

# Due Diligence Review for Paco Pumping Station Rehabilitation Sub-Project

Project Name:

# Metro Manila Flood Management Project



May 1, 2017





*Metro Manila Flood Management Project*

**Due Diligence Review**

**Paco Pumping Station Rehabilitation Sub-Project**

Prepared by

Department of Public Works and Highways  
and  
Metro Manila Development Authority

May 1, 2017

## **Acronyms**

DDR – Due Diligence Review

DPWH – Department of Public Works and Highways

GOP – Government of the Philippines

HH - Household Head

LGU – Local Government Unit

M&E – Monitoring and Evaluation

MMDA – Metro Manila Development Authority

MMFMP - Metro Manila Flood Management Project

NHA – National Housing Authority

PAP – Project-Affected Person

PCUP – Presidential Commission for the Urban Poor

PRRC – Pasig River Rehabilitation Commission

UDHA – Urban Development and Housing Act

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## Project Background and Description

1. The Government of the Philippines (GoP) has been implementing several urban drainage-related activities to manage and resolve recurring flooding. In Metro Manila, it is evident that there is a need to execute strategic initiatives to further improve and provide adequate flood management infrastructure. To this end, the Department of Public Works and Highways (DPWH) and Metro Manila Development Authority (MMDA), with support from the World Bank, are proposing the Metro Manila Flood Management Project (the Project), which will support the improvement of urban drainage by modernizing existing pumping stations and constructing new pumping stations in flood-prone drainage areas, improving waterways and drainage channels, improving solid waste management in and along waterways served by the pumping stations, and resettlement and economic rehabilitation of informal settler families (ISFs) residing within the technical footprint of pumping station and waterways connected to the pumping stations. Five project year 1 (PY1) drainage areas have been selected, including Paco in Manila.
  
2. Although recent government resettlement programs, notably Oplan Likas (objective is to resettle people from danger zones) and the proposed Project (objective is to improve flood management in selected areas of Metro Manila) have different objectives, there are certain areas where they overlap. That overlap is determined by the Project area of influence for resettlement, also referred to as the ‘technical footprint’. Resettlement under the Project will be unavoidable where dwellings and structures established by informal settlers impede the flow or inhibit access for effective maintenance and operation of the facilities. The technical footprint covers the pumping station and its related facilities as well as sections of waterways serving the pumping stations. The physical limits of technical footprints for waterways are established on the basis of hydrological and engineering criteria for each drainage area. Waterway sections within the technical footprint are typically in relatively close proximity to the pumping facility. People who live or have properties within the Project’s technical footprint or those who were resettled from the technical footprint under government programs are considered project-affected persons (PAP) under the Project.
  
3. The proposed Project may cause impacts on people whose dwellings or economic activities are within the technical footprint of the land areas acquired permanently or temporary, including:
  - a. the pumping station sites to be modernized or constructed under the proposed project;
  - b. the clearance of waterway sections connected to those pumping stations, which must be cleared of residents, ISFs and impeding structures to facilitate proper operation and maintenance of the pumping stations;
  - c. areas used temporarily for construction activities;
  - d. areas outside the immediate technical footprint of the proposed Project which serve to achieve the objectives of the project, (such as with interventions in wider drainage areas to remove solid waste and water hyacinth);
  - e. temporary impacts on people living and engaged in economic activities along access roads; and
  - f. permanent and temporary impacts on people living in off-site ancillary facilities such as disposal sites and resettlement sites.

4. Impacts will vary per project site and not all the above possible impacts will occur in a particular drainage area. Specific impacts will be determined during the investigation, survey, and design stage in each drainage area.

5. The Paco drainage area is located in Manila. The drainage area served by the pumping station is 182 ha. The total installed pumping capacity is 7.6 m<sup>3</sup>/sec. The pumped water is drained directly into the Pasig River that has an open connection with Manila Bay. The current pumping capacity is not sufficient to prevent flooding during a two day design rainstorm with a return time of 10 year, when more than 40 percent of the drainage area gets flooded. It is proposed during PY1 to increase the pumping capacity to 12 m<sup>3</sup>/sec.

## Objectives and Methodology of the DDR

6. In accord with the Resettlement Policy Framework (RPF) of the MMFMP, the Project must look retrospectively at past resettlement of people in the sub-project's technical footprint. Where people were moved before December 8, 2014 (the date of Project identification), the Project is thus obliged to carry out due diligence on this earlier "legacy" issue to determine if resettlement outcomes are generally consistent with national legislation and with the objectives of the World Bank's OP 4.12 – involuntary resettlement. Resettlement took place from the technical footprint of Paco well before December 2014, therefore the objectives of the due diligence work for the Paco drainage area are:

- a. Trace back project-affected persons that were resettled under Oplan Likas resettlement program from the technical footprint of Paco drainage area, identify the resettlement and compensation measures received, and identify gaps in meeting the requirements of national legislation and consistency with the objectives of OP 4.12;
- b. Verify that no land acquisition or resettlement has taken place after December 8, 2014, as was identified by an initial scoping exercise; and
- c. Develop remedial measures, as needed based on the due diligence surveys, as per requirements described in the Resettlement Policy Framework.

7. The project affected area is located along Estero de Paco within Barangay 662 in the City of Manila. The affected area was identified by the national government as one of the priority areas under Oplan Likas that has as objective to move people out of danger zones, including from flood prone waterway areas. In 2011, some 254 informal settler families (ISF) were relocated by the National Housing Authority (NHA) and the City of Manila. Of the 254 ISFs, a total of 74 ISFs were found to be in the technical footprint (see Annex E). These ISFs were relocated to Towerville 6 in San Jose Del Monte City, Province of Bulacan.

8. To trace back these project affected households, a tracer survey was conducted for the 74 households based on a list provided by the NHA. MMDA deployed a team of qualified personnel to undertake face-to-face interviews with the use of structured questionnaires. Quality control measures were

performed by field supervisors observing the work of interviewers and randomly checking the work done during the data gathering stage.

9. Enumerators were instructed to locate the houses and interview the household head or a legal age member of the household for the survey. The survey team spent four days to cover all 74 households listed. A mixture of strategies such as contacting the households through available mobile phones and other communication facility were explored. Relatives, house caretakers, and neighbors of padlocked units were also requested to assist the survey team to locate the household. Of the 74 households targeted for the survey, only 45 households were interviewed. The team spent additional days on a weekend for a chance to interview the remaining 29 households but was unsuccessful. Nevertheless, the team was able to document the various status and circumstances of their occupancy which include the following: (i) houses have been sold to other households that have been occupying the unit; (ii) units are padlocked and no one can tell if the occupant totally abandoned the unit; and (iii) units are closed without house care taker and no information can be obtained as to when the unit owner will come back. Neighbors were not able to supply information as to the whereabouts of the housing unit owner. Details of the status and circumstances can be found in Annex A.

10. The tracer survey was complemented with the conduct of Focus Group Discussion (FGD) and key informants' interview (KII) held in Paco pumping station site, the place of origin of relocated households. FGD and KII were also conducted with officials of the NHA managing the sites to gather information about the resettlement site and about the circumstances of the families relocated from Estero de Paco.

## Description of the Legal Framework

11. Philippine Laws and Regulations and World Bank Policy (OP 4.12) on Involuntary Resettlement are the main legal structure for this project.

### *Philippine Laws and Regulations*

- a. The Bills of Rights of the Constitution of the Republic of the Philippines states: In Article III, Section 1, "No person shall be deprived of life, liberty, or property without due process of law, nor shall any person be denied the equal protection of the laws." In Article III, Section 9, "Private property shall not be taken for public use without just compensation." Supreme Court Ruling (1987) defines just compensation as fair and full equivalent to the loss sustained to enable affected household to replace affected assets at current market prices.
- b. Republic Act 10752 (2015) "The Right-of-Way Act" ensures that owners of real property acquired for national government infrastructure projects are promptly paid just compensation for the expeditious acquisition of the required right-of-way for the projects.
- c. Republic Act 7279 (1992) "Urban Development and Housing Act" mandates the provision of a resettlement site, basic services and safeguards for the homeless and underprivileged citizens.

- d. Republic Act 7160 (1991) "Local Government Code" which allows the LGUs to exercise the power of eminent domain for public use.
- e. RA 7835 (CISFA): An Act Providing for a Comprehensive and Integrated Shelter and Urban Development Financing Program by Increasing and Regularizing the Yearly Appropriation of the Major Components of the National Shelter Program, Including the Abot-Kaya Pabahay Fund.
- f. Republic Act No. 6846, Augmenting the Authorized Capital Stock and Paid-Up Capital of the National Home Finance and Mortgage Corporation (NHFMC) and the Home Insurance and Guaranty Corporation (HIGC), Identifying Other Sources of Funding and Appropriating Funds for the Purposes Otherwise Known as "Comprehensive and Integrated Shelter Financing Act of 1994."
- g. Supreme Court Decision - G.R. Nos. 171947-48 ordering 16 government agencies to clean up, rehabilitate and preserve Manila Bay in their different capacities. Ordering the these government agencies to clean up, rehabilitate, and preserve Manila Bay, and restore and maintain its waters to SB level<sup>1</sup>

*World Bank Policy (OP 4.12) on Involuntary Resettlement*

12. The principles of resettlement in World Bank-assisted projects are governed by OP 4.12, which is applicable when the taking of land for project purposes necessitates involuntary resettlement. The policy covers all affected people/households within the project footprint regardless of their occupancy or tenurial status. Specifically, the following principles should be adhered to:

- a. Resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.
- b. Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits, inclusive of gender, disability, and intergenerational groups.
- c. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.
- d. Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

13. Below table shows the analysis of gaps between national laws and policies on resettlement and the World Bank OP 4.12.

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<sup>1</sup> Class B sea waters per Water Classification Tables under DENR Administrative Order No. 34 [1990]) to make them fit for swimming, skin-diving, and other forms of contact recreation.

**Table 1. Analysis of Gaps between Government Policies and WB OP 4.12**

<b>KEY ISSUES</b>	<b>PHILIPPINE POLICY</b>	<b>WORLD BANK POLICY</b>	<b>MEASURES TO FILL GAPS</b>
<b>Persons Considered as Project-Affected Persons (PAPs)</b>	PAPs consist of all members of a household who will be adversely affected by the project because their real property shall be acquired for government infrastructure projects	Persons/People impacted by Involuntary taking of land resulting in (i) relocation or loss of shelter; (ii) loss of assets or access to assets; (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location.	Everyone who occupies or occupied land or structure and those that conduct livelihood activities within the technical footprint shall be identified and properly documented including their condition in life, and their personal circumstances. The RPF provides specific guidance in the identification of PAPs and the corresponding measures to ensure they are supported towards a sustainable living condition.

<b>KEY ISSUES</b>	<b>PHILIPPINE POLICY</b>	<b>WORLD BANK POLICY</b>	<b>MEASURES TO FILL GAPS</b>
<b>Loss of Income or Sources of Livelihood</b>	<p>Major government policies (e.g. RA 7279, RA 10752) are silent regarding loss of income directly resulting from land acquisition.</p> <p>However, some agency-specific policies like the DPWH LARRIP Policy 2007 and DO 327 s. 2003 cover income loss:</p> <p>LARRIP on Income Loss. “For loss of business/ income, the PAF will be entitled to an income rehabilitation assistance not to exceed P 15,000 for severely affected structures, or to be based on the latest copy of the PAF’s Tax record for the period corresponding to the stoppage of business activities”</p> <p>DO 327 s. 2003 provides transitional allowance for severely affected shop owners for their computed income loss during demolition and reconstruction of their shops</p>	Displace persons should be assisted to improve their efforts to improve their livelihoods and living standards or at least to restore them	The project should compensate for lost income and provide rehabilitation measures to improve livelihoods and living conditions of PAPs or at least restore them to pre-project level.

<b>KEY ISSUES</b>	<b>PHILIPPINE POLICY</b>	<b>WORLD BANK POLICY</b>	<b>MEASURES TO FILL GAPS</b>
<b>Treatment of Informal Settlers</b>	R.A. 7279 states that eligible homeless and poor informal settlers in urban areas are entitled to resettlement if they are affected by development projects. However, R.A. 7279 limits this to residential informal settlers and is silent on informal structures on public or private land used for commercial purposes. Government also exclude from the eligibility list people who were previously resettled.	Sections 15-16 stipulate that informal settlers should be provided resettlement assistance	The project will replace lost structures and other assets of informal settlers. Replacement options include rehousing, cash compensation, rental support while waiting for the housing units to become available, transportation costs, and rehabilitation measures to restore lost livelihood.

## Due Diligence Review Findings

14. The Towerville 6 Resettlement Project is an NHA project planned to accommodate over 9,000 families identified to be living in danger areas, affected by calamities such as typhoons and fire, as well as government infrastructure projects in Metro Manila. The total land area is over 54 hectares subdivided into 3 phases. NHA disclosed that as of February 2016, the resettlement project has 8,106 resettled families from various cities in Metro Manila as a result of the Oplan Likas program or other government infrastructure projects such as roads and highways. The entire 54 hectares are subdivided into smaller clusters of blocks. The 74 relocated families from Estero de Paco are occupying only a portion of Towerville 6A and 6B (See Annex C for additional details on the resettlement site).

15. Completed community facilities include: (i) 54 elementary classrooms and 25 high school classrooms, (ii) 1 multipurpose covered court, basketball court, and barangay hall, (iii) health center, chapel, open space for playground, and a private market, and (iv) materials recovery facility (MRF) and police and community security outpost. Ongoing infrastructure development include day care centers and a Barangay Hall annex funded by the LGU, and an NHA project office with adjunct rooms for health center.

16. For 2017, additional facilities will be constructed under the Peso 1.8 billion appropriation for selected resettlement sites that includes Towerville 6. These facilities include additional 2 day care center buildings, land acquisition for the construction of 6-story building with 35 classrooms, a transportation terminal, public market, additional MRF, and a Community Police Action Center.

17. Out of the over 8,000 families on site, 6,702 have applications for electricity connection and 5,800 have already been connected. Energization campaign is ongoing for the remaining households not connected yet. Towerville 6 is a pilot site of the pre-paid metering scheme of Meralco, and currently it has over 1,000 pre-paid metering customers. Water is provided by the San Jose del Monte Water District and Maynilad, which is one of the two Water Service Concessionaires in Metro Manila.

18. NHA reported that as of November 2016, various livelihood intervention programs have been implemented in the resettlement site by partner agencies in government and private sector. Specifically, skills training and start-up kits were provided, equipment and funds for employment and livelihood projects for income generation, job referral and placement, job orientation and job sustenance, business capital through access to credit assistance from lending institutions and micro-finance group, and capacitating individuals and guilds on business management. Total number of individuals served by these programs is over 6,000 and 10 guilds.

### Description of the host LGU of Towerville 6 Resettlement Project

19. San Jose del Monte is a peri-urban first class component city in the Province of Bulacan.. It was established as a city in September 2000. According to the 2015 2010 national statistics census, it has a population of more than 500,000. making it the 19th most populated city in the country. Its distance from the City of Manila is 30 kilometers kilometers. The city is serviced by a 24 hours bus routes going to and from Metro Manila. Travel time is between 1.5 – 2 hours. The Metro Rail Transit 7 is under construction and is due for completion in 2 years time, making it shorter time by 1 hour to commute by attime to commute beteen San Jose Del Monte to Manila,

20. The city has 59 Barangays, each of which handles governance in a small area of the city. Towerville 6 Resettlement Site is in Barangay Gaya-Gaya. Apart from Towerville 6 Resettlement Site the San Jose Del Monte City is lso host of 3 more government resettlement sites, low cost housing projects developed by the private sector in partnership with key shelter agencies such as the SHFC, Home Mutual Development Fund of PagIbig, and in recent years some high and mid-end property construction in housing and commercial development, owing the capability of San Jose del Monte to abosorb expansion and development. San Jose del Monte has been experiencing major economic growth, evidenced by the presence of major commercial banks, fast food chain outlets, real estates, and wide coverage of landline and cellular phone services. Major players in real estate development have started their projects in San Jose del Monte. Information gathered from the interviews indicated that the real estate development increased its activities rapidly since 2010. Relocated households were witnessed owing some benefits from the city's rapidly increasing economic activities from construction works, retail shops and food chain outlets as workers, shopkeepers and vending as hawkers in the city.

## Demographic Profile of the 74 Households Resettled from Paco Technical Footprint

21. The demographic profile in Towerville shows that 64% (29 of the interviewed 45 resettled households) of the respondents were males while the remaining 36% (16) were females. The average household size stands at 4.6, which is similar to the mean number of household members in the country (Philippine Statistics Authority, 2012). In terms of age, the average household head is 44 years old.

22. Household members are generally healthy with 98% (44) citing no ailments within the household, at the time of the interview.

23. Of the 45 households, 36% (16) were high school graduates, 27% (12) were high school undergraduate, 13% (6) went to vocational schooling, while 11% (5) were college undergraduate. Most households in the high school level and high school graduate are employed in skilled or semi-skilled type of occupation (Tables 2 and 3).

**Table 2. Household's Education Level by Gender**

<b>Educational Attainment</b>	<b>Female</b>	<b>Male</b>	<b>Total</b>
Elem Undergraduate	1	1	2
Elem Graduate	1	3	4
High School Undergraduate	6	6	12
High School Graduate	5	11	16
Vocational /TVET	1	5	6
College Undergraduate	2	3	5
<b>Total</b>	<b>16</b>	<b>29</b>	<b>45</b>

**Table 3. Distribution of Household's Educational Attainment and their Type of Employment**

<b>Educational Attainment</b>	<b>Government employee</b>	<b>Office worker/ Company employee</b>	<b>Shopkeeper/shop-owner</b>	<b>Skilled worker</b>	<b>unskilled/semi-skilled</b>	<b>Vendor/street hawker</b>	<b>Unemployed</b>	<b>Total</b>
Elem Undergraduate	0	0	0	0	1	1	0	2
Elem Graduate	1	0	1	2	0	0	0	4
Hi-School Undergraduate	0	3	0	1	4	1	3	12
Hi School Graduate	0	1	0	5	7	1	2	16
Vocational /TVET	0	1	1	2	1	1	0	6
College Undergrad	0	0	2	0	2	1	0	5
<b>Total</b>	<b>1</b>	<b>5</b>	<b>4</b>	<b>10</b>	<b>15</b>	<b>5</b>	<b>5</b>	<b>45</b>

## Occupation, Employment and Income Sources

24. Prior to relocation, 34% of the interviewed 45 households were employed in unskilled/semi-skilled occupations while only 22% were skilled workers.

25. After the relocation, data showed an improvement in the household's occupation as 36% of them are now engaged in skilled jobs, while 20% have unskilled/semi-skilled work. However, the percentage of unemployed after relocation increased from 11% to 29%.

**Table 4. Distribution of Primary Occupation Prior and After Relocation Primary Occupation Category**

	Percentage(45 HHs)		Change (+/-)
	Paco(Prior)	Towerville (After)	
Unskilled/semi-skilled	15 (34%)	9 (20%)	-
Skilled worker	10 (22%)	16 (36%)	+
Government employee	1 (2%)	1 (2%)	same
Office worker/ Company employee	5 (11%)	3 (7.0%)	-
Vendor/street hawker	5 (11%)	3 (7.0%)	--
Shopkeeper/shop-owner	4 (9.0%)	4 (9.0%)	same
Unemployed	5 (11.0%)	13 (29.0%)	--
Total	45 (100%)	49 (100%)	

26. Highest educational attainment among those employed is at high school level and high school graduate level. Most of the households with current occupation (63%) work outside the city while 28% work within the vicinity of their city.

27. In terms of income, the survey revealed that the monthly average household income for the surveyed people in Towerville Resettlement Site is Php 10,592 and the median household income is Php 10,000. Average income before relocation to Towerville is estimated at PHP8,900.

**Table 5. Household's Monthly Income**

Total Household Income	Amount
Mean	10,592
Median	10,000
Mode	10,000
Minimum	1,800
Maximum	26,000

28. Out of the households interviewed in the tracer survey, 27 persons or sixty percent (60%) of the interviewed households are still working in or near Paco, Manila. Of these 27, 59% (16) travel to Manila on a weekly basis, 26% (7) travel daily, and remaining 15% (4) travel once or twice a month.

**Table 6. Frequency of Travel to Work**

Frequency of Travel to Work	Total	Percentage
Daily	7.0	26%
Weekly	16.0	59%
2x a month	3.0	11%
Less than a month	1.0	4%
Total	27.0	100%

29. In terms of frequency of travel to the place of work, 48% of the households generally take 30 minutes to an hour to reach work and 41% (11) take between one to two hours to travel to arrive at their work area. Only 11% (3) of the households reported that commuting to work exceeds 2 hours. The distance of Towerville 6 resettlement site to place of work outside the vicinity is between 15 to 40 kilometers away. Nearest cities to the resettlement site are Caloocan and Quezon City.

### Household Expenditure

30. The monthly average expenditure in Towerville is Php 9,927 and median expenditure is Php 8,768. Highest expense is on food which accounts to 53%, and second highest is on transportation for those working in Metro Manila which stands at Php 1,760 monthly or 19% on the average.

**Table 7. Household's Total Monthly Item of Expenditure**

Item of Expense	Average spent monthly	Percentage from HH gross income
Food	5,560	53%
Transportation to Work	1,757	19%
Education	934	9%
Fuel, mobile phone load and personal effects such as toiletries	600	6%
Electricity	515	5%
Water	343	3.5%
Medicines	243	2.5%
Clothing	169	2%

## Housing Profile

31. Prior to relocation, 49% of the household's shelter ownership status was owned. Most of their houses (77%) were located either on stilts over the waterway or along the river and easement zone. Most had access to a main source of drinking water (76%), but majority of the households also shared that they had no access to a latrine (78%).

**Table 8. Tenure Status Prior to Relocation**

What was the tenure status of the house and lot occupied by your family?	Number	Percentage
Owned	22.0	49%
Rented	5.0	11%
Rented free with owner consent	7.0	16%
Living with relatives	7.0	16%
Provided by employer	0.0	0%
Residing without consent of owner (illegal occupant )	4.0	9%
Total	45.0	100%

**Table 9. Location of House Prior to Relocation**

Where was your house located?	Number	Percentage
On stilts over waterway (estero, river)	20.0	44%
Along the river/estero easement zone	15.0	33%
Under bridges	10.0	22%
Total	45.0	100%

32. Most of the interviewed households in Towerville now have access to a main source of drinking water (89%) and have a toilet that is either flushed or uses a pail system (98%).

### Access to Services

33. The survey showed that generally access of the ISFs to services has improved after resettlement. Prior to relocation, 80% of the households had access to a power utility. This was increased to 87% after resettlement. While in Paco, 78% had access to the baranggay health center. That was low compared to the 96% now in the resettlement site although the residents shared they had difficulty adjusting in terms of distance to hospitals for emergency cases. Moreover, although health and birthing center are available in Towerville 6, the standard of services is perceived as lesser than in their previous site.

34. In terms of garbage disposal, 86% used to dispose of their solid waste through a collection scheme of the LGU or baranggay in Paco. Households in the Towerville Resettlement site all have access to a solid waste collection scheme provided by the local government unit or the barangay.

35. According to NHA, the households' transferred in 2011 did not have utilities connections immediately upon transfer, but were provided connection through generator sets by the NHA contractor on site, while the application from Meralco was being processed. Likewise a water delivery truck was provided to service water requirements for the resettled families by the same contractor until such time the piped water system was operational.

**Table 10. Access to Electricity Prior to and After Relocation**

	Prior to Relocation		After Relocation	
	Number	%	Number	%
Who supplies your electricity or Power/Electricity source?				
Gen set private	4.0	9%	4.0	9%
Gen set from developer	0.0	0%	0.0	0%
Power Utility / Grid	36.0	80%	39.0	87%
Jumper from neighbour	2.0	4%	1.0	2%
None	3.0	7%	1.0	2%
Total	45.0	100%	45.0	100%

**Table 11. Access to Health Services Prior to and After Relocation**

Where do you go for health services needs?	Prior to Relocation		After Relocation	
	Number	%	Number	%
Barangay/village health center	35.0	78%	43.0	96%
Nearby Barangay/town health center/hospital	8.0	18%	2.0	4%
Others	2.0	4%	0.0	0%
Total	45.0	100%	45.0	100%

**Table 12. Access to Educational Facilities Prior to and After Relocation**

	Prior to Relocation		After Relocation	
	Number	%	Number	%
What educational facilities do you have in your community? (Multiple Response)				
Kinder/Elementary school in the barangay or nearby	43.0	59%	18.0	40%
High school in the barangay or nearby	30.0	41%	27.0	60%
	45.0	100%	45.0	100%

### Resettlement Process

36. Almost all of the traced households (93%) were consulted on their relocation. The average number of consultations with the households was 2.6. More than half (60%) were given resettlement options (off-city options only), but 36% stated that they were not given a choice at all.

37. Table 13 below provides information about the relocation site options presented to the ISFs. Choices include resettlement in Calauan, Laguna which is more than 50 kilometers away from Paco site. Another site is Montalban, Rizal which is also more than 50 kilometers away from Paco community. Of those who were consulted with resettlement options, the most common choice was the resettlement in Calauan, Laguna or Bulacan (65%), followed by the resettlement in Montalban, Laguna or Bulacan and provision of housing assistance of Php 25,000, both at 12%.

**Table 13. Relocation Options of Households**

Options Provided (Common) (for those who answered "Yes")	Number	Percentage
Housing assistane of Php 25,000	3.0	12%
Resettlement in Calauan, Laguna or Bulacan	17.0	65%
Resettlement in Montalban, Laguna, or Bulacan	3.0	12%
Resettlement in San Mateo or Bulacan	1.0	4%
Shuttle service provided to Towerville	2.0	8%

38. When asked about what additional assistance were received on top of the house and lot allocation, most (91%) were given transport support (i.e. trucks for belongings and buses for households and family members) during the relocation process. Majority (72%) also shared that they received lunch packs and a kilo of rice and some grocery items (22%) as additional support or allowance.

**Table 14. Common Support Provided during Relocation**

39. What other support or allowances were given to you? (Common)	40. Number	41. Percentage
42. A kilo of rice and groceries	43. 7.0	44. 22%
45. Lunch pack	46. 23.0	47. 72%
48. Van for transportation	49. 2.0	50. 6%

51. More than half of the households (64%) agree that the assistance were given in a timely manner, but 25% said these entitlements came in late. Most of the households (65%) stated that the assistance was coursed through barangay officials, while 35% of them had to line up for rations.

52. FGD and KII results confirmed that there was a relocation activity for the household living along the waterways and within the proposed project technical foot print. Key informants shared that NHA offered off-city relocation options in various locations outside Metro Manila and in particular had ocular visits to Montalban, Bulacan, and Laguna relocation sites. The actual relocation happened in 2011.

53. Per FGD and KII results, ISFs from Paco said they were not included in PHP18,000 financial assistance as this benefit was not yet part of the relocation support under the Estero Waterways Projects of the government under the Pasig River Rehabilitation Commission (PRRC). Those that did not want to be relocated to any of the government resettlement sites were provided with financial assistance (e.g. Balik Probinsya, financial assistance to stay in another place of their choice, except in the same place). There was no exact number given as to how many availed of this scheme.

54. There were two people that went back to the same place (Estero de Paco) and, with the permission of the Barangay Chair, are living there again on temporary basis due to proximity to work and access to odd jobs and livelihood activities. These two households are siblings and their families remained in the resettlement site, while they continue their work as tricycle drivers. They are staying weekdays in Paco and go home to their families in Towerville on a weekly or bi-monthly basis depending on the income generated from their driving each pay cycle. Information gathered from the various sessions also indicated that some residents (numbers could not be verified) are reportedly renting in the same Barangay for ease in going to work and schools. The Barangay chairperson claimed that that these two were only permitted for a limited period but to date they have not been able to transfer to a rented space within the Barangay. The two explained that due to their limited income that is divided between their retained families in Towerville and their cost of living in Paco,

they are not able to comply with the agreement to leave their temporary space and rent as lodging space.

## **Grievance Redress System**

55. When asked about access to a system for accepting complaints grievance redress, only 22% said this was available while majority said they did not have or were not aware of such system.

## **Compliance with National Legislation and Consistency with OP 4.12 Objectives**

56. Methods used to assess whether there was compliance with the national legislation on resettlement as well as that of the OP 4.12 objectives included desk review, key informants interviews, focus group discussions, and the conduct of the tracer survey. Results indicate that the government complied with the established guidelines, procedures and necessary activities articulated in the Urban Development and Housing Act of 1992 as can be gleaned from the following: (a) NHA and the Manila City LGU went through a series of meetings and consultations led by the City's Local Inter-Agency Committee (LIAC). The minutes of meetings on various consultation meetings were documented by the LIAC secretariat and are available for any interested party to review; (b) ISFs were given resettlement site options to choose from and arrangement for site inspection were facilitated. The survey further indicated that the Towerville 6 was chosen by most of the residents of Estero de Paco in Barangay 662 after each household were given a chance to do ocular survey of available relocation sites; (c) replacement of their housing structures from the site of origin was provided through the award of a house and lot package in Towerville Phase 6 San Jose City, Bulacan. Survey results indicated that most housing units from the site of origin (Estero de Paco) were made of light materials. Upon verification, housing units awarded to the PAPs in Towerville 6 were made of concrete and GI roofing with provisions of individual toilet and bath in a lot of up to 40 square meter; and (d) relocated families were provided with basic community facilities and services such as schools for primary and secondary levels, health center, water and electricity, initially on temporary arrangement at the time of arrival until they were able to apply for their direct connection to the utility companies serving the community. From 2011 to date, there has been a remarkable improvement in the ISFs' access to services in the resettlement site.

57. While there were efforts on the part of some government agencies and their counterparts from the private sector and NGOs to provide livelihood and employment assistance (skills training, job referral and placement, start up kits for income generation and funds as seed capital, access to microfinance institutions, training on entrepreneurship, etc.), unemployment and the lack of opportunities to earn remained to be the most pressing need identified by the resettled families. The biggest challenge faced by the relocatees is finding sources of income or jobs within and around the vicinity of the relocation site. Unemployment rate among the resettled ISFs increased. Although the

location is also a city, and short-term jobs and income opportunities are available, there is not much opportunity for long-term sustainable livelihood. This prompted a number of the resettled people to go back to Manila-Paco area or to elsewhere in Metro Manila to work. For doing so, they spend part of their income for transportation and a reduced take home pay, as well as temporary separation from their family.

58. ISFs were provided with a house and lot package with 22-24 square meters row house in a lot size of 36-40 square meters. The awardees are expected to pay Php 200 per month after 1-year grace period from the time of relocation. The amortization schedule is presented in the table below.

**Table 15. Schedule of monthly amortization (Row House) in Towerville 6 Bulacan<sup>2</sup>**

Year to Amortize	Lot (PHP)	Housing Unit (PHP)	Total Monthly Amortization (PHP)
1 – 5	150	50	200
6 – 10	193	207	400
11 – 15	293	207	500
16 – 20	443	207	650
21 – 25	593	207	800
26 – 30	604.20	205.33	809.53

59. NHA resettlement project office reported that the ISFs from Estero de Paco have started paying monthly amortization, although not all are regularly paying. In early October 2015, NHA conducted occupancy check from among the 74 relocated families and found that there were only 36 or 48% of actual households that were currently occupying their awarded units<sup>3</sup>. Of the 36, only 16 households were recorded to have been paying monthly amortization based on the agreed schedule of payment. The occupancy check also revealed that there were housing units that were allegedly sold by original awardees, padlocked, or abandoned. Detailed results of the NHA occupancy check results is in Annex C. Annex A provides explanation as to the circumstances of the 29 non-residing owners as mentioned in the NHA occupancy check results in Annex C.

<sup>2</sup> NHA Project Office at Phase 6 Towerville Resettlement in Brgy Gaya-gaya, City of San Jose Del Monte, Bulacan

<sup>3</sup> Note that the tracer survey had higher number of interviewed respondents as the team exerted efforts to contact and interview those who are already living outside the relocation site.

## Action Plan to improve Resettlement Outcomes

60. Based on the current situation of Paco ISFs resettled in Towerville 6 discussed in the preceding sections, the Project will need to work on three complementary measures to improve resettlement outcomes and in the process meet government policies and OP 4.12 objectives. These are: livelihood restoration, community development assistance, and improvement in grievance redress.

61. If the focus would only be on the 74 resettled PAPs from the Paco technical footprint, implementation would be a challenge given that the PAPs are now co-mingled with a large group of 4,000 relocated households in Towerville blocks 6A and 6B. As a matter of strategy and to avoid social equity issues, DPWH has made arrangements with NHA to package the implementation of this action plan as a pilot project—to start with the PAPs and the two blocks where the PAPs are located. A communication and information campaign will be launched as part of the overall management of action plan implementation.

### Livelihood Restoration

62. To address the need for sustainable livelihood under Component 3, the Project, led by the DPWH PMO and with close cooperation of NHA, San Jose del Monte LGU, and other relevant agencies, prepared this site-specific livelihood action plan based on the Livelihood Restoration Strategy developed for MMFMP. Learning the lessons of past livelihood programs, this plan considers four key success factors for livelihood interventions: (i) matching of livelihoods with people's skills and interests; (ii) presence of a steady market to buy people's services or products; (iii) quality of the end product and/or skills; and (iv) placement services for employment. It looks at employment as the most prominent source of income for ISFs and thus building up employable skills of resettled ISFs and matching them with formal sector jobs near their resettlement sites would be a priority. Table 16 discusses details of the livelihood restoration plan.

**Table 16. Livelihood Restoration Plan**

	Category of Resettled HHs	Action Plan	By Whom	Budget
1	74 PAPs that will need basic / advance skills training for wage employment and for livelihood income generation.	<p>-Updating of PAPs profile, skills and entrepreneurial experiences.</p> <p>- Grouping of PAPs per profile based on the following :</p> <ol style="list-style-type: none"> <li>1. Low skilled – Semi skilled with low education and training but are mobile to work.</li> <li>2. Skilled – with education and training required by the market/business with mobility but will need skills enhancement</li> <li>3. Individuals/guilds with education and experiences on business ventures such as home-based enterprises leveraging on essential services required for any community</li> </ol> <p>- For all these categories, the project will provide life skills training, basic skills training, skills enhancement for national certification by TESDA and other accrediting body as well as placement services.</p> <p>- Market analysis to identify key industries that can provide wage employment as well as key services/products that have adequate market demand in the vicinity of the resettlement site.</p> <p>- Inventory of companies and business establishments within the 10 kilometer radius of Towerville 6 that are potential employers and or with potential sub- contracting work for the PAPs.</p> <p>-Target at least 2 business establishments and companies that nearby for job matching and job placement based on the updated skills, interest and experiences profile. Establish 1</p>	PMO, NHA, LGU DOLE, DTI, TESDA, and the LGUs	<p>Total - Php7,370,000</p> <p>Breakdown of Cost:</p> <p>Cost of training materials and equipment at 5,000 per trainee x 74 trainees = 370,000</p> <p>Cost of skills training at an average of 10,000 a month x 3 months x 74 = 2,220,000</p> <p>Cost of financial assistance to get documents for employment @ Average of 3,000 per employee times the 100 number of potential employees = 300,000</p> <p>Profiling and assistance job placement = 1,000,000</p> <p>Capital Asssitance for income and livelihood project to entrepreneurs = 2,000,000</p> <p>Capacity building of guilds, cooperative and social marketing = 1,000,000</p>

		<p>dedicated office for placement services with formal employers through institutional partnership with reputable recruitment agencies and/or using a conduit CSO's NGOs that has strong linkages with private sector.</p> <ul style="list-style-type: none"> <li>- Provide interest-free loan assistance to job hunters to comply with documentary requirements for formal employment, such as IDs, security clearance from barangays, police, National Bureau of Investigation, health and sanitary inspector, purchasing uniforms, clearances, and bridging the gap until their first payment of salary is received.</li> <li>-Enhancement of partnership with various sectors providing livelihood training, starter kit for income generation and seed capital and or access to credit for livelihood projects.</li> <li>- Mobilize at least 2 social entrepreneurs, 5 CSOs and NGOs for product design, packaging, and a sustainable market outlet for products and services.</li> <li>- Monitor and follow up for all 74 cases assisted to identify areas for learning and improvement on the intervention</li> <li>- Provide budget from 2017, (national and local funds), access of fund allotment from the 1.8 billion agencies mandated to provide livelihood intervention for Towerville 6.</li> </ul> <p>Conduct of a tracer study to track the employment status and progression of income levels among trained HHs and the progress of livelihood projects supported.</p>	<p>Monitoring and Evaluation = 500,000</p>
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2	27 PAPs working in Metro Manila that will need augmentation funds for their transportation expenses from the resettlement site to place of work.	<ul style="list-style-type: none"> <li>-Updating profile of resettled 27 PAPs working in Metro Manila, and prepare an individual case study to determine level of support needed including their preference in working near the relocation site with assistance under this Project.</li> <li>- Issue transportation voucher for 6 months for each of HHs head working in Metro Manila based on actual distance from home to work.</li> <li>- Prioritize HHs for job placement in nearby establishment and business. (included in the support extended for the 74 PAPs)</li> <li>- Extend capital assistance for income generating projects and entrepreneurial activities such as purchase of tricycle, market vendors, etc. (included in the computation for 74 PAPs)</li> <li>- Monitoring and evaluation (included above).</li> </ul>	DPWH PMO, NHA	<p>Transportation vouchers = 405,000</p> <p>Breakdown of cost estimate: Average of 2,500 per HHs per month x 27 HHs = 67,500 x 6 months = 405,000</p>
3	Some 4,000 HHs in Towerville Phase 6 A to E that is within the immediate neighborhood where the 74 PAPs from Paco PS are clustered. Some HH members will need assistance for employment and or for	<ul style="list-style-type: none"> <li>-Based on NHA data, identify interested individuals within the zone to join trainings to be provided to MMFMP PAPs. Initially target the same number as the PAPs</li> <li>-Establish 1 dedicated office for placement services with formal employers through institutional partnership with reputable recruitment agencies and/or using a conduit CSO's NGOs that has strong linkages with private sector.</li> </ul>	DPWH PMO, NHA	<p>5,690,000</p> <p>Breakdown of Cost: Cost of training materials and equipment at 5,000 per trainee x 74 trainees = 370,000</p> <p>Cost of skills training at an average of 10,000 a month x 3 months x 74 = 2,220,000</p>

livelihood projects			<p>Cost of financial assistance to get documents for employment @ Average of 3,000 per employee times the 100 number of potential employees = 300,000</p> <p>Capacity building, bechmarking and conduct to studies of studies = 300,000</p> <p>Administrative cost for salaries and benefits of personnel implementing the programs = 1,500,000</p> <p>Monitoring and evaluation = 1,000,000</p>
Notes. Fund sources: MMFMP and the Towerville 6 share from the 18 Resettlement Sites funds appropriated in the GAA 2017.	<b>Total PHP</b>		<b>13,465,000.00</b>

## Community Development Assistance

63. The main objective of the Community Development Assistance (CDA) intervention is to fill the gaps in the PAPs’ access to basic services through a set of community-wide development assistance programs. Per Tracer Survey and FGD/KII results, Towerville 6 needs assistance in improving access to quality health services, especially for emergency cases. Access to electricity is also another need as 13% of the PAPs at the time of the DDR still doesn’t have access. The MMFMP will allocate PhP15,000,000 for Towerville 6 to support PAPs and their neighbors in the improvement of remaining services needed in the resettlement site. DPWH PMO and NHA will develop specific project proposals within the first year of MMFMP implementation.

## Improvement in Grievance Redress Mechanism

64. The current grievance redress mechanism (GRM) has leaders of community or homeowners associations as the first level where resettled ISFs lodge their complaints or feedback. If not resolved there, the next level will be the NHA field office established at the resettlement site itself, in this case, in Towerville 6.

65. This DDR proposes to strengthen the current system for grievance redress to ensure that the overall welfare of the Paco ISFs resettled in Towerville 6 is protected and promoted. To do this, DPWH PMO will establish close coordination with NHA and the resettled families to review and enhance the current system and propose measures in pursuit of the following principles:

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

66. To achieve these principles, the GRM will be enhanced with the following features:

- **Multiple Uptake Points:** In addition to access through the Community Contact, complainants will be provided with multiple channels to submit their complaints. These include: postal mail, electronic messages, telephone, SMS, personal delivery/walk-in. A project GRS hotline will be established to be managed by the GRS Focal Person at the PMO.
- **Timely resolution at the lowest possible level:** The project will strive to attend to complaints in a timely manner. To do this, it will designate a Community Contact at the resettlement site (Towerville 6) level. In addressing and resolving complaints, the project will build on existing mechanisms in the community (community leaders, barangay officials, barangay justice system, etc.), such as the *Lupong Tagamapayapa*, a village committee on peace and order that hears complaints and resolves them in accordance with the guidelines of the Barangay justice system. It is only when the complaint is not resolved at this level that the complaint goes to the PMO GRS for resolution.
- **System for receiving, sorting, verifying, and tracking.** A simple system will be developed to facilitate effective management of complaints to guide the PMO, particularly the Public Complaints Unit, on the steps and arrangements from receiving, sorting, verifying, acting and

tracking complaints. Complaints will be categorized and actions on the complaints will be implemented and documented. The project will maintain a database documenting the salient details of complaints, including the dates they were received and when and what actions were taken. The project will monitor complaints and coordinate with the concerned LGUs and relevant government agencies as needed to resolve them adequately and expeditiously. MMDA will keep the World Bank Task Team informed about any significant complaints and the steps taken to resolve them.

- Disclosure and ease of access: The salient features of the GRS will be publically disclosed so that people are aware of where and how complaints will be managed. The Community Contact person assigned to the sub-project will further ensure that people in the sub-project's area of influence are aware of grievance management arrangements. Ideally complaints should be written, but if received verbally, the Community Contact person will ensure written documentation is made and that the complaint is dated and recorded.

## **Institutional arrangements for Action Plan Implementation**

67. The PMO (MMDA or DPWH), the main agency responsible, will work closely with NHA, the local government unit of San Jose del Monte City, the concerned Barangay LGU, and the host community in the implementation of the agreed remedial measures. The whole process may necessitate organization of a multi-stakeholder body composed of national government agencies, city and barangay LGUs, and local industries and business sectors.

68. The DPWH PMO will enter into a MoA with the local government of San Jose del Monte City and Barangay Muzon stipulating the division of responsibilities under the Project for the implementation of remedial measures discussed above.

69. Specifically, the roles and responsibilities of the Agencies are presented in table below.

**Table 17. Institutional Arrangement**

Agency	Specific Roles and Responsibilities
DPWH PMO	<p>Provides overall policy guidelines and action plan supervision, monitoring and evaluation</p> <p>Prepares project internal monitoring and progress reports</p> <p>Take the lead in securing funding from the government appropriation for the 18 resettlement site for Towerville 6 with focus on the area/zone of the 74 PAPs.</p> <p>Assign project staff to implement the livelihood restoration plan</p> <p>Engage the services of an External Monitoring Agency</p>
NHA	<p>Provides land / space for livelihood and social infrastructure</p> <p>Constructs additional basic social infrastructure in coordination with National agencies, utility service providers and the host LGU</p> <p>Through MMFMP, pilot test the livelihood and employment program with the objective of scaling up</p> <p>Undertakes estate management functions and issue tenure instruments to relocated HHs</p>
Partner national government agencies (Department of Education, DOH, DSWD, TESDA, etc.)	<p>Provides standard services and deploy human resources to the resettlement site for the formal establishment and operation of basic services</p> <p>Provides fund augmentation to the host LGU in planning and implementating needed basic services</p>
Host LGU	<p>Organize the Local Interagency Council (LIAC) LGU -HRT as a follow through function of the LIAC from the sending LGUs;</p> <p>Provides municipal services to the relocated families such as local basic services, solid and liquid waste disposal, among others;</p> <p>Ensures inclusion of Towerville 6 in the preparation of its Annual Investment Plan</p>

# Annex A: Households with Various Circumstances

Annex A Towerville Phase 6 Resettlement Project Various Cases as of 9Nov.15  
Brgy. Gaya-Gaya, City of San Jose Del Monte, Bulacan

No.	Name	Address			Original Owner		Currently Occupied		Occupant			Caretaker	Relationship to Owner	Owner's Contact Details	Ownership Status/Location	Amount Rent (Php/Unit)	Amount Sold (Php/Unit)	Remarks
		Phase	Block	Lot	Yes	No	Yes	No	Owner	Sharee	Renter							
1	Padilla, Ariel, Santos	6D	19	1	Yes			No						The owner is residing in UN Midtown, Paco, Ma			The owner visits once in a while	
2	Cayetano, Gloria	6D	19	3	Yes			No									The house is still unoccupied	
3	Tumang, Marilyn	6D	19	11	Yes		Yes		Henry Hermoso			Meryl Tunang / 09433227809	Sister/Neighbor				The owner is residing in Toledo, Ma	
4	Rivera, Jose Jr.	6D	19	25	Yes			No				Evelyn Monerba	Sister in law/neighbor	09204513200			The owner is residing in Bataan temporarily with his family	
5	Berongoy, Luzviminda	6D	19	27	Yes			No				Lolita Macabare	Sister/Neighbor				The owner is residing in SMC Compound, Cristobal St., Paco, Ma	
6	Cuevas, Celestino, Rebanal	6D	19	47	Yes		Yes			Charito Pimentel			Aunt of Mrs. Alice Cuevas				The owner is out during survey (2nd visit)	
7	Ortiz, Veronica, Japson	6D	20	2	Yes			No									The owner is residing in Paco, Ma. The house is still unoccupied	
8	Corpuz, Rogelio	6D	20	40	Yes		Yes			Rodrigo Copuz			Brother	09282974815			The owner is residing in Cristobal St., Paco, Ma, as renter	
9	Culala, Malou, Paras	6D	20	45	Yes		Yes		Culala, Malou, Paras								The owner is out during survey (2nd visit)	
10	Quiano, Roger	6D	21	3	Yes			No				Henemio Hernandez	Neighbor/bk21 lot5	09204779058			The owner resides in Paco, Ma. The owner visits every 2nd Sunday	
11	Torrecampo, Jeffrey	6D	21	7		No	Yes		Torrecampo, Jeffrey							50,000.00		
12	Colgado, Jocelyn	6D	21	11		No	Yes		Colgado, Jocelyn							65,000.00		
13	Valdez, Elaine, Cabinong	6D	21	17	Yes		Yes										The owner is working at City Hardware, U.N. Ave., Ma / Out during survey	
14	Grana, Raymark, Cabinong	6D	21	19	Yes		Yes		Grace Garcia Carucay (not from Paco)								Rent free	
15	Aldas, Rosalina	6D	21	25		No	Yes		Cathusy Dupaduca				Relative				The owner is residing in Caloccan. Rent free	
16	Guanlao, Rosarie	6D	21	27	Yes	No	Yes		Jennifer Artajo (not from Paco)				Not relative				The owner is residing in Manila. Rent free	
17	Cabidoag, Jazzie	6D	21	37	Yes		Yes		Cabidoag, Jazzie								The owner is out during survey (2nd visit)	
18	Charito Manacad	6D	21	38	Yes		Yes			Non-relative	Neighbor	Nephew			1,200/month			
19	Lustre, Catherine	6D	21	39	Yes		Yes			Vevinto De Guzman					700/month		The owner is residing in Paco, Ma	
20	Mondal, Nestor	6D	21	40	Yes		Yes			Regina Gallano	Salde Dacoco	Cousin			800/month		The owner is residing in Samar with his family	
21	Orpilla, Violeta	6D	21	45	Yes		Yes			Salvacion Garqarta	Maricel Tagutongan	Neighborhood			700/month			
22	Marvin, Marcelino	6D	22	14	Yes		No				Bobby Galante/Neighbor	Cousin					The owner is residing in Bilonzof, Sapang Palay	
23	Aquilar, Martin, Tamayo	6A	26	12	Yes		Yes				Janneth Aquilar	Niece/neighbor					The owner is residing in Antipolo	
24	Tamayo, Christopher, Vilantes	6A	26	14	Yes		Yes		Babylyn Noto with her family				Relative				The owner is residing in Cogeo	
25	Reyes, Arturo Jr., Cardeno	6A	26	16	Yes		Yes			Non-relative	Neighbor	Neighbor					The owner is residing in Antipolo. The owner visits once in a while	
26	Raphael Sikat	6D	36	19	Yes		Yes		Hannah de Vera (previously from Muzon)				Not relative				The owner is residing in Cristobal St. Paco, Ma	
27	Lavezares, Lizette	6D	36	21	Yes		Yes				Hannah / 09193454533	Neighbor					The owner is residing in Paco, Ma. The owner visits once in a while	
28	Castillo, Michelle	6D	36	23	Yes		Yes		Vilma Coronel				Friend	09154037632 / 09201030385			The owner is residing in Paco, Ma	
29	Ciocon, Rommel	6D	36	29	Yes		Yes				Bacud, Rechie	Neighborhood					The owner is residing in Paco, Manila as renter	

## Annex B: FGD –KII highlights and Photos

### Summary of FGD and KIIs Findings

- The tracer survey was complemented with the conduct of focus group discussion and key information interviews from the former neighbors and persons known and respected community leaders in the community. The FGD and the KII aim was to verify information gathered that there was indeed a relocation of ISF's that happened in the area, estimated number of residents, and the location by which they were resettled.
- Information gathered confirmed that there was a relocation activity for the household living along the waterways and within the proposed project technical foot print. Based on the key informants NHA offered off city relocation options in various locations outside Metro Manila and in particular had ocular visits to Montalban, Bulacan and Laguna relocation sites. The relocation happened in 2011.
- When asked about getting PhP 18,000 financial assistance, they said they were not included in this benefit as they are not covered yet by the OPLAN LIKAS of the DILG, but rather on the Estero Waterways projects of the government under the PRRC.
- Information gathered that for those that did not want to be relocated to any of the government resettlement sites, financial assistance for Balik Probinsya and financial assistance to stay in another place of their choice, except in the same place, was also extended to the households. There was no exact number given as to how many availed of this scheme.
- The sessions also validated information gathered from the tracer survey that there are some households that went back to the same place (Estero de Paco), with few people living there again on temporary basis due to proximity to work and access to odd jobs and livelihood activities. Results revealed that there were two households that put up shanties along the cleared Estero as temporary housing. These two households are siblings and their families remained in the resettlement site while they continue their work as tricycle drivers.
- Based on the information gathered, the two household heads sought permission of the Barangay chairperson for them to put up a temporary sleeping quarter in the cleared areas while they continue to work in Paco. They are staying weekdays in Paco and go home to their families in Towerville on a weekly or bi-monthly basis depending on the income generated from their driving each pay cycle. Information gathered from the session indicated that some residents (numbers could not be verified) are reportedly renting in the same Barangay for ease in going to work and schools.
- At least one of the key informants, a Barangay official, confirmed that he is currently renting a space in Paco (not the same place cleared) with his parents that suffered stroke while they were in Towerville. His main reason is proximity to the medical facilities for his sick parents. They go home to Towerville once in a while to check on their housing unit that is being tended by a neighbor in Towerville.
- In the same meeting the Barangay chairperson discussed the non-compliance of the two households given temporary accommodation of their shanties as sleeping quarters. She

claimed that that these two were only permitted for a limited period but to date they have not been able to transfer to a rented space within the Barangay. According to her, her constituents and former residents relocated are calling her attention and perceived to weak in the enforcement of the temporary agreement. She is also getting reprimand from the Manila City officials since the site had been turned over to the LGU as certified clear of ISFs.

- The two household heads aired their side of the story in the same meeting held where the Barangay chairperson mentioned the issue. They disclosed in the meeting that due to their limited income that is divided between their retained families in Towerville and their cost of living in Paco, they are not able to comply with the agreement to leave their temporary space and rent as lodging space.
- They however promised that as soon as they are able to put together funds to pay for rent of a lodging space, they will voluntarily vacate the shanties they erected in the cleared site.

### FGD and KII Photo Documentation in Paco PS

#### FGD at Barangay 662

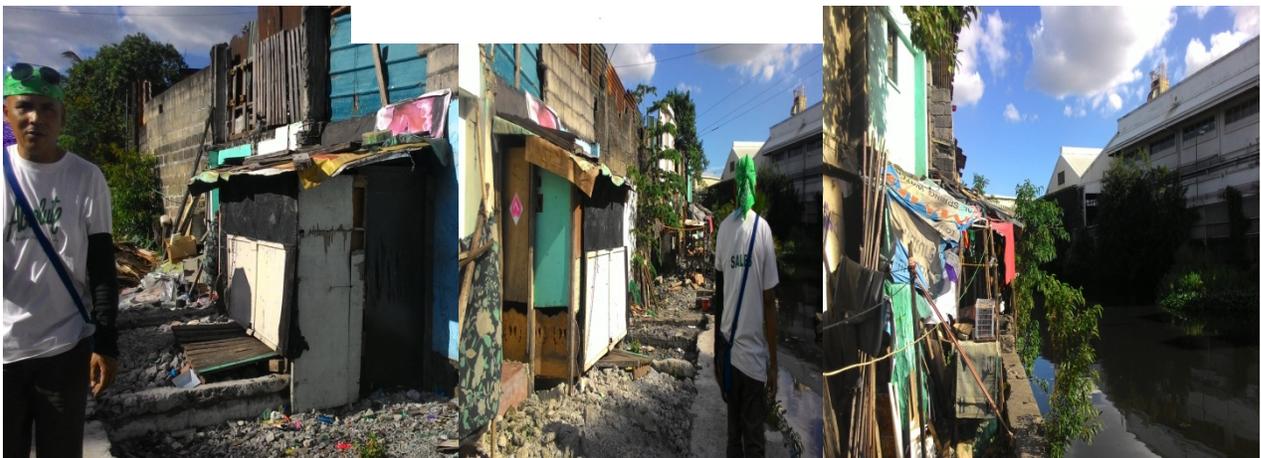


Metro Manila Flood Project Management – Phase 1  
Focus Group Discussion – Brgy. 662, Paco Pumping Station  
November 11, 2015

No.	Name	Signature	Address	Contact Number
1	Ms. Teodoro L. Sibat	<i>[Signature]</i>	602 Candelabro St., Paco	09178249616
2	Engr. Teodoro L. Sibat	<i>[Signature]</i>	602 Candelabro St., Paco	800-6079
3	Engr. Teodoro L. Sibat	<i>[Signature]</i>	602 Candelabro St., Paco	09174401979
4	Roberto P. Corpuz	<i>[Signature]</i>	602 Candelabro St., Paco	09235888453
5	Ron R. Corpuz	<i>[Signature]</i>	602 Candelabro St., Paco	0947332278199
6	EMILY JOYSON	<i>[Signature]</i>	814-A Candelabro St.	09216879953
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				



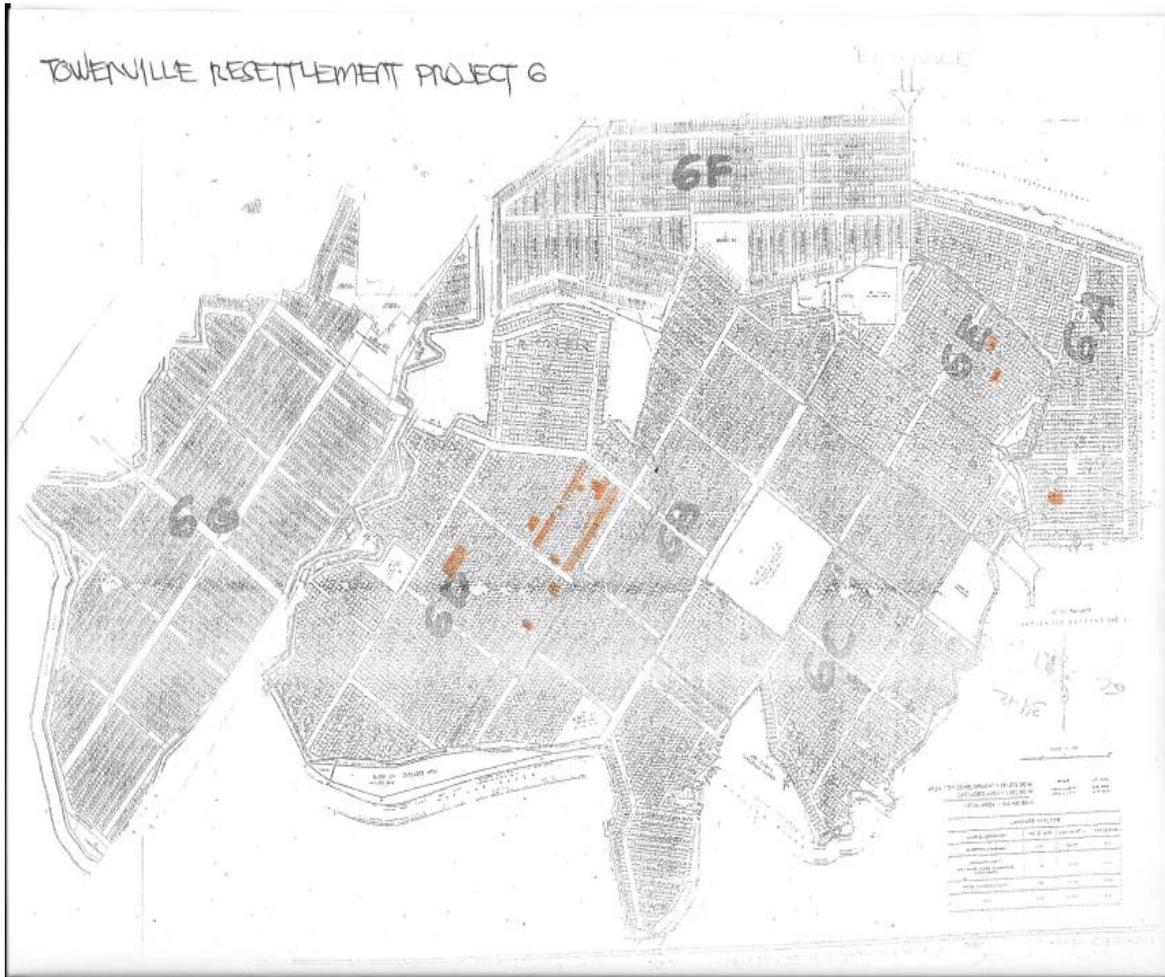
Roberto Corpuz beside his shanty located in Estero de Vitas



FGD with NHA Towerville Phase 6 staff, led by Project Manager Architect Elizabeth Joseph, Rico Abueva, Daisy Marinas, and Rosalio Plasencia. Agenda: Briefing about Towerville Project site. Status of Occupancy of HHs from Estero De Paco to Towerville 6 as of October 2015.



## Annex C: Information about the Towerville 6 Brgy Gaya-Gaya San Jose Bulacan



**PROJECT PROFILE**  
**PH6 TOWERVILLE RESETTLEMENT PROJECT**  
 Brgy. Gaya-Gaya, CSIDM, Bulacan  
 As of November 2, 2015

**I. BASIC INFORMATION**

PROJECT : Ph 6 Towerville Resettlement Project  
 LOCATION : Brgy. Gaya Gaya/Graceville City of San Jose Del Monte Bulacan  
 PROGRAM CLASSIFICATION : Community Initiative Approach Program ( CIAP )  
 BENEFICIARIES : Families affected by Fire , Typhoon and Road Widening  
 Families that are in endangered areas ( Metro Manila )

**II. PROJECT STATUS**

LAND AREA : 544,752 Sq. M.  
 ORIGINAL ( PH 6A to 6E ) = 351,375 SQM.  
 EXPANSION 1 ( PH 6F ) = 63,718 SQM.  
 EXPANSION 2 ( PH 6G ) = 129,659 SQM  
 TOTAL PLANNED UNITS : 9,170 Units  
 TOTAL RELOCATED FAMILIES : 8,106 Families

**III. DEVELOPMENTAL FEATURES**

AVERAGE LOT SIZE : Ordinary House 36 Square meters  
 Loftable 40 Square meters  
 AVERAGE FLOOR AREA : 22.50 square meters  
 DRAINAGE : RCP  
 SEWAGE : Individual Septic Tank  
 WATER SUPPLY : City of San Jose Water District  
 POWER SUPPLY : Meralco

**COMMUNITY FACILITIES**

- Elementary School
  - 2 Units 3 Storey 15 Classroom (NHA)
  - 1 Units 3 Storey 15 Classroom , Expansion Area, (on going construction) (NHA)
  - 1 Unit 2 Storey 4 Classroom (DepEd)
  - 1 Unit 4 Storey 20 Classroom , (on- going construction/DPWH)
- High School
  - 1 Unit 1 Storey 5 Classroom
  - 1 Unit 1 Storey 6 Classroom
  - 1 Unit 2 Storey 6 Classroom , (on- going construction/DPWH)
- Multi-Purpose Covered Court
- Multi-Purpose Covered Court, Expansion Area, (on- going construction)
- Basketball Court
- Barangay Hall (Gaya-Gaya Annex)
- Barangay Outpost
- Barangay Health Center
- Health Center ( CAMP ASIA)
- Play Ground
- Chapel
- Market

**PROPOSED PROJECT:**

- 1 Unit Birthing

<b>1. OCCUPANCY STATUS</b>		
1.1. Actual Occupant	-	36
1.2. Non-Residing	-	29
1.2.1. Padlocked Unit	-	27
1.2.2. Abandoned	-	2
1.3. Alleged Sale of Right	-	5
1.4. With Renter / Caretaker	-	4
TOTAL	:	<u>74</u>
<b>2. STATUS OF POWER / WATER UTILITIES</b>		
<b>A. POWER</b>		
2.1. With Individual Connection	-	51
2.2. Application Pending subject to Documentary Requirements	-	3
2.3. No Application	-	20
TOTAL	:	<u>74</u>
<b>B. WATER</b>		
2.1. With Individual Connection	-	34
2.2. Application Pending subject to Documentary Requirements	-	16
2.3. No Application	-	24
TOTAL	:	<u>74</u>
<b>3. STATUS OF FINANCIAL CAPABILITY</b>		
3.1. Employed / Self - employed	-	43
3.2. Pensioner	-	2
3.3. Unemployed	-	2
3.4. Non-residing/Abandoned/Padlocked	-	21
3.5. With Livelihood Intervention	-	6
TOTAL	:	<u>74</u>
<b>4. STATUS OF LOT PAYMENTS</b>		
4.1. Paying	-	0
a. with advance payment	-	0
b. updated payment	-	16
c. moved accounts/ In arrears	-	0
4.2. Non-Paying	-	29
a. with approved LIS/ awaiting PQ	-	29
b. not yet created account	-	0
TOTAL	:	<u>74</u>

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# Tracer Survey Results – Towerville 6

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Metro Manila Flood  
Management  
Project

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In 2011, 74 ISFs were resettled from the Paco Pumping Station's technical footprint. To assess the status with this resettlement, a tracer survey complemented by community consultations was conducted in Towerville 6 Gaya-Gaya San Jose del Monte Bulacan during the first week of November 2015. The survey involved 45 households.

### Objectives

The conduct of the tracer survey and community consultations in the Towerville Resettlement Site aimed to achieve the following goals:

- To obtain information on the socio-economic profile and preferences of the informal settler residents who will be affected by the project;
- To determine and assess their income and affordability levels based on the patterns of their expenditures;
- To identify needs of the informal settlers, in terms of basic services and preferences with respect to the new sites for housing particularly income and livelihood options for those who will be relocated outside the city; and
- To use the socio-economic data as a baseline for the social preparation of affected households against project impact and to use these information for the preparation of Resettlement Action Plan.

### Methodology

The project deployed a team of qualified personnel to undertake face-to-face interviews with the use of structured questionnaires. Quality control measures were performed by field supervisors observing the work of interviewers and randomly checking the work done during the data gathering stage.

The project was provided with a Masterlist of Families and their Household Heads by the PRRC. Enumerators were instructed to locate the houses and interview a legal-aged member of the household for the survey. Significant attempts were made to trace the households within the Masterlist of Families. However, the survey team was only able to locate and interview 45 households in the resettlement site. A list of the remaining 29 households out the 74 that were listed by NHA project office as beneficiaries is likewise prepared indicating the various status and circumstances of their occupancy.

### Key Findings

About the Resettlement Site. San Jose del Monte is a first class component city in the province of Bulacan, Philippines. It was established as a city in September 2000. The city has 59 Barangays, which handle governance in a much smaller area. Towerville 6 Resettlement Site is in Barangay Gaya-gaya. According to the 2010 national statics census, it has a population of 454,553 making it the 19th most populated city in the Philippines. Its distance from Metro Manila cities is between 15 - 40 kilometers. The city is serviced by 24 hours bus routes going to and from Metro Manila, such as cities Quezon City, Caloocan,

Pasay, Paranaque up to Ninoy Aquino International Airport, and Alabang Muntinlupa. Jeepneys also ply the roads between the city and the neighboring cities and towns in Metro Manila and Bulacan province.

San Jose del Monte has experienced major economic growth, evidenced by the presence of major commercial banks, fast food chain outlets, real estates, and wide coverage of landline and cellular phone services. Major players in real estate development have started their projects in San Jose del Monte. Information gathered from the interviews indicated that the real estate development increased its activities over a period of five years that started in 2010. Relocated households were witnessed to the city's economic activities owing some benefits from the on-going construction, retail shops and food chain outlets as workers, shopkeepers and vending as hawkers in these establishments.

The Towerville 6 Resettlement Project is an NHA project planned to accommodate over 9,000 families identified to be living in danger areas, affected by calamities such as typhoons, fire and government infrastructure projects from Maetro Manila. The total land area is over 54 hectares. Community facilities include elementary and high school schools, multipurpose covered court, barangay hall and health center, open space for playground, and market.

Water and electricity is provided by the San Jose del Monte Water District and Maynilad Water Service Concessionaire of the government and the electricity connection is by the Meralco. According to NHA, the households' transferred in 2011 did not have utilities connections immediately upon transfer but were provided generator sets by the NHA contractor on site in 2011 as their immediate electricity for each household meantime that their application from Meralco is being processed. Likewise a water delivery truck was provided to service water requirements for the resettled families also by the same developer.

### **Tracer Survey Findings**

Key findings of the tracer survey is organized in six parts: (1) demographic profile of the households, (2) occupation, employment and income sources, (3) household expenditures, (4) housing profile, (5) access to services, and (6) resettlement process.

Tracer survey results finding indicated that the total households relocated from within the technical footprint of the Project was 74. Of these 74 households, there were few HHs that retained residents in the relocation site. Out of the 74, there were 29 HHs that were not covered by the survey due to various circumstances such as no occupants and closed/padlocked units, unit sold to present occupant, unit with renters and caretakers with no information where owner is. Based on this information it is revealed that the retention percentage of households relocated to Towerville in San Jose Del Monte City Bulacan stands at 61%.

Towerville Resettlement Site Tracer Survey findings is summarized as follows: Prior to relocation, 34% of the households were employed in unskilled/semi-skilled occupations while only 22% were skilled workers. After the relocation, data shows an improvement in the Household's occupation as 36% of them are now engaged in skilled jobs while 20% have unskilled/semi-skilled work. However the percentage of unemployed after relocation increased from 11% to 29%.

Highest educational attainment among those employed is in high school level and high school graduate.

Most of the households with current occupation (63%) work outside the city while 28% work within the vicinity of their city.

In terms of income, survey revealed that the monthly household income of the surveyed people in Towerville Resettlement Site is Php 10,592.60 and the median household income is Php 10,000.

The monthly average expenditure in Towerville is Php 9,927.1 and median expenditure is Php 8,768.3. Highest expense is on food which accounts to Php 5,560, and second highest is on transportation for those working in Metro -Manila which stands at Php 1,760 monthly on the average.

The distance of travel to place of work in Metro Manila from Towerville is approximately 30-40 kilometers. Travel time is between 30-60 minutes, but can be much longer depending on the traffic situation on the roads.

Prior to relocation, 49% of the Household's shelter ownership status was owned. Most of their houses (77%) were located either on stilts over the waterway or along the river and easement zone. Most have access to a main source of drinking water (76%), but majority of the households also shared that they have no access to a latrine (78%). Since all households in Towerville now own their house, it also follows that most have access to a main source of drinking water (89%) and households now have a toilet that is either flushed or uses a pail system (98%).

Prior to relocation, only 80% of the households had access to a power utility. This was increased to 87% after resettlement in Towerville Bulacan. In Paco, 78% have access to the baranggay health center, in comparison to the 96% in the resettlement site. In terms of garbage disposal, only 86% used to dispose of their solid waste through a collection scheme of the LGU or baranggay in Paco. Households in the Towerville Resettlement site all have access to a collection scheme provided by the local government unit or the barangay.

With regard to the resettlement process, almost all identified the involvement of the National Housing Authority. More than half of the households (65%) recalled that they were offered resettlement options in Montalban, Laguna or Bulacan. Ninety six percent (96%) of the households mentioned that they were not paid for the damaged house/structures/fences and other assets from their previous site.

In terms of the typical assistance received during the relocation process, most (72%) stated that the assistance was provided in a timely manner

### Demographic Profile

The demographic profile in Towerville shows that 64% (29) of the respondents were males while the remaining 36% (16) were females.

**Table 1. Distribution of Households by Gender**

Number of Households	Female	Male	Total
1	1	1	2
2	1	3	4
3	4	4	6
4	1	5	5
5	3	7	8
6	3	4	5
7	1	2	3
8	0	2	2
10	1	1	2
Total	16	29	45

The average household size stands at 4.6 which is similar to the mean number of household members in the country (Philippine Statistics Authority, 2012). In terms of age, the average household head was 44 years old.

**Table 2. Household Size**

Number of Household Members	Total
Mean	4.6
Minimum	1.0
Maximum	10.0

Household members are generally healthy with 98% (44) citing no ailments within the household, at the time of the interview.

**Table 3. Health Status of Households**

Health Status	Number	Percentage
Skin ailment	0.0	0%
Stomach/Diarrhoea	0.0	0%
Fever	1.0	2%
No ailment	44.0	98%
Total	45.0	100%

Of the 45 households, 36% (16) were high school graduates, 27% (12) were high school undergraduate, 13% (6) were able to go to vocational schooling while 11% (5) were college undergraduate. The highest educational attainment for both male and female is at high school graduate and high school undergraduate level.

**Table 4. Household's Education Level by Gender**

Educational Attainment	Female	Male	Total
Elem Undergraduate	1	1	2
Elem Graduate	1	3	4
Hi-School Undergraduate	6	6	12
High School Graduate	5	11	16
Vocational /TVET	1	5	6
College Undergrad	2	3	5
Total	16	29	45

Most households in the high school level and high school graduate are employed as skilled, semi skilled type of occupation.

**Table 5. Distribution of Household's Educational Attainment and their Type of Employment**

Educational Attainment	Government employee	Office worker/ Company employee	Shopkeeper/shop-owner	Skilled worker	unskilled/semi-skilled	Vendor/street hawker	Unemployed	Total
Elem Undergraduate	0	0	0	0	1	1	0	2
Elem Graduate	1	0	1	2	0	0	0	4
Hi-School Undergraduate	0	3	0	1	4	1	3	12
Hi School Graduate	0	1	0	5	7	1	2	16
Vocational /TVET	0	1	1	2	1	1	0	6
College Undergrad	0	0	2	0	2	1	0	5
<b>Total</b>	<b>1</b>	<b>5</b>	<b>4</b>	<b>10</b>	<b>15</b>	<b>5</b>	<b>5</b>	<b>45</b>

### Occupation, Employment and Income Sources

Prior to their relocation, 33.3% of the households were employed in unskilled/semi-skilled work, followed by the 22% of skilled workers. Almost all (98%) did not have a secondary occupation. Results indicated positive change on the percentage of workers that become skilled after relocation. However, the percentage of unemployed households increased from 11% (5) to 29% (13).

**Table 6. Distribution of Primary Occupation Prior and After Relocation**

Primary Occupation Category	Percentage (45 HHs)		Change (+ -)
	Paco Prior	Towerville After	
Unskilled/semi-skilled	15 (34%)	9(20%)	-
Skilled worker	10 (22%)	16 (36%)	+
Government employee	1 (2.0%)	1 (2.0%)	same
Office worker/ Company employee	5 (11.1%)	3(7.0%)	—
Vendor/street hawker	5(11.0%)	3 (7.0%)	—
Shopkeeper/shop-owner	4 (9.0%)	4(9.0%)	same
Unemployed	5 (11.0%)	13(29.0%)	—
<b>Total</b>	<b>45 (100%)</b>	<b>100</b>	

Highest educational attainment of households employed as skilled, semi skilled workers completed high school and had high level education respectively. Some HHs with college level education are also employed as office workers skilled and semi skilled jobs.

**Table 7. Distribution of Household’s Educational Attainment and Type of Employment**

Educational Attainment	Government employee	Office worker/ Company employee	Shopkeeper/shop-owner	Skilled worker	unskilled/semi-skilled	Vendor/street hawker	Unemployed	Total
Elem Undergraduate	0	0	0	0	1	1	0	2
Elem Graduate	1	0	1	2	0	0	0	4
Hi-School Undergraduate	0	3	0	1	4	1	3	12
Hi School Graduate	0	1	0	5	7	1	2	16
Vocational /TVET	0	1	1	2	1	1	0	6
College Undergrad	0	0	2	0	2	1	0	5
<b>Total</b>	<b>1</b>	<b>5</b>	<b>4</b>	<b>10</b>	<b>15</b>	<b>5</b>	<b>5</b>	<b>45</b>

Most of the households with current occupation (63%) work outside the city while 28% work within the vicinity of their city.

**Table 8. Distribution of Household’s Work Location by Gender**

Work Location	Female	Male	Total
Within the Vicinity of the City	3	7	10
Outside the City	3	19	22
Unemployed	10	3	13
<b>Total</b>	<b>16</b>	<b>29</b>	<b>35</b>

The average monthly income of the household is Php 8,733.70.

**Table 9. Household’s Monthly Income**

Income	Amount
Mean	8,733.7
Median	9,500.0
Mode	10,000.0
Minimum	600.0
Maximum	20,000.0

Only five (11%) of the households are receiving other sources of income such as welfare. Four of these households are receiving government subsidies or pensions and one is accepting remittance from relatives.

**Table 10. Distribution of Households with Income from Welfare by Gender**

Income from Welfare	Female	Male	Total
Government subsidy/pension	2	2	4
Remittance from relatives	1	0	1
None	13	27	40
Total	16	27	45

The mean income from these remittances and other sources is Php 1,920.00.

**Table 11. Household's Remittances and Other Sources**

Income from Welfare	Amount
Mean	1,920
Median	1,600
Standard Deviation	1,132
Minimum	500
Maximum	3,500

On the average, survey revealed that the monthly household income in Towerville is Php 10,592.60 and the median household income is Php 10,000.

**Table 12. Household's Monthly Income**

Total Household Income	Amount
Mean	10,592.6
Median	10,000.0
Mode	10,000.0
Minimum	1,800.0
Maximum	26,000.0

Sixty percent (60%) of the households are still working in or near Paco, Manila. Of these 27, 59% (16) travel to Manila on a weekly basis, 26% (7) travel daily and remaining 15% (4) travel once or twice a month.

**Table 13. Frequency of Travel to Work**

Frequency of Travel to Work	Total	Percentage
Daily	7.0	26%
Weekly	16.0	59%
2x a month	3.0	11%
Less than a month	1.0	4%
Total	27.0	100%

Forty eight percent (48%) of the households generally take 30 minutes to an hour to reach work and 41% (11) take between one to two hours to travel to arrive at their work area. Only 11% (3) of the households reported that commuting to work exceeds 2 hours. The distance of Towerville 6 resettlement site to place of work outside the vicinity is between 15 to 40 kilometers away. Nearest cities to the sites are Caloocan and Quezon City.

### Household Expenditures

For 27 HHs travelling to work in Metro Manila, the computed average monthly transportation cost is Php 1,197.70. This amount is almost 20% of their total monthly income. Of the 27 HH that travels to work, there are 20 households travelling back to the resettlement site on a weekly or on bi-monthly schedule, they reported that they have lodging houses to stay for the week while in work. They spend on the average, Php 1,381.30 pesos on lodging every month on top of the weekly /bi-monthly transportation cost they spend.

Utilities in Towerville, such as electricity, cost Php 515.30 and water accounts to Php 343.80. Households also spend Php 1,757.20 on transport, Php 934.6 on education, Php 243.4 on medicines and Php 169.8 on clothing. Highest monthly expense is on food at Php 5,560. Also, households spend on fuel, mobile phone load and personal effects such as toiletries, expenditure on these items range from Php 358.8 to 855.8 or an average of 600 per month per household.

The monthly average expenditure in Towerville is Php 9,927.1 and median expenditure is Php 8,768.3.

**Table 14. Household's Total Monthly Item of Expenditure**

Item of Expense	Average spent monthly	Percentage from HH gross income
Food	5,560	53%
Transportation to Work	1,757	19%
Education	934	9%
Fuel, mobile phone load and personal effects such as toiletries	600	6%
Electricity	515	5%
Water	343	3.5%
Medicines	243	2.5%
Clothing	169	2%

### Housing Profile

#### Prior to Relocation

Prior to relocation, almost half (49%) of the households' shelter/structure ownership status was owned. Sixteen percent (16%) said that their dwelling units were rent-free with the owner's consent, another 16% were living with relatives while 11% were renting.

**Table 15. Tenure Status Prior to Relocation**

What was/is the tenure status of the house and lot occupied by your family?	Number	Percentage
Owned	22.0	49%
Rented	5.0	11%
Rented free with owner consent	7.0	16%
Living with relatives	7.0	16%
Provided by employer	0.0	0%
Residing without consent of owner (illegal occupant )	4.0	9%
Total	45.0	100%

According to 44% of the households, their dwelling units were typically on stilts over waterway. Thirty-three percent (33%) said they used to live along the river or estero easement zone, while another 22% lived under bridges.

**Table 16. Location of House Prior to Relocation**

Where was your house located?	Number	Percentage
On stilts over waterway (estero, river)	20.0	44%
Along the river/estero easement zone	15.0	33%
Under bridges	10.0	22%
Total	45.0	100%

Majority of the households (76%) had piped water as their household's main source of drinking water, 18% said they bought water from resellers or private sources while only 7% had other sources of drinking water (i.e. open pipeline of Maynilad).

**Table 17. Source of Drinking Water Prior to Relocation**

What was/is the family's main source of drinking water?	Number	Percentage
piped water (Manila Water/Maynilad)	34.0	76%
buying from resellers/private sources	8.0	18%
other sources (Open public pipeline of Maynilad)	3.0	6%
Total	45.0	100%

In terms of latrine use, most of the households (78%) had no direct system to waterway. Only 18% use the pail system while 2% use their own flush toilet and another 2% share a flush toilet with other families.

**Table 18. Type of Toilet Used Prior to Relocation**

What kind of toilet did/does the family use?	Number	Percentage
Flush toilet (own)	1.0	2%
Flush toilet (shared)	1.0	2%
Others (Pail System)	8.0	18%
None/Direct to waterway	35.0	78%
Total	45.0	100%

Most of the households' dwelling units were made of wood (53%) while 29% had a combination of half concrete/brick/stone and wood. For the roofing materials, majority (76%) used strong materials (i.e. galvanized iron, aluminum, tile, concrete, brick, stone, asbestos). As for the outer material, the households typically use light material (47%), others used strong materials (20%) while 16% used a mixture of both but predominantly light materials.

The average floor area of the households' house was 12.3 square meters. Only 33% of the households had a second floor while most (67%) had single flooring. Most of the households (69%) had a bare/no partition dwelling while 22% mentioned that they had a one-bedroom dwelling.

#### At Relocation Site

When asked about the current housing conditions in Towerville, all households said that their houses are now owned and being amortized. Majority (67%) have legally connected piped water from Manila Water or Maynilad as their family's main source of drinking water, 22% still buy from resellers or private sources while the remaining 11% had other sources. Some of these sources include an open pipeline of Maynilad, connected through a neighbor's house and drinking water from the San Jose water district.

**Table 19. Source of Drinking Water in Resettlement Site**

What was/is the family's main source of drinking water?	Number	Percentage
piped water (Manila Water/Maynilad)	30.0	67%
buying from resellers/private sources	10.0	22%
other sources	5.0	11%
Open pipeline of Maynilad -1.0		
No answer - 2.0		
from parents at lot 29 - 1.0		
San Jose water district - 1.0		
Total	45.0	100%

More than half (58%) of the households still use the pail system for their toilets, followed by 40% who have their own flush toilet.

**Table 20. Type of Toilet Used in Resettlement Site**

What kind of toilet did/does the family use?	Number	Percentage
Flush toilet (own)	18.0	40%
Flush toilet (shared)	1.0	2%
Others (Pail System)	26.0	58%
Total	45.0	100%

Most of the households' houses are of concrete materials (82%), while 11% said that theirs is of half concrete/brick/stone and half wood. Almost all households (96%) used strong materials for their roofs (i.e. (galvanized iron, aluminum, tile, concrete, brick, and stone, asbestos). In terms of the structure for the outer material of their houses, most households (93%) used strong materials such as galvanized iron, aluminum, tile, concrete,

brick, stone and asbestos while the remaining 7% used a mixture of predominantly strong materials.

The average floor area of relocation houses in Towerville is 33 square meters. More than half (73%) have one bare unit house without partition while 24% initiated modifications and installed a one bedroom. Only 2% of the households mentioned that they have a second floor.

## Access to Services

### Prior to Relocation

When asked about their access to electricity when they were still living in their previous site (Paco), most households (80%) shared that they had their own metered line from the electric supplier (i.e. Meralco). Nine percent (9%) mentioned that they had their own private generator set while 7% had no access to electricity.

**Table 21. Access to Electricity Prior to Relocation**

Who supplies your electricity or Power/Electricity source?	Number	Percentage
Gen set private	4.0	9%
Gen set from developer	0.0	0%
Power Utility / Grid	36.0	80%
Jumper from neighbor	2.0	4%
None	3.0	7%
Total	45.0	100%

In terms of access to health services, 78% of the households said they visited the barangay or village health center when a member of the household needed medical attention. Minority of the households (18%) went to the nearby village or town hospital while the remaining 2% consulted in a private clinic.

**Table 22. Access to Health Services Prior to Relocation**

Where do you go for health services needs?	Number	Percentage
Barangay/village health center	35.0	78%
Nearby Barangay/town health center/hospital	8.0	18%
Others	2.0	4%
Do not Know 1.0		
Private Clinic 1.0		
Total	45.0	100%

The households were asked about the manner of garbage disposal in their previous locality. More than half (53%) stated that their solid wastes were collected by the local government unit while a significant number (33%) mentioned their garbage was collected by the barangay. Nine percent (9%) said they used to have a private collection service but the remaining 4% had no proper mechanism of solid waste disposal.

**Table 23. Access to Garbage Disposal Services Prior to Relocation**

Where do you dispose your solid waste	Number	Percentage
Provided by LGU	24.0	53%
Provided by Barangay	15.0	33%
Private collection service	4.0	9%
None	2.0	4%
Total	45.0	100%

Additionally, majority of the households (91%) stated that they did not have a septic tank while only 4% had access to such basic services.

In terms of liquid waste disposal, almost all of the households (98%) said their wastes directly flowed to the river.

**Table 24. Access to Liquid Waste Disposal Prior to Relocation**

Where do you dispose of your liquid wastes	Number	Percentage
Septic tank	0.0	0%
River/Estero	44.0	98%
Don't know	1.0	2%
Total	45.0	100%

When asked about access to educational facilities in their previous site, majority of the households mentioned that they had a kinder or elementary school (96%) and a high school (67%) within or in the nearby barangay.

**Table 25. Access to Education Services Prior to Relocation**

What educational facilities do you have in your community? (Multiple Response)	Number	Percentage
Kinder/Elementary school in the barangay or nearby	43.0	59%
High school in the barangay or nearby	30.0	41%
Total	73.0	100%

As for their access to public transportation, all households stated that public transport was accessible to the school, market, work, health center and the hospital. The most common public transportation types used by the households were the tricycle and the jeepney. All households used a tricycle to go to the school or the health center. Majority of the households (84%) said they used a tricycle to go to the market while the remaining 16% rode a jeepney. More than half of the households (57%) stated that they also rode the tricycle to go to work, 31% had to ride a jeepney. Tricycle is still the more common type of public transportation for most of the households who needed to go to the hospital (52%), closely followed by the jeepney at 47%.

**Table 26. Types of Public Transportation Services Prior to Relocation**

Public Transportation-Type	Type										
	Tricycle	%	Jeepney	%	Bus	%	FX	%	Other	%	Total
School	45.0	100%	0.0	0%	0.0	0%	0.0	0%	0.0	0%	45.0
Market	42.0	84%	8.0	16%	0.0	0%	0.0	0%	0.0	0%	50.0
Work/ Employment	31.0	57%	17.0	31%	6.0	11%	0.0	0%	0.0	0%	54.0
Health Center	32.0	100%	0.0	0%	0.0	0%	0.0	0%	0.0	0%	32.0
Hospital	32.0	52%	29.0	47%	1.0	2%	0.0	0%	0.0	0%	62.0

Riding a tricycle, the average cost of transportation to the school was Php 22.89, Php 22.30 going to the market, Php 38.71 going to the health center and Php 41.76 going to the hospital. If riding a jeepney, the mean cost of Household's transportation to the market is Php 15.38, Php 44.06 going to work, and Php 27.79 going to the hospital. For households who take the bus to work, the average cost of transportation is Php 48.67.

If riding a jeepney, the mean cost of Household's transportation to the market is Php 15.38, Php 44.06 going to work, and Php 27.79 going to the hospital. For households who take the bus to work, the average cost of transportation is Php 48.67.

When asked about measures of public safety in the previous site, almost all (87%) said they had access to a community patrol while only 4% had none. Majority (76%) of the households said there was police presence or an outpost in their former site except for the 13% who said there was no outpost near their location. Furthermore, 11% of the households did not have street lights in their previous locations while 76% said they did. With regard to having an organization or office managing their former housing area in Paco Manila, only 18% of the households gave affirmative answers but the majority (80%) said they did not have this.

**Table 27. Presence of an Organization who managed/is managing their former housing site**

Do you have an organization/office managing their former housing site?	Number	Percentage
Yes	8.0	18%
No	36.0	80%
No answer	1.0	2%
Total	45.0	100%

Of those who had an organization to manage their resettlement sites, 75% answered that it was managed by the LGU, while 25% were managed by others such as the River Warriors<sup>4</sup>.

**Table 28. Organization who managed/is managing the resettlement site**

Managed by whom?	Number	Percentage
LGU	6.0	75%
Homeowners	0.0	0%
Developer	0.0	0%
Other	2.0	25%
River Warriors	2.0	25%
Total	8.0	100%

Most (56%) said that the organization's rules and sanctions are not often posted publicly but 44% said that they observed such notices in public areas.

When asked about the most common estate management issues raised in the organization, households identified garbage disposal as the typical issue discussed.

#### At Relocation Site

The households were also surveyed regarding access to basic services in their relocation site. In terms of electricity supply, most (87%) are connected to the service provider (i.e. Meralco) while 9% use a private generator set. Two percent (2%) of the households admitted that they have to use a jumper from a neighbor to access the electricity and the remaining 2% have no access at all.

<sup>4</sup> The River Warriors is the original home owner's association where the former Paco residents are affiliated until they were relocated. The organization kept their group identity in the resettlement site.

**Table 29. Access to Electricity in Resettlement Site**

Who supply your electricity?	Number	Percentage
Gen set private	4.0	9%
Gen set from developer	0.0	0%
Power Utility / Grid	39.0	87%
Jumper from neighbour	1.0	2%
Other sources	0.0	0%
None	1.0	2%
Total	45.0	100%

Almost all of the households (96%) mentioned that they go to the village health center for health services needs while the remaining 4% prefer to visit the nearby barangay or town health center.

**Table 30. Access to Health Services in Resettlement Site**

Where do you go for health services needs?	Number	Percentage
Barangay/village health center	43.0	96%
Nearby Barangay/town health center/hospital	2.0	4%
Others	0.0	0%
None within thirty minutes of travel	0.0	0%
Total	45.0	0%

In terms of solid waste disposal, majority of the households (82%) stated that the barangay collects their solid waste while 18% of the households mentioned of a garbage disposal scheme provided by the LGU.

**Table 31. Access to Garbage Disposal Services in Resettlement Site**

Where do you dispose your solid waste?	Number	Percentage
Provided by LGU	8.0	18%
Provided by Barangay	37.0	82%
Private collection service	0.0	0%
None	0.0	0%
Total	45.0	100%

Additionally, all households said that their households have access to a septic tank. Septic tanks are the most common form of liquid waste disposal for more than half of the households (51%), closely followed by a drainage canal (49%).

**Table 32. Access to Liquid Waste Disposal Services in Resettlement Site**

Where do you dispose of your liquid wastes?	Number	Percentage
Septic tank	23.0	51%
Drainage canal	22.0	49%
Don't know	0.0	0%
Total	45.0	100%

When it comes to access to educational facilities, 40% of the households have access to a kindergarten or elementary school while 60% have access to a high school within or in the nearby barangay.

**Table 33. Access to Education Services in Resettlement Site**

What educational facilities do you have in your community? (Multiple Response)	Number	Percentage
Kinder/Elementary school in the barangay or nearby	18.0	40%
High school in the barangay or nearby	27.0	60%
Kinder/Elementary school inaccessible / very far (estimated kilometers)	0.0	0%
High school inaccessible / very far ( estimated kilometers)	0.0	0%
Total	45.0	100%

All of the households said that they have access to public transport in their relocation sites - whether they are going to the school, market, work, health center or the hospital. Almost all of the households (98%) ride a tricycle when going to the school, market or health center. Less than half of the households (48%) ride a tricycle to work, 27% ride a bus while the remaining 24% use a jeepney. More than half (57%) prefers to ride a tricycle to the nearby hospital, closely followed by 41% who opt to ride a jeepney to the said facility. Riding a tricycle, the average cost of transportation to the school is Php 22.50, Php 29.20 going to the market, Php 37.44 going to work, Php 23.20 going to the health center and Php 41.43 going to the hospital.

**Table 34. Types of Public Transportation Services after Relocation**

Public Transportation - Types	Types										Total
	Tricycle	%	Jeepney	%	Bus	%	F X	%	Ot her	%	
School	42.0	98%	1.0	2%	0.0	0%	0.0	0%	0.0	0%	43.0
Market	42.0	98%	1.0	2%	0.0	0%	0.0	0%	0.0	0%	43.0
Work/ Employment	40.0	48%	20.0	24%	23.0	27%	1.0	1%	0.0	0%	84.0
Health Center	43.0	98%	1.0	2%	0.0	0%	0.0	0%	0.0	0%	44.0
Hospital	36.0	57%	26.0	41%	1.0	2%	0.0	0%	0.0	0%	63.0

When asked about measures for public safety and security in their resettlement sites, majority of the households (76%) said they have access to a community patrol while only 11% had none. More than half of the households said there is police visibility in their area while 22% had none. Majority of the households (53%) still do not have a street light at night while 29% stated that they have access to street light.

In terms of having an organization managing the resettlement site, more than half stated that they do not have such office or organization while 31% said they know of such organization that manage the relocation site.

Of those who said yes, 36% mentioned the LGU followed by the homeowner's association and NHA, both at 21%. Twenty four percent (24%) of the households who affirmed of the presence of a managing organization stated that their rules and sanctions are posted publicly while 22% said no. More than half (53%) opted not to answer when asked whether the organization post their rules and sanctions in public areas. Similarly, majority (53%) still refused to answer when asked if such organization rules and sanctions are being enforced while 31% said yes.

It must be noted that only 24 out of the 45 households (53%) were also household heads which could explain why they were unaware of the rules and sanctions. The households did not mention any particular issue raised with their organization in the resettlement area.

#### Resettlement Process

Households were also asked to recall their resettlement process. In most cases (90%), the NHA were involved in the process. Twenty one percent (21%) of the households

mentioned of the PRRC, 19% mentioned of the LGU while 5% identified the DPWH and 2% noted of the LIAC to be involved in the relocation procedure.

**Table 35. Agencies involved in the Relocation Process**

What agency or agencies were involved in your relocation/resettlement? (Multiple Response)	Number	Percentage
NHA	38.0	66%
SHFC	0.0	0%
PRRC	9.0	16%
DPWH	2.0	3%
LGU	8.0	14%
LIAC	1.0	2%
Total	58.0	100%

Almost all of the households (93%) were consulted in their relocation while the remaining 4% said they were not consulted. The average number of consultations with the households is 2.6. More than half (60%) were given resettlement options (off city options only) but 36% stated that they were not given a choice at all.

Of those who were consulted with resettlement options, the most common choice is the resettlement in Calauan, Laguna or Bulacan (65%), followed by the resettlement in Montalban, Laguna or Bulacan and provision of a housing allowance of Php 25,000 both at 12%.

**Table 36. Relocation Options of Households**

Options Provided (Common) (for those who answered "Yes")	Number	Percentage
Provision of a housing allowance of Php 25,000	3.0	12%
Resettlement in Calauan, Laguna or Bulacan	17.0	65%
Resettlement in Montalban, Laguna or Bulacan	3.0	12%
Rsettlement in San Mateo or Bulacan	1.0	4%
Shuttle service provided to Towerville	2.0	8%
Total	26.0	100%

When asked about access to a system for accepting complaints grievance redress, only 22% said this is available while majority said they did not have such system.

Almost all of the households (96%) were not paid for the damaged house/structures/fences and other assets from their previous site while the remaining 4% cannot remember if they received any compensation at all.

Most (91%) were given transport support (i.e. trucks for belongings and buses for households and family members) during the relocation process. Additionally, majority (72%) shared that they received lunch packs and a kilo of rice and some grocery items (22%) as additional support or allowance.

**Table 37. Common Support Provided during Relocation**

What other support or allowances were given to you? (Common)	Number	Percentage
A kilo of rice and groceries	7.0	22%
Lunch pack	23.0	72%
Van for transportation	2.0	6%
Total	32.0	100%

More than half of the households (64%) agree that the assistance were given in a timely manner but 25% said these entitlements came in late.

Most of the households (65%) stated that the assistance was coursed through barangay officials while 35% of them had to line up for rations.

# Annex E: Paco Pumping Station Technical Footprint



## Annex F: Minutes of Consultations – October 2016

Metro Manila Flood Management Project  
**Minutes of Public Consultation for the  
Paco Pumping Station Manila**  
October 11, 2016 8:30 – 10:30AM  
Barangay Hall, Barangay 662, Paco, Manila

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### Meeting Highlights

1. The meeting started with an Opening Prayer led by a barangay council member of Barangay 662.
2. Teresita Sikat, Chairperson of Barangay 662 gave the Welcome Remarks. Chair Sikat welcomed the representatives from DPWH and acknowledged the presence of other barangay chairmen and residents. She encouraged everyone to listen to DPWH's presentation and to participate in the public consultation.
3. Engr. Lydia Aguilar, DPWH, presented the background, objectives and components of the proposed Metro Manila Flood Management Project. She outlined the four major components, i.e. Component 1 – construction and rehabilitation of pumping stations; Component 2 – Clearing of waterways; Component 3 – Resettlement of ISFs on waterways; and Component 4 – Project management and coordination. She said that the Paco pumping station will be rehabilitated as one of the priority subprojects under Component 1. Activities will include the replacement of pumps to improve capacity and dredging of the waterways. DPWH will still conduct a feasibility study to determine the requirements for the rehabilitation and upgrading of the Paco pumping station.

4. Engr. Cherry Rivera presented the results of the environmental and social impact assessment that was conducted for the Paco pumping station. The major impacts and mitigation measures that were identified in the study includes: (i) generation of dredged materials, sampling/testing of the dredged materials and its appropriate disposal; (ii) collection and disposal of water hyacinth; (iii) odor from dredging activities; (iv) noise from operation of pumps and motors; (v) accumulation of solid waste at the pumping station that requires proper disposal; and (vi) movement of large vehicles along the roads leading to the pumping station which may affect community safety residents. All major activities will be undertaken inside the existing property of the pumping station except for dredging and as such no resettlement will take place during rehabilitation of Paco pumping station.
5. Ms. Reggie Gabales, Environmental and Social Safeguards Division of DPWH said that the rehabilitation and upgrading of the Paco pumping station will not involve resettlement of informal settler families (ISFs) since they have been relocated in 2013. However, for information of the community, Ms. Gabales presented the resettlement framework and resettlement action plan of the project. The project will avoid resettlement as much as possible. If resettlement cannot be avoided, appropriate plans and budget will be prepared and allocated for the families to be resettled. For project-affected persons (PAPs) who own houses, the proposed options will be housing or cash compensation. For those who will chose the housing option, assistance that will provided by the project will be in the form of: (i) rental subsidy; (ii) transition allowance; (iii) transportation assistance during resettlement; and (iv) livelihood training and financial assistance. For PAPs who are renting, the project assistance will be in the form of: (i) housing; (ii) rental for temporary housing; (iii) transition allowance; (iv) transportation assistance; and (v) livelihood training and financial assistance. There will also be additional assistance for those who are pregnant, senior citizens, children, and disabled. For those who have been previously given housing assistance, the Government through NHA, SHFC, and DILG will evaluate if the PAP is qualified to receive assistance from the project.





## 6. Open Forum and Discussion



- a. **Assessment and studies conducted for the ESIA.** A barangay kagawad asked what studies or assessments were done to come up with the ESIA. Engr. Rivera said that tests on water quality, sediments and noise inside and outside the pumping station were conducted. Sediments were analyzed to confirm if these materials contain heavy metals. If the sediments or dredged materials contain heavy metals, then these are considered as hazardous waste materials and could not be disposed as ordinary garbage and should be brought to a sanitary landfill. The sediment analysis showed

that heavy metals were not detected in the samples. However, the ESIA recommends further testing of the sediments because there might be factors upstream that would lead to heavy metal contamination of the sediments. In terms of noise, the noise levels inside the pumping station need to be managed by providing workers with ear mufflers.

- b. **The project should be sustainable.** A resident said that she believes that the flood control project is necessary but only hopes that it will be sustainable. She said that the previous night, their area was flooded up to knee level because of continuous rains. She only hopes that everything is planned properly.

Engr. Aguilar answered that the DPWH developed a Master Plan for flood control after the flooding that occurred during typhoon “Ondoy”. The Master Plan which was approved by NEDA identified three types of flooding: (i) excessive rain water which causes river flooding; (ii) flooding due to clogged waterways; and (iii) coastal flooding. The Master Plan designed structural and non-structural measures to address flooding in Metro Manila. The Government is now asking assistance from the World Bank to implement the MMFMP1. The approach will be wholistic so that resources will be used properly.

- c. **Will there be demolition of pumping station structures?** An elderly resident asked if the existing pumping station will be demolished and replaced by a new and bigger pumping station. She also asked if there are feasibility studies undertaken for the project.

Engr. Aguilar said that although the pumping station was built a long time ago, the existing structures are still very stable. Only equipment and pumps will be replaced or installed with higher capacity pumps. Before any upgrading of the pumping station, the DPWH will evaluate each pumping station. There are 139 pumping stations that have been identified under the Master Plan, of which 36 are existing pumping stations for upgrading. Of the 139 pumping stations, 56 were identified as priority for implementation. Feasibility studies and detailed engineering design will be undertaken for each pumping station.

- d. **Will the existing pumping stop operation during rehabilitation works?** The pumping station will continue to operate during rehabilitation.
- e. **Indiscriminate dumping of garbage on waterways by residents.** A Barangay River Warrior said that she is an employee of the Pasig River Rehabilitation Commission (PRRC) who conducts daily cleaning of the creeks. Each day she would collect tons of garbage from the waterways. She said that the problem is within each and everyone. People just throw empty bottles or plastics on the waterways. She asked everyone to cooperate and do their share in cleaning the environment and the waterways.

- f. **Standard operating procedure for operating the pumping station.** A resident asked what is the standard operating procedure on when to pump water. One time there was flood in the area but the pumping station was still not pumping water. When they visited the Paco pumping station, the MMDA personnel said that there is no diesel to run the pumps.

Engr. John Labilles, DPWH, explained that the Paco pumping station is being operated by the MMDA. There are guidelines on when to operate the pumps based on certain water levels. In the pumping station are gauges that provide information on when to operate the pump. If the reason given was the lack of diesel to run the pumps, then that is a management problem.

- g. **Damage to the floodgate.** Chairman Sikat said that the floodgate was damaged and that water from Pasig River could enter their area. Engr. Aguilar said that DPWH will look into the matter during the feasibility study.
- h. **Solid wastes from upstream.** Chairman Teresita Sikat said that ISFs living on the banks of the river have been resettled already. Although there are no more ISFs throwing garbage in the water, the barangay still conducts river clean-up on a monthly basis. They still collect tons of garbage. The problem is that the upstream communities and residents from nearby barangays still continue dumping wastes into waterways. Barangay 662 is the recipient of these wastes. She asked if there is possibility of putting up boundary to determine which barangay is throwing garbage on the waterways.

Engr. Aguilar said that Component 2 will look into ways to improve solid waste management.

- i. **Information Education Campaign (IEC) on Solid Waste Management.** A representative from the Department of Public Services of Manila City said that the City conducts IEC on solid waste management and has started enforcement in District 6. The IEC will also be conducted in Paco.

Chairman Sikat said that their barangay has conducted several IEC on solid waste management already but the problem is the attitude and discipline of the people. The barangay already installed waste segregation bins for biodegradable and non-biodegradable waste materials but this became a disincentive for the residents to bring their segregated garbage out when the haulers arrive. The area of the segregation bins became a dumping site and so the barangay removed all the segregation bins.

- j. **Collection of segregated wastes.** Chairman Sikat asked the help of the City of Manila to instruct the haulers to refuse collection of garbage if these are not segregated according to biodegradable and non-biodegradable, similar to what is being done in Quezon City. A problem is that the collectors allow unsegregated wastes because they themselves are selling the recyclables.

The representative from City of Manila said that another problem is that residents would complain and quarrel with the haulers if they do not collect the garbage.

DPWH said that it is actually discipline of the people that is the root cause of the problem.

A video on the Metro Manila Flood Management Project was shown.

After the video presentation, Chair Sikat thanked the DPWH, barangay chairs, and residents for their participation to the public consultation meeting. She thanked DPWH for the information on the project and asked everyone to maintain cleanliness in the surrounding.

# Attendance List

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**PUBLIC CONSULTATION FOR THE  
METRO MANILA FLOOD MANAGEMENT PROJECT, PHASE 1**  
Barangay 662 Hall, Paco, Manila  
October 11, 2016, Tuesday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
1. Angeline Kofler	Blk. 3-L-35 Custodial			<i>[Signature]</i>
2. ROBERTO ABEAR	BLK-2 1391 CRISTO			<i>[Signature]</i>
3. Zenaida Valdepe	BLK 2 1389 CRISTO			Z Valdepe
4. Anastacia Hernandez	BLK 4 L. 8			A Hernandez
5. Maricela Rapera	Blk 7 Dorcasita			M Rapera
6. Manda G. Tablar	Blk. 2 lot. 11			<i>[Signature]</i>
7. MAMIC N. POGUNO	1795 CRISTO BPO ST. PACO, MANILA	SECRETARY / DMS	0995 3647552	<i>[Signature]</i>
8. Gina Bulacan	8999 Custodial St PODO			<i>[Signature]</i>

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Barangay 662 Hall, Paco, Manila  
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**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
9. Elizabeth Rodenas	883 Cristobal St. - Paco, Manila		09460438357	<i>[Signature]</i>
10. JUANITA M. DATUSPAD	883 LuisAtal		8975791734	<i>[Signature]</i>
11. Marilyn Paradero	1393 " "			<i>[Signature]</i>
12. Mercedes Celebria	Pkt 6 Lot 2 epilog Paco			<i>[Signature]</i>
13. Rosario Celebria	Bkt 6 Lote Cristobal/Hoco			<i>[Signature]</i>
14. EMILY P. BULACAN	899-H CRISTOBAL	BHW	09216899931	<i>[Signature]</i>
15. CARMELA LORCA	1352 "	BHW	09.	<i>[Signature]</i>
16. ANGELING ENOT	1736A. "	BHW		<i>[Signature]</i>

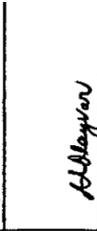
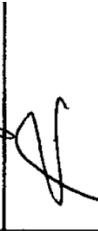
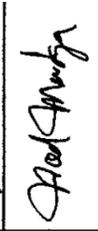
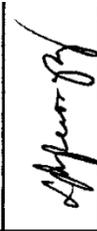
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Barangay 662 Hall, Paco, Manila  
October 11, 2016, Tuesday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
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18. RAONEL S. GIBAY	Buk. 1 Lot 1 SMC1		09061458244	<i>R. Gibay</i>
19. DEXSON CUEVAS	Buk 6 Lot 7 SMC1		099977067706	<i>D. Cuevas</i>
20. CHRISTIAN GARCIA	CRISTOBAL		NONE	<i>C. Garcia</i>
21. JANE CRUZ	CRISTOBAL		NONE	<i>J. Cruz</i>
22. ALFREDO CASI JR	CRISTOBAL			<i>A. Casi Jr.</i>
23. ALFREDO JAMSON	"			<i>A. Jamson</i>
24. ERINDA V. MALLANGIT	CRISTOBAL			<i>E. Mallangit</i>

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**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
25. SHERYL TENERIFE	B669 CRISTOBAL			
26. JASUINTO FUERTES	BL 4 LOT 16			
27. SHIRLEY HIPATA	880 cristobal			
28. Alayzar Alayuda	Blk 3 lot 23			
29. PRODRICO TRASEDA	' '			
30. GREG VERMUSALADY	882 17 "			
31. NOEL MENDOLA	BLK. 3 LOT 11			
32. LUISA R. MEDONGON	BLK 4 LOT 6			

**PUBLIC CONSULTATION FOR THE  
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35. Emerica S. Micares	Crustabal Paco BLK 1 LOT 20	Senior Citizen P.R.O.	0926716777	
36. ROSARIO M. YBANEZ	CRISTOBAL ST, PACO	PRES.		
37. Patricia E. Suman	14 Cristobal St. Paco		09056570188	
38. Rowen D. Sogof	17 CRISTOBAL ST.		0916067220	
39. ANAAYN UACUSPAD	883 CRISTOBAL ST. PACO			
40. Yalandu Uyay	999 Cristobal Paco			

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Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
41. LUZVIMINDA DELA QUIZ	883 CRISTOBAL		091058825679	
42. FEU J. RANER	BLK 2 LOT 6 CRISTOBAL			
43. MARILYN FABREAG	BLK 4 lot 2 CRISTOBAL PACO MALIBU		09758818549	
44. MARY GRACE CAJMIANO	883 CRISTOBAL		09214961991	
45. Edith Samson	BLK 1 lot 23 SMC1			
46. MARK ELIZAN	1341 CRISTOBAL			
47. MILDAGROS VALVES	BLK 2 LOT 3			
48. RICHEL RANER	BLK 3 LOT 6			

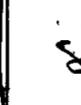
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Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
49. Grace Sorad	1342-k cristobal		09290702159	<i>[Signature]</i>
50. Erma Doygar	883-P cristobal			<i>[Signature]</i>
51. DARYL PACCUAL	B.3 L-8 "		09998509521	<i>[Signature]</i>
52. Eduardo Ty Conese	1382 cristobal		0917 404037	<i>[Signature]</i>
53. Ferny Alegre	1342-A cristobal		09204298080	<i>[Signature]</i>
54. Delia Torrea	905-E cristobal			<i>[Signature]</i>
55. Amnando C. Leon	1334 "			<i>[Signature]</i>
56. Raul B. Latorza	cristobal st			<i>[Signature]</i>

**PUBLIC CONSULTATION FOR THE  
METRO MANILA FLOOD MANAGEMENT PROJECT, PHASE 1**  
Barangay 662 Hall, Paco, Manila  
October 11, 2016, Tuesday, 8:30-10:30 AM

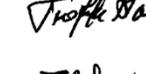
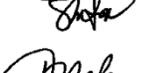
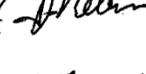
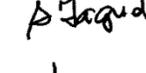
**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
57. JOSEFA A ANGELLES	14 CRISTOBAL ST	DRIVER		
58. ERIC P. SARRAGA	1361 CRISTOBAL ST.	DRIVER		
59. DAREX FABREAG	1376 CRISTOBAL ST	DRIVER		
60. SALOME CAASI	1352 " "	SECRETARY		
61. JUDITH R. ESPINOSA	B3 Lot 21 Cristobal		255-14-70	
62. JEFFREY P. FRANCISCO	Block 2, Lot 12 "	DRIVER		
63. AUDIE FANUEB	14 CRISTOBAL	CAPP.		
64. Julian Ortega	1352 CRISTOBAL			

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Barangay 662 Hall, Paco, Manila  
October 11, 2016, Tuesday, 8:30-10:30 AM

**ATTENDANCE SHEET**

Name	Address/Office	Position	Contact Number/ E-mail Address	Signature
65. ANGELO D. IMPERIO	CRISTOPAL	SUMAMAKA PRES.	09202286519	
66. LONA SADORO	CRISTOPAL	DAMAYAN PRES.	09212588379	
67. Chat N. Pansa	Tangue	Boyanad	09088855740	
68. Josephine D. Binayang	Tangue	Tanod	09182008533	
69. Fe Amante	" " "	Tanod		
70. Lucy B. DelaRena	Tanoue	Lupon	09200329177	
71. Nonette Caporal	Cristofel			
72. Flor Pimental	Cristofel	TRISURION	0912357496	

- |                             |                  |        |             |   |
|-----------------------------|------------------|--------|-------------|---|
| 73. Teofila G. Pido         | Cristobal        | Senior | 09212357496 | Pido  |
| 74. Amie Evangelio          |                  |        | 09081611671 | a. 8to  |
| 75. P/B Cuernina Torales    | 664-A            |        | 09153862072 |    |
| 76. P/B TERESITA L. SIKAT   | 662              |        | 09178294612 |    |
| 77. P/B ROMUALDO BILANES    | 829              |        | 0917865315  |    |
| 78. HENRIETA BEVIN S. MANOS | 825              |        | 09156768334 |    |
| 79. Rodolfo Martin          | Manila-City Hall | D.P.S. | 570281      |    |
| 80. MARIA GILDO             | 662              |        | 562.0021    | in 9th St   |
| 81. DIO B CABINTOG          |                  |        |             |    |
| 82. HENRY TABLAC            |                  |        |             |    |
| 83. Kenneth Lopez           | 664-A            |        | 09090944644 |    |
| 84. BENJIE GOEVANNA         | 664-A            |        | 09283155444 |    |
| 85. Manteo Chasi            | 662              |        |             |   |
| 86. ARLUNA Impunio          | 662              |        |             |  |
| 87. Teofila L. Marcia       | 662              |        |             |  |
| 88. Mary Jane Borrientes    | 664-A            |        |             |  |
| 89. Francis Arcega          |                  |        |             |  |
| 90. Suliet Melencion        | } 664-A          |        |             |  |
| 91. Soledad Tagudin         |                  |        |             |  |
| 92. Josie Fajardo           |                  |        |             |  |
| 93. Michelle Macajeto       |                  |        |             |  |
| 94. Chanto G. Pameca        |                  |        |             |  |
| 95. FERMINO M. JAGUARY      | 662              |        |             |  |
| 96. ELMER P. RETES          | 662              |        |             |  |
| 97. ALICIA B. CUEVA         | 662              |        |             |  |
| 98. AYONG V. MAASLANGIT     | 662              |        |             |  |
| 99. FROILAN C. ESPERE       | 662              |        |             |  |

100 - Iowa Landino - ~~604-A-2-71~~ 604-A-2-71  
 101. ELMER ARCEGA - 604-A-2-71  
 102. Marivic Imperio  
 103. Lourdes R. Cruz BIR 320734 CRISTOBAL  
 905 CRISTOBAL  
 104 MARY JANE HUGO 905 CRISTOBAL  
 105 MARIO LONCA 1352 CRISTOBAL ST. PACO  
 106 Lydia C. Aguilar DPWH-UPMO-FMUC  
 107 Juan Villalobos  
 108. JOHN LABIUS DPWH  
 109. Reggie Marie S. Gabales DPWH  
 110. Cherry B. Rivera