



**REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS**

**PASIG-MARIKINA RIVER CHANNEL
IMPROVEMENT PROJECT
(PHASE IV)**

**RESETTLEMENT ACTION PLAN
FOR MANGAHAN FLOODWAY**

**IN ACCORDANCE WITH THE
JICA RESETTLEMENT GUIDELINES/POLICIES
FOR SOCIAL CONSIDERATIONS**

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Abbreviations

4Ps	Pantawid Pamilya Pilipino Program
AHHS	Average Household Size
APOAMF	Alliance of People’s Organizations along Mangahan Floodway
BIR	Bureau of Internal Revenue
BSP	Bangko Sentral ng Pilipinas
CA	Commonwealth Act
CLOA	Certificate of Land Ownership Award
CTSES	Census Tagging and Socio-economic survey
DENR	Department of Environment and Natural Resources
DILG	Department of the Internal Government
DO	District Office
DP	Displaced person
DPWH	Department of Public Works and Highways
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
ECC	Environmental Compliance Certificate
EIA	Environmental Impact Assessment
EMA	External Monitoring Agent
ESSD	Environmental and Social Safeguards Division
FCMC	Flood Control Management Cluster
FGD	Focus Group Discussion
FS	Feasibility Study
GRM	Grievance Redress Mechanism
GRS	Grievance Redress System
HH	Household
HOA	Homeowners Association
HUDCC	Housing and Urban Development Coordinating Council
IEC	Information Education Campaign
IMA	Internal Monitoring Agent
IP	Indigenous People
IROW	Infrastructure Right of Way
IRR	Implementing Rules and Regulations
ISF	Informal Settlers Families
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
KII	Key Informant Interview
LAPRAP	Land Acquisition Plan and Resettlement Action Plan
LARRIPP	Land Acquisition, Resettlement, Rehabilitation and Indigenous People’s Policy
LCE	Local Chief Executive
LDRRMC	Local Disaster Risk Reduction and Management Councils
LGU	Local Government Units
LHB	Local Housing Board
LIAC	Local Inter-Agency Committee
MCGS	Marikina Control Gate Structure
MDRRMO	Municipal Disaster Risk Reduction and Management Office

MEO	Municipal Engineering Office
MF	Mangahan Floodway
MMDA	Metropolitan Manila Development Authority
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPDC	Municipal Planning and Development Coordinator
MPOC	Municipal Peace and Order Council
MRB	Medium-Rise Building
MRIC	Municipal Resettlement Implementation Committee
NA	Neighborhood Association
NDRMMP	National Disaster Risk Reduction and Management Plan
NGO	Non Government Organization
NHA	National Housing Authority
OP	Operational Proceedure
PAFs	Project Affected Families
PAP	Project Affected Persons
PCUP	Presidential Commission on the Urban Poor
PhP	Philippine Peso
PMO	Project Management Office
PMRCIP	Pasig-Marikina River Channel Improvement Project
PO	People's Organization
Pubcon	Public Consultation
PWD	Person with Disability
RA	Republic Act
RAP	Resettlement Action Plan
RIC	Resettlement Implementation Committee
RO	Regional Office
ROW	Right-of-Way
SAPROF	Special Assistance for Project Formation
SEC	Security Exchange Commission
SEMS	Social and Environmental Management System
SES	Socio-economic Survey
SHFC	Social Housing Finance Corporation
Sqm	Square meters
TCT	Transfer Certificate Title
TOR	Terms of Reference
UDHA	Urban Development and Housing Act
UPAO	Urban Poor Affairs Office
UPMO	United Project Management Office
WCI	Woodfields Consultants, Inc.

EXECUTIVE SUMMARY

INTRODUCTION

The preparation of a land acquisition plan and a Resettlement Action Plan (RAP) is required for every project based on Department Order No. 05 Series of 2003 of the Department of Public Works and Highways (DPWH). It is a collaborative process which results to a document that provides a framework for addressing issues concerning relocation as well as basis for the compensation of the affected assets such as lots and structures. The Land Acquisition, Resettlement, Rehabilitation and Indigenous Peoples' Policy (LARRIPP) serves as the policy guidance in the preparation of RAP. It also stipulates that severely affected Project Affected Persons (PAPs) are entitled to compensation equivalent to the 100% of the value of the lost structure while the marginally affected are entitled to compensation of the affected portion of the structure only.

This Resettlement Action Plan (RAP) for the Mangahan Sections of Taytay and Cainta is formulated in view of the implementation of the Phase IV of the Pasig-Marikina River Channel Improvement Project. This RAP was part of the preparatory works in Supplemental Agreement No. 3 to the Consulting Services for Assistance to Procurement of Civil Works and Construction Supervision of the JICA-Assisted Pasig-Marikina River Channel Improvement Project, Phase III (PH-P252) which started last June 2015. This can be found in the document entitled "The Definitive Plan of Pasig-Marikina River Channel Improvement Project (PMRCIP)".

PROJECT AREA

The Mangahan Floodway (MF) is a man-made water channel stretching 10-km long and traversing one city (Pasig City) and two municipalities (Cainta and Taytay, Rizal). There are nine barangays covering the floodway (Pasig City-5; Cainta-2; Taytay-2). The number of families within the MF is estimated at 13,525. It is 250 m wide and 18 m deep designed to carry 2,400 m³/s of water towards Laguna Lake. The MF is an important component of the PMRCIP in the entire flood control system for Metro Manila and outlying areas as it will function as the main floodwater diversion route once the Marikina Control Gate Structure (MCGS) would had been completed.

OBJECTIVE OF THE PROJECT

This plan aims to prepare and formulate a RAP for the Project-Affected Families (PAFs) in the Mangahan Floodway under the jurisdiction of Taytay and Cainta that is in accordance with JICA Guidelines on Social and Environmental Considerations (2010) and the DPWH's Updated Social and Environmental Management Systems Manual of Operation (2014). Specifically, it shall:

- (1) Assess the resettlement requirements of the different affected structures and families along the both banks of Mangahan Floodway in the municipalities of Taytay and Cainta;
- (2) Estimate the number of structures, households, public and private institutions and businesses which will be affected by land acquisition and the removal of these structures;
- (3) Identify vulnerable groups among the displaced persons such as poor, female headed households, elderly headed households, and households with persons with disabilities (PWDs);
- (4) Provide an initial estimate of the value of income losses arising from the Project;

- (5) Identify potential resettlement sites for informal settlers with the concerned LGU;
- (6) Provide an initial estimate for land acquisition and resettlement costs;
- (7) Present the institutional arrangements for implementing the RAP as well as mechanisms for information disclosure, consultation of displaced persons (DPs), and grievance mechanisms; and
- (8) Establish monitoring and evaluation indicators and identify the parties responsible for monitoring and evaluation

PROJECT COMPONENTS/SCOPE OF WORK

To complete the essential components of the Resettlement Action Plan (RAP) for the Municipalities of Taytay and Cainta the following activities are carried out:

(1) Census, Tagging and Socio- economic Survey

The census and tagging aimed to establish the eligibility of the PAFs for entitlements and other forms of assistance. To clarify, qualified affected households are those who are found to be subject to the resettlement program as of the date of census. The date of census shall be considered as the cut-off date for eligibility of PAFs for entitlement to resettlement benefits.

The activity is done simultaneously with the Socio-economic Survey (SES). Its aim is to find out the social and economic conditions of the affected families so that its finding would be inputted in the formulation of the RAP and aim for a relocation site that would approximate their current conditions and mitigate their dislocations.

(2) Socio-economic Survey (SES)

Baseline demographic and socio – economic profile of PAPs were obtained through socio – economic survey. A survey instrument bearing the basic information was used to gather necessary information.

The SES is supplemented with secondary data from available government and private sources. Additional information, as necessary, is obtained through key informant interviews and focus group discussions with the community leaders and government officials.

The census, tagging and the socio-economic survey (CTSES) was undertaken by the National Housing Authority, with the logistical support of Woodfields Consultants, Inc. (WCI).

(3) Income Loss Survey

Originally, an asset inventory was planned to be undertaken to benchmark the existing assets of the affected families in the area. However, existing Philippine laws and resettlement policies constrains the compensation for the affected structures. Thus, in lieu of an asset inventory, an income loss survey was undertaken to provide an estimate of possible business establishment compensation. This survey was conducted upon the advice of the Environmental and Social Safeguards Division (ESSD) of the DPWH.

BRIEF LEGAL FRAMEWORK

The 1987 Philippine Constitution serves as the basic legal foundation in relation to resettlement principles. Article III of the Section 9 states that no private properties shall not be taken for public use without just compensation. In relation to resettlement, affected families especially the urban poor or rural dwellers shall not be evicted, nor dwellings be demolished except in accordance with the law and in just humane manner. Also, no resettlement of urban or rural dwellers shall be undertaken without adequate consultation with them and the communities where they are to be relocated.

In 2016, the Right of Way Act or Republic Act 10752. It defined the meaning of national government projects and the government may acquire real property as right of way or location for any national government infrastructure project through donation, negotiated sale, expropriation or any other mode of acquisition as provided by law.

The Urban and Housing Act of 1992 or RA 7279 outlines the legal basis for eviction and demolition for the government infrastructure projects. It also mandates the local government units to relocate and resettle people living along danger areas in coordination with National Housing Authority (NHA) which will provide relocation sites with sufficient basic services and facilities for the affected families.

The Land Acquisition, Resettlement, Rehabilitation and Indigenous Peoples' Policy (LARRIPP) defines that Project Affected Families (PAFs) are considered to be severely affected if 20% or more of their assets are affected or even if the remaining part less than 20% if the remaining portion is no longer economically viable or it will no longer function as intended.

The Japan International Cooperating Agency (JICA) Guidelines for Social and Environmental Consideration (April 2010) aims to encourage proponents to have appropriate consideration for environmental and social impacts and to ensure that JICA's support and examination of environmental and social considerations are conducted accordingly. It also outlines the basic principles regarding environmental and social considerations: (1) A wide range of impacts must be addressed; (2) measures for environmental and social considerations must be implemented from an early stage to a monitoring stage; (3) JICA is responsible for accountability when implementing cooperation projects; (4) JICA asks stakeholders for their participation; (5) JICA discloses information; (6) JICA enhances organizational capacity; and (7) JICA makes serious attempts at promptness.

IMPLEMENTATION SCHEDULE

The construction of the Marikina Control Gate Structure (MCGS) is expected to start by 2020 and the project area and its immediate vicinity should be cleared by 2019 in preparation to the construction of the said structure.

PUBLIC CONSULTATION PROCEEDINGS

There were two types of public consultation that was conducted in the course of preparing the Resettlement Action Plan (RAP): one was to disclose the PMRCIP-IV project as well as the purpose for the conduct of the Income Loss Survey- a supplementary survey to the NHA-conducted census, tagging and socio-economic survey- as part of the study on the impact and mitigation measures for the project-affected families (PAFs) in the Manggahan Floodway; and the other is to present the mitigation measure involving the relocation and

resettlement as contained in the draft RAP for comments and inputs from the PAFs themselves.

The project's survey team discussed the project background while DPWH – ESSD provided the discussion for the LARRIPP. The public consultation meetings for Taytay and Cainta were conducted on April 19, 2017 and June 21, 2017, respectively.

For Taytay, the stakeholders raised their concerns regarding the effectivity of the resettlement and the plans for all the residents. Issues from compensation were also raised for the affected families especially for the Project Affected Persons (PAPs) including aids to be given to the residents before relocation in addition to the transportation assistance.

For Cainta, the stakeholders inquired the options for the ISFs residing within the BERM area including the eligibility of the affected residents to the compensation or resettlement. Most of the participants shared their preference for on-site resettlement i.e. inside the Floodway; however, on-site resettlement is not possible.

Meanwhile, for the disclosure of the Draft RAP, the Public consultation in Taytay was done in 26 and 31 July 2018. In Cainta, public consultation was done in two days with two sessions each – 19 and 25 September 2018.

In general, the overall concern raised in Taytay were the possibility of the so-called "People's Plan" to be considered or approved by the government; the feasibility of enlarging the habitable area of the housing unit possibly by introducing a space for "lofts"; the possibility of decreasing the monthly amortization cost; and, the inclusion for qualification of some of the households who were not interviewed or were not considered as separate households at the time of the NHA census, tagging and socio-economic survey. There were also some opposition observed during one on the public consultations.

Finally, in Cainta, the general concerns observed were about the final identification of qualified beneficiaries for relocation and resettlement, the basis for qualification, and the options available for qualified beneficiaries; procedure and basis for allocation of housing units, the size of the units, and the amortization for these units; and the procedure and schedule for the actual relocation. Nevertheless, there was unanimity in supporting the relocation and resettlement for as long as all pertinent plans and activities will be planned with the HOAs/POs and will be implemented smoothly and peacefully.

SUMMARY OF THE PROJECT IMPACTS

Municipality of Taytay

Based on the census and tagging survey conducted by the National Housing Authority (NHA), there are 3,382 households to be affected by the project.

Impacts on Structures

The total affected structures in Taytay are 3,102. Eighty four percent (84%) of the affected structures present in the area are single detached structures totaling to 2,615.

Majority (43%) of the affected houses are constructed using mixed type of materials. Twenty four percent of the materials are made up of strong materials.

Of all the surveyed structures in the area, majority or 83% of the structures are utilized as residential (purely residential, residential-commercial, residential-institutional and residential-

industrial) while 17% are considered non-residential (pigpen, bodega, chicken coop, comfort room, etc.).

Majority of the interviewed households are owners (39%) while some of the interviewed households are renters (16%) and sharer (13.96%).

Impacts on Business establishments

Based on the tagging activity conducted by the NHA, there are 749 businesses to be affected by the project.

Majority of the businesses are residential – commercial and commercial types. It is also noted that there are establishments that were singly tagged by NHA but multiple surveyed particularly those classified as commercial.

Municipality of Cainta

There are 5,806 structures to be affected by the project in which majority of them are located at Barangay San Andres. The initial number of eligible ISFs is 7,483.

Impacts on business establishments

Based on the tagging activity conducted by the NHA and the supplemental income loss survey done by the consultants, there are 1,260 businesses to be affected by the project.

COMPENSATION COST/FUND REQUIREMENT

Resettlement Cost for Taytay

The indicative budget for resettlement is **PhP 3,705,392,569.12**. The following are the summary detail (**Table ES 1-1**) of the indicative budget requirement for the Taytay portion of the Mangahan Floodway berm:

**Table ES 1-1
Indicative Budget Requirement for Taytay**

Items	Amount (PhP)
Procurement of Resettlement Site	375,000,000.00
Resettlement Housing Development Cost	2,660,000,000.00
Resettlement Site Development Costs	429,160,569.12
Demolition/ Hauling Cost	149,646,000.00
Transfer of Informal Settlers to Resettlement Housing	27,056,000.00
Rehabilitation Assistance (Chapter 8)	11,235,000.00
Preliminary activities and studies: <ul style="list-style-type: none"> • Land development planning (incl. topographic survey and geotechnical study) • Parcellary survey and subdivision plan survey • Conduct of EIA to acquire ECC • Conduct of tree inventory to acquire tree cutting permit • Social preparation 	53,295,000.00
Total	3,705,392,569.12

Source: WCI RAP Consultant

Resettlement Cost for Cainta

The indicative budget for resettlement is **PhP 6,433,014,370.40**. This could be reduced further once the actual number of re-settlers from Cainta are finalized which most probably will be lower than this estimate. The following are the summary detail (**Table ES 1-2**) of the indicative budget requirement for the Cainta portion of the Mangahan Floodway berm:

**Table ES 1-2
Indicative Budget Requirement for Cainta**

Items	Amount (PhP)
Procurement of Resettlement Site– available lots	298,360,000.00
Procurement of Resettlement Site– additional lots	175,063,000.00
Resettlement Housing Development Cost	5,275,200,000.00
Resettlement Site Development Costs	237,253,632.00
Demolition/ Hauling Cost	286,495,000.00
Transfer of Informal Settlers to Resettlement Housing	59,864,000.00
Rehabilitation Assistance (Chapter 8)	18,900,000.00
Preliminary activities and studies: <ul style="list-style-type: none"> • Topographic survey and geotechnical study • Conduct of EIA to acquire ECC • Social preparation 	81,878,738.40
Total	6,433,014,370.40

Source: WCI RAP Consultant

RELOCATION SITE AND DEVELOPMENT PLAN

Relocation Site for Taytay

The potential relocation site was identified by the Mayor of Taytay and the Municipal Assessor. The property, known locally as the Don Enrique Heights Subdivision is located in Sitio Malaking Parang, Phase 3, Barangay San Juan, Taytay, Rizal. The area is located northeast of Taytay and is bounded by Antipolo City and Cainta Municipality. It is about 3.14 kilometers from the Taytay Municipal Hall and can be accessed through a 10-minute tricycle ride from either Tikling, Taytay or from a Shell Station in Angono

The development plan for Taytay will involve the construction of modular tenement housing within the Don Enrique Heights Subdivision. This modular tenement housing is a 5-storey building where the ground floor is designated as common area in which residents can carry out economic and livelihood activities (10 units) within a total area of 200 sq.m.

To ensure supply of water in each building, a water tank on the rooftop may be included in the building design or a centralized water tank tower may be constructed to service the entire resettlement site as part of the social infrastructure and a potential income generating source for the resettles. Also, the rooftop may be used for common activities including laundry activities. Each building will also be provided with stairs and ramp for people with disability (PWD) and senior citizen up to the second floor only due to land availability constraint and affordability.

Access road will also be developed leading to the resettlement site for easy access during construction and operation of the site. The resettlement site will also be provided with enough water supply pipes and electricity poles and lines to ensure easy connection to the source providers.

The available land for settlement site has enough land provisions for future developments of the Municipality such as schools and other necessary social facilities.

Relocation Site for Cainta

The Municipality of Cainta, through the Municipal Assessor Office, has initially identified 30 lots but only 15 lots were chosen with a total area of 59,671.00 sq.m. Of these lots, one lot is owned by the LGU while the rest of the lots are privately owned with delinquencies in paying real property taxes.

Similar with the plan for Taytay, the development plan for Cainta will involve constructing modular tenement MRBs with a functional theme and a potential for installing water tanks at the rooftop (as necessary, otherwise, a water supply system pipes will be installed since the utilities are readily available in Cainta). Site development may be minimal as the available lots for resettlement are in existing communities with complete social infrastructures and are strategically located.

GRIEVANCE REDRESSAL

The DPWH shall establish a Grievance Redress Mechanism (GRM). This is crucial in responding to legitimate concerns of affected individuals and groups during Project implementation. Management of issues is of primary importance in the context of resettlement. This is especially true within the area of entitlements, which may arise.

Grievance related to any aspect of the implementation of the approved RAP will be handled through negotiations aimed at achieving consensus.

INSTITUTIONAL ARRANGEMENT

Various entities are actively involved in the implementation of the Resettlement Action Plan. This includes the DPWH-UPMO-FCMC, DPWH-ESSD, DPWH-Regional and District Office, Municipal RIC and other cooperating entities.

MONITORING MECHANISM

The main objective of monitoring the implementation of the RAP is to determine if the document is being carried out in accordance with the Implementing Rules and Regulations (IRR) of Republic Act No. 10752, the law itself, as well as the LARRIPP (2007) and the Social and Environmental Management Systems (SEMS) of DPWH. It involves the monitoring of land acquisition of the relocation/resettlement site, payment of compensation for lost assets (when applicable), the actual resettlement of persons severely affected by the Project, and release of funds and the over-all actual implementation.

There would be supervision and monitoring scheme for the implementation of RAP. An Internal Monitoring Agent (IMA) shall conduct the supervision and in-house monitoring of implementation of the RAP under the office of DPWH-ESSD. Meanwhile, An External Monitoring Agent (EMA) will be commissioned by the DPWH-UPMO-FCMC 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.

Stages of monitoring and report

The stages and monitoring frequency of the contract packages by the IMA and EMA are as follows:

- Compliance Monitoring
- Semi-annual Monitoring
- Final Evaluation
- Post- Evaluation

The UPMO-FCMC, in coordination with the ESSD, shall establish a schedule for the implementation of RAP and the required monitoring considering the Project's implementing schedule. It is expected that one month prior to the start of the civil works in PMRCIP Phase IV particularly the MCGS, all RAP activities have been determined by the IMA and EMA as having been concluded.

The EMA is accountable to the UPMO-FCMC and reports to the ESSD

CHAPTER 1 INTRODUCTION

1.1 RATIONALE

This Resettlement Action Plan (RAP) for the Mangahan Sections of Taytay and Cainta is formulated in view of the implementation of the Phase IV of the Pasig-Marikina River Channel Improvement Project. This RAP was part of the preparatory works in Supplemental Agreement No. 3 to the Consulting Services for Assistance to Procurement of Civil Works and Construction Supervision of the JICA-Assisted Pasig-Marikina River Channel Improvement Project, Phase III (PH-P252) which started in June 2015.

Among the major work component of Phase IV's is the construction of the Marikina Control Gate Structure (MCGS) which aims to regulate the flow of floodwater downstream to Pasig River and to safely divert the bulk of the floodwater towards Laguna Lake through the Mangahan Floodway (MF). At present, the MF's flood carrying capacity of 2,400 m³/s has been reduced of its designed effective flow capacity due to obstacles in both banks especially on the berm areas posed by structures and heavy siltation. The Berm Area of MF is illustrated in **Figure 1.1-1**.

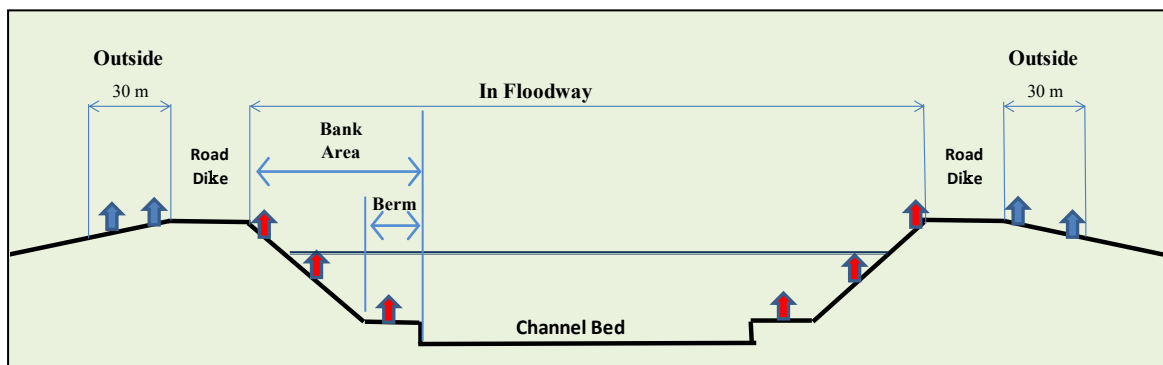


Figure 1.1-1
Schematic Cross-section of Mangahan Floodway

Once construction is completed, the MCGS will divert flood waters headed for the Pasig River to the Mangahan Floodway. The perspective of the MCGS is presented in **Figure 1.1-2**. Since this diversion will utilize the MF's maximum capacity, it may in turn flow fully of both banks where people are currently occupying. In view of this disaster threat to life and property, it is of utmost importance to relocate the families in the MF and at the same time make the MF retain its effective flood mitigation purpose.



**Figure 1.1-2
Perspective of the Proposed Marikina Control Gate Structure**

In order to ensure the safety and security of the families in the MF, the DPWH has decided to prepare a Resettlement Action Plan (RAP) for project-affected families (PAFs) in the MF. It has also conceived to conduct a hydraulic study to rehabilitate the Floodway. Cognizant that there is already an LGU-approved RAP for the affected ISFs in Pasig City, the focus of the current RAP study is on the other two affected municipalities of Cainta and Taytay. Meanwhile, the on-going implementation of the RAP in Pasig City is monitored and assessed as to its current level of accomplishments.

The preparation of RAP will be guided by the social safeguard policies of the DPWH and JICA in involuntary resettlement, legal framework, eligibility, compensation and entitlements, as well as implementation procedure. This will ensure that issues and concerns that may arise will be properly addressed, that public support and participation are mobilized, and internal and external monitoring to ensure generally accepted standards of safeguards during implementation of the RAP is observed.

1.2 OBJECTIVES

This plan aims to prepare and formulate a RAP for the Project-Affected Families (PAFs) in the Mangahan Floodway under the jurisdiction of Taytay and Cainta that is in accordance with JICA Guidelines on Social and Environmental Considerations (2010) and the DPWH's Updated Social and Environmental Management Systems Manual of Operation (2014).

Specifically, it shall:

- (1) Assess the resettlement requirements of the different affected structures and families along the both banks of Mangahan Floodway in the municipalities of Taytay and Cainta;
- (2) Estimate the number of structures, households, public and private institutions and businesses which will be affected by land acquisition and the removal of these structures;

- (3) Identify vulnerable groups among the displaced persons such as poor, female headed households, elderly headed households, and households with persons with disabilities (PWDs);
- (4) Provide an initial estimate of the value of income losses arising from the Project;
- (5) Identify potential resettlement sites for informal settlers with the concerned LGU;
- (6) Provide an initial estimate for land acquisition and resettlement costs;
- (7) Present the institutional arrangements for implementing the RAP as well as mechanisms for information disclosure, consultation of displaced persons (DPs), and grievance mechanisms; and
- (8) Establish monitoring and evaluation indicators and identify the parties responsible for monitoring and evaluation

1.3 METHODOLOGY

1.3.1 Resettlement Principles

The preparation of this RAP follows the Hierarchy of Mitigation.

- (1) Involuntary resettlement should be avoided where feasible;
- (2) Where involuntary resettlement is unavoidable, minimize through the adoption of feasible design alternatives;
- (3) Offset or compensate for any loss of land, structures, and sources of livelihood following the principle of replacement cost;
- (4) There will be no displacement -- physical or economic - without full payment of compensation and without evidence that the implementation of livelihood restoration measures is underway. In cases when the power of eminent domain is explicitly invoked, no displacement until the full compensation is placed in escrow or the legally mandated initial payment has been made;
- (5) Assist displaced persons (DPs) in their efforts to improve their livelihood and standard of living or at least restore them to levels prevailing prior to the beginning of project implementation;
- (6) Meaningfully consult DPs in resettlement planning and implementation and in overall project planning and implementation; and,
- (7) Assist vulnerable groups among DPs to avoid impoverishment and enhance their access to project benefits.

1.3.2 Methodological Process

The following were undertaken in formulating this RAP:

- (1) Review of related literature such as Philippine laws, statutes and jurisprudence; JICA Policies; and international covenants to which the Philippines is a party;
- (2) Review of the studies produced by the Pre-FS and FS of the PMRCIP;
- (3) Ocular inspection involving transect walk of the floodway to gather notes and photographs;
- (4) Coordination and briefing of the LGU officials and DPWH Regional and District offices including barangay officials and Urban Poor Affairs Office (UPAO) of Taytay and Cainta;
- (5) Coordination with National Housing Authority (NHA) on the census, tagging and socio-economic survey of the affected structures and its resident families since they have the mandate to undertake census of the area;
- (6) Attended the Local Inter-Agency Committee (LIAC) meetings called by the LGU of Taytay and Cainta;
- (7) Public consultation with PAFs and disclosure of policies;

- (8) Tagging and census of socio-economic characteristics of residences and establishments on the east and west banks of the Mangahan Floodway; and
- (9) Coordination with LGU on the relocation site for DPs who are willing to be resettled.

1.3.3 Census, Tagging and Socio-economic Survey

The census and tagging aimed to establish the eligibility of the PAFs for entitlements and other forms of assistance. To clarify, qualified affected households are those who are found to be subject to the resettlement program as of the date of census. The date of census shall be considered as the cut-off date for eligibility of PAFs for entitlement to resettlement benefits.

The activity is done simultaneously with the Socio-economic Survey (SES). Its aim is to find out the social and economic conditions of the affected families so that its finding would be inputted in the formulation of the RAP and aim for a relocation site that would approximate their current conditions and mitigate their dislocations.

The census, tagging and the socio-economic survey (CTSES) was undertaken by the National Housing Authority, with the logistical support of Woodfields Consultants, Inc. (WCI). The forms used in the CTSES are included as **Annex 1**. The standard NHA survey form composed of two pages was augmented to six pages to incorporate the RAP requirements under the standard of DPWH-Environmental and Social Safeguard Division (ESSD).

The following were the primary steps in the conduct of the CTSES:

1. Briefing of the LIAC of the respective municipalities and the key leaders of the Peoples' Organization (POs) which was also attended by the Consulting firm;
2. Public Consultation of the affected barangays undertaken by NHA with the participation of the Consulting firm;
3. The CTSES used the following procedures:
 - a. Mapping of Affected Structures in the floodway;
 - b. Census master listing of the affected structures and families and its appropriate tagging using a sticker with special design and code;
 - c. Socio-economic survey based on the master list;
 - d. Call backs were undertaken for those structures with no persons present or no adults (18 years old and above);
4. The NHA published the master list in the affected areas for a week to accommodate corrections from residents and other refinements;
5. After the publication, the master list was finalized.

The Census Master List will be submitted to the respective LGUs and the Presidential Commission on the Urban Poor (PCUP) by the National Housing Authority (NHA) which will disqualify PAFs pursuant to provisions of the RA 7279, otherwise known as Urban Development and Housing Act (UDHA), based on the following considerations:

- Those who have availed of any government resettlement program in the past;
- Professional squatters and/or squatting syndicates; and
- Those who, taking advantage of the perceived benefits of resettlement, occupy the project site after the census date.

Meanwhile, as per Section 16 (Eligibility Criteria for Socialized Housing Program Beneficiaries of RA 7279) of UDHA, to qualify for the socialized housing program, a beneficiary:

- Must be a Filipino citizen
- Must be underprivileged and homeless citizen, as defined in Section 3 (UDHA);
- Must not own any real property whether in the urban or rural areas; and
- Must not be a professional squatter or a member of squatting syndicate.

The final Master List of ISFs will bear the endorsement of the concerned LGU, the NHA and PCUP official and concurred to by DPWH.

1.3.4 Socio-Economic Survey (SES)

The socio-economic survey (SES) aimed to obtain the baseline demographic and socio-economic profile of the PAFs. The survey instrument gathers the following basic information:

- Name, age, sex, and educational attainment of HH head, spouse and HH members
- Tenure status (including proof thereof, if any), ethnicity and length of residence
- Household members' occupation and primary and secondary sources of income
- Grade level of school going member
- Family income and expenditure level
- Transportation cost to and from school/work
- Employment, business, skills (current and preferred)
- Living conditions - Power supply, water supply, fuel, sanitation facilities, garbage disposal; appliances etc. valuable items owned
- Housing conditions - type of structure, housing (wall, roof, flooring) materials, age of structure, number of rooms
- Family health conditions - Common illnesses; access to health services
- Gender concerns - Family roles, ownership, rights,
- Community Conditions – Community problems and issues, access to health facilities, educational facilities, recreational facilities, solid waste disposal, religious centres, credit facilities
- Social organizations and community network

The SES is supplemented with secondary data from available government and private sources. Additional information, as necessary, is obtained through key informant interviews and focus group discussions with the community leaders and government officials.

1.3.5 Income Loss Survey

Originally, an asset inventory was planned to be undertaken to benchmark the existing assets of the affected families in the area. However, existing Philippine laws and resettlement policies constrains the compensation for the affected structures. The relocation and resettlement appears to be the viable mode of entitlement to ensure that the qualified affected families will be provided with better living conditions. Thus, in lieu of the asset inventory, and upon advice by the ESSD, an income loss survey was undertaken instead. The survey aimed to establish the actual number of operating business establishments, whether operating with business license or without, and generate estimates of potential business income losses.

The income loss survey form included the following items:

- Business License and Assessment from LGU current and last four years. If not possible, current and a previous document
- SEC/DTI registration
- SEC Annual Report past five years
- Financial Statement submitted to BIR past five years
- Barangay certification for non-licensed business
- Estimated monthly gross income
- Estimated monthly gross expenses
- Number of days/weeks required to restore operations.

Further for qualified relocation Informal Settler Families (ISFs) affected by the project, in lieu with income loss, they will be provided with rehabilitation assistance in a form of skills training if the present means of livelihood is no longer viable and the PAF will have to engage in a new income activity as per LARRIPP.

1.4 PUBLIC CONSULTATION PROCEEDINGS

It is imperative that full public disclosure is conducted to ensure transparency in the RAP preparation process. Thus, coordination with all the stakeholders was of primary importance and had been planned from the very start of the study with consultation with the respective LGUs especially with its Urban Poor Affairs Office (UPAO), the different concerned homeowners'/ people's organization (POs), and the barangay officials. Coordination with other concerned government agencies had been lined up as well like with the Department of the Interior and Local Government (DILG), the Presidential Commission on the Urban Poor (PCUP), the National Housing Authority (NHA) and the Housing and Urban Development Coordinating Council (HUDCC).

In addition to coordination works and public consultations, focus group discussions and key informant interviews were also planned to be undertaken to supplement information as well as to generate and mobilize support to the ongoing RAP study.

1.5 PROJECT DESCRIPTION

The PMRCIP was formulated through the updating/review of a master plan and feasibility study (JICA, 1990) under the Special Assistance for Project Formation (SAPROF) (JBIC, 1998). Its Project implementation was programmed in four phases:

- Phase I: Detailed Design for the Overall Project (from Delpan Bridge to Marikina Bridge: 29.7 km) which was completed in July 2002
- Phase II: Construction of Stage I: Channel Improvement Works for Pasig River (from Delpan Bridge to immediate vicinity of Napindan Hydraulic Control Structure-NHCS: 16.4 km) which was completed in May 2013
- Phase III: Construction of Stage II: Channel Improvement Works for the remaining sections of Pasig River in Phase II and Lower Marikina River (Junction with Napindan River to the Downstream of Mangahan Floodway: 5.4 km) which was started in 2013 and expected to be completed by end of December 2017

- Phase IV: Construction of Stage III: Channel Improvement Works for Upper Marikina River (Downstream of Mangahan Floodway to Marikina Bridge; 7.9 km) including construction of the Marikina Control Gate Structure (MCGS).

The Mangahan Floodway (MF) is a man-made water channel stretching 10-km long and traversing one city (Pasig City) and two municipalities (Cainta and Taytay, Rizal). As shown in **Figures 1.1-3** and **1.1-4**, there are nine barangays covering the floodway (Pasig City-5; Cainta-2; Taytay-2). The number of families within the MF is estimated at 13,525. It is 250 m wide and 18 m deep designed to carry the discharge of 2,400 m³/s towards Laguna Lake. The MF is a key component of the PMRCIP in the entire flood control system for Metro Manila and outlying areas as it will function as the main floodwater diversion route once the Marikina Control Gate Structure (MCGS) would have been completed.

Way back in 1986, the observed space on the berms of the Mangahan Floodway led people to believe that it was alright for them to put up living shanties. This belief was bolstered when in 1994, the then President Fidel V. Ramos issued Presidential Proclamation No. 458 declaring the embankment side of the floodway as a socialized housing site. This was followed in 1995 by another Presidential Proclamation No. 704. And again, in 2006, then President Gloria M. Arroyo issued Presidential Proclamation No. 1160 (amending Presidential Proclamation No. 458) which included the berm as part of the socialized housing site where medium-rise buildings (MRBs) could be erected. These proclamations paved the way for the massive inflow of settlers into the floodway and the nearby areas of the Napindan Channel.

In December 2008, the Supreme Court, through G.R. Nos. 171947-48, issued a Writ of Mandamus directing the Metropolitan Manila Development Authority (MMDA), among other government agencies, to clean-up and undertake efforts to preserve the ideal water quality level for Manila Bay and other major rivers and connecting waterways. Consequent to the order is the necessity to evict all ISF living in danger areas such as esteros and other waterways and demolish all structures encroaching on these waterways.

Hence, in December 2009, President G. M. Arroyo issued Executive Order No. 854 (EO 854) abrogating both Presidential Proclamation Nos. 1160 and 458 and ordering the comprehensive rehabilitation of the channel and floodway and the relocation of all informal settlers from the Napindan Channel and the Mangahan Floodway especially on the berms of the latter. At this time, there were too many informal settler families (ISFs) who have found residence on the site. This is shown in **Figure 1.1-5**.

The floodway ISFs have banded together and formed the Alliance of People's Organizations along Mangahan Floodway (APOAMF) with each LGU-cluster initially serving as chapters of the mother organization. Thus, there is the APOAMF-Pasig City, the APO-Cainta and the APOAMF-Taytay. At this present time, only the APOAMF-Pasig City is active.

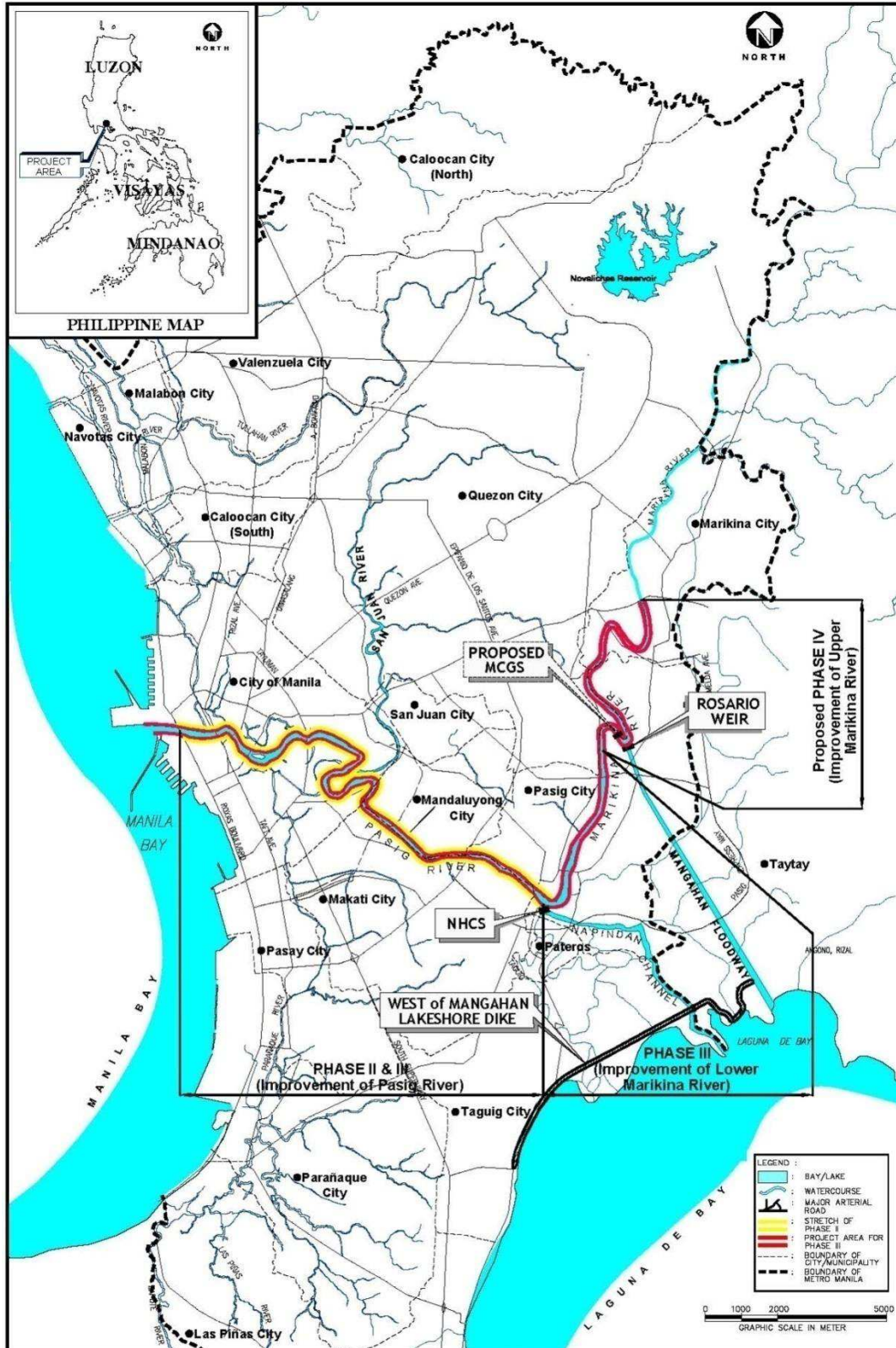


Figure 1.1-3
Vicinity Map of Mangahan Floodway

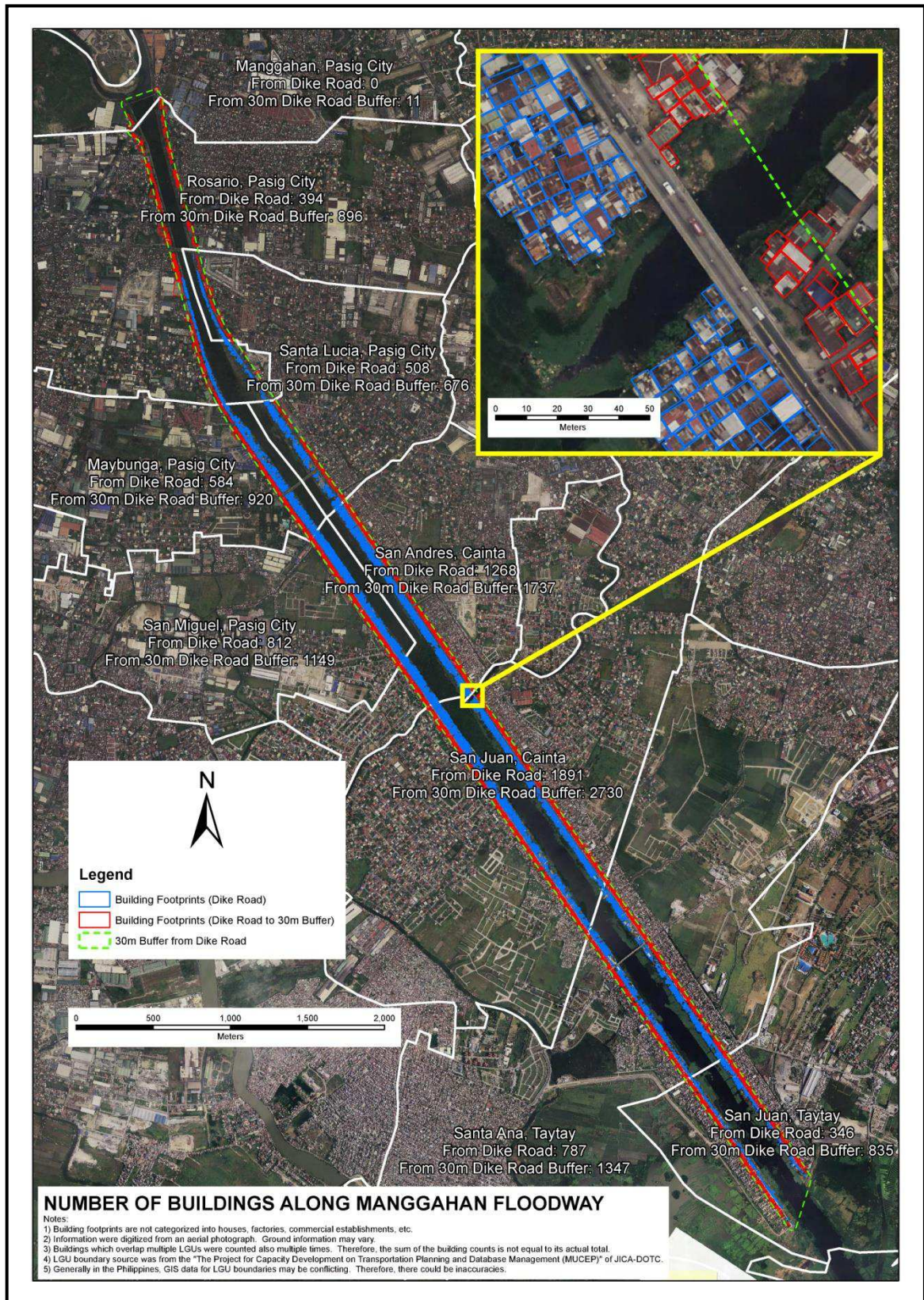
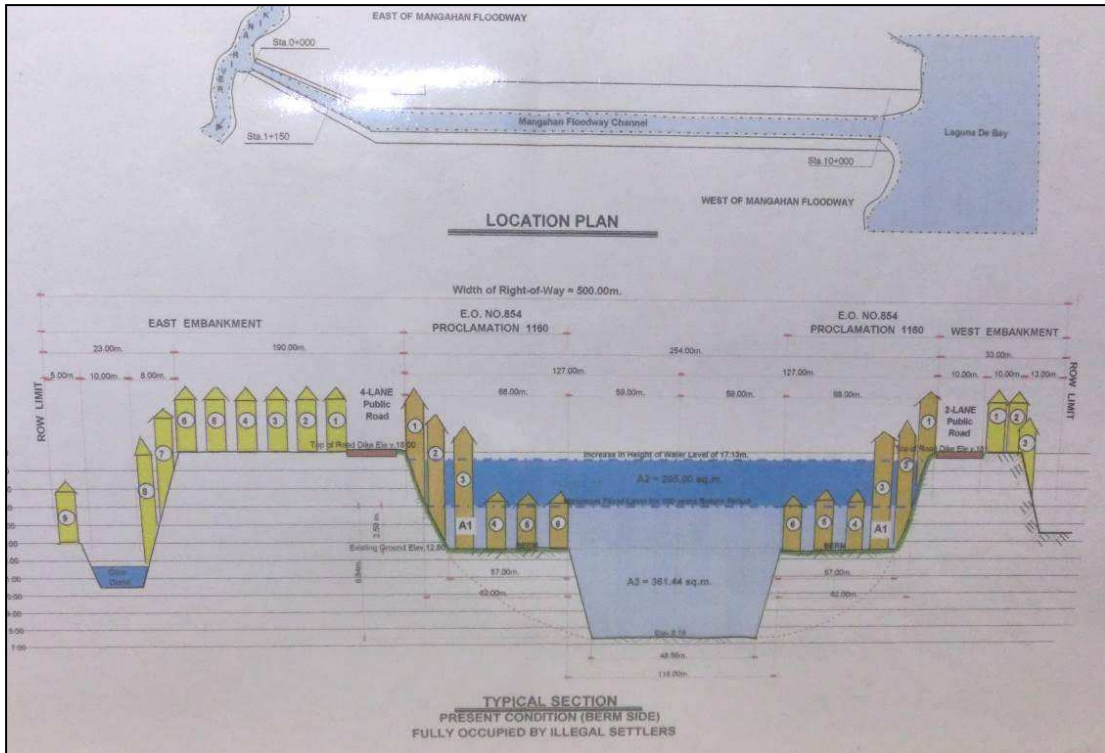


Figure 1.1-4
UAV Map of Manggahan Floodway showing LGU Boundaries and
Affected Barangays



Source: Pasig Housing and Resettlement Unit

Figure 1.1-5
Mangahan Floodway Cross-Section Dimensions

The diversion of the floodwater through the channel intends to optimize the full design of the MF (2,400 m³/s) as indicated in **Figure 1.1-6** and clearing it of obstructions is crucial to the successful over-all flood mitigation and disaster risk reduction program of the government. In terms of environmental impact assessment, the entire MF is considered as a critical indirect impact area.

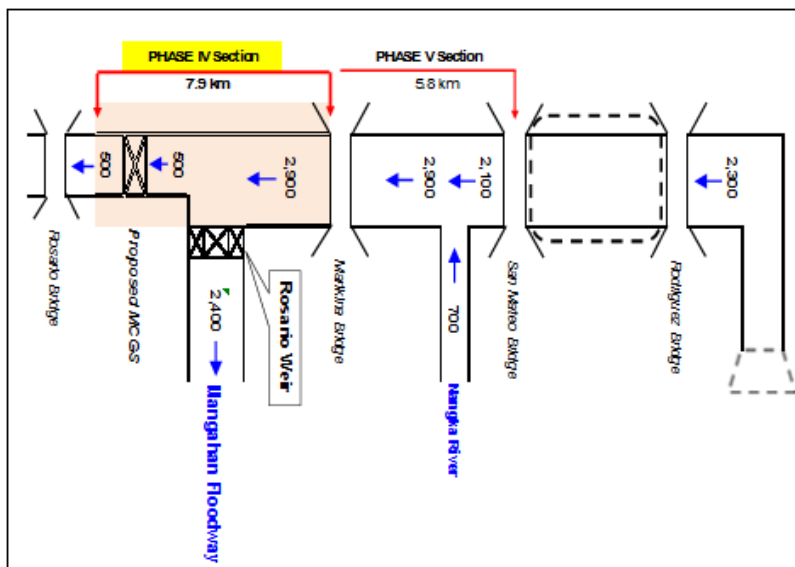


Figure 1.1-6
Diversion of Floodwater from Marikina River to Mangahan Floodway

CHAPTER 2 LEGAL AND POLICY FRAMEWORK

2.1 LEGAL ASPECTS OF RESETTLEMENT AND RELOCATION

The pertinent laws and policies that bear on land acquisition and resettlement are summarized in Table 2.1.1 below, including the policies of international financing institutions (IFI) like JICA, ADB and the WB, which are possible funders of the PMRCIP Phase IV.

As will be gleaned from the succeeding discussions, the laws of the Philippine as well as its jurisprudence are at par with internationally accepted policies and best practices in the acquisition of private property for public use, as well as of involuntary resettlement of displaced people.

**Table 2.1 Summary of Pertinent Laws and International Policy on
Land Acquisition and Resettlement**

Philippine Laws/Statutes	
1987 Philippine Constitution	JICA Guidelines for Environmental and Social Considerations and World Bank Operational Policy 4.12
PD 1067- The Water Code of the Philippines	
RA 7279- Urban Development and Housing Act of 1992	
RA 7835- Comprehensive & Integrated Shelter Financing Act of 1994	
RA 7160- Local Government Code	
RA 10752- An Act Facilitating the Acquisition of the Right-Of-Way, Site or Location for National Government Infrastructure Projects	

2.1.1 Philippine Laws Governing Land Acquisition and Resettlement

(1) Philippine Constitution

The following provisions in the 1987 Philippine Constitution serve as the basic legal foundation of resettlement policies. They set out the system of beliefs and laws by which the Philippines is governed.

- Article II, Section 10: The State shall promote social justice in all phases of development.
- Article II, Section 11: The State values the dignity of every human person and guarantees full respect for human rights.
- Article III, Section 9: Private property shall not be taken for public use without just compensation.
- Article III, Section 11: Free access to the courts and quasi-judicial bodies and adequate legal assistance shall not be denied to any person by reason of poverty.
- Article XIII, Section 10: Urban or rural poor dwellers shall not be evicted nor their dwellings demolished, except in accordance with the law and in a just humane manner. No resettlement of urban or rural dwellers shall be undertaken without adequate consultation with them and the communities where they are to be relocated.

(2) Related Laws Enacted

Below are the laws enacted that is used to create policies in order to carry out the principles of the Constitution:

- Section 4 of RA 10752 or the Right of Way Act of 2016: considers the conditions for the lands granted through Commonwealth Act No. 141. Regarding compensation for the structures of Informal Settlers Families, the Implementing Rules and Regulations (IRR) of the law provides the following conditionalities:
 - Must be a Filipino citizen;
 - Must not own any real property or any other housing facility, whether in an urban or rural are;
 - Must not be a professional squatter or a member of a squatting syndicate, as defined in A 7279; and,
 - **Must not occupy an existing government ROW** (*underscoring supplied*)
- Article 5 of PD 1067 or the Water Code of the Philippines stipulates the full and uncontestable ownership of the State of water and water bodies, specifically, river and their natural beds and delineates the easement areas of 3-meters for urban areas, 20-meters in agricultural areas and 40 meters in forest areas that are reserved for public use and is considered as state-owned.
- RA 7279 or the Urban Development and Housing Act of 1992: provides the legal base for eviction and demolition related to Government infrastructure projects
- RA 7160 or the Local Government Code of 1991 which devolves certain national programs and projects to the local government units and empowers it by allowing it to exercise powers it had otherwise not had before the passage of the law, specifically its Section 27.
- RA 9710 or Magna Carta of Women Act of 2009: provides for the following, in regards to the rights of women: equal treatment before the law; protection from all forms of violence; participation and representation; equal access and elimination of discrimination against women in education, scholarships and training; equal rights in all matters related to marriage and family relations; comprehensive health services and health information/education; non-discrimination in employment; and other aspects.
- RA 10121 otherwise known as the Philippine Disaster Risk Reduction and Management Act of 2010 which aims to develop resilient communities that are safe and able to cope with various natural hazards such as flooding.

(3) Land Acquisition and Resettlement Policies and Guidelines of DPWH

- Land Acquisition, Resettlement, Rehabilitation, and Indigenous Peoples Policy (LARRIPP) – indicates that Project Affected Families (PAFs) are considered severely affected if 20% or more of their residential or business structures will be affected by the Project. However, PAFs can also be considered severely affected even if less than 20% of the structures will be affected if the remaining part of the structure will no longer be viable for continued use or will no longer function as intended. PAFs are considered marginally affected if less than 20% of their housing or business structures are affected and the remaining portion is still viable for continued and intended use. The severely affected PAFs are entitled to compensation equivalent to the 100% of the value of the lost structure while the marginally affected are entitled to compensation of the affected portion of the structure only. Other forms of assistance and entitlements consist of the following: rehabilitation assistance and livelihood support, transportation allowance or assistance, rental subsidy and income loss.

- RA 10752 or the Act to Facilitate the Acquisition of Right-of-Way (ROW), Section 4 of The Right of Way Act outlines the modes of acquiring real property. It states that the government may acquire real property needed as right of way site or location for any national government infrastructure project through donation, negotiated sale, expropriation or any other mode of acquisition as provided by law. The rules on negotiated sale (Section 5) and guidelines for expropriation proceedings (Section 6) are also included.

(4) Japan International Cooperation Agency (JICA) Guidelines for Environmental and Social Considerations April 2010

The guidelines as specified in the document itself took effect on July 2010 after its publication on April the same year. It essentially merged and updated the environmental and social considerations guidelines by JICA and the old Japan Bank for International Cooperation (JBIC) (which has since been merged with JICA in October 2008) when funding international aid projects. The guidelines set out the objective “to encourage Project proponents etc. to have appropriate consideration for environmental and social impacts, as well as to ensure that JICA’s support for an examination of environmental and social considerations are conducted accordingly”. Likewise, the guidelines indicated the “Basic Principles regarding Environmental and Social Considerations”. Principles stated that while project proponents bear the ultimate responsibility for the environmental and social considerations of projects, JICA supports and examines appropriate environmental and social considerations undertaken by project proponents to avoid or minimize development projects’ impacts on the environment and local communities, and to prevent the occurrence of unacceptable adverse impacts.

There are seven principles to be followed, in summary:

- A wide range of impacts must be addressed
- Measures for environmental and social considerations must be implemented from an early stage to the monitoring stage
- JICA is responsible for accountability when implementing cooperation projects
- JICA asks stakeholders for their participation
- JICA discloses information
- JICA enhances organizational capacity
- JICA makes serious attempts at promptness

(5) World Bank’s (WBs) Operational Policy 4.12

Japan International Cooperation Agency (JICA) Guidelines specifically prescribes that “it is desirable that the resettlement action plan include elements laid out in the World Bank (WB) Safeguard Policy, OP 4.12.” The following additional principles specific to this Project are adopted from the World Bank OP 4.12, as follows:

- 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) to prevent a subsequent influx of encroachers or others who wish to take advance of such benefits.

- Eligibility of Benefits include the Project-Affected Persons (PAPs) who have formal legal rights to land (including customary and traditional land rights recognized under law), the Project-Affected Persons (PAPs) 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 Project-Affected Persons (PAPs) who have no recognizable legal right to the land they are occupying.
- Provide support for the transition period between displacement and livelihood restoration.
- Particular attention must be paid to the needs of the displaced vulnerable groups, especially those below the poverty line, landless, elderly, women and children.

2.1.2 Legal Mandates Governing Mangahan Floodway Settlements

This section enumerates in chronological order all the applicable legal mandates governing Mangahan Floodway.

- Proclamation No. 458: Reserving for Socialized Housing Development Certain Parcels of Land Situated along the Manggahan Floodway in the Municipalities of Cainta and Taytay, Province of Rizal and the Municipality of Pasig, Metro Manila, Island of Luzon transferring to the National Housing Authority the ownership of the said government lands and declaring the same open for disposition in favor of the Qualified Beneficiaries Pursuant to the Republic Act No. 7279 and the Memorandum Order No. 191 Dated 12 February 1994.
- Proclamation No. 704: Reserving for Socialized Housing Development a Portion of the Public Domain located at Sitio Tapayan, Barangay Sta. Ana, Municipality of Taytay, Province of Rizal; Transferring to the National Housing Authority the Ownership of the said Government Land; and Declaring the Same Open for Disposition in Favor of Pasig River Squatters and less privileged Families of Taytay, Rizal pursuant to republic Act No. 7279, Otherwise known as the "Urban Development Housing Act of 1992", and Executive Order No. 292, Otherwise known as "Administrative Code of 1987"
- Proclamation No. 1160: Amending Proclamation No. 458, Dated August 29, 1994, "Reserving the Foregoing Twenty Parcels of Land at Manggahan Floodway Complex for the Construction of Medium Rise Socialized and Low Cost Housing Project and Its Allied Structures for the Benefit of some 6,700 Urban Poor Families and the Deserving Landless-Homeless Employees of the Provincial Government of Rizal."
- Executive Order No. 854: Revoking Proclamation No. 704, S. 1995 and Proclamation No. 1160, S. 2006, and Establishing a Task Force to Formulate and Implement a Comprehensive Rehabilitation Plan for the Napindan Channel, Lupang Arenda and Manggahan Floodway.

2.1.3 Basic Principles of Resettlement Policy of World Bank

In summary, this section enumerates the objectives of the World Bank Operational Policy (OP) 4.12: Involuntary Resettlement.

- Involuntary resettlement should be avoided where feasible
- Where population displacement is unavoidable, it should be minimized by exploring all viable project options
- People unavoidably displaced should be compensated and assisted, so that their economic and social future would be generally as favorable as it would have been in the absence of the project

- People affected should be fully informed and consulted on resettlement and compensation options
- Involuntary resettlement should be conceived and executed as part of the project.

2.2 GAPS BETWEEN JICA GUIDELINES AND LEGISLATIONS OF THE PHILIPPINES

The following table presents the gap analysis for the JICA Guidelines and the existing Philippine laws.

Table 2-2
Gaps between JICA Guidelines and Legislations of the Philippines

No.	JICA Guidelines	Laws/Guidelines/Policy, etc. of the Philippines	Gaps between JICA GL and the Philippines	Project Policy
1.	<p><u>Avoidance of Involuntary resettlement</u></p> <p>Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives. (JICA GL)</p>	<p>No person shall be deprived of life, liberty or property without due process of law, nor shall any person be denied equal protection of the law. (Article III, Section 1)</p> <p>Private property shall not be taken for public use without just compensation. (Article III, Section 9)</p> <p>"Consent" is required from affected indigenous peoples before any land taking and/or relocation from their ancestral domain by the project. (Indigenous Peoples' Rights Act (IPRA) 1997)</p> <p>Involuntary resettlement should be avoided where feasible. Where population displacement is unavoidable, it should be minimized by exploring all viable project options. (LARRIPP, 2007)</p>	<p>No significant gaps were identified from the principals of Constitution of the Philippines, and as the principals of DPWH LARRIPP includes the WB OP 4.12, although no laws to meet this item were found in the Philippines.</p>	<p>Follow JICA GL and LARRIPP</p>
2.	<p><u>Population Displacement</u></p> <p>When population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken. (JICA GL)</p>	<p>Ditto</p>	<p>Ditto</p>	<p>Follow JICA GL and LARRIPP</p>

No.	JICA Guidelines	Laws/Guidelines/Policy, etc. of the Philippines	Gaps between JICA GL and the Philippines	Project Policy
3.	<p><u>Livelihood Assistance</u></p> <p>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. (JICA GL)</p>	<p>LGU and NHA provide a resettlement site with basic services and safeguards for the homeless and underprivileged citizens. (RA7279)</p> <p>As well as compensations for assets, the supports include disturbance compensation for agricultural land, income assistance for loss of business/income, inconvenience allowance, rehabilitation assistance (skills training and other development activities), rental subsidy, transportation allowance or assistance. (LARRIPP, 2007)</p>	<p>No significant gaps were identified, as RA7279 mandates the provision of resettlement site for informal settlers, and DPWH LARRIPP states the supports to restore the standard of living, income opportunities and production levels for the people who must be resettled involuntarily.</p>	<p>Follow JICA GL and LARRIPP</p>
4.	<p><u>Compensation Scale</u></p> <p>Compensation must be based on the full replacement cost as much as possible. (JICA GL)</p>	<p>The project implementation agency shall offer to the property owner concerned as compensation price, the sum of: the current market value of the land; the replacement cost of structural and improvements, therein; and the market value of crop therein (RA10752, 2016)</p>	<p>No significant gaps were identified, as RA10752 states that the project implementation agency shall offer to the property owner the current market value and the replacement cost for compensation price DPWH LARRIPP also states the compensation at the replacement cost.</p>	<p>Follow RA10752, JICA GL and LARRIPP</p>
5.	<p><u>Timing of Compensation</u></p> <p>Compensation and other kinds of assistance must be provided prior to displacement. (JICA GL)</p>	<p>Unless ROW is purchased, project notice of award to contractor cannot be issued. (DPWH D.O. No. 5, 2003)</p> <p>PAPs are relocated after payment as Procedures for ROW Acquisition Process. (Implementing Rules and Regulations of R.A. No. 10752, 2016)</p>	<p>No significant gaps were identified, as Implementing Rules and Regulations of R.A. No. 10752 shows PAPs are paid before relocation.</p> <p>Unless ROW is purchased, the construction is not started by DPWH D.O. No. 5.</p>	<p>Follow Implementing Rules and Regulations of R.A. No. 10752, JICA GL and DPWH D.O. No. 5,</p>
6.	<p><u>RAP Preparation & Availability</u></p> <p>For projects that entail large-</p>	<p>Land Acquisition and Resettlement Action Plan (LAPRAP) shall be prepared for all projects, whether local or foreign funded,</p>	<p>No significant gaps were identified, as DPWH DOs states that Land Acquisition and Resettlement Action Plan shall be</p>	<p>Follow JICA GL, DPWH DOs and LARRIPP</p>

No.	JICA Guidelines	Laws/Guidelines/Policy, etc. of the Philippines	Gaps between JICA GL and the Philippines	Project Policy
	scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. (JICA GL)	<p>that will require ROW acquisitions. (DPWH D.O. No. 5, 2003)</p> <p>The LAPRAP document shall describe the project, expected impacts and mitigating measures, socio-economic profile of project affected persons (PAPs), compensation package, and timetable of implementation, institutional arrangements, monitoring and evaluation arrangements, participation, consultation and grievance procedures. (DPWH D.O. No. 327, 2003)</p> <p>LARRIPP shall provide guidance to those preparing resettlement action plans (RAPs) and safeguards instrument for Indigenous Peoples (IPs) affected by infrastructure projects implemented by the DPWH, whether foreign or locally funded. (LARRIPP, 2007)</p>	prepared including participation, consultation and grievance procedures, although no laws to meet this item were found in the Philippines.	
7.	<p><u>Holding Public Consultation</u></p> <p>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. (JICA GL)</p>	<p>Consultation meetings are conducted to describe project brief and concept of LAPRAP, and to seek comments and opinions. (IROW Procedural Manual, 2003)</p> <p>The information campaign will convey to all PAPs. (LARRIPP, 2007)</p>	No significant gaps were identified, as DPWH LARRIPP states the information disclosure with consultation meetings, although no laws to meet this item were found in the Philippines.	Follow JICA GL and LARRIPP
8.	<p><u>Manners of Public Consultation</u></p> <p>When consultations are held, explanations must be given in a</p>	The information campaign will be carried out by PMO with support of ESSD, Regional and District Engineering Offices through community meetings with leaflets. The	No significant gaps were identified, as DPWH LARRIPP states that information is disclosed in language understandable to PAPs, although no laws to meet this	Follow JICA GL and LARRIPP

No.	JICA Guidelines	Laws/Guidelines/Policy, etc. of the Philippines	Gaps between JICA GL and the Philippines	Project Policy
	form, manner, and language that are understandable to the affected people. (JICA GL)	leaflets are printed in language understandable to PAPs and provide a statement of purpose, project details, and procedures of compensation programs. (LARRIPP, 2007)	item were found in the Philippines.	
9.	<p><u>Participation to Public Consultation</u></p> <p>Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans. (JICA GL)</p>	PAPs are involved in community meetings and monitored internally by ESSD and externally by external monitoring agent which consists of a qualified/experienced individual or consultancy firm. (LARRIPP, 2007)	No significant gaps were identified, as DPWH LARRIPP states that PAPs are involved in community meetings, although no laws to meet this item were found in the Philippines.	Follow JICA GL and LARRIPP
10.	<p><u>Grievance Redress Mechanism</u></p> <p>Appropriate and accessible grievance redress mechanisms must be established for the affected people and their communities. (JICA GL)</p>	The PAPs will lodge their grievances by writing to the Resettlement Implementation Committee (RIC) for immediate resolution, and RIC and/or DPWH Regional Office (RO) deal with the grievances. If the complaint is not satisfactorily resolved, the PAP can file a legal complaint in any appropriate Court of Law. (LARRIPP, 2007)	No significant gaps were identified, as DPWH LARRIPP states that the grievance mechanisms are established, although no laws to meet this item were found in the Philippines.	Follow JICA GL and LARRIPP
11.	<p><u>Cut-off Date Declaration</u></p> <p>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</p>	<p>The Cut-off Date is the date of commencement of the census of affected families within the project boundaries. Persons not covered at the time of census-taking will not be eligible for claims of compensation entitlements.</p> <p>The concerned PAFs were physically residing in the affected structure and land at the time of the cut-off date. (LARRIPP, 2007)</p>	No significant gaps were identified, as DPWH LARRIPP states that affected people are identified and recorded as early as possible with the census, although no laws to meet this item were found in the Philippines.	Follow WB OP4.12 and LARRIPP

No.	JICA Guidelines	Laws/Guidelines/Policy, etc. of the Philippines	Gaps between JICA GL and the Philippines	Project Policy
	<p>identification stage, to prevent a subsequent influx of encroachers of others who wish to take advantage of such benefits. (WB OP4.12 Para.6)</p>			
12.	<p><u>Eligibility of Benefits</u></p> <p>Eligibility of benefits includes, the PAPs who have formal legal rights to land (including customary and traditional land rights recognized under law), the PAPs who do not have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying. (WB OP4.12 Para.15)</p>	<p>The following persons are eligible. (LARRIPP, 2007)</p> <p>Landowners</p> <p>a) Users of arable land who have no land title or tax declaration</p> <p>b) Agricultural lessees</p> <p>Structure</p> <p>c.) Owners of structures, including shanty dwellers, who have no land title or tax</p> <p>Owner of Structures and Improvements with No Rights to the Land (IRR of RA 10752)</p> <p>The provision pertaining to the replacement cost of structures and improvements shall also apply to all owners of structures and improvements who do not have legally recognized rights to the land, and who meet all of the following criteria:</p> <ul style="list-style-type: none"> • Must be a Filipino citizen; • Must not own any real property or any other housing facility, whether in an urban or rural area; • Must not be a professional squatter or a member of a squatting syndicate, as defined in RA No. 7279, otherwise known as the “Urban Development and Housing Act of 1992;” and • Must not occupy an existing government ROW. <p>b) Renters</p>	<p>No significant gaps were identified, as RA7279 states that informal settlers qualify for the socialized housing program, and DPWH LARRIPP states that the owners of structures without land title are eligible to the compensation.</p> <p>However, RA7279 states: There is no eligibility for “Professional squatters,” individuals or groups who occupy lands without the express consent of the landowner and who have sufficient income for legitimate housing.</p> <p>The term shall also apply to persons who have previously been awarded home lots or housing units by the Government but who sold, leased or transferred the same to settle illegally in the same place or in another urban area, and non-bona fide occupants and intruders of lands reserved for socialized housing.</p> <p>And “Squatting syndicates,” groups of persons engaged in the business of squatter housing for profit or gain.</p>	<p>All affected people (except professional squatters) will be eligible for compensation and rehabilitation assistance, regardless of tenure status, social or economic standing, and same as WB OP4.1 2, RA7279 and RA10752</p> <p>Meanwhile, all qualified affected ISFs are entitled for housing program and rehabilitation assistance.</p>

No.	JICA Guidelines	Laws/Guidelines/Policy, etc. of the Philippines	Gaps between JICA GL and the Philippines	Project Policy
13.	<p><u>Land Swapping</u></p> <p>Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based. (WB OP4.12 Para.11)</p>	<p>Land swapping if feasible, 'land for land', will be provided in terms of a new parcel of land of equivalent market value, at a location acceptable under zoning laws, or a plot of equivalent value, whichever is larger, in a nearby resettlement area with adequate physical and social infrastructure. Meanwhile, when the affected holding has a higher value than the relocation plot, cash compensation will cover the difference in value." (LARRIPP, 2007)</p>	<p>No significant gaps were identified, as DPWH LARRIPP states that the land swapping will be provided if feasible, although no laws to meet this item were found in the Philippines.</p>	<p>Follow WB OP4.12 and LARRIPP</p>
14.	<p><u>Support for Transition</u></p> <p>Provide support for the transition period (between displacement and livelihood restoration). (WB OP4.12 Para.6)</p>	<p>The following assistances are provided. (LARRIPP, 2007)</p> <ul style="list-style-type: none"> i) Disturbance Compensation for agricultural land severely affected the lessees are entitled to disturbance compensation. ii) Income assistance for loss of business/income iii) Inconvenience allowance iv) Rehabilitation assistance (skills training and other development activities) v) Rental Subsidy vi) Transportation allowance or assistance 	<p>No significant gaps were identified, as DPWH LARRIPP states that the assistances are provided for the transition period, although no laws to meet this item were found in the Philippines.</p>	<p>Follow WB OP4.12 and LARRIPP</p>
15.	<p><u>Attention to Vulnerable Group</u></p> <p>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 OP4.12 Para.8)</p>	<p>The IPRA sets conditions, requirements, and safeguards for plans, programs, and projects affecting Indigenous Peoples. (Indigenous Peoples' Rights Act (IPRA), 1997)</p> <p>Indigenous Peoples Action Plan (IPAP) is written when an infrastructure project has been found through the social assessment to have potentially adverse effects on Indigenous Peoples, there is need to</p>	<p>No significant gaps were identified, as DPWH LARRIPP states the attentions for women and elderly while the Magna Carta of Women are particular in addressing the needs of women.</p>	<p>Follow WB OP4.12 and LARRIPP</p>

No.	JICA Guidelines	Laws/Guidelines/Policy, etc. of the Philippines	Gaps between JICA GL and the Philippines	Project Policy
		<p>formulate an Indigenous Peoples Plan (IPAP).</p> <p>The women and elderly who are among the PAPs shall likewise be consulted and mobilized to participate in the consultation meeting, and discussed with them the socio-cultural implication of the Resettlement Action Plan. (LARRIPP, 2007)</p> <p>In addition, the Magna Carta of Women addresses the needs of women that will be affected by the project specifically by the Department Order No. 130 Series of 2016 wherein the workforce is equally accessible by both men and women. (RA 9710)</p> <p>Socialized housing shall be the primary strategy in providing shelter for the underprivileged and homeless. (RA7279)</p>		

CHAPTER 3 POLICY ON ELIGIBILITY FOR COMPENSATION AND OTHER ENTITLEMENTS

This chapter outlines the basis on the eligibility of PAFs to available compensation and entitlements based on the existing local, national and international policies and guidelines that were mentioned in Chapter 2.

3.1 CRITERIA FOR ELIGIBILITY FOR COMPENSATION

Based on the existing policies and guidelines on housing and resettlements, the identification of eligible PAFs for compensation are outlined in the following subsections.

3.1.1 Landowners

- a. Legal owners (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
- b. Users of arable land who have no land title or tax declaration
- c. Agricultural lessees

3.1.2 PAFs with Structures

- a. Owners of structures who have full title, tax declaration or who are covered by customary laws, (e.g. possessory rights, usufruct, etc) or other acceptable proof of ownership
- b. Owners of structures, including shanty dwellers, who have no land title or tax Owner of Structures and Improvements with No Rights to the Land (IRR of RA 10752)

The provision of Section 6.6 of RA 10752 pertaining to the replacement cost of structures and improvements shall also apply to all owners of structures and improvements who do not have legally recognized rights to the land, and who meet all of the following criteria:

- Must be a Filipino citizen;
- Must not own any real property or any other housing facility, whether in an urban or rural area;
- Must not be a professional squatter or a member of a squatting syndicate, as defined in RA No. 7279, otherwise known as the "Urban Development and Housing Act (UDHA) of 1992;" and
- Must not occupy an existing government ROW.

- c. Renters

3.2 COMPENSATION/ENTITLEMENTS PER CATEGORY OF ASSETS AFFECTED

The classifications or categories of assets to be compensated include land, structures, other improvements, crops and trees and perennials. Enumerated below are the only compensation and other entitlements provisions for eligible PAFs.

a. Relocation of Informal Settlers

As provided in Section 9 of RA 10752, *“the government, through the Housing and Urban Development Coordinating Council (HUDCC) and the National Housing Authority (NHA), in coordination with the LGUs and the IAs concerned, shall establish and develop resettlement sites for informal settlers, including the provision of adequate basic services and community facilities, in anticipation of informal settlers that have to be removed from government ROW or site of future infrastructure projects, pursuant to the provisions of RA 7279 (UDHA). Whenever applicable, the concerned LGUs shall provide and administer the resettlement sites.”*

b. Types of Assistance or Entitlements

Rehabilitation assistance—PAFs will not be entitled with income loss assistance brought about by the loss of businesses/income as they have been occupying the government land illegally. A skills training and other development activities equivalent to PhP15,000.00 per family, however, will be provided in coordination with other government agencies if the present means of livelihood is no longer viable and the PAF will have to engage in a new income activity as indicated in desired livelihood skills training of Chapter 5 particularly in Table 5-30.

Transportation allowance or assistance will be applied if PAFs will be relocated; they are to be provided with free transportation. Also, informal settlers in urban center who opt to go back to their place of origin in the province or be shifted to government relocation sites will be provided free transportation.

It should be emphasized however that the transportation allowance and rehabilitation assistance will be given to qualified ISFs.

CHAPTER 4 DESCRIPTION OF ADVERSE IMPACTS

4.1 PARAMETERS OF THE SEVERITY OF IMPACTS

Properties to be acquired for the project may include the entire area or a portion of it. Hence, compensation for such assets or properties depends on whether the entire property will be affected or just a portion of it. The severity of the impact of the project to the PAFs is categorized either 'severe' or 'marginal' and is described below.

- (1) Severe –The portion of the property to be affected is more than 20% of the total land area or even less than 20% if the remaining portion is no longer economically viable or it will no longer function as intended. The owner of this property (land or structures, etc.) shall be entitled to full compensation in accordance to RA 10752.
- (2) Marginal – The impact is only partial, and the remaining portion of the property or asset is still viable for continued use. Compensation will be on the affected portion only.

4.2 ADVERSE IMPACTS ON THE PROJECT AFFECTED FAMILIES

In December 2009 Executive Order 854 revoked Presidential Proclamation 1160 which amends Proclamation No.458, dated August 29, 1994, "*Reserving Twenty Parcels of Land at Mangahan Floodway Complex for the Construction of Medium-Rise Socialized and Low-Cost Housing Project and its Allied Structures for the Benefit of Some 6,700 Urban Poor Families and the Deserving Landless-Homeless Employees of the Provincial Government of Rizal*".

The Mangahan Floodway and its east and west banks especially its respective berms are government ROW since it is a "**national government project**" under the definition of RA 10752. Because of EO 854 and under the definition of Section 3 of RA 10752, the existing settlers in the berm have no rights to the land.

Subsequently, under Section 6.8 of RA 10752, since the settlers are in a government ROW, they are not qualified for compensation to replace their structures and improvements. They are however, entitled to relocation based on Section 14 of the same law.

Further, due to the above-mentioned, there was no census of assets and improvements conducted. Per LARRIPP, the only impact identified for the PAFs is the loss of income of businesses operating in the ROW until they (the businesses) can regain their normal operations. An income loss survey was done for those businesses tagged by NHA and observed and conducted by the RAP Consultant

4.2.1 Project Affected Families and Structures in Taytay

Based on the census conducted, the total number of households in Taytay is 4,269 while the total number of structures tagged is 3,102 (please refer to Chapter 5 for more details and **Annex 2-A** for the Masterlist of Taytay). This means that of the total households in the LGU, there are families that reside as multiple households within the tagged structures.

Most of the affected structures in Taytay are single-detached (83%) while about 13 percent of the structures are classified as 'Others' (either stand-alone bodega, comfort rooms, chicken coop, pigpen, sleeping quarters, etc). **Table 4-1** summarizes the number of affected structures per type.

Table 4-1
Type and Number of Structures Affected in Taytay

No.	Type of Structure	Number	% Share
1	Single-detached	2,615	84.30
2	Duplex	11	0.35
3	Extended Housing	67	2.16
4	Row house/Apartment	8	0.26
5	Others (<i>bodega, comfort room, chicken coop, pigpen, sleeping quarters etc.</i>)	401	12.93
	Total	3,102	100.00

Source: Based on NHA Census and Tagging (2016)

The type of housing materials used are topped by mixed (43%) followed by light (33%) and strong (24%). Salvaged materials are virtually zero (**Table 4-2**). Apparently, these materials used for housing are not the typical barong-barong of informal settler families. Illustrations of the type of structures are provided in **Annex 3**.

Table 4-2
Type and Number of Housing Materials

No.	Type of Housing Materials	Number	% Share
1	Salvaged	4	0.13
2	Light	1,028	33.14
3	Strong	734	23.66
4	Mixed	1,336	43.07
	Total	3,102	100.00

Source: Based on NHA Census and Tagging (2016)

In terms of use of structure (**Table 4-3**), almost two-thirds (62%) are completely residential. Those with business on their residences (i.e., residential-commercial, residential-industrial, residential-institutional) or those with purely business structures (i.e., commercial, industrial, institutional) constitute 20% or a total of 626 structures. These 626 structures are presumed to have potential loss of income and were targeted for the income lost survey conducted by the RAP Consultant. The non-residential structures total 522 (17%) most of which are Others (i.e. pigpen, bodega, chicken coop, comfort room, etc.). Of the 2,580 structures used for residential purposes 2,416 (94%) have families inside (Item 1.1 to 1.4 of **Table 4-3**).

**Table 4-3
Use of Structures and Number**

No.	Structures by Use	Number	% Share
1	Residential		
1.1	Completely Residential	1,911	61.61
1.2	Residential-Commercial	488	15.73
1.3	Residential-Industrial	14	0.45
1.4	Residential-Institutional	3	0.10
1.5	Residential-Others (<i>abandoned, under construction, vacant, etc.</i>)	164	5.29
	Sub-Total	2,580	83.17
2	Non-Residential		
2.1	Commercial	94	3.03
2.2	Industrial	9	0.29
2.3	Institutional	18	0.58
2.4	Others (<i>pigpen, bodega, chicken coop, comfort room, etc.</i>)	401	12.93
	Sub-Total	522	16.83
	Total	3,102	100.00

Source: Based on NHA Census and Tagging (2016)

The total number of household with tenurial status in Taytay is 4,269 (**Table 4-4**) of which: 3,106 (73%) is listed and interviewed; and 1,163 (27%) were listed but not interviewed of which: 273 (6% of total) out during census; 3 (0.07%) refused interview; 864 (20%) absentee owners; and 23 (1%) government housing awardees.

The absentee-owners are identified house-owners or identified house co-owners who do not reside in the structure but lives elsewhere. They allow the use of their structures to other people mostly for monetary purposes. The absentee owners are sometimes referred allegedly as “squatter syndicates”.

Those categorized as “government housing awardees” are likewise not considered as eligible for entitlement to relocation and resettlement programs because they were already recipients of government housing programs. Whether they have totally abandoned their former government houses for valid reasons or have maintained it but still persisted on squatting will need to be investigated and validated by the LGUs in coordination with government housing agencies such as HUDCC/SHFC/NHA.

At this juncture, both absentee owners and government housing awardees are considered ineligible to entitlements.

The potential eligible for relocation covers only the: listed and interviewed, out during census, and refused interview which totals 3,382 (79%). The final number of qualified households shall be determined by the government shelter agencies (HUDCC/SHFC/NHA) and the LGU. According to the LARRIP of DPWH, PAFs opting for relocation shall be provided with free transportation to the relocation site while those opting to go back to their province of origin shall be similarly given such assistance.

Table 4-4
Household Tenurial Status in Taytay Mangahan Portion

Tenurial Status	Number	% Share
1. Listed and Interviewed	3,106	72.76
- Owner	1,652	38.70
- Co-Owner	160	3.75
- Renter	677	15.86
- Sharer/Rent-Free Occupant	596	13.96
- Caretaker	21	0.49
2. Listed but not Interviewed	1,163	27.24
2.1 Out During Census	273	6.39
- Owner	95	2.23
- Co-Owner	18	0.42
- Renter	105	2.46
- Sharer/Rent-Free Occupant	54	1.26
- Caretaker	1	0.02
2.2 Refused Interview	3	0.07
- Renter	3	0.07
2.3 Absentee (No Interview Required/Non-resident/ Structure without known resident)	864	20.24
- Absentee House Owner	810	18.97
- Absentee House Co-Owner	54	1.26
2.4 Government Housing Awardee	23	0.54
- NHA Housing Project Structure Owner	14	0.33
- PCUP Housing Project Structure Owner	9	0.21
Total	4,269	100.00

Source: Based on NHA Census and Tagging (2016)

In addition to the initially identified eligible PAFs, businesses operating within the area were also considered in the survey. Based on the NHA tagging and census (Items 1.2 to 1.4, and 2.1 to 2.3 of **Table 4-3**), there are 626 structures classified as having business operating in the berm of the Taytay portion of the Mangahan Floodway. Further, the RAP Consultant conducted an income and loss survey (**Annex 4-A** and **4-B**) and identified additional businesses affected in the area (**Table 4-5**). There are 57 change of use of structure: From Purely Residential and Others to Residential – Commercial/Commercial while there are 66 establishments singly tagged by NHA but were multiple surveyed particularly those classified as commercial. These two additions, together with the original 626, shall be a total 749 affected businesses of which, 602 (80%) allowed themselves to be surveyed for their income loss.

Table 4-5
Number of Businesses in the Taytay Mangahan Portion

Type	NHA Tagged	% Share	Surveyed by RAP Consultant	% Share
Residential – Commercial	488	65.15	395	65.61
Residential – Industrial	14	1.87	11	1.83
Residential – Institutional	3	0.40	1	0.17
Commercial	94	12.55	63	10.47
Industrial	9	1.20	6	1.00
Institutional	18	2.40	3	0.50
Sub-Total	626	83.58	479	79.57
Change of use of structure: From Purely Residential and Others to Residential – Commercial/Commercial	57	7.61	57	9.47
Establishments singly tagged by NHA but were multiple surveyed particularly those classified as commercial	66	8.81	66	10.96
Total	749	100.00	602	100.00

Source: Based on NHA Census and Tagging (2016) and RAP Consultant Income Loss Survey (2017)

In summary, the total number of PAFs in Taytay given the applicability of current laws is: Affected Households 3,382 and Affected businesses 749. However, as the PAFs are residing within the government ROW, they are considered as ISFs; and based on the policies and related laws mentioned in Chapter 2 of this RAP, ISFs will not be entitled for compensation on loss of structure and income. Nevertheless, a rehabilitation assistance (as mentioned in Chapter 3) will be provided to qualified PAFs particularly those that will be economically displaced.

4.2.2 Project Affected Families in Cainta

In the case of Cainta, there are 9,256 households identified within the berm. Considering that 5,806 structures were tagged, many families are residing as multiple households within the tagged structures (please refer to Chapter 5 for more details and **Annex 2-B** for the Masterlist of Cainta). As presented in **Table 4-6**, majority of the affected structures are single detached (79%), similar with that of Taytay. A sizable percentage is shared by extended housing (11%) and those classified as 'Others' (8%).

Table 4-6
Type and Number of Structures Affected in Cainta

Item	Type of Structure	Number	% Share
1	Single-detached	4,608	79.37
2	Duplex	73	1.26
3	Extended Housing	638	10.99
4	Row house/Apartment	13	0.22
5	Others (<i>bodega, pigpen, chicken coop, comfort room, skeleton, garage, waiting shed, basketball court, etc.</i>)	474	8.16
	Total	5,806	100.00

Source: Based on NHA Census and Tagging (2017)

The type of housing materials used are mostly 'Strong' (40%) followed by 'Mixed' (38%) and 'Light' (21%). Use of salvaged materials is very minimal (**Table 4-7**). Again, the use of these materials for housing is not the typical barong-barong of informal settler families.

Table 4-7
Type and Number of Housing Materials

No.	Type of Housing Materials	Number	% Share
1	Salvaged	22	0.38
2	Light	1,245	21.44
3	Strong	2,324	40.03
4	Mixed	2,215	38.15
	Total	5,806	100.00

Source: Based on NHA Census and Tagging (2016)

In terms of use of structure (**Table 4-8**), more than two-thirds (70%) are completely residential. Those with business on their residences or those with purely business structures (commercial, industrial, institutional) constitute 16% or a total of 950 structures. These 950 structures are presumed to have potential loss of income and were targeted for the income lost survey conducted by the RAP Consultant. The non-residential structures total 566 (10%) most of which are 'Others' (pigpen, bodega, chicken coop, comfort room, etc.).

Table 4-8
Use of Structures and Number

Item	Structures by Use	Number	% Share
1	Residential		
1.1	Completely Residential	4,079	70.25
1.2	Residential-Commercial	839	14.45
1.3	Residential-Industrial	11	0.19
1.4	Residential-Institutional	8	0.14
1.5	Residential-Others (<i>abandoned, under construction, vacant, etc.</i>)	303	5.22
	Sub-Total	5,240	90.25
2	Non-Residential		
2.1	Commercial	81	1.4
2.2	Industrial	5	0.09
2.3	Institutional	6	0.10
2.4	Others (<i>pigpen, bodega, chicken coop, comfort room, etc.</i>)	474	8.16
	Sub-Total	566	9.75
	Total	5,806	100.00

Source: Based on NHA Census and Tagging (2016)

Of the 5,240 structures used for residential purposes 4,937 (94%) have families or household inside (Item 1.1 to 1.4 of **Table 4-8**). These 4,937 structures have 9,256 listed households of which 66% were listed and interviewed while 34% were listed but not interviewed (**Table 4-9**). For the latter, 1,370 (15% of total) were out during census; 3 (0.03%) refused interview; 1,769 (19%) are absentee owners; and 4 (0.04%) are government housing awardees. The potential eligible for relocation covers only the: listed

and interviewed, out during census, and refused interview which totals 7,483 (81%). As in Taytay, the final number of qualified households in Cainta shall be determined by the national government shelter agencies and LGU under Republic Act 7279.

Table 4-9
Household Tenurial Status in Cainta Mangahan Portion

Tenurial Status	Number	% Share
1. Listed and Interviewed	6,110	66.01
- Owner	3,205	34.63
- Co-Owner	346	3.74
- Renter	1,419	15.33
- Sharer/Rent-Free Occupant	1,130	12.21
- Caretaker	10	0.11
2. Listed but not Interviewed	3,146	33.99
2.1 Out During Census	1,370	14.8
- Owner	385	4.16
- Co-Owner	72	0.78
- Renter	595	6.43
- Sharer/Rent-Free Occupant	313	3.38
- Caretaker	5	0.05
2.2 Refused Interview	3	0.03
- Owner	1	0.01
- Renter	2	0.02
2.3 Absentee ((No Interview Required/ Non-resident/ Structure without known resident)	1,769	19.11
- Absentee House Owner	1,645	17.77
- Absentee House Co-Owner	124	1.34
2.4 Government Housing Awardee	4	0.04
- NHA Housing Project Structure Owner	3	0.03
- PCUP Housing Project Structure Owner	1	0.01
Total	9,256	100.00

Source: Based on NHA Census and Tagging (2017)

In addition to the 7,483 households, the other considered affected are those with businesses operating in the area. Based on the NHA tagging and census (**Table 4-8**), there are 950 structures (Items 1.1 to 1.4, and 2.1 to 2.3) classified as having business operating in the berm of the Cainta portion of the Mangahan Floodway. The RAP study team conducted an income and loss survey of these businesses and identified additional businesses affected in the area (**Table 4-10**).

There are 175 change of use of structure: From Purely Residential and Others to Residential – Commercial/Commercial while there are 135 establishments singly tagged by NHA but were multiple surveyed particularly those classified as commercial. These two additions together with the original 950 shall total 1,260 affected businesses of which 1,065 (85%) allowed themselves to be surveyed for their income loss.

Table 4-10
Number of Businesses in the Cainta Mangahan Portion

Type	NHA Tagged	% Share	Surveyed by RAP Consultants	% Share
Residential - Commercial	839	66.59	688	64.60
Residential - Industrial	11	1.16	8	0.75
Residential - Institutional	8	0.63	4	0.38
Commercial	81	6.43	54	5.07
Industrial	5	0.40	1	0.09
Institutional	6	0.48	0	0.00
Sub-Total	950	75.40	755	70.89
Change of use of structure: From Purely Residential and Others to Residential – Commercial/Commercial	175	13.89	175	16.43
Establishments singly tagged by NHA but were multiple surveyed particularly those classified as commercial	135	10.71	135	12.68
Total	1,260	100	1,065	100.00

Source: Based on NHA Income Loss Survey (2016)

In summary the total affected given the applicability of current laws for Cainta are the following: Affected Households 7,483 and Affected businesses 1,260.

4.3 RESETTLEMENT OPTIONS

From the very beginning of consultation with the PAFs, they were insisting on an ‘on-site’ relocation at the berm. Considering that this could not be permitted, a consultation with the LGU resulted in the insistence of the latter for an ‘in-city’ relocation where all qualified PAFS will be relocated. It was emphasized that all qualified beneficiaries should be relocated within the municipality and not even one should be relocated ‘off-site’. Thus, study for the resettlement options focused on satisfying this pre-condition for ‘in-city’ relocation.

The resettlement site for the PAFs from the area of Taytay is within the Don Enrique Heights Subdivision of Taytay. The land area required is between 12 to 15 hectares, which is sufficient to accommodate all its eligible 3,379 affected households should they all be found qualified, as well as land for the necessary social facilities and infrastructures. Meanwhile, Cainta has already identified 15 resettlement sites within their administrative boundary and continues to identify suitable relocation sites within the municipality to accommodate all its 7,483 eligible PAFs for ‘in-city’ relocation.

The resettlement sites and the resettlement facilities of Taytay and Cainta are discussed in **Chapter 6**.

CHAPTER 5

SOCIO-ECONOMIC PROFILE OF PAFs

The PAFs consist of all members of a household residing under one roof and operating as a single economic unit, who will be adversely affected by the project. For resettlement purposes, PAPs will be dealt with as members of PAFs. These are HHs currently residing along Mangahan Floodway whose dwellings will be affected by ROW of the Project. The PAFs resides in two barangays each of the municipalities of Taytay (San Juan, Sta. Ana) and Cainta (San Andres, San Juan) on both the east and west banks' berm of the Mangahan Floodway. The socioeconomic profiles presented here are based on the results of the census and household surveys conducted by the NHA in 2016 (Taytay) and 2017 (Cainta) and covered only those that were listed and interviewed. As mentioned in Chapter 4, the number of households interviewed in Taytay is 3,106 while for Cainta it is 6,110 for a total number of 9,216 households or families.

5.1 BASIC INFORMATION

The average household size (AHHS) of the area is 4.3, which is lower than the provincial AHHS of 4.5 (**Table 5-1**). Most of the households (78%) have sizes between 3 and 6. Majority (56%) have been residing in the area for ten (10) years or less (**Table 5-2**) while 30% have 11-20 years of residence. Majority of the HHs(50%) came from within the the respective municipalities (**Table 5-3**) while a significant portion (14%) came from other towns of Rizal. The rest are from other parts of the country particularly Luzon (31%).

In terms of ethnic origin almost all (99.5%) are Non-Indigenous (**Table 5-4**). Very few (3%) owns real property (**Table 5-5**) but surprisingly, 45 HHs owns real property within the area but it is not clear if it is in the berm which is a ROW (and therefore cannot be own privately) or on the embankment. It is possible that these owners may opt to transfer to their properties rather than avail of relocation sites that shall be provided by the LGUs. Only around 8% of the HHs are recipients of Pantawid-Familyang Pilipino Program (4Ps, also known as the Conditional Cash Transfer) (**Table 5-6**) which means the rest are not qualified or are outside the criteria of 4Ps and are not the poorest of the poor.

Table 5-1
Household Size and Average HH Size

Household Size	Taytay		Cainta		Total		% Share
	# of Families	Population	# of Families	Population	# of Families	Population	
One	47	47	96	96	143	143	1.55
Two	351	702	613	1,226	964	1,928	10.46
Three	748	2,244	1,484	4,452	2,232	6,696	24.22
Four	768	3,072	1,547	6,188	2,315	9,260	25.12
Five	535	2,675	1,134	5,670	1,669	8,345	18.11
Six	336	2,016	643	3,858	979	5,874	10.62
Seven	174	1,218	357	2,499	531	3,717	5.76
Eight	81	648	140	1,120	221	1,768	2.40
Nine	37	333	50	450	87	783	0.94
Ten	20	200	36	360	56	560	0.61
Eleven	3	33	7	77	10	110	0.11
Twelve	3	36	1	12	4	48	0.04
Thirteen	2	26	2	26	4	52	0.04

Household Size	Taytay		Cainta		Total		% Share
	# of Families	Population	# of Families	Population	# of Families	Population	
Fourteen	0	0	0	0	0	0	0.00
Fifteen	1	15	0	0	1	15	0.01
Total	3,106	13,265	6,110	26,034	9,216	39,299	100.00
Ave. HH Size	4.3						
Rizal AHHS*	4.5						

Source: Basic data from NHA Census and Tagging, Computation from RAP Consultants

Note: The actual population refers only to those who were "listed and interviewed" by NHA

Table 5-2
Household by Length of Residence in the Area

No.	Length of Residence	Taytay	Cainta	Total	% Share
1	Under 1 year	201	419	620	6.7
2	1 - 5 years	971	1,875	2,846	30.9
3	6 - 10 years	623	1,072	1,695	18.4
4	11 - 15 years	513	805	1,318	14.3
5	16 - 20 years	502	904	1,406	15.3
6	21 - 25 years	223	774	997	10.8
7	26 - 30 years	47	194	241	2.6
8	31 years and over	18	32	50	0.5
9	No Answer	8	35	43	0.5
Total		3,106	6,110	9,216	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-3
Household by Place of Origin

No.	Place of Origin	Taytay	Cainta	Total	% Share
1	Within Municipality	1,420	3,204	4,624	50.2
2	Outside Municipality but within Rizal Province	674	636	1,310	14.2
3	Outside Rizal Province	979	1,899	2,878	31.2
	3.1 Luzon	632	1,332	1,964	21.3
	3.2 Visayas	254	466	720	7.8
	3.3 Mindanao	93	101	194	2.1
4	No Answer	33	371	404	4.4
Total		3,106	6,110	9,216	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-4
Household by Ethnicity

No.	Ethnicity	Taytay	Cainta	Total	% Share
1	Indigenous (<i>Kankanaoy, Maranao, Nitibo Biwang</i>)	3	18	21	0.2
2	Non-Indigenous	3,091	6,080	9,171	99.5
3	No Answer	12	12	24	0.3
Total		3,106	6,110	9,216	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-5
Household Ownership of Other Real Property by Location

No.	Ownership	Taytay	Cainta	Total	% Share
1	Yes	101	152	253	2.7
1.1	Within the Area	45	0	45	0.5
1.2	Outside Area, but within Municipality	10	11	21	0.2
1.3	Outside Municipality, but within Province of Rizal	11	18	29	0.3
1.4	Outside Province of Rizal	35	4	39	0.4
1.4.1	<i>Luzon</i>	16	57	73	0.8
1.4.2	<i>Visayas</i>	14	48	62	0.7
1.4.3	<i>Mindanao</i>	5	14	19	0.2
2	No	2,991	5,887	8,878	96.3
3	No Answer	14	72	86	0.9
Total		3,106	6,111	9,217	100.0

*Of the 9,216 households, 1 provided multiple responses

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-6
Household as Recipient of DSWD's Conditional Cash Transfer (CCT) or 4 Ps

No.	Recipient	Taytay	Cainta	TOTAL	% Share
1	Beneficiary	253	439	692	7.5
1.1	<i>PhP1,000.00 & below</i>	52	127	179	1.9
1.2	<i>PhP1,001.00 - PhP2,000.00</i>	159	249	408	4.4
1.3	<i>PhP2,001.00 - PhP3,000.00</i>	25	42	67	0.7
1.4	<i>PhP3,001.00 - PhP4,000.00</i>	16	19	35	0.4
1.5	<i>PhP4,001.00 & above</i>	0	1	1	0.0
1.6	<i>No Answer</i>	1	1	2	0.0
2	Non-Beneficiary	2,853	5,671	8,524	92.5
Total		3,106	6,110	9,216	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

5.2 DEMOGRAPHIC PROFILE

About 78% of the households are headed by males (**Table 5-7**). In terms of male-female ratio the area has 1.05 which is higher than the provincial rate of 0.99. Males therefore outnumber the females in terms of population of the area. Most of the residents (94%) are composed of the HH heads, spouse and their children. For age composition, the population of the area is slightly younger (**Table 5-8**) than the province with its percentage of 0-14 years old (35%) higher than the 32% of Rizal. The share of senior citizen dependents (65 years old and over) is 1.6% which is lower than the province's rate of 3%. For the potential economically active population of 15-64 years old, the area has 63% which is slightly lower than the provincial rate of 65%.

Most of the population (**Table 5-9**) is Roman Catholic (88%) with Born again Christians the next most significant religion (6%) followed by Iglesia ni Cristo (3%). On levels of educational attainment (**Table 5-10**), the area has less population with no education than the province of Rizal(0.3% versus 2.9%) but it lags behind in number of graduates at elementary (6% versus 9%), high school (20% versus 23%), college (5% versus 12%) and post graduate (0.00 versus 0.3%%) when compared to the level of the province. Its only advantage in education was its slightly greater proportion of graduates in vocational/technical when compared to Rizal (3.22% versus 3.19%). Given this, it can be said that the area has lower level of education than the province.

Table 5-7
Household Population by Composition and by Sex

Composition	Male		Female		Grand Total	Male % Share	Female % Share	% Grand Total
	Taytay	Cainta	Taytay	Cainta				
Household Head	2,479	4,664	627	1,446	9,216	18.2	5.3	23.5
Relative HHH % of HHS						77.5	22.5	
Spouse	323	759	2,344	4,433	7,859	2.8	17.2	20.0
Son/ Daughter	3,539	7,138	3,056	5,943	19,676	27.2	22.9	50.1
Son-in-Law/ Daughter-in-Law	15	27	21	20	83	0.1	0.1	0.2
Stepson/ Stepdaughter	54	91	50	104	299	0.4	0.4	0.8
Parent/ Parent-in-Law	28	30	61	116	235	0.1	0.5	0.6
Brother/ Sister	50	96	37	72	255	0.4	0.3	0.6
Brother-in-Law/ Sister-in-Law	22	23	12	24	81	0.1	0.1	0.2
Half-Brother/ Half-Sister	1	1	0	4	6	0.0	0.0	0.0
Other Relative	244	429	200	373	1,246	1.7	1.5	3.2
Non-relative	44	115	58	123	340	0.4	0.5	0.9
- No Answer		3		0	3	0.0	0.0	0.0
Total	6,799	13,376	6,466	12,658	39,299	51.3	48.7	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-8
Household Population by Age and by Sex

No.	Age Group	Male		Female		Total Number	% Share of Total
		Taytay	Cainta	Taytay	Cainta		
1	Under 5 years old	869	1,742	792	1,549	4,952	12.6
2	5 - 9 years old	807	1,632	746	1,459	4,644	11.8
3	10 - 14 years old	750	1,532	669	1,278	4,229	10.8
4	15 - 19 years old	655	1,367	643	1,289	3,954	10.1
5	20 - 24 years old	688	1,249	659	1,226	3,822	9.7
6	25 - 29 years old	601	1,134	559	1,073	3,367	8.6
7	30 - 34 years old	494	912	486	925	2,817	7.2
8	35 - 39 years old	446	890	423	924	2,683	6.8
9	40 - 44 years old	416	878	428	817	2,539	6.5
10	45 - 49 years old	381	757	363	766	2,267	5.8
11	50 - 54 years old	306	575	275	562	1,718	4.4
12	55 - 59 years old	176	333	175	333	1,017	2.6
13	60 - 64 years old	98	203	110	219	630	1.6
14	65 years old and over	106	171	134	233	644	1.6
15	No Answer	6	1	4	5	16	0.0
Total		6,799	13,376	6,466	12,658	39,299	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-9
Household Population by Religious Affiliation and by Sex

Religion	Male		Female		Total	% Share
	Taytay	Cainta	Taytay	Cainta		
Roman Catholic	6,016	11,901	5,646	11,161	34,724	88.4
Born-Again Christian	468	730	507	783	2,488	6.3
Iglesia ni Cristo	196	451	188	434	1,269	3.2
Protestant/Evangelical	12	30	12	31	85	0.2
Islam	46	40	51	29	166	0.4
Buddhism	0	13	0	12	25	0.1
Aglipayan	7	1	6	2	16	0.0
Jehova's Witnesses	10	23	11	31	75	0.2
Ang Dating Daan	0	5	0	4	9	0.0
Baptist	0	22	0	21	43	0.1
Bishop Sugasa Tuluhu-an Inc.	0	4	0	9	13	0.0
Church of God	0	5	0	5	10	0.0
Iglesia ng Diyos	1	2	1	3	7	0.0
Members of Church of Christ In	0	9	0	8	17	0.0
Seventh Day Adventist	0	19	0	14	33	0.1

Religion	Male		Female		Total	% Share
	Taytay	Cainta	Taytay	Cainta		
United Church of Christ of the	0	5	0	4	9	0.0
Temple of The Holy Spirit	0	5	0	1	6	0.0
United Pentecostal Church	0	6	0	1	7	0.0
Mormons	0	5	1	2	8	0.0
- No Answer	43	100	43	103	289	0.7
Total	6,799	13,376	6,466	12,658	39,299	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-10
Household Population by Highest Educational Attainment and by Sex

No.	Highest Educational Attainment	Male		Female		Total Number	% Share	Rizal % (2010)
		Taytay	Cainta	Taytay	Cainta			
1	Pre-school	219	407	207	360	1,193	3.0	3.1
2	Elementary Undergraduate	1,444	2,716	1,161	2,119	7,440	18.9	18.4
3	Elementary Graduate	469	812	394	747	2,422	6.2	8.8
4	High School Undergraduate	1275	2,848	1,306	2,821	8,250	21.0	13.7
5	High School Graduate	1277	2,580	1,305	2,589	7,751	19.7	23.3
6	Vocational/Technical	227	516	189	335	1267	3.2	3.2
7	College Undergraduate	611	994	654	1,176	3,435	8.7	13.1
8	College Graduate	320	549	407	765	2,041	5.2	12.2
9	Post Graduate	1	5	1	1	8	0.0	0.3
10	No Education	37	25	32	36	130	0.3	2.9
11	Recipient of DepEd Special Educational Assistance Program	0	12	0	10	22	0.1	0.0
12	- Not Applicable	878	1,878	781	1,651	5,188	13.2	0.0
13	- No Answer	41	34	28	48	151	0.4	1.0
14	Program	0	0	1	0	1	0.0	0.0
	Total	6,799	13,376	6,466	12,658	39,299	100.0	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

5.3 EMPLOYMENT

Based on the census, the area has a total employment of 14,864 or 37.8% of the population of 39,299 (**Table 5-11**) or 57% of the identified labor force of 25,378 for the area. Among the 9,191 HH head labor force about 86% or 7,920 are employed. Of these employed, 84% are males and only 16% are females. As percentage of HH head labor force, the employed male HH head is 93% while the employed female HH head is 62%. A similar trend is manifested in the employed other HH members percentage to other HH members labor force where employed male is 53% while employed female is 37%. The “other HH member employed female”, on the other hand, makes up for the lopsided

male-female ratio in the employed HH head by partaking more of the “total number employed of other HH members” with 67% versus the 33% of the other HH member employed male”. Overall, of the total employed, employed male makes up 65% while employed female is 35% for male-female employed ratio of 1.8. This figure is lower than the province’s employed ratio of 2.08. The implication of these findings, points to the need for more employment opportunities especially for women.

In terms of occupation type (**Table 5-12**), the largest are in Craft and Related Trades Workers (20%) followed by Service and Sales Workers (19%) and Elementary Occupations(17%) and Plant and Machine Operators, and Assemblers (11%). Comparatively, its percentage of Professional (2%) is much lower than the provincial rate (8%). Similarly lower are its percentages of “Plant and Machine Operators, and Assemblers” (11% versus 15%), Clerical Support Workers (6% versus 8%), Technician and Associate Professionals (3% versus 5%), Skilled Agricultural, Forestry and Fishery (1% to 4%); and in Elementary Occupations (17% to 21%). However, in contrast, it has higher percentages of Craft and Related Trades Workers (20% versus 17%), Service and Sales Workers (19% versus 10%), and Managers (12% to 9%) than the provincial rate. The latter three occupations can be assumed as the employment specialization of the area.

Majority (60%) of the employed get their salaries from being employees (**Table 5-13**). The rest get it from solely from other source (business, pension, remittance, & dole out) or other sources. In terms of place of work, more than a quarter (28%) is working outside the two municipalities but within Rizal Province (**Table 5-14**). More than a fifth (23%) work within the municipalities while almost a fifth (19%) works in their residence/house or in the neighborhood. About three-fourths (75%) are employed by private firms while almost a fifth (17%) are self-employed without employee (**Table 5-15**). One noticeable difference of the area when compared to the province is that it has more proportion of privately employed (75% versus 70%), self-employed (17% versus 16%) and those employed in family business (0.3% versus 0.1%). It has less proportion of government employed (3.2% versus 7.0%) and employer in own business (0.7% and 0.8%).

The status of employment seems rather unstable since only a little over a fifth (20%) have permanent jobs (**Table 5-16**) while majority (58%) are either in the following: Casual/Temporary (27%); Contractual (21%); and Seasonal (9.6%). Since most of the employed are in non-government sector it is understandable that most of them (**Table 5-17**) are members of the Social Security System (SSS, 40%) or SSS & Pag-IBIG (56%). However, these memberships only cover 10,455 or 70% of the total area employment of 14,864 which is below the mandated ideal membership of 100%. Pag-IBIG memberships allow members to borrow funds for housing either elsewhere or in designated relocation sites.

Table 5-11
Labor Force Distribution of Employed vs. Not Employed by Sex

No.	Labor Force	Male	Male	Female	Female	Total Number	% Share
		Taytay	Cainta	Taytay	Cainta		
1	Household Head Labor Force	2,490	4,639	643	1,419	9,191	36.2
1.1	Employed	2,295	4,346	398	881	7,920	31.2
1.2	Not Employed	108	192	168	411	879	3.5
1.3	Others*	87	101	77	127	392	1.5
2	Other Household Member Labor Force	1,877	3,796	3,661	6,853	16,187	63.8
2.1	Employed	990	1,997	1,297	2,660	6,944	27.4
2.2	Not Employed	826	1,768	2,007	3,920	8,521	33.6
2.3	Others*	61	31	357	273	722	2.8
	Total	4,367	8,435	4,304	8,272	25,378	100.0
	Employed	3,285	6,343	1,695	3,541	14,864	58.6
	% Share of Employed	75.2	75.2	39.4	42.8	58.6	
	Not Employed	934	1,960	2,175	4,331	9,400	37.0
	Others*	148	132	434	400	1,114	4.4
	HH Head Employed as % of Total Number Employed	29.0	54.9	5.0	11.1	100.0	
	HH Head Employed as % of HH Head Labor Force	92.2	93.7	61.9	62.1		
	Employed Other HH Members as % of Total Number Employed Other HH Members	14.3	28.8	18.7	38.3	100.0	
	Employed Other HH Members as % of Other HH Member Labor Force	52.7	52.6	35.4	38.8		
	Male-Female as % of Total Number Employed	22.1	42.7	11.4	23.8	100.0	

*Neither employed nor unemployed but receiving income thru pension, remittance, dole out and allowance
Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-12
Employed Household Members by Occupation and by Sex

No.	Occupation	Male		Female		Total Number	% Share	Rizal % Share of Employed
		Taytay	Cainta	Taytay	Cainta			
1	Craft and Related Trades Workers	857	2,006	223	314	3,400	20.3	17.4
2	Elementary Occupations (Unskilled Workers)	651	1,081	377	755	2,864	17.1	20.8
3	Service and Sales Workers	545	1,131	414	1,065	3,155	18.8	10.2
4	Plant and Machine Operators, and Assemblers	621	1,142	12	32	1,807	10.8	15.4
5	Managers	283	413	391	894	1,981	11.8	9.1
6	Clerical Support Workers	147	257	199	388	991	5.9	7.9
7	Technician and Associate Professionals	122	222	54	132	530	3.2	5.0
8	Professional	37	93	66	121	317	1.9	7.7
9	Skilled Agricultural, Forestry and Fishery	61	101	1	5	168	1.0	4.0
10	Unidentifiable	19	1	19	-	39	0.2	0.2
11	Enlisted Personnel	1	4	-	-	5	0.0	0.0
	Others	94	222	373	797	1,486	8.9	2.3
	No Answer	1	2	-	-	3	0.0	
Total		3,439	6,675	2,129	4,503	16,746	100.0	100.0

*Of the 14,864 employed household heads and members, 1,882 provided multiple responses
Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-13
Employed Household Members by Income Source and by Sex

No.	Income Source	Male		Female		Total Number	% Share
		Taytay	Cainta	Taytay	Cainta		
1	Solely from employment	2,056	4,665	921	1,740	9,382	59.6
2	Solely from other source (business, pension, remittance, & dole out)	1,222	1,702	858	1,976	5,758	36.6
3	Other source (business, pension, remittance, & dole out)	84	108	190	225	607	3.9
Total		3,362	6,475	1,969	3,941	15,747	100.0

*Of the 14,864 employed household heads and members, 883 provided multiple responses
Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-14
Employed Household Members by Place of Work and by Sex

No.	Place of work	Male	Male	Female	Female	Total Number	% Share
		Taytay	Cainta	Taytay	Cainta		
1	Residence/House	257	250	428	943	1,878	11.9
2	Neighborhood	230	249	175	408	1,062	6.7
3	Within Municipality	1,097	1,297	472	773	3,639	23.1
4	Outside Municipality but within Rizal Province	1,429	1,818	551	639	4,437	28.2
5	Outside Rizal Province	93	2,333	21	726	3,173	20.2
6	No Definite Area	156	312	14	61	543	3.5
7	Abroad	63	170	87	137	457	2.9
8	No Answer	14	40	6	37	97	0.6
	- Not Applicable	-	71	-	379	450	2.9
Total		3,339	6,540	1,754	4,103	15,736	100.0

**Of the 14,864 employed household heads and members, 872 provided multiple responses*
Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-15
Employed Household Members by Type of Employment and by Sex

No.	Type of Employment	Male		Female		Total Number	% Share	Rizal % Share of Employed
		Taytay	Cainta	Taytay	Cainta			
1	Government Employee	76	144	67	214	501	3.2	7.0
2	Privately Employed	2,746	5,675	1,142	2,232	11,795	75.0	70.7
3	Employer in own Business	46	24	24	18	112	0.7	0.8
4	Self-employed without employee	435	570	515	1,217	2,737	17.4	15.7
5	Employed in Family Business	27	15	2	4	48	0.3	0.1
6	Others (Project-Based, boundary, extra, etc.)	-	5	2	5	12	0.1	5.0
7	No Answer	9	71	2	379	461	2.9	0.7
	Not Applicable	-	36	-	34	70	0.4	
Total		3,339	6,540	1,754	4,103	15,736	100.0	100.0

**Of the 14,864 employed household heads and members, 872 provided multiple responses*
Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-16
Employed Household Members by Status of Employment and by Sex

No.	Status of Employment	Male		Female		Total Number	% Share
		Taytay	Cainta	Taytay	Cainta		
1	Permanent	770	1,554	312	579	3,215	20.4
2	Casual/Temporary	1,002	1,965	453	850	4,270	27.1
3	Contractual	649	1,659	315	634	3,257	20.7
4	Seasonal	410	611	135	353	1,509	9.6
5	Job Order	-	43	-	49	92	0.6
6	For Self-employed	496	588	534	1,222	2,840	18.0
7	Others (<i>Boundary, On-call</i>)	-	6	3	1	10	0.1
8	No Answer	12	43	2	36	93	0.6
	Not Applicable	-	71	-	379	450	2.9
Total		3,339	6,540	1,754	4,103	15,736	100.0

*Of the 14,864 employed household heads and members, 872 provided multiple responses

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-17
Employed Household Members by Financing Institution and by Sex

No.	Institution	Male		Female		Total Number	% Share
		Taytay	Cainta	Taytay	Cainta		
1	GSIS	8	10	6	4	28	0.3
2	SSS	968	1,626	520	1,076	4,190	40.1
3	Pag-IBIG	7	19	1	33	60	0.6
4	GSIS & SSS	5	7	3	5	20	0.2
5	GSIS & Pag-IBIG	16	27	8	31	82	0.8
6	SSS & Pag-IBIG	1,074	3,058	503	1,220	5,855	56.0
7	GSIS, SSS, & Pag-IBIG	27	21	16	13	77	0.7
8	No Answer	51	15	41	36	143	1.4
Total		2,156	4,783	1,098	2,418	10,455	100.0

*Of the 14,864 employed household heads and members, only 10,455 are members or 70.3%

Source: NHA Socio-Economic Survey (2016 and 2017)

5.4 HOUSEHOLD INCOME

The household monthly income (**Table 5-18**) in the area shows that 17.6% of the HH have incomes below PhP10,000 a month. The national poverty threshold income at the moment is around PhP10,000 for a family of 5. This poverty rate is below the national poverty rate of 21.1%. Majority (52%) have household monthly income between PhP10,000 to 19,999. Those with incomes above PhP35,000 composed only around 8%. The indicative average HH income is PhP17,265.

The average indicative HH expenditures is PhP12,425 (**Table 5-19**). The average indicative savings is PhP6,956 (**Table 5-20**). These figures are important especially

when designing the housing units for resettlement and their affordability. Any planned amortization should not go beyond Php6,000 per month based on these findings.

Table 5-18
Household by Monthly Income

No.	Income	Taytay	Cainta	Total Number	% Share
1	Under Php 5,000.00	89	108	197	2.1
2	Php 5,000.00 - Php 9,999.00	566	858	1,424	15.5
3	Php 10,000.00 - Php 14,999.00	990	2,187	3,177	34.5
4	Php 15,000.00 - Php 19,999.00	536	1,036	1,572	17.1
5	Php 20,000.00 - Php 24,999.00	334	768	1,102	12.0
6	Php 25,000.00 - Php 29,999.00	196	408	604	6.6
7	Php 30,000.00 - Php 34,999.00	149	267	416	4.5
8	Php 35,000.00 and over	245	478	723	7.8
9	No Answer	1	0	1	0.0
Total		3,106	6,110	9,216	100.0

*Average HH monthly income is PhP17,265

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-19
Household by Monthly Expenditure

No.	Expenditure	Taytay	Cainta	Total Number	% Share
1	Under Php 5,000.00	119	186	305	3.3
2	Php 5,000.00 - Php 9,999.00	1,164	2,119	3,283	35.6
3	Php 10,000.00 - Php 14,999.00	1,117	2,307	3,424	37.2
4	Php 15,000.00 - Php 19,999.00	448	928	1,376	14.9
5	Php 20,000.00 - Php 24,999.00	163	314	477	5.2
6	Php 25,000.00 - Php 29,999.00	45	128	173	1.9
7	Php 30,000.00 - Php 34,999.00	29	65	94	1.0
8	Php 35,000.00 and over	21	63	84	0.9
Total		3,106	6,110	9,216	100.0

*Average HH monthly expenditures is PhP12,425

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-20
Household by Monthly Net Income

No.	Savings	Taytay	Cainta	Total Number	% Share
1	Under Php 5,000.00	1,226	2,330	3,556	38.6
2	Php 5,000.00 - Php 9,999.00	535	1,181	1,716	18.6
3	Php 10,000.00 - Php 14,999.00	264	564	828	9.0
4	Php 15,000.00 - Php 19,999.00	142	283	425	4.6
5	Php 20,000.00 - Php 24,999.00	92	172	264	2.9
6	Php 25,000.00 - Php 29,999.00	57	71	128	1.4
7	Php 30,000.00 - Php 34,999.00	13	52	65	0.7
8	Php 35,000.00 and over	42	75	117	1.3
9	No Income	735	1,382	2,117	23.0
	Total	3,106	6,110	9,216	100.0

*Average HH monthly net income or savings is PhP6,956

Source: NHA Socio-Economic Survey (2016 and 2017)

5.5 EXISTING BUSINESSES

More than a quarter (28%) of the interviewed households engaged in various form of businesses (**Table 5-21**) most of which are in Trading (17%) followed by Rental (5%), Home/Small-Scale Industry (2%) and Transport (2%).

Of these 2,664HHs who engaged in business, morethan one-third have initial (35%) and current (36%) capitalization below PhP5,000 (**Table 5-22** and **Table 5-23**). Similar percentages have initial (33%) and current (31%) capitalization of more than PhP15,000.

Majority (62%) are just 5 years or below inexistence (**Table 5-25**). Most (64%) have income below PhP10,000 (**Table A 5-26**). Majority (53%) are situated within the house/lot (**Table 5-27**). When asked of what type of assistance they need almost all (88%) said its additional capital (**Table 5-28**).

Table 5-21
Households Engaged in Business by Type and by Sex

No.	Type of Business	Male		Female		Total Number	% Share
		Taytay	Cainta	Taytay	Cainta		
1	Engaged in Business	708	1,362	201	393	2,664	27.9
1.1	Trading	440	810	131	242	1,623	17.0
1.2	Manufacturing	4	1	1	1	7	0.1
1.3	Personal Services	20	42	4	13	79	0.8
1.4	Home/Small-Scale Industry	66	92	19	28	205	2.1
1.5	Transport	50	93	11	19	173	1.8
1.6	Service Contracting	22	39	3	5	69	0.7
1.7	Agri-business	21	10	4	6	41	0.4
1.8	Others (Room Rental, Apartment, Landlord, etc.)	85	275	28	79	467	4.9
2	Not Engaged in Business	1,854	3,489	449	1,090	6,882	72.1
	Total	2,562	4,851	650	1,483	9,546	100.0

*Of the 9,216 censused households, 330 provided multiple responses, Source: Consultants (2017)

Table 5-22
Households Engaged in Business by Initial Capitalization

No.	Initial Capital	Taytay	Cainta	Total Number	% Share
1	Under Php 5,000.00	305	628	933	35.0
2	PhP5,000.00 - PhP9,999.00	166	292	458	17.2
3	PhP10,000.00 - PhP14,999.00	110	210	320	12.0
4	Php15,000.00 and over	307	578	885	33.2
5	No Answer	21	47	68	2.6
Total		909	1,755	2,664	100.0

Source: Consultants (2017)

Table 5-23
Households Engaged in Business by Present Capitalization

No.	Present Capital	Taytay	Cainta	Total Number	% Share
1	Under Php 5,000.00	340	631	971	36.4
2	PhP5,000.00 - PhP9,999.00	151	300	451	16.9
3	PhP10,000.00 - PhP14,999.00	77	200	277	10.4
4	Php 15,000.00 and over	292	542	834	31.3
5	No Capital	0	4	0	0.0
6	No Answer	49	78	127	4.8
Total		909	1,755	2,664	100.0

Source: Consultants (2017)

Table 5-24
Households Engaged in Business by Source of Capital

No.	Source of Capital	Taytay	Cainta	Total Number	% Share
1	Savings	507	1,125	1,632	60.9
2	Loan / Lending	244	359	603	22.5
3	Salary	54	104	158	5.9
4	Income / Earnings	4	8	12	0.4
5	Relative / Family	63	81	144	5.4
6	Others (ease up, pension, back pay, 4 P's, etc.)	1	46	47	1.8
7	No Answer	36	49	85	3.2
Total		909	1,772	2,681	100.0

*Of the 2,644 household engaged in business, 17 provided multiple responses

Source: Consultants (2017)

Table 5-25
Households Engaged in Business by Years of Existence

No.	Years of Existence	Taytay	Cainta	Total Number	% Share
1	Less than 1 year	128	320	448	16.8
2	1 - 5 years	419	774	1193	44.8
3	6 - 10 years	163	285	448	16.8
4	More than 10 years	166	317	483	18.1
5	No Answer	33	59	92	3.5
Total		909	1,755	2,664	100.0

Source: Consultants (2017)

Table 5-26
Households Engaged in Business by Net Income

No.	Net Income	Taytay	Cainta	Total Number	% Share
1	Under Php 5,000.00	267	716	983	36.9
2	Php5,000.00 - Php9,999.00	252	480	732	27.5
3	Php10,000.00 –Php14,999.00	152	268	420	15.8
4	Php 15,000.00 and over	214	291	505	19.0
5	No Answer	24	0	24	0.9
Total		909	1,755	2,664	100.0

Source: Consultants (2017)

Table 5-27
Households Engaged in Business by Location

No.	Location of Business	Taytay	Cainta	Total Number	% Share
1	Situated within the house/lot	477	946	1,423	53.4
2	Situated outside the house/lot (Pasig City, Marikina City, Cainta Rizal, etc.)	337	735	1,072	40.2
3	No answer	95	74	169	6.3
Total		909	1,755	2,664	100.0

Source: Consultants (2017)

Table 5-28
Households Engaged in Business by Type of Assistance Needed

No.	Type	Taytay	Cainta	Total Number	% Share
1	Additional Capital	424	1,040	1,464	87.7
2	Additional Training	21	73	94	5.6
3	Additional Manpower	32	44	76	4.6
4	No Answer		35	35	
Total		477	1,192	1,669	100.0

5.6 CURRENT SKILLS AND DESIRED SKILLS

Should there be an employment program for the resettlement area, the following are the significant existing employable skills (**Table 5-29**) of the current labor force (force aged 15 - 64 years old): Food and Beverage Preparation (18%); Personal Service (15%); Communication (13%); Construction (15%); and Transport-Related (11.4%). They also desired to be trained (**Table 5-30**) particularly in the following: Food and Beverage Preparation (22%); Transport Related (16%); Communication/Information Technology (9%); Construction Related Skills and Trainings (10%); Home and Small-Scale Industry (9%); and Electronics and Electrical Works (8%).

Table 5-29
Employable Household Members by Present Skills and by Sex

No.	Present Skill	Male		Female		Total Number	% Share
		Taytay	Cainta	Taytay	Cainta		
1	Food and beverage Preparation	315	678	1,231	2,539	4,763	17.8
2	Personal Service	100	276	1,202	2,458	4,036	15.1
3	Communication and Information Technology	603	1,089	664	1,134	3,490	13.0
4	Construction	1,226	2,621	36	74	3,957	14.8
5	Transport-Related	1,105	1,841	30	69	3,045	11.4
6	Home and Small-Scale Industry	76	132	462	760	1,430	5.3
7	Trading, Sales And Business Management	170	225	343	572	1,310	4.9
8	Electronics And Electrical Works	230	552	13	25	820	3.1
9	Professional Services	102	41	86	93	322	1.2
10	Games, Amusement And Entertainment	150	340	4	16	510	1.9
11	Cosmetology And Beauty Culture	25	54	114	239	432	1.6
12	Arts And Music	49	220	86	307	662	2.5
13	Agricultural And Marine Products	129	107	6	11	253	0.9
14	Machinery, Motor And Heavy Equipment Operation	99	182	5	6	292	1.1
15	Clerical Works	19	99	59	187	364	1.4
16	Security, Life Safety, Health And Sanitation	64	166	11	23	264	1.0
17	Fabrication And Installation	36		0	0	36	0.1
18	Others (Unidentifiable)	17	32	8	30	87	0.3
19	No Answer, None And Don't Know	128	248	119	215	710	2.7
Total		4,643	8,903	4,479	8,758	26,783	100.0

*Of the 24,814 total labor forces aged 15 - 64 years old, 1,969 provided multiple responses

Table 5-30
Employable Household Members by Desired Skills Training and by Sex

No.	Training Needs	Male		Female		Total Number	% Share
		Taytay	Cainta	Taytay	Cainta		
1	Food And Beverage Preparation	256	571	1462	3,228	5,517	21.8
2	Transport Related	1328	2564	83	168	4,143	16.4
3	Communication/Information Technology	435	793	383	674	2,285	9.0
4	Construction Related Skills And Trainings	681	1,555	67	119	2,422	9.6
5	Home And Small-Scale Industry	29	87	719	1,368	2,203	8.7
6	Electronics And Electrical Works	579	1206	32	67	1,884	7.5
7	Trading, Sales And Business Management	181	336	318	565	1,400	5.5
8	Cosmetology And Beauty Culture	38	55	324	680	1,097	4.3
9	Professional Services	69	41	89	38	237	0.9
10	Security, Life Safety, Health And Sanitation	18	11	87	6	122	0.5
11	Personal Services	16	54	83	546	699	2.8
12	Machinery, Motor And Heavy Equipment Operation	83	69	18	1	171	0.7
13	Arts And Music	17	31	14	47	109	0.4
14	Agricultural And Marine Products	13	30	9	16	68	0.3
15	Games, Amusement And Entertainment	8	0	2	0	10	0.0
16	Clerical Works	2	29	4	64	99	0.4
17	Fabrication And Installation	6	24	0	6	36	0.1
18	No Answer, None And Don't Know	610	962	498	693	2,763	10.9
Total		4,369	8,418	4,192	8,286	25,265	100.0

*Of the 24,814 total labor force aged 15 - 64 years old, 451 provided multiple responses

5.7 HEALTH SITUATION

About 368 residents can be considered as person with disability (PWD) (**Table 5-31**). This makes up 0.9% of the population which is lower than the provincial rate of 1.8%. Those populations (**Table 5-32**) with special needs (1.5%) are largely seniors (1%).

Two of the most common illnesses for the past year (**Table 5-33**) are Fever/Influenza (26%) and Common colds/Cough (28%). The most prevalent cause of deaths (**Table 5-34**) among the HHs is: Heart disease (1%), followed by Cyst/Cancer (1%) and Diabetes (1%).

Table 5-31
Household Members by Disability

	Person with Disability	Taytay	Cainta	Total Number	% Share
1	Common Disease/Illness	80	288	368	0.9
1.1	<i>Deaf/Mute</i>	8	26	34	0.1
1.2	<i>Blind</i>	3	10	13	0.0
1.3	<i>Autistic</i>	2	8	10	0.0
1.4	<i>Amputated</i>	1	8	9	0.0
1.5	<i>With Cleft Palate</i>	2	80	82	0.2
1.6	<i>Mentally-Challenged</i>	24	97	121	0.3
1.7	<i>Others (stroke, epileptic, etc.)</i>	40	59	99	0.3
2	None	13,185	25,746	38,931	99.1
	Total	13,265	26,034	39,299	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-32
Household Members by Special Needs

No.	Special Need	Taytay	Cainta	Total Number	% Share
1	With Special Need	82	496	578	1.5
1.1	<i>Senior Citizen</i>	79	308	387	1.0
1.2	<i>Victim of Violence</i>	1	22	23	0.1
1.3	<i>Solo Parent</i>	1	46	47	0.1
1.4	<i>Depression</i>	1	0	1	0.0
1.5	<i>Rape victim</i>	0	12	12	0.0
1.6	<i>Sexually/Mentally harassed</i>	0	6	6	0.0
1.7	<i>School dropout</i>	0	55	55	0.1
1.8	<i>Others (special child, etc.)</i>	0	47	47	0.1
2	None	13,183	25,538	38,725	98.5
	Total	13,265	26,034	39,299	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-33
Household Members by Illness for the Past 12 Months

No.	Illness	Taytay	Cainta	Total Number	% Share
1	With Illness	6,633	23175	29,808	62.3
1.1	<i>Common fever/ Influenza</i>	2,389	9900	12,289	25.7
1.2	<i>Common colds/ Cough</i>	2,385	11090	13,475	28.2
1.3	<i>Bronchitis/Pneumonia</i>	91	128	219	0.5
1.4	<i>Diarrhea</i>	299	106	405	0.8
1.5	<i>Asthma</i>	293	592	885	1.9
1.6	<i>Urinary Tract Infection</i>	379	121	500	1.0
1.7	<i>Dengue</i>	54	59	113	0.2
1.8	<i>Hypertension</i>	469	416	885	1.9
1.9	<i>Ulcer</i>	75	28	103	0.2
1.10	<i>Tuberculosis</i>	42	50	92	0.2

No.	Illness	Taytay	Cainta	Total Number	% Share
1.11	Skin disease/ Allergy	0	51	51	0.1
1.12	Diabetes	0	99	99	0.2
1.13	Chicken pox	0	43	43	0.1
1.14	Arthritis/ Rheumatism	0	40	40	0.1
1.15	Stroke	0	29	29	0.1
1.16	Heart disease	0	59	59	0.1
1.17	Kidney disease	0	20	20	0.0
1.18	Goiter	0	21	21	0.0
1.19	Cancer	0	13	13	0.0
1.2	Anemia	0	12	12	0.0
1.21	Ovarian cyst	0	11	11	0.0
1.22	Boil	0	4	4	0.0
1.23	Rabies	0	4	4	0.0
1.24	Drug addiction	0	1	1	0.0
1.25	Malnutrition	0	1	1	0.0
1.26	Others	157	93	250	0.5
2.0	None	6,632	11,375	18,007	37.7
Total		13,265	34,550	47,815	100.0

*Of the 39,299 total population, 8,332 provided multiple responses
Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-34
Household Members by Specific Illness as Cause of Death

No.	Cause of Death	Taytay	Cainta	Total Number	% Share
1	With Deceased Member/s	333	234	567	6.1
1.1	Heart disease	67	42	109	1.2
1.2	Cancer	35	21	56	0.6
1.3	Diabetes	35	15	50	0.5
1.4	Kidney Disease	15	10	25	0.3
1.5	Asthma	20	17	37	0.4
1.6	Stroke	22	17	39	0.4
1.7	Tuberculosis	32	6	38	0.4
1.8	Hypertension	51	34	85	0.9
1.9	Pneumonia	20	26	46	0.5
1.10	Lung Disease	0	4	4	0.0
1.11	Skin disease/Allergy	6	0	6	0.1
1.12	Others (Leukemia, Liver Failure, Dengue, etc.)	30	42	72	0.8
2	None	2,804	5,886	8,690	93.9
Total		3,137	6,120	9,257	100.0

Of the 9,216 censused households, 41 provided multiple responses
Source: NHA Socio-Economic Survey (2016 and 2017)

5.8 DECISION-MAKING IN THE HOUSEHOLD

On decision-making in the household (**Table 5-35**), most type of decisions are largely done by both Household Head and his/her Spouse. However, for buying new house and changing/transferring residence, the male HH head largely makes the decision.

In the manner of household budgeting, More than two-fifths (45%) have sharing system (**Table 5-36**) which bodes well with regard to ability and affordability to pay the amortization of resettlement housing.

Table 5-35
Person/s Responsible for Decision-Making by Sex

No.	Type of Decision	Male			Female					Total
		A	B	C	A	B	C	D	E	
1	Purchase of household equipment/appliances/furniture	2,974	260	142	1,333	2,309	149	4,082	-	11,249
	% Share	26.4	2.3	1.3	11.8	20.5	1.3	36.3	0.0	100.0
2	Renovation of the house	3,124	282	159	1,305	2,061	211	4,042	99	11,283
	% Share	27.7	2.5	1.4	11.6	18.3	1.9	35.8	0.9	100.0
3	Buying new house	2,324	243	54	567	1,862	40	-	-	5,090
	% Share	45.7	4.8	1.1	11.1	36.6	0.8	0.0	0.0	100.0
4	Education of children	584	27	69	657	404	97	3,803	538	6,179
	% Share	9.5	0.4	1.1	10.6	6.5	1.6	61.5	8.7	100.0
5	Changing/ Transferring residence	2,317	238	52	578	1,878	38	-	-	5,101
	% Share	45.4	4.7	1.0	11.3	36.8	0.7	0.0	0.0	100.0
6	Budget/s spending prioritization	651	39	90	782	667	126	3,921	1	6,277
	% Share	10.4	0.6	1.4	12.5	10.6	2.0	62.5	0.0	100.0
7	Family investment	2,957	270	170	1,303	2,258	183	4,189	-	11,330
	% Share	26.1	2.4	1.5	11.5	19.9	1.6	37.0	0.0	100.0
8	Giving assistance or support to relatives/ friends in need	2,990	280	148	1,325	2,241	172	4,234	-	11,390
	% Share	26.3	2.5	1.3	11.6	19.7	1.5	37.2	0.0	100.0
9	Inviting other relatives/friends to live or move in with the household/family	2,972	278	140	1,309	2,203	187	4,266	1	11,356
	% Share	26.2	2.4	1.2	11.5	19.4	1.6	37.6	0.0	100.0
10	Family issues/problems	677	45	103	727	286	128	4,310	8	6,284
	% Share	10.8	0.7	1.6	11.6	4.6	2.0	68.6	0.1	100.0

A - Household Head

B - Spouse

C - Other Household Member

D - Both Household Head & Spouse

E - Not Applicable/No Answer

Source: NHA Socio-Economic Survey (2016 and 2017)

**Table 5-36
Household Budgeting Practice**

No.	Practiced Used	Taytay	Cainta	Total Number	% Share
1	Budgeting				
1.1	<i>All earning members share on the household expenses</i>	1,332	2,845	4,177	45.1
1.2	<i>Each earning member is assigned a specific set of household expenses</i>	420	475	895	9.7
1.3	<i>Others (only household head shoulders all expenses)</i>	1,354	2,631	3,985	43.0
2	No Answer		207	207	2.2
	Total	3,106	6,158	9,264	100.0

Of the 9,216 recorded/surveyed households, 48 provided multiple responses

5.9 ACCESS TO BASIC SOCIAL SERVICES

The main source of water for the HHs (Table 5-37) are piped connection (86%) more than half of which are individual HH connections (50%). This figure of piped connection is higher than the provincial rate of 60%.

Source of power is mostly electricity from MERALCO (Table 5-38) constituting 98% of the HHs of which 45% are sub-connected to a neighbors. This percentage is higher than the provincial rate of 93.1%.

Garbage disposal utilized by the HHs are those provided by LGU collection (97%) of which only 42% are segregated (Table 5-39). This figure is higher than the provincial rate of 83%. Very few throw in the river. One can observe in the area that unlike other settlements in other water bodies, the floodway is not ridden with garbage.

Ownership of appliances/equipment is commonly characterized by having TVs (87%), electric fans (96%), cellular phones (67%), gas ranges (54%), washing machines (41%), Refrigerator/Freezer (27%), and DVD/VCD Player/Stereo (43%) (Table 5-40).

In summary, the area is a typical urban area with almost complete access to the trappings of urban living.

Table 5-37
Household Source of Water

No.	Source/s of Water	Taytay	Cainta	Total Number	% Share
1	Piped connection (individual meter)	1,376	3,293	4,669	49.8
2	Piped connection (group meter)	1,321	2,051	3,372	36.0
3	Public/Street faucet	27	130	157	1.7
4	Water vendors (e.g. bottled water, container, peddlers, etc.)	331	678	1,009	10.8
5	Deep well	2	1	3	0.0
6	Shallow Well	-	29	29	0.3
6.1	Fetch	-	12	12	0.1
6.2	Free	-	1	1	0.0
6.3	No Water	-	1	1	0.0
7	Illegal connection	8	-	8	0.1
8	No Answer	53	54	107	1.1
Total		3,118	6,250	9,368	100.0

**Of the 9,216 recorded/surveyed households, 152 provided multiple responses*
Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-38
Household Source of Power/Lighting

No.	Source/s of Power	Taytay	Cainta	Total Number	% Share
1	MERALCO	1,426	2,796	4,222	45.8
2	Sub-connected to a neighbor	1,507	2,626	4,133	44.8
3	Kuryente (pre-paid load)	72	579	651	7.1
4	Solar panel	15	1	16	0.2
5	Kerosene lamp/LPG lamp/Candle	28	40	68	0.7
6	Illegal connection	7	1	8	0.1
7	Rechargeable batteries	5	1	6	0.1
8	No connection of electricity	4	16	20	0.2
9	No connection of electricity	7	3	10	0.1
10	Free	-	3	3	0.0
11	No Answer	35	47	82	0.9
Total		3,106	6,113	9,219	100.0

Of the 9,216 recorded/surveyed households, 3 provided multiple responses
Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-39
Household Garbage Disposal by Type

No.	Garbage Disposal	Taytay	Cainta	Total Number	% Share
1	Collected by LGU not segregated by the household	2,089	3,060	5,149	55.0
2	Collected by LGU/segregated by the household	929	2,958	3,887	41.5
3	Recycled as part of livelihood/business activity	10	106	116	1.2
4	Composting	5	7	12	0.1
5	Burning	6	19	25	0.3
6	Throw in the river/anywhere	11	6	17	0.2
7	Collected by the children	-	1	1	0.0
8	None	-	1	1	0.0
9	No Answer	73	74	147	1.6
Total		3,123	6,232	9,355	100.0

**Of the 9,216 recorded/surveyed households, 139 provided multiple responses
Source: NHA Socio-Economic Survey (2016 and 2017)*

Table 5-40
Household Ownership of Appliances/Equipment by Quantity

No.	Appliances/Equipment	Taytay	Cainta	Total	% Share of Total Households (9,216)
1	Electric Fan	2,917	5,911	8,828	95.8
2	Television	2,691	5,340	8,031	87.1
3	Cellphone	302	5,889	6,191	67.2
4	Gas Range/Electric Stove	1,015	3,935	4,950	53.7
5	DVD/VCD Player/Stereo	1,353	2,579	3,932	42.7
6	Washing Machine	1,131	2,614	3,745	40.6
7	Flat Iron	287	2,959	3,246	35.2
8	Radio	984	1,805	2,789	30.3
9	Refrigerator/Freezer	824	1,621	2,445	26.5
10	Computer/Laptop/Tablet	442	1,059	1,501	16.3
11	Rice Cooker	138	840	978	10.6
12	Air conditioner	77	219	296	3.2
13	Water Dispenser	73	11	84	0.9
14	Blender	4	62	66	0.7
15	Amplifier/ Sound Speaker	8	23	31	0.3
16	Sewing Machine	13	17	30	0.3
17	Microwave Oven	6	21	27	0.3
18	Videoke Machine	7	17	24	0.3
19	Water Heater	2	7	9	0.1
20	Turbo Broiler	3	2	5	0.1

No.	Appliances/Equipment	Taytay	Cainta	Total	% Share of Total Households (9,216)
21	Electric Kettle	1	4	5	0.1
22	Air cooler	1	1	2	0.0
23	Vacuum Cleaner	1	1	2	0.0
	Others	19	57	76	0.8

Source: NHA Socio-Economic Survey (2016 and 2017)

5.10 SOCIAL SERVICES AND COMMUNITY ISSUES AND PROBLEMS

Majority of the HHs rate their existing social services as adequate (**Table 5-41**) except for health and day care. On community issues (**Table 5-42**) the leading issue is Unemployment (22%). The following are the other issues identified by at least 12% of the HHs are: Alcoholism (18%); Drug Addiction (12%); and Noise/Air Pollution 12%).

Only 28% of the HHsin Taytay and 22% of the HHs members are members of any Community/Cooperative/ Business Organization in the area (**Table 5-43**). This would have implication in the subsequent activities in implementing the RAP.

Table 5-41
Household Assessment Rating of Existing Social Services

No.	Assessment	Adequate	Inadequate	None	No Answer	Total Households
1	Health	3,290	2,520	304	3,103	9,216
	% Share	35.7	27.3	3.3	33.7	100.0
2	Nutrition	5,809	2,794	554	59	9,216
	% Share	63.0	30.3	6.0	0.6	100.0
3	Sanitation	6,173	2,744	253	46	9,216
	% Share	67.0	29.8	2.7	0.5	100.0
4	Education	5,281	3,011	863	62	9,216
	% Share	57.3	32.7	9.4	0.7	100.0
5	Peace and Order	7,016	1,981	156	62	9,216
	% Share	76.1	21.5	1.7	0.7	100.0
6	Communication	5,709	3,224	229	54	9,216
	% Share	61.9	35.0	2.5	0.6	100.0
7	Transportation	6,403	2,589	155	69	9,216
	% Share	69.5	28.1	1.7	0.7	100.0
8	Basic Utilities					
8.1	Electricity	7,055	2,000	101	60	9,216
	% Share	76.6	21.7	1.1	0.7	100.0
8.2	Water	6,636	2,349	171	60	9,216
	% Share	72.0	25.5	1.9	0.7	100.0
9	Day Care	3,709	2,202	157	3,148	9,216
	% Share	40.2	23.9	1.7	34.2	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-42
Household Identified Community Issues and Problems

No.	Issues and Problems	Taytay	Cainta	Total Number	% Share
1	Unemployment	1,931	2,809	4,740	21.6
2	Alcoholism	1,416	2,565	3,981	18.2
3	Drug Addiction	1,205	1,490	2,695	12.3
4	Noise/Air Pollution	20	2,550	2,570	11.7
5	Poor Garbage Disposal/Sanitation	943	639	1,582	7.2
6	Vices/Gambling	630	899	1,529	7.0
7	Youth Conflicts/Problem	951	0	951	4.3
8	Lack of Portable Water Supply	199	410	609	2.8
9	Flood	498	0	498	2.3
10	Illegal Water Connection	78	255	333	1.5
11	Illegal Power Connection	107	159	266	1.2
12	Organizational Conflict	0	105	105	0.5
13	Crime (<i>robbery, snatching, theft, etc.</i>)	99	0	99	0.5
14	Prostitution	0	45	45	0.2
15	Others	1,929	1,929	1,929	8.8
Total		10,006	13,855	21,932	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

Table 5-43
**Household and Household Members Membership in Community/
Cooperative/ Business Organization**

No.	Membership	Number of Households in Taytay	% Share of Taytay Households	Number of Household Members in Cainta	% Share of Cainta Household Members
1	Member	885	28.5	3,352	21.6
2	Non-member	2,221	71.5	12,053	77.7
	No Answer			103	0.7
	Total	3,106	100.0	15,508	100.0

Source: NHA Socio-Economic Survey (2016 and 2017)

CHAPTER 6 RELOCATION PLAN FOR INFORMAL SETTLERS

6.1 RELOCATION PLAN CONSIDERATIONS AND PARAMETERS

The relocation plan formulated for the informal settlers in Manggahan Floodway observed the current standards of government socialized housing in terms of design and cost, amortization schedule and repayment period, the requirement for social preparation and the actual involvement of the affected community members. Further, the conditions set forth by the respective local chief executives of Cainta and Taytay for in-city relocation, and the limitations on available land for such a relocation condition played a major role in choosing the housing model: medium-rise building (MRB). The experience of Pasig City for in-city relocation and resettlement, particularly of its own informal settlers in the floodway, was adopted as it fitted on maximizing the use of available land. However, to enhance the chances of implementing livelihood restoration measures with much greater chances of success, the building design was modified to allow the ground floor to serve as an economic and livelihood activity area.

In conventional MRB socialized housing, the land is excluded from the cost of the housing unit and a usufruct agreement between the government and the respective HOAs/POs are undertaken. The usufruct agreement will contain provision for the possible purchase of the land when the HOAs/POs are able to afford it in the future. Thus, the initial minimum costing for each housing unit is PhP450,000.00 payable within 30 years with a minimum amortization of PhP200 per month. However, due to the suggestions and comments from the HOAs/POs during the series of consultation meetings to increase the floor area of the housing units, there would likely be an increase in the unit cost as well as in the monthly amortization. There was in fact a suggestion from the participant during the public consultation that they can pay up to PhP1,500 amortization (see Chapter 7).

Another innovation for the relocation and resettlement plan for the Manggahan Floodway is the direct involvement of the DPWH in the construction of the MRBs to ensure synchronicity with the other components of the PMRCIP Phase IV. Notwithstanding, there is on-going talks with government housing agencies (i.e. HUDCC/SHFC/NHA) as regards the management of the community before and after turn-over of the housing unit, the final building design and cost, and cost recovery systems.

Further, each concerned LGU has issued Certificate of Support to the Project and this can be found in **Annexes 5-A, 5-B and 5-C**.

6.2 RELOCATION SITE AND DEVELOPMENT PLAN

6.2.1 Relocation Site for Taytay, Rizal

The potential relocation site was identified by the Mayor of Taytay and the Municipal Assessor. A series of coordination meetings with the lawful representative of the property owner of the relocation site, the LGU through its designated representatives and the DPWH-UPMO-FCMC Project Engineers were conducted to explain the purpose of the purchasing the land. Based on these meetings, it was established that the land owner is actually inclined to sell the property instead of pursuing its original plan of developing it into a subdivision. The total area of the property is about 18 hectares. The consultation meetings resulted in a concrete agreement as indicated in the copy of the final draft Memorandum of Understanding (MOU) presented in **Annex 6**.

The property, known locally as the Don Enrique Heights Subdivision is located in Sitio Malaking Parang, Phase 3, Barangay San Juan, Taytay, Rizal. The area is located northeast of Taytay and is bounded by Antipolo City and Cainta Municipality (**Figure 6.1-1**). It is about 3.14 kilometers from the Taytay Municipal Hall and can be accessed through a 10-minute tricycle ride from either Tikling, Taytay or from a Shell Station in Angono. Part of the MOU is the agreement between the Municipality of Taytay and the DPWH to mutually plan and undertake the development of another access road passing near the San Beda High School through BuroI, Taytay that aims to decrease travel time from the resettlement site to the municipal proper to only about five minutes.

The property is not yet fully developed and there are pockets of informal settlers that have illegally encroached on it¹. Its topography is steep and rolling and will need to be thoroughly surveyed i.e. topographic survey, subdivision plan survey, etc. before any further development can begin.

As there are minimal settlements within the property, the electricity service for now is only available through a sub-meter with those who have regular connections or meters. Thus, residents who are on a sub-metered connection are paying PhP30.00 per kilowatt-hour (kwh) instead of the PhP10.00 per kwh if directly serviced by MERALCO. Regular connections to MERALCO shall be applied for the housing units at the relocation site.

In terms of water supply, there is no piped-in water system. Residents must buy water at PhP35.00 per drum which could last for two days for a family of five. Water distribution system will be one of the basic services that will have to be prioritized and is included in this resettlement plan which could be through a designed water tank at the rooftop of each tenement building or by constructing a centralized water tower, whichever is more economically viable.

Health Services are provided through the presence of Barangay Health Workers (BHW) who assists the Municipal Health Office (MHO) medical staff. These medical personnel visit the area once a month. For emergencies, the nearest health care facility is the privately-owned Manila East Hospital at Tikling, Taytay.

In terms of educational facilities, the nearest primary school is the Nazareth Elementary School in Antipolo located three to four kilometers away. For secondary school, the San Roque National High School is situated five kilometers away. The nearest tertiary institution is the University of Rizal. At present, the nearest elementary schools from the floodway are the Exodus Elementary School in Cainta, the San Juan Elementary School in Taytay and the Bagong Pag-Asa Elementary School also in Taytay. Meanwhile, the nearest secondary school is Manuel I. Santos Memorial National High School located 300 meters away from the floodway. In this sense, there may be a need to establish schools within the relocation site for at least the primary and secondary level.

The livelihood of the host community residents is construction work while some of the women are engaged in sub-contract sewing jobs. A development plan was formulated for the livelihood of the relocates as discussed in **Section 6.3** of this report. Further, the design of the building incorporated a space for economic and livelihood activity for the resettles.

The monitoring of access to health, education, utilities and other social services is presented in **Chapter 12**.

¹*It was reported by the Attorney-In-Fact for the AGC that the encroachment is estimated to occupy nearly a maximum of 20% of the property*

Development Plan for Taytay

The development plan for Taytay will involve the construction of modular tenement housing within the Don Enrique Heights Subdivision. This modular tenement housing is a 5-story building where the ground floor is designated as common area in which residents can carry out economic and livelihood activities (10 units) within a total area of 200 sq.m. On the other hand, the second to fifth floors will be for residential use, the area of each unit at a minimum of 20 sq.m based on the socialized housing standards set forth by the Housing and Urban Development Coordinating Council (HUDCC). The final floor area will be determined based on the affordability of each beneficiary to pay the monthly amortization. Each floor will have 10 residential units for a total of 40 residential units per building. This functional theme was suggested by the Taytay Mayor to provide economic and residential location on the resettlement site. Allocation of the units for the rest is randomized.

To ensure supply of water in each building, a water tank on the rooftop may be included in the building design or a centralized water tank tower may be constructed to service the entire resettlement site as part of the social infrastructure and a potential income generating source for the resettles. Also, the rooftop may be used for common activities including laundry activities. Each building will also be provided with stairs and ramp for people with disability (PWD) and senior citizen up to the second floor only due to land availability constraint and affordability.

For estimating the land area and budget requirement, the footprint area used for each MRB is a minimum of 500 sq.m. Considering the number of PAFs to be relocated, 85 to 95 MRBs will have to be built. The development of these buildings will have a land area requirement of approximately 48,000 sq.m. An additional area of about 40% or 19,000 sq.m will be included in the land requirement for the open space making a total land requirement of approximately 67,000 sq.m. However, DPWH has stated that it is inclined to fund the purchase of additional land of up to 12-15 hectares to ensure there is enough space for the development of the site. A creative representation of the potential configuration in the resettlement site is provided in **Figure 6.1-2**.

Access road will also be developed leading to the resettlement site for easy access during construction and operation of the site. The resettlement site will also be provided with enough water supply pipes and electricity poles and lines to ensure easy connection to the source providers.

The available land for settlement site has enough land provisions for future developments of the Municipality such as schools and other necessary social facilities.

An indicative perspective of the MRB is presented in **Figure 6.1-3**. Meanwhile, the final design of the building/s may adopt any of the high-density housing/medium-rise building of the Social Housing Finance Corporation (SHFC) and/or the National Housing Authority (NHA) design.

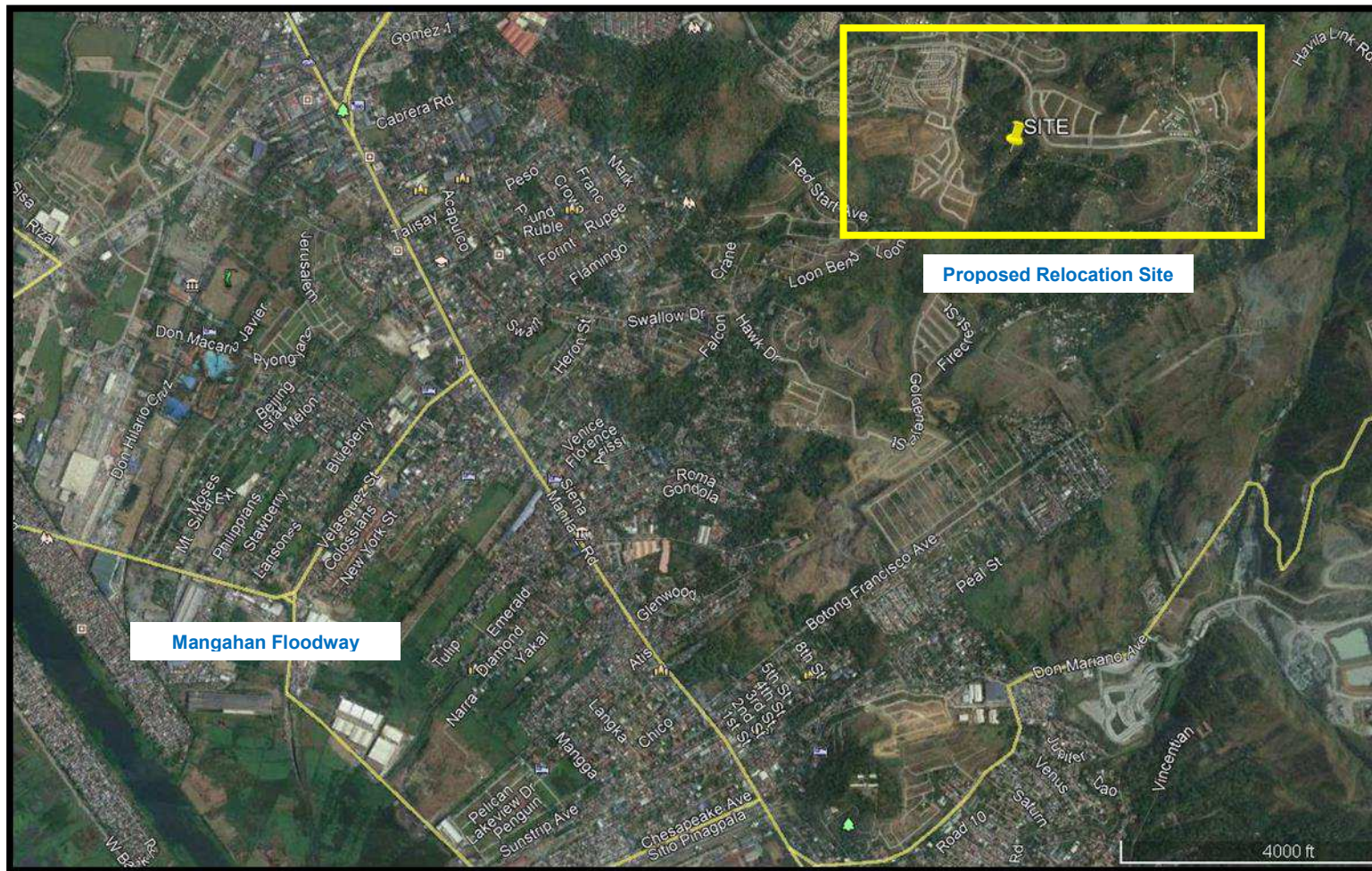


Figure 6-1
Vicinity Map of Relocation Area for Taytay



Figure 6-2
Creative Representation of Building-Layout
in the Resettlement Site of Taytay



Figure 6-3
Indicative Perspective of Model A Medium-Rise Building

6.2.2 Relocation Site for Cainta, Rizal

The Municipality of Cainta, through the Municipal Assessor Office, has initially identified 30 lots but only 15 lots were chosen with a total area of 59,671.00 sq.m. Of these lots, one lot is owned by the LGU while the rest of the lots are privately owned with delinquencies in paying real property taxes.

Majority of the lands (85.18%) are classified as agricultural according to the Municipal Assessor which may mean a land conversion process via the LGU and DAR before it is developed into residential areas.

The LGU informed the 14 lot owners of the government's intent to purchase their properties which are due for auctions due to tax delinquency. Consequently, the Municipality of Cainta, through the Legal Office and Municipal Assessor Office, sent a letter of intent to purchase to the owners of the above-mentioned lots and is being monitored by both the Mayor and the DPWH. On the other hand, the Mayor offered one of their lots located in Brookside Subdivision with a land area of 7,502.70 sq.m.

The location and measurement of these properties needs to be exactly defined through a geodetic survey and then an independent appraiser needs to assess the current market value for these properties. The 14 lots were grouped according to their proximity to each other; thereby, a total of six lot groups are made (Group Lots 3 & 4 are clustered together). The location and dimension of these lands are provided in **Figure 6.2-1**.

Development Plan for Cainta

Similar with the plan for Taytay, the development plan for Cainta will involve constructing modular tenement MRBs with a functional theme and a potential for installing water tanks at the rooftop (as necessary, otherwise, a water supply system pipes will be installed since the utilities are readily available in Cainta). Site development may be minimal as the available lots for resettlement are in existing communities with complete social infrastructures and are strategically located.

However, there might be a need to have different models (i.e., A and B) for the buildings depending on the available lands. MRB Model A (**Figure 6.1-2**) will have a minimum building footprint of 500 sq.m and yield 40 residential units per building while Model B (**Figure 6.2-2**) will have approximately 325 sq.m with 24 residential units per building.

As mentioned in **Chapter 4**, the Municipality of Cainta will need to relocate a potential maximum of about 7,483 eligible ISFs. This would require a total land area of approximately 95,000 sq.m. However, the currently available 15 lots have a total area of only 59,671 sq.m and will only shelter an estimated 4,736 ISFs. To address the deficit, additional lands (approximately 40,329 sq.m) are currently being sought by the LGU. The LGU is optimistic about this as they stated that they have actually other properties they can make available for the resettlement project.

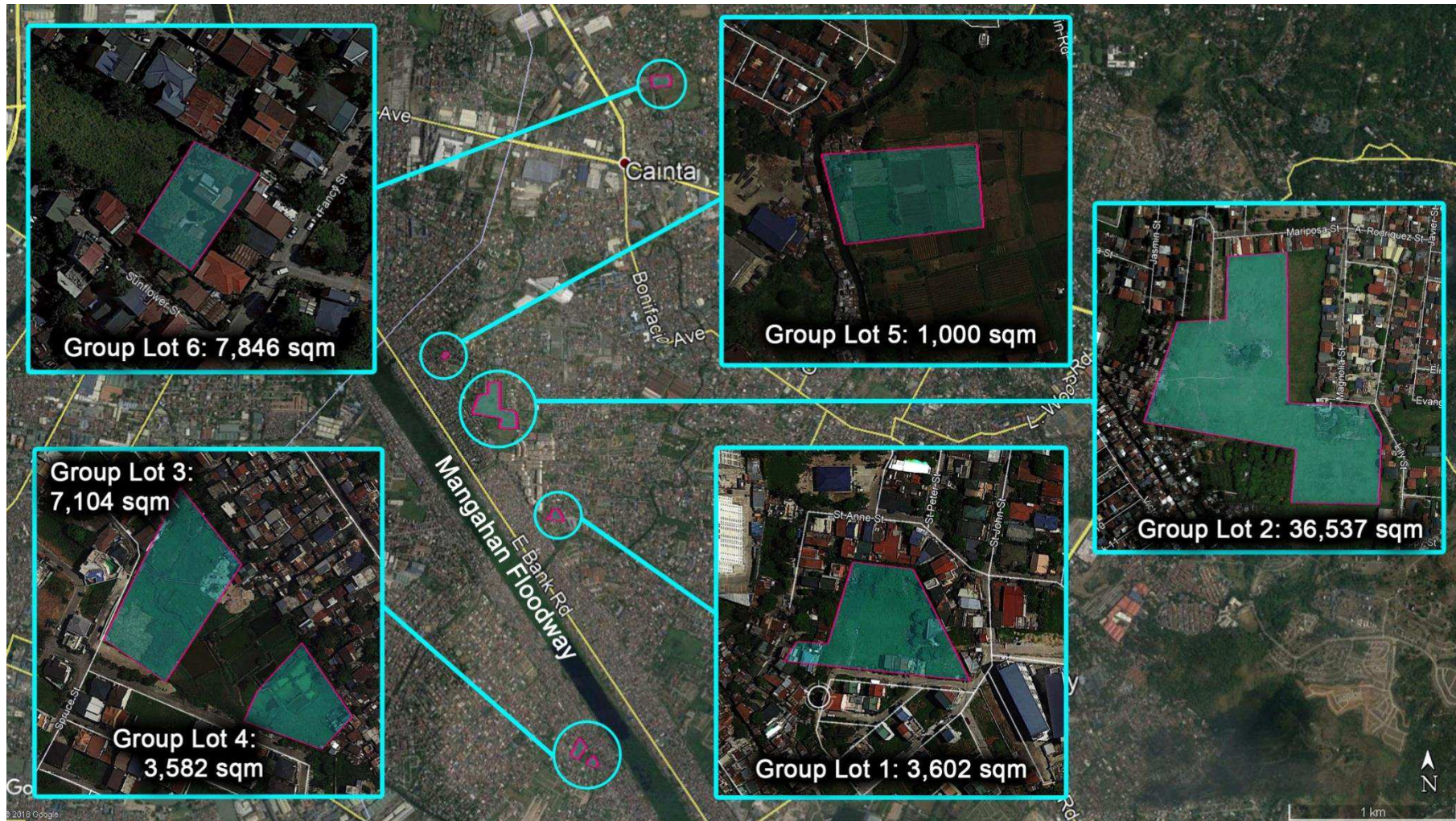


Figure 6-4
Location of Identified Resettlement Sites of Cainta



Figure 6-5
Indicative Perspective of Model B Medium-Rise Building

6.3 OTHER DEVELOPMENT ACTIVITIES TO ADDRESS THE INFORMAL SETTLERS NEEDS

Given the results of the socio-economic survey, **Table 6-1** presents the periodic training and workshops that shall be conducted for the relocatees for their sustainable socio-economic development.

Table 6-1
Proposed Development Activities for the Resettlement Area and Residents

Activity	Implementing Agency	Frequency	Target Participants
1. Livelihood Training in the following: Food and Beverage Preparation; Personal Service; Communication; Construction; and Transport-Related.	DTI, GoNegosyo and LGU	Every Quarter (from 3 rd quarter of 2020 until 2 nd quarter of 2022)	40 participants per class for each of the 4 barangays in Taytay and Cainta
2. Skills Training in the following: Food and Beverage Preparation; Transport Related; Communication/Information Technology; Construction Related Skills and Trainings; Home and Small -Scale Industry; and Electronics and Electrical Works.	TESDA, CHED, and LGU	Every Semester (from 2 nd semester of 2020 until 2 nd semester of 2022)	40 participants per class for each of the 4 barangays in Taytay and Cainta
3. Training on Disaster Risk and Reduction Management of their Site	Office of Civil Defense. LGU, Red Cross	Annually (for 3 years)	300 participants per class for each of the 4 barangays in Taytay and Cainta
4. Training of Environmental Management	DENR, LGU, LLDA	Annually (for 3 years)	300 participants per class for each of the 4 barangays in Taytay and Cainta
5. Workshop on Violence Against Women and Children	Barangay, LGU	Every two years	300 participants per class for each of the 4 barangays in Taytay and Cainta
6. Training on Community Management and Good Neighborhood	Barangay, LGU, HLURB	Annually (for 3 years)	300 participants per class for each of the 4 barangays in Taytay and Cainta
7. Trade Fair	LGU, DTI	Every two years	1,000 area entrepreneurs

6.4 IMPLEMENTATION SCHEDULE

The implementation schedule of this plan shall include activities such as validation and finalization of qualified PAFs for the relocation and resettlement program, social preparation activities, public consultation meetings (PCMs), the actual relocation and resettlement of the PAFs, acquisition of resettlement sites, site development, acquisition of necessary permits, and the actual construction/development of the MRBs. This plan is expected to be executed from 2019 up to 2025 or until all the PAFs have been relocated and resettled and their socio-economic well-being restored or enhanced. **Table 6-2** summarizes the activities to be conducted while the more detailed implementing schedule is found in **Annex 7**.

**Table 6-2
Indicative Implementing Schedule of RAP**

ACITIVITIES	RESPONSILLITY	YEAR																			
		2019				2020				2021		2022		2023		2024		2025		2026	
		1	2	3	4	1	2	3	4	1	2	1	2	1	2	1	2	1	2	1	2
Consulting Services / Construction works																					
Detailed Engineering Design	DPWH-UPMO-FCMC																				
Other Consulting Services for Resettlement Sites	DPWH-UPMO-FCMC																				
Construction Works	DPWH-UPMO-FCMC																				
Relocation and resettlement of PAFs																					
DPWH-UPMO-FCMC and LGU MOA signing	DPWH-UPMO-FCMC, LGUs																				
RIC formation	LGUs																				
Final qualification of eligible PAFs	HUDCC/SHFC/NHA, LGU																				
Building construction monitoring	DPWH-UPMO-FCMC, HOAs/POs																				
Social Preparation	LGUs, SHFC/NHA, HOAs/POs, DPWH																				
Pre-demolition consultation	LIAC, HOAs/POs, MRIC																				
RAP implementation	DPWH-UPMO-FCMC, LGUs, MRIC, HUDCC/SHFC/NHA, HOAs/POs																				
RAP implementation monitoring	DPWH-UPMO-FCMC																				
Post-evaluation	DPWH-UPMO-FCMC																				
Land procurement and site development																					
Procurement of independent property/land appraiser	DPWH-UPMO-FCMC																				
Conduct of property/land appraisal (IPA)	IPA Consultant																				
Validation of Appraised Value	IPA Consultant, LGU (Assessor)																				
Procurement of property for Cainta	DPWH-IROW, LGU, DPWH-RO																				
Procurement of property for Taytay	DPWH-IROW, LGU, DPWH-RO																				
Site development activities (as appropriate)	DPWH-UPMO-FCMC, Consultant/s																				
Housing Construction*																					
Securing of necessary government permits for Cainta	LGU LIAC, MRIC																				
Construction of MRBs for Cainta	DPWH, LGU																				
Securing of necessary government permits for Taytay	LGU LIAC, MRIC																				
Construction of MRBs for Taytay	DPWH, LGU																				

***Assumptions**

- *Housing Design finalized (based on HUDCC Standards)*
- *Construction strategy and methodology has been finalized (may require simultaneous building construction);*
- *The Terms of Reference for the Building Contractor has been finalized and approved;*
- *Bidding process for the Building Contractor (takes about 3-6 months) followed immediately by Awarding and Notice to Proceed (NTP) issuance;*

CHAPTER 7 PUBLIC INFORMATION, CONSULTATION AND PARTICIPATION

7.1 FOCUS GROUP DISCUSSIONS

An FGD with local community leaders in Taytay was conducted in February-March 2017 during the initial period of the resettlement planning activities. It was attended by the officers of the HOAs/ POs. In said event, the officers expressed their disagreement with leaving the floodway area and opined that they prefer “on-site” relocation. By on-site relocation, they mean that they be allowed to reclaim 15 meters of the floodway and on the reclaimed portion, 5-storey medium-rise buildings be constructed to accommodate them. They refer to this idea as their People’s Plan for Relocation although they refuse to provide copies of this alleged plan to the DPWH. They further requested that the national government leadership dialogue with them directly especially the Secretary of the DPWH. It was explained during the FGD that this same narrative was already the focus of previous dialogue with the DILG where the DPWH had already stated that such a request cannot be granted since even the Supreme Court Mandamus Order had already declared that these areas are considered danger zones and that all informal settlers located in waterways must be relocated and resettled for their own protection. It was further clarified that under Executive Order 854 which revoked all previous Presidential Proclamations related to settlement in the floodway, a government task force was created to protect, relocate and rehabilitate the informal settlers in the floodway. The FGD ended with the HOA/PO leaders insisting that they will continue to oppose any relocation that is not consistent with their People’s Plan.

In Cainta, an FGD was called by the Office of the Mayor on July 2017 immediately after the conduct of the first public consultation for the conduct of the income loss survey. The FGD was meant to clarify key concerns of the officers of the HOAs/POs in Cainta. In the said FGD, it was clarified that the on-going study is for preparing a RAP and does not mean immediate demolition and relocation once the RAP is completed. It was clarified that whatever RAP is formulated, it will still be presented to the Mayor and the community for inputs and comments. With the clarification, there was a consensus that the LGU and the community will await the result of the RAP and they must be able to input and comments on it as necessary and appropriate.

7.2 PROJECT DISCLOSURE

There were two types of public consultation that was conducted in the course of preparing the RAP: one was to disclose the PMRCIP-IV project as well as the purpose for the conduct of the Income Loss Survey- a supplementary survey to the NHA-conducted census, tagging and socio-economic survey- as part of the study on the impact and mitigation measures for the project-affected families (PAFs) in the Manggahan Floodway; and the other is to present the mitigation measure involving the relocation and resettlement as contained in the draft RAP for comments and inputs from the PAFs themselves.

Prior to the conduct of the census, tagging and socio-economic survey conducted by the NHA in Taytay and Cainta, the agency held a public consultation only for the survey. It was participated by members of the interim LIAC, by representatives of the DPWH-UPMO-FCMC and its consultants, by the representatives from the HOA/POs and by a non-government organization¹ (NGO).

¹ *Community Organizing-Multiversity (CO-Multiversity)*

To address the gap and to obtain the other needed information of the project specifically on the business sector and resettlement, both the NHA and DPWH agreed that prior to the conduct of the income loss survey (which was not part of the NHA activity), a full public disclosure for the relocation and resettlement of the PAFs in MF will be undertaken.

7.2.1 Public Consultation Prior to the Income Loss Survey in Taytay, Rizal

The details of the public consultations for the two affected barangays, San Juan and Sta. Ana in Taytay, Rizal, are presented below:

Barangay Sta. Ana

Item	Content	Remark
Date & Time	19 April 2017, 9:00AM –12:00NN	Language: Tagalog, English
Venue	Ynares Fishport Multi-purpose Covered Court in Barangay San Juan	
Participant	28 (Ratio of women: 21%) Representatives from DPWH (UPMO, ESSD), Taytay municipality, barangay concerned, residents, NGOs etc.	
Agenda	1. Explanation of project summary 2. Introduction to the Land Acquisition Plan and Resettlement Action Plan 3. Income Loss Survey details and schedule 4. Open forum (Q&As, Discussion)	

The Consultants discussed extensively the project background while DPWH-ESSD provided the introduction to the Land Acquisition Plan and Resettlement Action Plan. Further, it was explained that the purpose of the income loss survey was to supplement the survey conducted by the NHA and is meant to generate additional information for the preparation of the RAP.

The activity was sparsely attended by the stakeholders/ community residents from Barangay Sta. Ana even with the prior notice for attendance since as per the secretary of Barangay Sta. Ana, the HOA and POs insisted that DPWH should have discussed the project with the Mayor first. The morning public consultation which was scheduled for Barangay Sta. Ana was attended by some of the nearby residents of Barangay San Juan.

The following items summarize the discussion during the open forum of the public consultation:

1. The Consultants discussed further the vulnerability of the Taytay area during heavy rain, describing Laguna Lake's only outlet as the Napindan Channel and that the lake's saturation leads to heavy flooding.
2. Mr. Jesus Tanap, a resident, asked if there were any (flooding) simulations and if it is possible to put identifiable markers along the river for residents to be informed.

The Consultants answered that there are flooding simulations and available markers to monitor the height of the water.

3. Ms. Virginia Ramos, a resident, asked for the timeline of the data gathering and the study for the Mangahan RAP. Specifically inquiring about the effectivity of the resettlement and the plans for all the residents within the berm area. In addition, she also asked about the DPWH's project implementation schedule.

The Consultants discussed that the estimated start of construction of the control gate structure is expected to start in 2020. Given the said date, the floodway should be cleared of residents and structures by 2019. JICA will not allow the start of the construction if there are still unaddressed concerns.

4. Mr. Jose Bautista, a resident, raised the issue of the influence of changes in government leadership on the project.

The Consultants reiterated that the project is national government-mandated. There is still continuous coordination with the LGU. DPWH has almost finished the first three phases of the PMRCIP in coordination with all the concerned LGUs of NCR.

5. Mr. Jun Tecson, a resident, raised the question of the possible compensations for the affected families. But since the riverside is the property of the government, they would like to know if there will be compensation for the ISFs. If yes, how will they be compensated?

DPWH-ESSD, reiterated the contents of RA 10752. Compensation (in the form of payment) will only occur if ISFs occupy private lots and there is an understanding between the ISFs and the private owner that the ISFs can occupy the land. However, if ISFs live on government land resettlement will be the compensation.

6. A follow up question by Mr. Tecson is regarding the aid to be given to the residents before relocation.

DPWH-ESSD replied that it would depend on the funding agency. As for DPWH, for relocation it provides transportation assistance.

7. A suggestion from one of the residents was raised regarding aid in the relocation in addition to the transportation assistance.

The Consultants cited the significance of public consultations to better determine the needs and problems of the affected community to better come up with practical solutions to them.

Moreover, the Consultants also specified that whatever compensation that will be provided will be given at the relocation site (after the resettlement).

As for Barangay San Juan, the flow of the program of the afternoon session is like the presentation of the morning public consultation. The outline of the presentation of the consultation is presented below:

Barangay San Juan

Item	Content	Remark
Date & Time	19 April 2017, 2:00PM – 4:00PM	Language: Tagalog, English
Venue	Ynares Fishport Multi-purpose Covered Court in Barangay San Juan	
Participant	24 (Ratio of women: 54%) Representatives from DPWH (UPMO, ESSD), Taytay municipality, barangay concerned, residents, NGOs etc.	
Agenda	1. Explanation of project summary 2. Introduction to the Land Acquisition Plan and Resettlement Action Plan 3. Income Loss Survey details and schedule 4. Open forum (Q&As, Discussion)	

The following items summarize the discussion during the open forum of the public consultation:

1. Mr. Gilbert Lee, a resident and student, asked the option for the ISFs residing within the berm area.

The Consultants replied that the practical options for the ISFs are either resettlement or Balik-Probinsya² Program.

2. Mr. Boy Mercado, one of the purok (district) chairmen, mentioned that there are instances when the relocated ISFs sell their houses. He wanted to clarify if those ISFs can still avail of resettlement.

DPWH-ESSD answered that only the eligible will be relocated. The qualification of ISFs for resettlement will be verified by the UPAO and NHA.

3. A resident also asked the about the project implementation.

The Consultants discussed that the estimated timeline for the construction of the control gate structure is expected to start in Year 2020. Cognizant of this estimated date, the floodway should be cleared of residents and structures by 2019. DPWH will not allow the start of the construction if there are still unaddressed concerns

7.2.2 Public Consultation Prior to the Income Loss Survey in Cainta, Rizal

The details of the public consultations for the two affected barangays, San Juan and San Andres in Cainta, Rizal, are presented below:

Barangay San Juan

Item	Content	Remark
Date & Time	21 June 2017, 8:00AM – 10:00AM	Language: Tagalog, English
Venue	Anak Pawis Covered Court in Barangay San Juan	
Participant	366 (Ratio of women: 69%) Representatives from DPWH (UPMO, ESSD), Cainta municipality, barangay concerned, residents, NGOs etc.	

² Literally, it translates to “Back to the Province”, a continuing program of assisting people to return to their home province by arranging with transport companies (land and sea transport companies) for accommodation paid for by the government

Item	Content	Remark
Agenda	1. Explanation of project summary 2. Income Loss Survey details and schedule 3. Open forum (Q&As, Discussion)	

During the public consultation, the survey team discussed extensively the project background and the income loss survey to be conducted in line with the preparation of the RAP Report.

The following items summarize the discussion during the open forum:

1. A resident asked the extent of the area to be affected by the project.

The Consultants answered that all residents and structures will be removed from the berm area of the MF. This is in line with construction of the MCGS is expected to start in 2020. He added that DPWH will not allow the start of the construction if there are still unaddressed concerns of the residents.

2. Another resident raised the issue about the possible effect of the construction of Circulo Verde to the MF.

The Consultants answered that the construction of Circulo Verde will have no effect on MF since it is situated along Marikina River.

3. One participant asked the possibility of constructing a dike on the MF to protect the residents from flood.

The Consultants replied that it is not possible to construct a dike on the Floodway since it is a man-made structure designed to accommodate flood. It was also explained that construction of houses should have not been allowed in the Floodway since it is a danger zone.

4. A resident shared his insight affirming the process and treatment of Pasig LGU on relocating their ISFs within the MF.

5. One participant suggested for DPWH to consider other flood control structure.

The Consultants answered that, there is still no alternative option but the full utilization of the MF once the MCGS will be operated. Given this, the importance of consultation and planning with the concerned agencies and affected residents was reiterated.

6. Regarding the issue of possible resettlement, most of the participants shared their preference for on-site resettlement. But since it was not feasible at the moment, the Consultant highlighted that instead of on-site, the prospective resettlement for the ISFs in the MF is in-city/in-municipality (within Cainta) relocation sites.

The flow of the program of the afternoon session is like the presentation of the morning public consultation. The outline of the presentation of the consultation is presented below:

Barangay San Andres

Item	Content	Remark
Date & Time	21 June 2017, 10:00AM –12:00NN	Language: Tagalog, English
Venue	Covered court beside the Barangay Hall of San Andres	
Participant	42 (Ratio of women: 71%) Representatives from DPWH (UPMO, ESSD), Taytay municipality, barangay concerned, residents, NGOs etc.	
Agenda	1. Explanation of project summary 2. Income Loss Survey details and schedule 3. Open forum (Q&As, Discussion)	

The following items summarize the discussion during the open forum of the public consultation:

1. A resident mentioned the Presidential Proclamation 458 and 1160, wherein part of the MF is allotted for socialized housing. She also suggested having a thorough study regarding on-site resettlement.

The Consultants answered that the said Presidential Proclamations (PPs) were already revoked under EO 854. It was also explained that MF is designed to accommodate flood water and considered to be a danger zone which is not intended for housing. Since government's main priority is public safety, on-site resettlement is not recommended.

2. A resident asked about the timeline of the project implementation. He also suggested that the proponent must take into consideration the livelihood and the condition of the resettlement site to prevent the ISF from going back to the berm area.

The Consultants replied that the project implementation of the MCGS is expected to start in 2020. If there will be a relocation, the welfare of the affected families will be considered.

3. One of the participants suggested considering and including in the study the possibility for on-site medium rise building within the berm of MF.

The Consultants answered that MF has no foundation underneath to support bulk load from above. They also added that the MF is built to accept pressure on side not top making the floodway a danger area.

4. A resident shared that they will follow the LGUs decision about the resettlement. But she is highly suggesting for an on-site resettlement and to even ask Pres. Duterte to award and proclaim the MF to the residing ISFs.

The Consultants clarified the difference of the on-site resettlement which is to reside and stay on the berm and in-city/in-municipality resettlement which is on the other hand provision of relocation sites within Cainta emphasizing that the latter is highly feasible. In addition, they said that on-site peoples plan is not possible because the MF is an artificially constructed waterway.

5. Another question from the participant is on the amount of compensation they would be receiving.

The Consultants answered that that is still subject to further study and planning with the stakeholders. They asked for the cooperation of the residents for the conduct of the survey to be able to obtain valid and reliable data for the study.

7.2.3 Public Consultation on the Draft RAP in Taytay, Rizal

After a series of consultation meetings with the LGU through its UPAO, Municipal Assessor, Municipal Engineer, Municipal Legal Officer, the Municipal Planning and Development Coordinator, and the property owner of the proposed relocation site, the public consultation for the disclosure of the draft RAP was scheduled. The agreed schedule was 2 days (July 26 & 31) with two sessions per day (9-10 AM & 1-2 PM) meant to mobilize at least 10% of the total 4,269 affected household. The first public consultation date was for the residents from Floodway "A" while the second public consultation date was for those coming from Floodway "B"³. The venue for the public consultation was the Ynares Multipurpose Covered Court in Taytay, Rizal.

A total of 21 HOAs/POs were present with its officers and members and with nearly 300 individuals (representing one household at least). A few of the participants came from Floodway "B".

The public consultation involved a presentation of the background of the PMRCIP project with focused discussion on the various completed phases of the project. Then, the basic technical basis for the project was presented emphasizing the key component of PMRCIP-IV. The focus of the public consultation was the presentation of the draft RAP after which, an open forum was started.



Plate 7-1
Panoramic view of the attendees during the first session of public consultation in Taytay

During the open forum, there was open opposition from the leaders of the HOAs/POs regarding relocation although it was observed that there was silent openness from most of the participants to the offered RAP. The main contention of the leader-oppositions, who were raising their voices and drowning out peaceful discussion from other participants, was their refusal to be relocated and their demand for "on-site" relocation based on their People's Plan- that a 15-meter wide of land from the roadside going towards the floodway be reclaimed and used for constructing a 5-storey tenement

³ Floodway "A" are residents occupying the downstream side of the East and West Bank from the Barkadahan Bridge of the floodway while Floodway "B" were those coming from the upstream side the of the East and West Bank from Barkadahan Bridge.

socialized housing⁴. They have further claimed that they have commissioned a “boring test on four locations” within the berm to determine the feasibility of erecting such a building on the reclaimed portion on the berm. However, when asked to provide the DPWH with copies of their plan and the boring test, the leaders refused to share the same claiming that they will only do so in the presence of the DPWH Secretary⁵.

Other concern expressed was that the planned housing area of 20-square meters is too small and may not be comfortable for a family of five; that in a medium-rise housing they will not be able to own the lot and in perhaps 50 years time they will again be relocated as what happens in some of the earlier government socialized housing projects; that a row-house type of socialized housing is their preferred option; and, that the actual amount of the housing be disclosed (total cost= principal plus interest payments) for their study.

The first public consultation ended at 11:30 AM and the leaders of the HOAs/POs individually apologizing to the DPWH Team members and saying they were only expressing the sentiments of their members.

On the second scheduled date of the public consultation last 31 July 2018, it was participated by ISFs from the other area of the floodway the LGU calls “Floodway Area B”. There were three HOAs/POs with thirty-eight participants. The same presentation procedure was observed. During the open forum, the key concerns aired by the participants were as follows:

- The possibility of the so-called “People’s Plan” to be considered or approved by the government;
- The feasibility of enlarging the habitable area of the housing unit possibly by introducing a space for “lofts”;
- The possibility of decreasing the monthly amortization cost; and,
- The inclusion for qualification of some of the households who were not interviewed or were not considered as separate households at the time of the NHA census, tagging and socio-economic survey.

It was clarified that as far as the People’s Plan is concerned, it was expressed that the DPWH had turned it down in as many times as it was presented because it violates current laws and prescriptions, e.g. the Philippine Water Code, the Philippine Disaster Risk Reduction and Management Act, as well as due to the Supreme Court Mandamus Order. The DPWH cannot be complicit in the violation of these laws or statutes and will follow and implement the provision of these.

About the suggestion regarding the possibility of enlarging the habitable area for the housing units, this will be investigated and if possible will be considered if affordability allows it. The amortization schedule is something that is already set as a standard in government socialized housing and is therefore fixed.

⁴ The HOAs/POs call this their “People’s Plan” (a conceptual design of a medium rise building constructed on the reclaimed portion on the berm of the floodway) which they have presented on several occasion and which they claimed had been designed for them by their hired architects and engineers. This “People’s Plan” had been rejected on the same number of occasion that it was presented.

⁵ The same request had been made by the DPWH and its Consultants before during FGDs/meetings, but the same refusal and reasoning was given

On the inclusion of households that were not identified as separate households during the NHA census, tagging and socio-economic survey to those eligible for entitlement, it was clarified that it is the NHA which could adequately and appropriately respond to it.

Annex 13 shows proceeding of public consultations in Taytay including program, presentation materials, photographs and queries/opinions and clarifications made.

7.2.4 Public Consultation on the Draft RAP in Cainta, Rizal

Prior to the holding of the public consultation for Cainta, there was a series of prior consultations with the LGU involving the UPAO, the Municipal Administrator, the Municipal Assessor and in two consultations, with the local chief executive (LCE). In those consultations, the draft RAP was presented, and the main onus of the discussion was on the source of funds for the RAP implementation, the RAP implementation schedule, the role of the LGU and on the actual RAP itself. After having gained confidence on the availability of the land and the procedure for acquiring these, the LCE gave the concurrence to proceed with the public consultation for the community.

The public consultation for the PAFs in Cainta, Rizal was originally scheduled to be conducted in three Saturdays beginning on August 11, but it was later re-scheduled to be held on August 19 and 25. The change in the schedule was to ensure greater attendance and participation from the affected families. There were two sessions for each day- one in the morning and one in the afternoon. Following the requirement set forth by the local chief executive, the public consultation was to be held within the immediate proximity of the PAFs.

Thus, the morning session of the first public consultation on August 19 was held at the Anak Pawis I Covered Court in Barangay San Juan from 10:30 AM up to 12:00 PM and was attended by nearly 1,000 individuals (**Plate 7-2**) from three HOAs/POs. The afternoon session, meanwhile, was held at the Anak-Pawis II Covered Court in Barangay San Andres and was participated in by about 300 people from three HOAs/POs although not all registered in the attendance sheet (**Plate 7-3**). In both sessions, information materials were distributed to the participants.



Plate 7-2
View of the morning session in Cainta
on 19 August 2018

Plate 7-3
View of the afternoon session in Cainta
on 19 August 2018

After the presentation on the PMRCIP background, the components of PMRCIP-IV and the draft RAP, an open forum ensued. The enumeration below is the summary of issues and concerns that were discussed during both sessions:

- Final identification of qualified beneficiaries for relocation and resettlement, the basis for qualification, and the options available for qualified beneficiaries;
- Procedure and basis for allocation of housing units, the size of the units, and the amortization for these units; and,
- Procedure and schedule for the actual relocation.

Foremost, it was clarified that the final determination of qualified beneficiaries will be done by the NHA and the LGU and the basis for determining the qualification is not whether they were interviewed or not but on rational policy criteria of the key government shelter agency. Once qualified, each beneficiary is entitled to all lawful benefits and based on their assessed needs. They can either opt out of getting relocated or choose to go back to their province of origin.

In terms of the housing unit allocation, this is randomized, and no one can choose which unit to occupy although in a medium-rise building, households with senior citizen or physically disabled household members are prioritized to occupy the second floor. These housing units have a minimum of 20 sqm area although this could be increased depending on the affordability which at the minimum is pegged at PhP 200 per month graduated over the amortization schedule. Each unit cost at a minimum of PhP 450,000 but could reach up to PhP 700,000.

It was also discussed that beginning 2019, RAP implementation will commence with preliminary activities which involves all the necessary social preparations and trainings for the beneficiaries synchronized with the process of relocation site preparation and development and the actual building construction. Each HOA/PO will be involved in most of these preliminary activities including the organization of the RIC and all its appropriate sub-committees as well as in the monitoring of the building construction. Consistent with the law, there will be no eviction without relocation thus actual relocation depends on the number of completed MRBs. By estimate, this could start to take place sometime in 2021.

The second public consultation was held on 25 August 2018. The morning session was held PFCI⁶ East Floodway Covered Court in Barangay San Andres and was attended by nearly 1,000 individuals from three HOAs/POs while the afternoon session, attended by 707 individuals from one HOA, was held at Block 3, Lakas-Bisig Covered Court West Floodway also in Barangay San Andres (**Plate 7-4** and **Plate 7-5**). The concerns and issues raised were not dissimilar to the ones aired during the morning public consultation of 19 August, as well as those articulated in the public consultation held in Taytay and were thus adequately responded to and clarified.

It is noteworthy that in all the four sessions of the two-day public consultation in Cainta, there was unanimity in supporting the relocation and resettlement for as long as all pertinent plans and activities will be planned with the HOAs/POs and will be implemented smoothly and peacefully.

Annex 14 shows proceeding of public consultations in Cainta including program, presentation materials, photographs and queries/opinions and clarifications made.

⁶ *Progressive Filipino Community Inc. (PFCI)*



Plate 9-4
View of the morning session in Cainta on 25 August 2018



Plate 9-5
View of the afternoon session in Cainta on 25 August 2018

7.3 INFORMATION CAMPAIGN AND OTHER CONSULTATION ACTIVITIES

As part of the information and data gathering activities of the project, the Consultants took part in coordination meetings with the different LGUs, offices, agencies and organizations presented in **Table 7-1**.

Table 7-1
Cooperating Agencies and the Focal Persons

Agency	Contact Person/s
1. DPWH <ul style="list-style-type: none"> • Unified Project Management Office Flood Control Management Cluster (UPMO-FCMC) • Environment and Social Safeguards Division (ESSD) 	<ul style="list-style-type: none"> • Engr. Rodrigo delos Reyes • Engr. Marie Grace Capistrano • Dr. Rosemarie del Rosario
2. National Housing Authority (NHA) <ul style="list-style-type: none"> • Resettlement and Development Services Department (RDSD) • Bagong Nayon II • East Sector II 	<ul style="list-style-type: none"> • Ms. Elsie Trinidad • Engr. Lorenzo Pineda • Engr. Ma. Theresa Siat
3. Taytay, Rizal <ul style="list-style-type: none"> • Office of the Mayor • Urban Poor Affairs Office (UPAO) • Assessor's Office • Barangay Sta. Ana • Barangay San Juan • Peoples Organization (PO) 	<ul style="list-style-type: none"> • Mayor George Ricardo Gacula • Ms. Milagros Monez • Mr. Bonifacio Leonardo • Chairman Joselito Calderon • Chairman Joseph Valera
4. Cainta, Rizal <ul style="list-style-type: none"> • Office of the Mayor 	<ul style="list-style-type: none"> • Mayor Johnielle Keith Nieto

Agency	Contact Person/s
<ul style="list-style-type: none"> • Urban Poor Affairs Office (UPAO) • Barangay San Andres • Barangay San Juan • Peoples Organization (PO) 	<ul style="list-style-type: none"> • Mr. Dennis Cope • Chairwoman Mamerta Ferrer • Chairman Wilfredo Felix
5. Alliance of Peoples Organizations along Mangahan Floodway (APOAMF) for the Pasig City ISFs	<ul style="list-style-type: none"> • Bernard Belmonte
6. Community Organizations of Don Enrique Heights Taytay Rizal (CODEHTA)	<ul style="list-style-type: none"> • Mr. Jerry Plantig
7. Housing and Urban Development Coordinating Council (HUDCC)	<ul style="list-style-type: none"> • Director Jeanette S. Cruz
8. Community Organizers (CO) Multiversity	<ul style="list-style-type: none"> • Exec. Director Lucila Malibiran
9. Pasig City	<ul style="list-style-type: none"> • Engr. Josenar Caparas

7.3.1 Consultation Meetings with Taytay LGU and other Agencies

The Consultants conducted courtesy call to the Mayor of Taytay wherein the Project was presented and explained. The Mayor also affirmed to the Consultants that he will extend assistance and professed support for the project endeavours. Meetings and FGD with the leaders of the HOAs and POs were directly coordinated with the UPAO while KIIs were directly scheduled with the target interviewees.

Prior to the conduct of the income loss survey, a consultation meeting with the interim LIAC meeting was held on 17 February 2017 to present the project background and to discuss possible issues of the stakeholders and concerned agencies. Preparations for the public consultation and income loss survey were arranged directly with the Barangay LGU of Sta. Ana and San Juan. The public consultation was finally held last 19 April 2017.

The income loss survey of Taytay was conducted on May 15-19, 22, 2017. The focus of the said survey is to establish the base income of business and commercial establishments that will be affected by the project. It is worth to note that aside from the details about the business/commercial establishments in the Floodway, part of the data gathered during the conduct of the survey are information regarding the resettlement project such as: (a) level of awareness, (b) willingness to continue business on other areas and (c) estimated average compensation.

Aside from the meetings and coordination works, the Consultants, in close coordination with the Taytay UPAO, reconnoitred the 18-hectare potential resettlement site in Taytay for the Mangahan ISFs. The said area is in Don Enrique Heights Subdivision, Sitio Malaking Parang, Phase 3, San Juan, Taytay, Rizal.

7.3.2 Consultation Meetings with Cainta LGU and Other Agencies

The Project was also presented and explained to the Mayor of Cainta during the courtesy call of the Consultant. The Mayor shared his affirmations in extending his assistance and support for the project endeavours. After the courtesy call, all other meetings and coordination works were directly coordinated with the UPAO.

Similar with Taytay, NHA, the partner agency organized and carried out the census, tagging and social survey on March 2017. The preparations for the public consultation and income loss survey were arranged with barangays San Juan and San Andres through several visits to the respective barangays. The income loss survey of Cainta was conducted on June 24 – July 5, 2017 while the KIIs for the two barangays were held on 05 August 2017.

Aside from the courtesy call with the Mayor, another meeting was held on his office on 07 July 2017. This meeting was also attended by HOA of Cainta. During the said meeting, the project was again discussed and presented. Issues about the project and the on-going conduct of income loss survey were clarified and resolved. The Mayor again reiterated his support on the on-going project. In addition, the said meeting also obtained positive feedback from the HOA.

Lastly, the Consultants also inspected the 30 sites given by the UPAO for the possible resettlement areas of the ISFs of Cainta Mangahan berm.

CHAPTER 8 ENTITLEMENT MATRIX

This Chapter presents the matrices for eligibility and entitlement of the PAPs based on the impacts identified and discussed in **Chapter 4. Tables 8-1 and 8-2**, summarizes the eligibility and compensation/entitlements in Taytay and Cainta, respectively, based on existing guidelines.

**Table 8-1
Eligibility and Entitlement Matrix for Taytay**

Type of Loss	Entitled Person	Compensation/Entitlements
Business Income		
749 Businesses	Businesses classified as Residential - Commercial, Residential - Industrial, Residential - Institutional, Commercial, Industrial, Institutional with NHA Census Tagged Plus Those Multiple surveyed under one NHA tag	Rehabilitation assistance (skills training and other development activities) equivalent to PhP15,000 per family per municipality will be provided in coordination with other government agencies, if the present means of livelihood is no longer viable and the PAF will have to engage in a new income activity
Structures With Residential Households		
3,382 Households	Listed and recorded households that are residing in the area and are not recipient of previous government housing assistance	Transportation allowance or assistance. If relocating, PAFs to be provided free transportation. Also, informal settlers in urban centers who opt to go back to their place of origin in the province or be shifted to government relocation sites will be provided free transportation.

**Table 8-2
Eligibility and Entitlement Matrix for Cainta**

Type of Loss	Entitled Person	Compensation/Entitlements
Business Income		
1,260 Businesses	Businesses classified as Residential - Commercial, Residential - Industrial, Residential - Institutional, Commercial, Industrial, Institutional with NHA Census Tagged Plus Those Multiple surveyed under one NHA tag	For loss of business/income, the PAF will be entitled to rehabilitation assistance not to exceed PhP 15,000 for severely affected structures, or to be based on the latest copy of the PAF's tax record for the period corresponding to the stoppage of business activities.
Structures With Residential Households		
7,483 Households	Listed and recorded households that are residing in the area and are not recipient of previous government housing assistance	Transportation allowance or assistance. If relocating, PAFs to be provided free transportation. Also, informal settlers in urban centers who opt to go back to their place of origin in the province or be shifted to government relocation sites will be provided free transportation

CHAPTER 9 BUDGET REQUIREMENT

9.1 FUNDS FOR RAP IMPLEMENTATION

Under RA 10752 (Section 10) and elaborated on the pertinent Implementing Rules and Regulations (IRR) particularly Section 15, the cost of development and implementation of resettlement projects, including planning, social preparation, in accordance with HUDCC design standards, and costing shall be borne by the implementing agency which, in this case is the DPWH. Where necessary, this may include land development and housing construction, conduct of technical survey and studies, acquisition of necessary government permits, provision of basic services and community facilities, livelihood restoration and improvement, and other activities under the resettlement action plan in coordination with concerned government agencies. Whenever applicable, the concerned LGUs shall provide and administer the resettlement sites.

For Taytay, the resettlement site is a 12 to 15 hectares land property inside Don Enrique Heights Subdivision which is sufficient to locate 85 to 95 MRBs. Meanwhile for Cainta, the LGU has initially provided 15 lots for relocation and will identify more. The proposed relocation sites for both municipalities are presented in **Chapter 6**.

The identified lot properties will undergo a process of land procurement using different modes in accordance with the law, e.g., donation, negotiated sale, expropriation, etc. Consequently, the LGU will need funds to acquire the necessary lots in which, the final cost is still to be determined during the RAP implementation. In view of the resource constraints of the concerned LGUs, funds will have to be provided by the DPWH.

In summary, the total estimated budget requirement for the RAP implementation is valued at PhP 6,127,530,400.00 with a greater portion allotted for construction of the housing units.

9.2 RESETTLEMENT COST

9.2.1 Resettlement Cost for Taytay

The indicative budget for resettlement in Taytay is **PhP 2,143,748,000.00**. This cost includes the following considerations:

- procurement of between 6.7 hectares of land at the Don Enrique Heights Subdivision at an estimated price of PhP2,500.00 per sq-m, based on the average current market value provided by the Municipal Assessor's Office¹;
- cost for the construction and development of the required 85-95 MRBs. This is estimated based on the number of eligible PAFs to be relocated (i.e. not lower than 3,400) at a cost of approx. PhP 400,000.00² per housing unit;
- cost for site development such as site grading, road networks, storm drainage system, sewerage system, electricity and water supply system, earthworks and slope protection and perimeter fence (to secure the area once acquired);
- cost to assist in the demolition of the existing properties as well as in hauling;
- cost to transfer ISFs to relocation site;
- cost to carry out rehabilitation assistance;
- cost to cover the needed preliminary studies and survey such as:

¹This will be subject to an independent property appraiser (IPA) evaluation

² Minimum amount based on current experiences. However, actual amount will be finalized during the implementation depending on the chosen building design.

- land development planning including topographic survey and geotechnical study;
- parcellary survey and subdivision plan survey;
- conduct of environmental impact assessment (EIA) to acquire environmental compliance certificate (ECC) and conduct of tree inventory to acquire tree cutting permit; and,
- cost to undertake social preparation activities which is assumed at PhP 10,000 per ISF.

Table 9-1 provides the summary of the indicative budget requirement for the resettlement of the affected PAFs within the Taytay portion of the Mangahan Floodway. A more detailed costing for the resettlement is provided in a supplemental report (see **Annex 18**) prepared for this RAP.

Table 9-1
Indicative Budget Requirement for Taytay

Items	Amount (PhP)
Procurement of Resettlement Site	167,500,000.00
Resettlement Housing Development Cost	1,328,500,000.00
Resettlement Site Development Costs	298,171,000.00
Demolition/ Hauling Cost	149,646,000.00
Transfer of Informal Settlers to Resettlement Housing	27,056,000.00
Rehabilitation Assistance (Chapter 8)	11,235,000.00
Preliminary activities and studies:	80,820,000.00
• Land development planning (incl. topographic survey and geotechnical study)	30,000,000.00
• Parcellary survey and subdivision plan survey	10,000,000.00
• Conduct of EIA to acquire ECC	5,000,000.00
• Conduct of tree inventory to acquire tree cutting permit	2,000,000.00
• Social preparation	33,820,000.00
Total	2,143,748,000.00

Source: Consultant

9.2.2 Resettlement Cost for Cainta

The indicative budget for resettlement in Cainta is estimated at **PhP 3,983,782,400.00**. Similar with the considerations used in Taytay, the following is used to estimate the budget:

- land acquisition estimated at approximately PhP 5,000.00 per sqm³;
- construction and development of the required number of MRBs;
- site development such as road networks, storm drainage system, sewerage system, electricity and water supply system;
- amount needed to provide assistance in demolition;
- transportation assistance to ISFs moving to the resettlement housing;
- livelihood rehabilitation assistance; and,
- cost to undertake preliminary studies and survey such as:

³ Again, final value will be determined upon evaluation by an Independent Property Appraiser (IPA)

- geotechnical study and topographic survey (as needed);
- conduct of environmental impact assessment (EIA) to acquire environmental compliance certificate (ECC) and conduct of tree inventory to acquire tree cutting permit; and,
- funds to carry out social preparation activities.

Table 9-2 provides the summary of the indicative budget requirement for the resettlement of the affected ISFs within the Cainta portion of the Mangahan Floodway. A more detailed costing for the resettlement is provided in a supplemental report (see **Annex 18**) prepared for this RAP.

Table 9-2
Indicative Budget Requirement for Cainta

Items	Amount (PhP)
Procurement of Resettlement Site– available 15 lots (60,000 sq.m)	300,000,000.00
Procurement of Resettlement Site– lots by LGU (35,000 sq.m)	175,000,000.00
Resettlement Housing Development Cost	2,956,800,000.00
Resettlement Site Development Costs	86,893,400.00
Demolition/ Hauling Cost	286,495,000.00
Transfer of Informal Settlers to Resettlement Housing	59,864,000.00
Rehabilitation Assistance (Chapter 8)	18,900,000.00
Preliminary activities and studies:	99,830,000.00
• Topographic survey and geotechnical study	20,000,000.00
• Conduct of EIA to acquire ECC	5,000,000.00
• Social preparation	74,830,000.00
Total	3,983,782,400.00

Source: Consultant

9.3 PROCEDURES FOR FLOW OF FUNDS

The required funds will be downloaded to the respective implementing organization. For the procurement of lands for the resettlement site, funds may be downloaded to the LGU of Cainta to be used for the latter's land acquisition. For Taytay, DPWH will directly manage the land procurement.

The construction of all the MRBs, as well as other activities will be undertaken and directly supervised by the DPWH. The flow of funds will follow the usual DPWH protocol of project management: from DPWH-UPMO-FCMC to DPWH Regional Offices or District Offices.

All fund flows shall follow existing DPWH fund and project management protocol including existing government accounting and auditing rules and regulations.

Funds for social preparation activities, including training will be responsible by the respective implementing organizations such as the LGUs, the government housing agencies (HUDCC/SHFC/NHA) and other partner national government agencies.

CHAPTER 10

GRIEVANCE REDRESSAL

The DPWH shall establish a Grievance Redress Mechanism (GRM). This is crucial in responding to legitimate concerns of affected individuals and groups during Project implementation. Management of issues is of primary importance in the context of resettlement. This is especially true within the area of entitlements, which may arise.

Grievance related to any aspect of the implementation of the approved Resettlement Action Plan (RAP) will be handled through negotiations aimed at achieving consensus. Outlined below are the procedures that will be followed:

- a. Issues, grievances, and other concerns will be filed by the Project Affected Families (PAFs) with the Municipal Resettlement Implementation Committee (MRIC). The latter is expected to act within 15 days upon receipt of the complaint, except the concerns that specifically pertain to the valuation of affected assets, since these are to be decided by the proper courts.
- b. If no amicable or mutually acceptable solution is reached, or if the PAF does not receive a response from the RIC within the stipulated 15 days of registry of the complaint, the case can be appealed to the concerned Regional Office of the DPWH (Region IV-A), which should act on the complaint/grievance within 15 days from the day of its filing.
- c. If the PAF is not satisfied with the decision of the Regional Office, as a last resort, the complaint can be filed with any court of law.
- d. PAFs shall be exempted from all administrative and legal fees incurred pursuant to the grievance redress procedures.
- e. All complaints received in writing (or written when received verbally) from the PAFs will be documented and shall be acted upon immediately according to the procedures.

Grievance redress mechanism will be implemented on the following principles:

- a. **Simplicity:** Procedures in filing complaints is understandable to users and easy to recall.
- b. **Accessibility:** filing complaints is easy through means that are commonly used by stakeholders, especially by the project- affected people.
- c. **Transparency:** information about the system is made widely available to all stakeholders and the general public.
- d. **Timeliness:** grievances are attended and resolved in timely manner.
- e. **Fairness:** feedback or complaints are validated thoroughly and subjects of complaints are given due process and opportunities for appeal.
- f. **Confidentiality:** the identity of complainants remains confidential.

CHAPTER 11 INSTITUTIONAL ARRANGEMENT

Various entities are actively involved in the implementation of the Resettlement Action Plan. See **Annex 19** for the institutional framework for the RAP implementation. These consist of the following with their respective roles and responsibilities:

1. Unified Project Management Office-Flood Control Management Cluster (UPMO-FCMC) of the DPWH

The UPMO-FCMC has overall responsibility for implementing the Project. In coordination with relevant agencies, the UPMO-FCMC shall manage and supervise the Project, including resettlement activities and land acquisition. It shall ensure that funds for the timely implementation of the RAP are available and that expenses are properly accounted for. The UPMO-FCMC shall be assisted by ESSD (Environmental and Social Safeguards Division) in providing technical guidance and support in the implementation of the RAP.

2. Environmental and Social Safeguards Division (ESSD)

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

- Attend to the overall preparation and planning of the RAP;
- Submit RAP budget plans (to include compensation, relocation costs, operations) for approval and allocation of needed resources by the DPWH Central Office;
- In accordance with the Department's Resettlement Policies, guide the UPMO-FCMC and the DPWH Regional Office IV (DPWH RIV) in their tasks, final inventory of affected assets, information dissemination, public consultation, presentation, and dispute resolution;
- Amend or complement the RAP in case problems are identified during the internal and/or external monitoring of its implementation;
- In collaboration with the UPMO-FCMC, monitor the actual payment of compensation to PAFs and release of funds; and
- Prepare periodic supervision and monitoring reports on the RAP implementation for submission to the UPMO-FCMC.

3. DPWH Regional Office IV-A (DPWH ROIV-A)/District Engineering Office

The Regional Office (RO)/District Engineering Office (DEO) shall ensure that the RAP is implemented as planned. Its specific activities are: monitor the RAP implementation; approve disbursement vouchers/payments; submit reports on disbursements, payments to PAFs and release of funds; submit Monthly Progress Reports to the ESSD and the UPMO-FCMC. The RO/DEO will also address grievances filed at its office by the PAFs for speedy resolution and serve as an actively participating member of the Resettlement Implementation Committee (RIC).

4. Municipal Resettlement Implementation Committee (MRIC)

The MRIC shall be composed of representatives from the DPWH Regional Office and UPMO-FCMC, the Municipality of Taytay, Barangays Sta. Ana and San Juan, the municipality of Cainta, barangays San Andres and San Juan, and PAFs/PAPs. Its functions consist of the following:

- 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;
- Assist the DPWH and NCIP staff in identifying who among the Project Affected Persons are IPs or belong to ICCs.
- Assist the DPWH staff engaged in the LARRIPP activities in the public information campaign, public participation and consultation.
- Assist DPWH in the payment of compensation to PAFs;
- Receive complaints and grievances from PAFs and other stakeholders and act accordingly;
- Maintain a record of all public meetings, complaints, and actions taken to address complaints and grievances; and
- 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 a Memorandum of Understanding (MOU) between DPWH and the Municipal Governments of Taytay and Cainta, Rizal. The framework for the Municipal RIC is shown on **Annex 20**.

5. Other Cooperating Entities

Through the Local Housing Board (LHB) and/or the Local Inter-Agency Committee (LIAC), the support and cooperation from the following entities will be secured: Housing and Urban Development Coordinating Council (HUDCC); Social Housing Finance Corporation (SHFC); National Housing Authority (NHA); Presidential Commission for the Urban Poor (PCUP); Department of Social Welfare and Development (DSWD); Housing and Urban Development Coordinating Council (HUDCC); various units of Provincial and Local agencies which deal with Livelihood and Entrepreneurial concerns; the Non-governmental Organization, Community Organization Multiversity (COM); Civic Organizations; accredited Peoples' Organizations (POs) and Homeowners Associations.

The functions of the aforementioned agencies are enumerated in **Table 11.1-1**

**Table 11-1
Cooperating Agencies Related to Resettlement**

Agency	Resettlement Related Functions
Housing and Urban Development Coordinating Council	<ul style="list-style-type: none"> • Sole mandate for housing and shelter program of the government under whose umbrella belongs all the government housing agencies; • Central coordinating agency on shelter and housing
Social Housing Finance Corporation	<ul style="list-style-type: none"> • Acquires, develops and establishes relocation sites for informal settlers • Monitor and document progress to key implementation milestones in monthly reports. • Provide specific details on land or site areas to be used and arrangements for the provision of low cost rental housing of PAFs
National Housing Authority	<ul style="list-style-type: none"> • Acquires, develops and establishes relocation sites for informal settlers
Housing and Urban Development Coordinating Council	<ul style="list-style-type: none"> • Conducts overall coordination in the resettlement programs of informal settlers and reviews RAP • Provides over-all policy and direction on government shelter and housing program
Presidential Commission for the Urban Poor	<ul style="list-style-type: none"> • Issuance of clearance for demolition and eviction notices for national government projects; and • Monitoring of evictions and demolitions for homeless and underprivileged citizens
Department of Social Welfare and Development	<ul style="list-style-type: none"> • Promote the general well being of resettled families; • Ensure that adequate social services in health, nutrition, education, responsible parenthood and environmental sanitation
	<ul style="list-style-type: none"> •
Various Units of Provincial and Local Agencies for Livelihood and Entrepreneurial concerns	<ul style="list-style-type: none"> • Implementation of relevant skills training program to introduce/upgrade skills of the labor force to meet the manpower requirements of the nearby communal and industrial; • Coordination with TESDA Regional /Provincial level regarding of skills possessed for the issuance of Certificate of Competency (COC); • Provide the target beneficiaries the package assistance necessary to enhance their capabilities and potentials to become successful entrepreneurs for increased opportunities towards generation of employment and income
Non- governmental organizations (NGOs)	<ul style="list-style-type: none"> • Can provide a skill based training for self employment and self reliance; and • Develop basic amenities and rehabilitation in the resettlement area;
Community Organization Multiversity	<ul style="list-style-type: none"> • Provide and develop to enhance and nurture capacities of community organizers, peoples' organizations and other development organizations
Civic Organizations	<ul style="list-style-type: none"> • Facilitate information collection and bridge state agencies to provide a multilateral development assistance to the affected people
Peoples' Organizations	<ul style="list-style-type: none"> • Provide and bridge proper consultation mechanism among its members to effectively let the people participate at all levels of social, political and economic decision making
Homeowners Associations	<ul style="list-style-type: none"> • Provide and maintain community facilities the delivery of adequate social services and economic advantages for the association to improve the quality of life and well being of its members on a non profit basis

The participation of these entities will be at various stages of the RAP implementation and as needed by the major stakeholders.

CHAPTER 12 MONITORING MECHANISM

12.1 OBJECTIVE

The main objective of monitoring the implementation of the Resettlement Action Plan (RAP) is to determine if the RAP is being carried out in accordance with the Implementing Rules and Regulations (IRR) of Republic Act No. 10752, the law itself, as well as the Land Acquisition, Resettlement, Rehabilitation and Indigenous Peoples' Policy (LARRIPP) 2007 and the Social and Environmental Management Systems (SEMS) of DPWH. It involves the monitoring of land acquisition of the relocation/resettlement site, payment of compensation for lost assets (when applicable), the actual resettlement of persons severely affected by the Project, and release of funds and the over-all actual implementation.

12.2 SUPERVISION AND INTERNAL MONITORING

The Environmental and Social Safeguards Division (ESSD) of DPWH shall conduct the supervision and in-house monitoring of implementation of the RAP and will be alternately called the Internal Monitoring Agent (IMA).

The tasks of the Internal Monitoring Agent are to:

- Regularly supervise and monitor the implementation of the RAP in coordination with the DPWH Regional Office IV-A (DPWH ROIV-A) and the Municipal Resettlement Implementation Committee (MRIC). The findings will be documented in the quarterly report to be submitted to the DPWH's Unified Project Management Office-Flood Control Management Cluster (DPWH-UPMO-FCMC);
- Verify that the re-inventory baseline information of all PAFs has been carried out and that the provision of compensation and other entitlements, and relocation, if any, have been carried out in accordance with the IRR-RA 10752, RA 10752, LARRIPP and the SEMS, and the respective RAP Reports;
- Ensure that the RAP is implemented as designed and planned;
- Verify that funds for implementing the RAP is provided by the UPMO-FCMC in a timely manner and in amounts sufficient for the purpose;
- Record all grievances and their resolution and ensure that complaints are dealt with promptly;

12.3 EXTERNAL MONITORING AND EVALUATION

An External Monitoring Agent (EMA) will be commissioned by the DPWH-UPMO-FCMC 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.

The tasks of the EMA are the following:

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

12.4 STAGES OF MONITORING AND REPORTING

The stages and monitoring frequency of the contract packages by the IMA and EMA are as follows:

- **Compliance Monitoring:** This is the first activity that both IMA and EMA shall undertake to determine whether or not the RAP was carried out as planned and according to the policy. The EMA will submit an Inception Report and Compliance Monitoring Report one month after receipt of Notice to Proceed. The engagement of the EMA shall be scheduled to meet the Policy's requirement of concluding RAP implementation activities at least one (1) month prior to the start of civil works.
- **Semi-annual Monitoring:** The EMA will be required to conduct a monthly monitoring of RAP implementation activities.
- **Final Evaluation:** This will be conducted three months after the completion of payments of compensation to PAFs.
- **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 have improved after the implementation of the Project.

The UPMO-FCMC, in coordination with the ESSD, shall establish a schedule for the implementation of RAP 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 in PMRCIP Phase IV particularly the Marikina Control Gate Structure (MCGS), all RAP activities have been determined by the IMA and EMA as having been concluded.

The EMA is accountable to the UPMO-FCMC and reports to the ESSD.

12.5 MONITORING INDICATORS

Table 12-1 Monitoring Indicators for Internal Monitoring Agent (IMA)

Indicators	Basis for Indicators
Budget and timeframe	<ul style="list-style-type: none"> -Have all land acquisition and resettlement staff been appointed and mobilized for the field and office work on schedule? -Have capacity building and training activities been completed on schedule? -Are resettlement implementation activities being achieved against the agreed implementation plan? -Are funds for resettlement being allocated to resettlement agencies on time? -Have resettlement offices received the scheduled funds? -Have funds been disbursed according to the RAP? -Has the social preparation phase taken place as scheduled? -Has all land been acquired and occupied in time for Project implementation?
Delivery of Compensation and Entitlements	<ul style="list-style-type: none"> -How many PAFs have received housing as per relocation options? -Does house quality meet the standards agreed? -Have relocation sites been selected and developed as per agreed standards? -Are the PAFs occupying the new houses? -Are assistance measures being implemented as planned for host communities? -Is restoration proceeding for social infrastructure and services? -Are the PAFs able to access schools, health services, cultural sites and activities at the level of accessibility prior to resettlement? -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? -If set out in the Income Restoration Plan, have affected businesses received entitlements including transfer and payments for net losses resulting from lost business and stoppage of production?
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 of the community and with proper disclosure?
Benefit Monitoring	<ul style="list-style-type: none"> -What changes have occurred in patterns of occupation, production and resources use compared to the pre-Project situation? -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? -What changes have taken place in key social and cultural parameters relating to living standards? -What changes have occurred for vulnerable groups?

Source: LARRIPP (2007)

Table 12-2 Monitoring Indicators for External Monitoring Agent (EMA)

Indicators	Basis for Indicators
Basic Information on PAPs	<ul style="list-style-type: none"> -Location -Composition and structures, ages, education and skill levels -Gender of household head -Ethnic group -Access to health, education, utilities and other social services -Housing type -Land use and other resource ownership and patterns -Occupation and employment patterns -Income sources and levels -Participation in neighborhood or community groups -Access to cultural sites and events -Value of all assets forming entitlements and resettlement entitlements
Restoration of Living Standards	<ul style="list-style-type: none"> -Have PAFs adopted the housing options developed? -Have perceptions of “community” been restored -Have PAFs achieved replacement of key social cultural elements?
Restoration of Livelihoods	<ul style="list-style-type: none"> -Were compensation payments free of deduction for depreciation, fees or transfer costs to the PAP? -Were compensation payments sufficient to replace lost assets? -Was sufficient replacement land available of suitable standard? -Did transfer and relocation payments cover these costs? -Did income substitution allow for re-establishment of enterprises and production? -Have enterprises affected received sufficient assistance to re-establish themselves? -Have vulnerable groups been provided income-earning opportunities? Are these effective and sustainable? -Do jobs provided restore pre-project income levels and living standards?
Levels of PAF Satisfaction	<ul style="list-style-type: none"> -How much do PAFs know about resettlement procedures and entitlements? Do PAFs know their entitlements? -Do they know if these have been met? -How do PAFs assess the extent to which their own living standards and livelihood been restored? -How much do PAFs know about grievance procedures and conflict resolution procedures? How satisfied are those who have used said mechanism?
Effectiveness of Resettlement Planning	<ul style="list-style-type: none"> -Were the PAFs and their assets correctly enumerated? -Was any land speculator assisted? -Was the time frame and budget sufficient to meet objectives? -Were entitlements too generous?

Source: LARRIPP (2007)