin Cost	5%	794,711.79	
GRAND TOTAL		18,278,371.14	

Source: RAP Survey Team

5.2 Gaps between JICA Guidelines and Project Legal Framework / Practices

Table below shows the gap between JICA Guidelines and the existing laws and regulations adopted by the project. In the last column, the resettlement policy and the practices under the project are described.

Since the Republic Act 8974 stipulates mainly the procedures of the land acquisition, there are gaps between JICA Guidelines and RA 8974. However, most of such gaps were filled in by the Executive Order (EO) No. 15, Series of 2013, which was issued by the Governor of PGBh on 6th

June 2013. The EO No 15 established the units and communities responsible for requirements by JICA Guidelines, including resettlement, livelihood assistance, consultations and grievance redress. Even the requirements by JICA Guidelines were not stipulated in EO No 15, the actual practice is in accordance with JICA guidelines, such as avoidance of additional land acquisition by changing the road design, and prioritizing the assistance for the vulnerable PAFs.

On the other hand, a gap remains with regards to compensation payment between the JICA guidelines and practice under the project. The prevailing market price varies depending on the locations.

Table 5.2-1 Gaps between JICA Guidelines and Project Legal Framework/ Practice

JICA Guidelines (A)		Laws and Regulations adopted by the Project (B)	Gaps Between (A) and (B)	Resettlement Policy / Practice under the Project
1	Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives		NA	The final alignment of the project was adjusted to avoid heritage area.
2	When population displacement is unavoidable, effective measures to minimize the impact and to compensate for losses should be taken		NA	The final alignment of the project was adjusted land acquisition and resettlement.
3	People who must be resettled involuntarily and people whose means of livelihood will be hinder or lost must be sufficient compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels	EO No 15 stipulate the Resettlement Unit and Livelihood and their responsibilities	No significant gap	- Livelihood assistance and employment matching will be conducted. - Resettlement site with low-cost housing will be developed.
4	Compensation must be based on the full replacement cost as much as possible	RA 8974 stipulates the steps to determine land compensation, starting from donation, then zonal value. If not agreed by PAPs, market values shall be paid through negotiations.	Zonal value for the land may not meet the full replacement cost.	- Prevailing market value varied depending on the locations. - Offered options of cash compensation or barter of land.
5	Compensation and other assistance must be provided prior to displacement	EO No 15 stipulates the compensation payment and other assistance. Compensation schedule will be dependent with the implementing agency (DPWH).	No significant gaps were identified, as Implementing Rules and Regulations of R.A. No. 10752 shows PAPs are paid before relocation. Unless ROW is purchased, the construction is not started by	Follow Implementing Rules and Regulations of R.A. No. 10752, JICA GL and DPWH D.O. No. 5,

JICA Guidelines (A)		Laws and Regulations adopted by the Project (B)	Gaps Between (A) and (B)	Resettlement Policy / Practice under the Project
			DPWH D.O. No. 5.	
7	In preparation a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance	EO No 15 established the Community Relation & IES Unit and mandates the Unit to conduct adequate consultations.	No significant gaps	Series of consultations and information dissemination are being conducted.
8	When consultations are held, explanation must be given in a form, manner, and language that are understandable to the affected people.	EO No 15 established the Community Relation & IES Unit and mandates the Unit to conduct adequate consultations.	No significant gaps	Consultations were conducted in Maranao (local) and Tagalog dialect.
9	Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including census that serves as an eligibility cut off dates, asses inventory and socio economic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advantage of such benefits	EO No 15 established the Land Acquisition Unit, and mandates the unit to conduct inventory and tagging of structures to discourage the influx of unqualified dwellers	No significant gaps	- The cut off dates was set on the completion of the census in ROW. Any improvements after the date have not been compensated. - Tagging of existing houses in the ROW was conducted, which is the basis for the eligibility for current resettlement assistance.
10	Provide support for the transition period (between displacement and livelihood restoration)	EO No 15 established the livelihood Unit and Estate Management Unit. The latter is mandated to manage the resettlement site.	No significant gaps	- Livelihood assistance and employment matching will be conducted. - The above assistance will ensure the payment of monthly amortization at the resettlement site
11	Particular attention must be paid to the needs of the vulnerable groups among those displaces, especially those below the poverty line, landless, elderly, women and children, ethnic minorities and etc	EO No 15 established the livelihood Unit and Estate Management Unit. The latter is mandated to manage the resettlement site.	NA	- Physically vulnerable persons who need assistance during relocation should be identified. - Livelihood assistance will be prioritize these PAFs or PAPs.

5.3 Institutional Arrangements

Due to the nature of the ARMM which enjoys autonomy, there is a need to observe the legal process when the National Government is implementing project in the region. Based on the discussions with both sides (DPWH National and ARMM Government), the proposed procedure is illustrated in **Figure 5.3-1**.

Based on the said figure, identified projects by the DPWH National inside the ARMM will be submitted to the ARMM Government thru DPWH-ARMM for inclusion in the list of projects to

be consolidated by the RPDO (Regional Planning Development Office). These lists are then discussed and approved by the REDPB (Regional Economic and Development Planning Board) and endorsed to the RLA (Regional Legislative Assembly). The RLA then enacts a law (Regional Assembly Public Works Act) containing the projects approved by the REDPB. Once the RAPWA is ready (where the target projects of DPWH-National are included), the ARMM Government through the DPWH-ARMM will request the DPWH-National to implement the projects identified by the DPWH-National. The reasons for such request may include (i) lack of experience of DPWH-ARMM to handle such huge project, (ii) technical difficulty among other reasons.

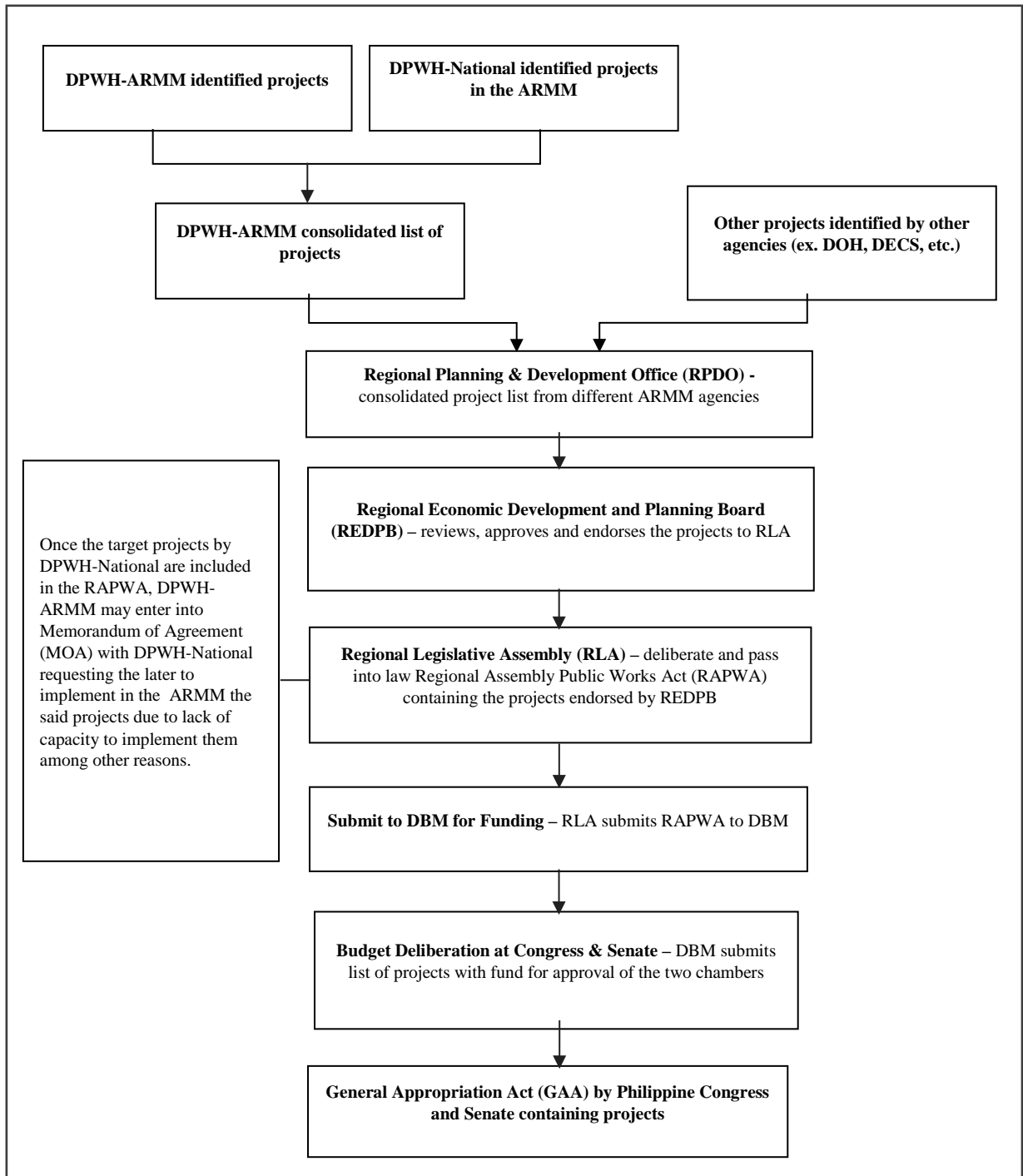


Figure 5.3-1 Proposed collaboration procedure between DPWH-ARMM and DPWH-National

5.3.1 The Project Implementation Office or the Project Management Office (PMO) of the DPWH

It has overall responsibility for implementing the project. In coordination with relevant agencies, the PMO shall manage and supervise the project, including resettlement activities and land acquisition. It shall ensure that funds for the timely implementation of the RAP, PAP, and MOA are available and that expenses are properly accounted for. The PMO shall be assisted by ESSO (formerly EIAPO per D.O. # 58 dated May 21, 2004) in providing technical guidance and support in the implementation of the RAP, PAP, and MOA.

5.3.2 Environmental and Social Services Office (ESSO)

ESSO shall provide technical guidance and support in the implementation of the RAP and PAP and will be responsible for the following resettlement activities:

1. overall preparation and planning of the RAP and PAP;
2. coordinate with the DPWH field offices in the preparation, planning, and if needed, revision of the MOA for affected ancestral domains;
3. submit RAP, PAP, and MOA budget plans (to include compensation, relocation costs, operations) for approval and allocation of needed resources by the DPWH central office;
4. in accordance with the Department's resettlement policies, guide the District Engineering Offices and the Regional Offices in their tasks, such as the identification of who will likely be affected by the project, verification of PAFs, final inventory of affected assets, information dissemination, public consultation, and dispute resolution;
5. amend or complement the RAP and PAP in case problems are identified during the internal and/or external monitoring of its implementation;
6. in collaboration with its counterpart in the Region, follow-up with the DPWH ARMM the processing of compensation claims of PAFs and the release of funds for the implementation of the PAP and the MOA;
7. in collaboration with the PMO, monitor the actual payment of compensation to PAFs and release of funds for the implementation of the PAP and the MOA;
8. in collaboration with its regional counterpart and prepare periodic supervision and monitoring reports on RAP, PAP, and MOA implementation for submission to the PMO and the Bank.

5.3.3 District Engineering Offices of the DPWH

As the major implementer of this undertaking, the DEOs shall act as the Technical Coordinator and shall: a) oversee the staking-out, verification and validation of the PAFs' assets; b) conduct inventories of properties that will be affected; c) approve disbursement vouchers/payments; d) submit reports on disbursements, payments to PAFs and release of funds for PAP and MOA implementation to the Regional Office and the PMO; and e) submit Monthly Progress Reports to ESSO, the Regional Offices and the PMO. The DEO will also be a member of the Resettlement Implementation Committee (RIC) and will actively participate in its functions.

5.3.4 Regional Offices of the DPWH

The Regional Office shall act as the Liaison between ESSO and the District Office and shall ensure that the RAP, PAP and the MOA are implemented as planned. Its specific activities are: a) monitor the RAP, PAP, and MOA implementation and fund disbursement; b) submit the monthly progress reports to ESSO, c) monitor payments to PAFs and release of funds for MOA and PAP Implementation. The RO will also address grievances filed at its office by the PAFs for speedy resolution.

5.3.5 Resettlement Implementation Committee (RIC)

It shall be composed of representatives from the Regional Office and District Engineering Office, the City/Municipality, affected barangays, and PAFs/PAPs communities affected by the project.

Its functions are:

1. Assist the DPWH staff engaged in LARRIPP activities in (a) validating the list of AFs; (b) validating the assets of the PAFs that will be affected by the project (using a prepared compensation form); and (c) monitoring and implementing the LARRIPP;
2. Assist the DPWH staff in identifying who among the Project Affected Persons;
3. Assist the DPWH staff engaged in the LARRIPP activities in the public information campaign, public participation and consultation;
4. Assist DPWH in the payment of compensation to PAFs;
5. Receive complaints and grievances from PAFs and other stakeholders and act accordingly;
6. Maintain a record of all public meetings, complaints, and actions taken to address complaints and grievances; and
7. In coordination with concerned government authorities, assist in the enforcement of laws/ordinances regarding encroachment into the project site or Right-of –Way (ROW).

The MRIC shall be formed through Memorandum of Understanding (MOU) between DPWH, the concerned local government unit.

5.4 Mitigating Measures and Grievance Process

There will be four (4) levels of grievance redress available to all PAPs and other stakeholders that can be done in the implementation of the project. Simple query or inquiry, any controversy, issue or conflict that arose resulting from the interpretation and implementation of the Road Network Development Project in Conflict-affected Areas in Mindanao was referred to as grievance. This would range from issues on compensation for the lot and structure owners and eligibility criteria as well as on the issues of relocation sites and the quality of services extended by proper authorities and agencies in those sites. These grievances were seen to potentially induce unnecessary delays, local resistance and political tensions in executing the project. To appropriately address the grievances from the Project affected persons, a systematic Grievance Redress Mechanism (GRM) must be established to respond to potential valid concerns of the Project affected persons. This method will resolve the grievances of Project affected persons for the satisfactory implementation of the Road Network Development Project in Conflict-affected Areas in Mindanao.

- i. **Level I – Municipal Level** – There will be committee composed of AP representatives, representatives of affected Barangays and LGU stakeholders that will be set up and shall meet whenever a complaint is lodged. The committee will be chaired by the respective Municipal Mayor. However, in case the Municipal Mayor is an AP, there will be a deputy chair which will represent in his behalf. In this level, the grievance shall be filed by the AP (or the Punong Barangay) with the chairperson of the municipal grievance level committee. A record of the grievance will be provided to the MRIC within a working day of receipt by the municipal level Grievance Committee chairperson. A decision should be made within 15 calendar days after receipt of the complaint. The AP or stakeholder will be informed in writing of the decision within two working days.
- ii. **Level II – DPWH Regional Office** – If the PAP is not satisfied with the decision of the Municipal Level, he can appeal before the DPWH Regional Office. The complaint will be acted upon and be decided within 10 calendar day from the date of receipt. A resolution will be officially sent in writing to the AP within five working days from the date in which the decision was made.

- iii. **Level III** – Project Level – The Project Level, represented by the DPWH Project Management Office and the DPWH ESSD, is the next level of committee that can cater any grievance complaint whose decision after the Level II is still not satisfactory to the AP. The complaint shall be acted upon and decided within 15 calendar days and the decision shall be communicated in writing within seven working days.
- iv. **Level IV** – Legal Procedures – Grievance complaints will be taken to the appropriate court of the Republic of the Philippines if the Project Level decision is unsatisfactory.

Other Grievances concerning officials conducting the resettlement process will be settled in accordance to the provisions of the DPWH Infrastructure Right-of-Way (IROW) Procedural Manual, to wit:

- i. For complaints concerning local government executives, it shall be filed with the Department of Interior and Local Government.
- ii. For complaints against subordinate officials shall be filed with the Office of the Local Chief Executive concerned.
- iii. Complaints against officials of other national agencies may be filed with the Office of the President, or the Office of the Ombudsman.
- iv. Aggrieved parties may also direct their complaints to and/or seek the assistance of the Commission on Human Rights or the Presidential Commission for the Urban Poor.

In addition to the project's GRM, JICA's accountability mechanism also applies to the project. The accountability mechanism provides opportunities for people that are adversely affected by JICA projects to express their grievances, seek solutions, and report alleged violations of JICA's operational policies and procedures, including safeguard policies. JICA's accountability mechanism comprises of (i) consultation led by JICA's special project facilitator to assist people adversely affected by JICA projects in finding solutions to their concerns and (ii) providing a process through which those affected by projects can file requests for compliance review by JICA's Compliance Review Panel.

5.5 Implementation Schedule

Table 5.5-1 summarizes the indicative schedules of the various interrelated activities in relation to the preparation and implementation of the RAP.

Table 5.5-1 Resettlement Schedule

Activity	2019				2020				2021				2022				2023				2024	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
First Disclosure																						
Parcellary Survey																						
Updating of RAP																						
Formulation of MRIC																						
Disclosure of Updated RAP to PAPs																						
Notification of PAPs																						
Compensation																						
Income Restoration																						
Detailed Design																						
ROW Acquisition and RAP																						
Procurement of Contractor																						
Construction																						
Construction Supervision																						
Monitoring and Evaluation																						
Internal Monitoring																						
External Monitoring & Evaluation																						

Source: JICA Study Team

5.6 Monitoring and Evaluation

5.6.1 Supervision and Internal Monitoring

The Environmental and Social Services Office (ESSO) under D.O. 58 of the DPWH shall conduct the supervision and in-house monitoring of implementation of the RAPs and will be alternately called the Internal Monitoring Agent (IMA).

The tasks of the Internal Monitoring Agent are to:

- a. Regularly supervise and monitor the implementation of the RAPs in coordination with the concerned District Engineering Office (DEO), Regional Office (RO), and the Resettlement Implementation Committee (RIC). The findings will be documented in the quarterly report to be submitted to the PMO, which in turn will submit the report to the Bank;
- b. Verify that the re-inventory baseline information of all PAFs has been carried out and that the valuation of assets lost or damaged, the provision of compensation and other entitlements, and relocation, if any, has been carried out in accordance with the LARRIPP and the respective RAP Report;
- c. Ensure that the RAP and the MOA are implemented as designed and planned;
- d. Verify that funds for implementing the RAPs, MOA are provided by the PMO in a timely manner and in amounts sufficient for the purpose;
- e. Record all grievances and their resolution and ensure that complaints are dealt with promptly.

5.6.2 External Monitoring and Evaluation

An External Monitoring Agent (EMA) will be commissioned by the DPWH-PMO to undertake independent external monitoring and evaluation. The EMA for the Project will be either a qualified individual or a consultancy firm with qualified and experienced staff. The Terms of Reference of the engagement of the EMA shall be prepared by the DPWH and shall be acceptable to the Bank prior to the engagement. The tasks of the EMA are the following:

- a. Verify results of internal monitoring;
- b. Verify and assess the results of the information campaign for PAFs rights and entitlements;
- c. Verify that the compensation process has been carried out with the procedures communicated with the PAFs and affected IPs during the consultations;
- d. Assess whether resettlement, MOA; specifically, whether livelihoods and living standards have been restored or enhanced;
- e. Assess efficiency, effectiveness, impact and sustainability of resettlement and MOA implementation, drawing lessons as a guide to future resettlement policy making and planning;
- f. Ascertain whether the resettlement, MOA entitlements were appropriate to meet the objectives, and whether the objectives were suited to PAF; Suggest modification in the implementation procedures of the RAPs, MOA, if necessary, to achieve the principles and objectives of the Resettlement Policy;
- g. Review on how compensation rates were evaluated; and
- h. Review of the handling of compliance and grievances cases.

5.6.3 Stages and Frequency of Monitoring

The stages and monitoring frequency of the contract packages by the IMA and EMA as follows:
Compliance Monitoring.

1. This is the first activity that both IMA and EMA shall undertake to determine whether or not the RAPs and MOA were carried out as planned and according to this policy. The

EMA will submit an Inception Report and Compliance Monitoring Report one month after receipt of Notice to Proceed for the engagement. The engagement of the EMA shall be scheduled to meet the Policy's requirement of concluding RAP, MOA, and implementation activities at least one (1) month prior to the start of civil works.

2. Semi-Annual Monitoring - The EMA will be required to conduct a monthly monitoring of RAP, MOA.
3. Final Evaluation-Final evaluation of the implementation of the LARRIPP will be conducted three months after the completion of payments of compensation to PAPs. For the MOA, the EMA will coordinate with the affected community on the dates of the final evaluation.
4. Post- Evaluation-This activity will be undertaken a year after the completion of the project, to determine whether the social and economic conditions of the PAFs after the implementation of the project have improved.

5.6.4 Schedule Of Implementation Of Raps And Monitoring

The PMO in coordination with the ESSO shall establish a schedule for the implementation of RAPs and PAPs and the required monitoring taking into account the project's implementing schedule. It is expected that one month prior to the start of the civil works, all RAP activities have been determined by the IMA and EMA as having been concluded. For MOA, all activities that relates to land acquisition, resettlement, including compensation, should also have been completed one month before the start of civil works. For activities other than those that execute Chapter III of this LARRIPP but are nonetheless covered by the MOA and the PAPs, their completion is not a pre-requisite for the start of the civil works component.

5.6.5 Reporting

The EMA is accountable to the PMO and reports to the ESSO. The PMO submits copy of EMA's and IMA's Reports.

5.6.6 Monitoring Indicators

Table 5.5-1 and Table 5.5-2 presents the Internal and External Monitoring Indicators (based on Chapter 8, LARRIPP, 2007)

Table 5.6-1 Suggested Internal Monitoring Indicators

Monitoring Indicators	Basis for Indicators
1. Budget and timeframe	<ol style="list-style-type: none"> a) Have all land acquisition and resettlement staff been appointed and mobilized for the field and office work on schedule? b) Have capacity building and training activities been completed on schedule? c) Are resettlement implementation activities being achieved against the agreed implementation plan? d) Are PAP and MOA activities being implemented and targets achieved against the agreed time frame? e) Are funds for resettlement being allocated to resettlement agencies on time? f) Are funds for the implementation of the PAPs and MOA allocated to the proper agencies on time? g) Have resettlement offices received the scheduled funds? h) Have agencies responsible for the implementation of the PAPs

Monitoring Indicators	Basis for Indicators
	<p>and MOA received the scheduled funds?</p> <ul style="list-style-type: none"> i) Have funds been disbursed according to the RAP? j) Have funds been disbursed according to the PAPs and MOA? k) Has the social preparation phase taken place as scheduled? l) Has all land been acquired and occupied in time for project implementation?
2. Delivery of Compensation and Entitlements	<ul style="list-style-type: none"> a) Have all AFs received entitlements according to numbers and categories of loss set out in the entitlement matrix? b) Have PAFs received payments for affected structures and lands on time? c) Have PAFs losing from temporary land borrow been compensated? d) Have all received the agreed transport costs, relocation costs, income substitution support and any resettlement allowances, according to schedule? e) Have all replacement land plots or contracts been provided? Was the land developed as specified? Are measures in train to provide land titles to PAFs? f) How many PAFs opted to donate their land to the government? g) How many PAFs did not receive payment because their title is covered by the provisions of Sec. 112 of CA 141? h) How many PAFs opted to donate their lands to the government? i) How many landholdings were subjected to quit claim? Easement? j) How many PAFs accepted the first offer at zonal valuation? k) How many PAFs rejected the first offer and accepted the second offer? l) How many PAFs resorted to expropriation? m) How many PAF households have received land titles? n) How many PAFs have received housing as per relocation options in the RPAP? o) Does house quality meet the standards agreed? p) Have relocation sites been selected and developed as per agreed standards? q) Are the PAFs occupying the new houses? r) Are assistance measures being implemented as planned for host communities? s) Is restoration proceeding for social infrastructure and services? t) Are the PAFs able to access schools, health services, cultural sites and activities at the level of accessibility prior to resettlement? u) Are income and livelihood restoration activities being implemented as set out in income restoration Plan? For example utilizing replacement land, commencement of production, numbers of PAFs trained and provided with jobs, micro-credit disbursed, number of income generating activities assisted? v) Have affected businesses received entitlements including transfer and payments for net losses resulting from lost business and stoppage of production?

Monitoring Indicators	Basis for Indicators
3. Public Participation and Consultation	<ul style="list-style-type: none"> • Have consultations taken place as scheduled including meetings, groups, and community activities? Have appropriate resettlement leaflets been prepared and distributed? • How many PAFs know their entitlements? How many know if they have been received? • Have any PAFs used the grievance redress procedures? What were the outcomes? • Have conflicts been resolved? • Was the social preparation phase implemented? • Was the conduct of these consultations inter-generationally exclusive, gender fair, free from external coercion and manipulation, done in a manner appropriate to the language and customs of the affected community and with proper disclosure?
4. Benefit Monitoring	<ol style="list-style-type: none"> a) What changes have occurred in patterns of occupation, production and resources use compared to the pre-project situation? b) What changes have occurred in income and expenditure patterns compared to pre-project situation? What have been the changes in cost of living compared to pre-project situation? Have PAFs' incomes kept pace with these changes? c) What changes have taken place in key social and cultural parameters relating to living standards? d) What changes have occurred for vulnerable groups? e) Are women reaping the same benefits as men? f) Are negative impacts proportionally shared by men and women?

Source: RAP Survey Team

Table 5.6-2 External Monitoring Indicators

Monitoring Indicators	Basis for Indicators
1. Basic information on AP/IP households	<ol style="list-style-type: none"> a) Location b) Composition and structures, ages, education and skill levels c) Gender of household head d) Ethnic affiliation e) Access to health, education, utilities and other social services f) Housing type g) Land use and other resource ownership patterns h) Occupation and employment patterns i) Income sources and levels j) Agricultural production data (for rural households) k) Participation in neighborhood or community groups l) Access to cultural sites and events m) Value of all assets forming entitlements and resettlement entitlements
2. Restoration of livings standards	<ol style="list-style-type: none"> a) Were house compensation payments made free of depreciation, fees or transfer costs to the PAPs? b) Have PAPs adopted the housing choices developed? c) Have perceptions of "community" been established? d) Have PAPs achieved replacement of key social cultural elements?
3. Restoration of Livelihoods	<ol style="list-style-type: none"> a) Were compensation payments free of deduction for devaluation, fees or transfer costs to the PAPs? b) Were compensation payments adequate to replace lost assets?

	<ul style="list-style-type: none"> c) Was sufficient replacement land available of appropriate standard? d) Did transfer and relocation payments cover these costs? e) Did income substitution allow for re-establishment of enterprises and production? f) Have enterprises affected received adequate assistance to re-establish themselves? g) Have vulnerable groups have been provided income-earning opportunities? Are these effective and sustainable? h) Do jobs provided re-establish pre-project income levels and living standards?
4. Levels of AP Satisfaction	<ul style="list-style-type: none"> a) How much do PAPs know about resettlement procedures and entitlements? b) Do PAPs know their entitlements? c) Do they know if these have been met? d) How do PAPs measure the extent to which their own living standards and livelihood been restored? e) How much do PAPs know about grievance procedures and conflict resolution procedures? How satisfied are those who have used said mechanisms?
5. Effectiveness of Resettlement Planning	<ul style="list-style-type: none"> a) Were the PAPs and their assets correctly enumerated? b) Were any land speculators assisted? c) Was the time frame and budget enough to meet objectives? d) Were entitlements too generous? e) Were vulnerable groups identified and assisted? f) How did resettlement implementers deal with unforeseen difficulties?
6. Other impacts	<ul style="list-style-type: none"> a) Were there unintended environmental impacts? b) Were there unintended impacts on employment or incomes?

Source: RAP Survey Team

5.7 Next steps

After completion of the Feasibility Study, the following activities will be undertaken with their corresponding timeline:

- First Disclosure – 2nd quarter of 2020
- Parcellary Survey – 2nd to 4th quarter of 2020
- Updating of RAP – 4th quarter of 2020
- Formulation of MRIC – 4th quarter of 2020
- Disclosure of updated RAP to APs – 1st quarter of 2021
- Notification of PAPs – 2nd quarter of 2021
- Compensation – mid 2nd to mid 3th quarter of 2021
- Income Restoration – mid 2nd to mid 3th quarter of 2021
- Detailed Design – 4th quarter of 2019 to 3rd quarter of 2020
- ROW Acquisition and RAP – 2nd quarter of 2020 to 2nd quarter of 2021
- Procurement of Contractor – 3rd quarter of 2020 to mid-4th quarter of 2021
- Construction – mid 3rd quarter of 2021 to 1st quarter of 2024
- Civil Works – mid 3rd quarter of 2021 to 1st quarter of 2024

Monitoring and evaluation:

- Internal monitoring – mid 3rd quarter of 2021 to 1st quarter of 2024
- External Monitoring and Evaluation – mid 3rd quarter of 2021 to 1st quarter of 2024