Table 12.1 Estimated RAP Implementation Cost

BUDGET TO BE FINALIZED BY 9/15

| Activity | | Cost Item | | Amount (PhP) | | Remarks | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A. Land Acquisition , Structures and Improvements | | Land | | 122,242,995.00 | | Estimated based on the Replacement Cost Survey that considers current market values based on Development Bank of the Philippines Credit and Appraisal Management Department (DBP-CAM), Bulacan Provincial Assessor and City Assessors of Malolos, Meycauyan, Valenzuela, and Manila. | |
| Structures | | 361,506,740.65 | | Estimated based on Replacement Cost Survey that considers cost as defined in R.A 10752, using Bill of Quantities for legal structures and DMS for ISF structures. | |
| Improvements | | 19,191,678.00 | | Estimated based on Replacement Cost Survey as defined in R.A 10752 using Bill of Quantities for legal structures and Replacement Cost Survey for ISF structures. | |
| Trees and crops | | 1,128,913.68 | | Estimated based on current market values of Department of Agriculture, Department of Environment and Natural Resources, Provincial and Municipality/ City Assessors. | |
| Subtotal for (A) | | 502,941,413.65 | |  | |
| B. Other Assistance | | Livelihood rehabilitation assistance | | 3,315,000.00 | | Maximum amount PhP 15,000 per households including ISFs. | |
| Income Loss | | 7,504,224.00 | | Compensation for income loss for declared incomes for CIBE, vendors and employees/ workers. | |
| Rental Subsidy | | 666,900.00 | | Structure owners, renters for one-month rent of their current rental fee (but not more than PhP 15,000). | |
| Special Assistance for vulnerable groups | | 1,730,000.00 | | Special Assistance for vulnerable persons such as medical care due to the implementation of relocation. | |
| Transportation assistance | | 455,000.00 | | For relocation purposes only, but not to be given in cash to PAFs. | |
| Food assistance | | 1,710,000.00 | | For relocating PAPs during relocation schedule (3 days). | |
| Allowance to commute | | 910,000.00 | | To current working place/school. | |
| Assistance to PAFs in NSCR | | 2,595,000.00 | | Rehabilitation assistance in the form of skills training and other developmental activities. | |
| **Subtotal for (B)** | | ***20,015,037.68*** | |  | |
| C. Cost of Relocation Package | | **Subtotal for (C)** | | ***66,066,000.00*** | |  | |
| D. RAP Implementation and monitoring | | LIAC coordination | | 5,400,000.00 | | Organizing and make LIAC functioning through meetings and other related activities. | |
| Internal monitoring cost | | 7,400,000.00 | | RAP Internal monitoring cost for 2017 and 2023. | |
| External monitoring cost | | 3,900,000.00 | | RAP External monitoring cost for 2016 to 2023. | |
| ***Subtotal for (D)*** | | ***16,700,000.00*** | |  | |
| ***Total (A+B+C+D)*** | | | | ***605,722,451.33*** | |  | |
| E | Administration Cost | | 5% | | *30,286,122.57* | | 5% of Total (A+B+C+D) |
| Contingency | | 10% | | *60,572,245.13* | | 10% of Total (A+B+C+D) |
| **Total (A+B+C+D+E)** | | | | **696,580,819.03** | |  | |

**Cost of Affected Land**

Table 12.2 Cost of Project-Affected Land (PhP/sq.m.)

based on Current Market Value

| City / Municipality | Residential | | | Commercial | | | Industrial | | | Agricultural | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P/C/M Assessors | DBP | BIR | P/C/M Assessors | DBP | BIR | P/C/M Assessors | DBP | BIR | P/C/M Assessors | DBP | BIR |
| Malolos | - | 4,350 | - | 6,500 | - | - | 7,000 |  |  | 400 |  |  |
| Guiguinto | - | 5,350  (Subdivision lots) | - | 5,000 | - | - | 2,500 |  |  | 950 |  |  |
| Balagtas | - | 12,300 | - | - | 12,300 | - |  | 5,100 |  |  | 275 |  |
| Bocaue | - | 2,100 | - | - | 6,000 |  |  | 5,050 |  | 1,100 |  |  |
| Marilao | - | 2,250 | - | 3,765 | - |  | 3,880 |  |  |  | 1,550 |  |
| Meycauayan | - | 4,500 | - | 5,000 | - |  | 4,900 |  |  | 700 |  |  |
| Valenzuela | - | 6,767 | - | - | 22,300 |  |  | 11,700 |  | 800 |  |  |
| Caloocan | - | 9,733 | - | - | 19,050 |  |  |  | 10,739 |  |  |  |
| Manila | - | 18,150 | - | - | 36,350 |  |  |  | 10,201 |  |  |  |

Note:

P/C/M Assessors : Bulacan Provincial Assessors and City Assessors of Malolos, Meycauayan, and Valenzuela (2008-2015)

DBP : Development Bank of the Philippines Credit & Appraisal Management (DBP CAM), 2017

BIR: BIR Department Order for Land/Real Estate Zonal Value.

Note:

* Appraiser to check which of the following will be used as basis for computation of estimate cost: (a) P/C/M Assessor, (b) BIR or (c) DBP
* Cost per source (P/C/M Assessor, BIR or DBP) per area in the barangay will be detailed in the Annexes

Table 12.3 Cost of Private Land (PhP/sq.m)

based on Current Market Value

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| City/  Municipality | Residential | | | Commercial | | | Institutional | | | Industrial | | | Agricultural | | | All Lands | | |
| Market Value | Total Area Affected, m2 | Total Cost (PhP) | Market Value | Total Area Affected, m2 | Total Cost (PhP) |  | Total Area Affected, m2 | Total Cost (PhP) | Market Value | Total Area Affected, m2 | Total Cost (PhP) | Market Value | Total Area Affected, m2 | Total Cost (PhP) | Total Area Affected, m2 | Total Cost (PhP) | % |
| Malolos | 4,350 | 257 | 1,117,950 | 6,500 | 326 | 2,119,000 |  |  |  | 7,000 | 529 | 3,703,000 |  |  |  | 1,112 | 6,939,950 |  |
| Guiguinto | 5,350 | 1,910 | 10,218,500 |  |  |  |  | 2,712 | 3,132,360 | 2,500 | 1,795 | 4,487,500 | 950 | 2,442 | 2,319,900 | 8,859 | 20,158,260 |  |
| Balagtas | 12,300 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bocaue | 2,100 | 58 | 121,800 |  |  |  |  |  |  |  |  |  | 1,100 | 1,796 | 1,975,600 | 1,854 | 2,097,400 |  |
| Marilao | 2,250 | - | - | 3,765 | 7,043 | 26,516,895 |  |  |  |  |  |  |  |  |  | 7,043 | 26,516,895 |  |
| Meycauayan | 4,500 | 3,071 | 13,819,500 | 5,000 | 1,109 | 5,545,000 |  |  |  |  |  |  |  |  |  | 4,180 | 19,364,500 |  |
| Valenzuela | 6,767 | 6,970 | 47,165,990 |  |  |  |  |  |  |  |  |  |  |  |  | 6,970 | 47,165,990 |  |
| Caloocan | 9,733 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Manila | 18,150 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total |  | 12,266 | 72,443,740 |  | 8,478 | 34,180,895 |  | 2,712 | 3,132,360 |  | 2,324 | 8,190,500 |  | 4,238 | 4,295,500 | 30,018 | 122,242,995 |  |
| % |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Cost of Affected Structures**

Table 12.4 Estimated Replacement Cost of Legal Structures based on BOQ

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **City/**  **Municipality** | **Marginally Affected** | | | **Severely Affected** | | | **Total Cost** |
| No. | Area Affected, (m2) | Cost  (PhP) | No. | Area Affected, (m2) | Cost  (PhP) |
|
| Malolos | 28 | 387 | 3,153,247.42 | 10 | 463 | 4,258,235.40 | 7,411,482.82 |
| Guiguinto | 13 | 481 | 3,079,281.28 | 10 | 613 | 6,946,217.98 | 10,025,499.26 |
| Balagtas | 1 | 17 | 324,601.60 | 1 | 17 | 61,191.80 | 385,793.40 |
| Bocaue | 1 | 12 | 30,461.96 | - | - | - | 30,461.96 |
| Marilao | 6 | 37 | 334,431.71 | 9 | 6,580 | 26,051,955.32 | 26,386,387.03 |
| Meycauayan | 13 | 302 | 3,665,303.56 | 20 | 1,871 | 13,581,821.76 | 17,247,125.32 |
| Valenzuela | 39 | 869 | 8,127,248.82 | 29 | 6,569 | 73,884,568.74 | 82,011,817.56 |
| Caloocan | 15 | 661 | 12,079,789.78 | 12 | 1,523 | 10,021,618.51 | 22,101,408.29 |
| Manila | 8 | 153 | 1,384,503.86 | 18 | 10,672 | 194,522,261.15 | 195,906,765.01 |
| **Total** | **129** | **2,975.60** | **32,220,850.33** | **98** | **37,257** | **141,953,634.69** | **361,506,740.65** |

Table 12.5 Estimated Cost of ISF Structures based on RCS

| **City**  **/Municipality** | **Marginally Affected** | | | **Severely Affected** | | | Total Cost, (PhP) |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No. | Area Affected  (m2) | Cost  (PhP) | No. | Area Affected,  (m2) | Cost  (PhP) |
|
| Malolos | 5 | 45 | 470,420 | 1 | 30 | 0 | 470,420 |
| Guiguinto | 0 | 0 | 0 | 4 | 291 | 2,914,700.00 | 2,914,700 |
| Balagtas | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Bocaue | 0 | 0 | 0 | 1 | 50 | 0 | - |
| Marilao | 0 | 0 | 0 | 1 | 45 | 90,000 | 90,000 |
| Meycauayan | 1 | 5.85 |  | 3 | 26.34 |  | - |
| Valenzuela | 2 | 11 |  | 38 | 500.34 | 2432000 | 2,432,000 |
| Caloocan | 20 | 120 | 1,048,500.00 | 66 | 1,060 | 10,610,050 | 11,658,550 |
| Manila | 23 | 199.62 | 1,982,200 | 32 | 894.9 | 6,158,300 | 8,140,500 |
| **Total** | **51** | **381.59** | **3,501,120** | **146** | **2,897** | **22,205,050** | **25,706,170** |

**Cost of Affected Improvements**

Table 12.6 Estimated Cost of Affected Improvements

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| City / Municipality | Fence | | Gate | | Others | | Total Cost Improvements, (PhP) |
| Area (lm) | Cost (PhP) | No. | Cost (PhP) | No. | Cost (PhP) |
| Malolos | 848 | 1,866,040 | 8 | 52,500 | 7 | 733,896 | 2,652,436 |
| Guiguinto | 1,400 | 3,080,616 | 0 | 0 | 2 | 205,000 | 3,285,616 |
| Balagtas | 159 | 349,800 | 0 | 0 | 0 | 0 | 349,000 |
| Bocaue | 95 | 208,560 | 1 | 6,500 | 2 | 315,000 | 530,000 |
| Marilao | 64 | 141,240 | 1 | 6,500 | 4 | 279,900 | 427,000 |
| Meycauayan | 600 | 1,318,900 | 3 | 19,500 | 6 | 1,854,809 | 3,193,209 |
| Valenzuela | 823 | 1,809,500 | 12 | 78,000 | 5 | 1,034,970 | 2,922,470 |
| Caloocan | 834 | 1,918,039 | 20 | 1,064,200 | 5 | 1,239,207 | 4,221,246 |
| Manila | 432 | 993,738 | 16 | 121,600 | 7 | 493,863 | 1,609,201 |
| Total | 5,255 | 11,686,433 | 53 | 1,348,600 | 38 | 6,156,645 | 19,191,678 |

**Cost of Affected Trees and Plants**

Table 12.7 Estimated Cost of Affected Trees and Plants

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| City / Municipality | Fruit trees1 | | Timber / Non fruit bearing trees2 | | Cash Crops by Area3 | | All trees and Plants | |
| No. | Total Cost, PhP | No. | Total Cost, PhP | No. | Total Cost, PhP | No. | Total Cost, PhP |
|
| Malolos | 73 | 28,729.00 | 62 | 29,541.00 | 24 | 12,625.85 | 159 | 70,895.85 |
| Guiguinto | 47 | 47,717.00 | 56 | 32,479.00 | 102 | 142,929.00 | 205 | 223,125.00 |
| Balagtas | 13 | 6,944.00 | 40 | 15,235.00 | 16 | 22,624.00 | 69 | 44,803.00 |
| Bocaue | 21 | 4,694.00 | 112 | 8,800.00 | 114 | 21,915.44 | 247 | 35,409.44 |
| Marilao | 23 | 5,194.00 | 44 | 12,744.00 | 41 | 23,292.21 | 108 | 41,230.21 |
| Meycauayan | 9 | 15,857.00 | 56 | 6,518.00 | 72 | 34,998.00 | 137 | 57,373.00 |
| Valenzuela | 17 | 72,717.00 | 36 | 212,833.00 | 41 | 155,114.00 | 94 | 440,664.00 |
| Caloocan | 109 | 42,180.00 | 60 | 10,181.00 | 72 | 43,186.58 | 241 | 95,547.58 |
| Manila | 142 | 40,113.60 | 107 | 13,859.00 | 80 | 65,893.00 | 329 | 119,865.60 |
| Total | 454 | 264,146.00 | 573 | 342,190.00 | 562 | 519,443.58 | 1,589.00 | 1,128,913.68 |

Source: JICA Study Team

Note: 1) Fruit bearing trees: Mango, Coconut/ Buco, Jackfruit/ Langka, Santol, Duhat, Tamarind/ Sampaloc, Aratiles/ Manzanita, Guava/ Bayabas, Macopa, Kaimito, Avocado, Atis, Casoy/ Kasuy

2) Timber, Non-fruit bearing trees: Narra, Acacia, Talisay, Bangkal, Balite

3) Plants, Cash crops: Banana, Papaya, Atsuete, Malunggay, Cassava, Cacao

Table 12.8 Estimated Cost of Affected Rice Crops

|  |  |  |  |
| --- | --- | --- | --- |
| **City / Municipality** | **Area**  **(m2)** | **Cost**  **(PhP)** | **Total Cost**  **(PhP)** |
| Malolos | 0 |  | 0 |
| Guiguinto | 18,000 |  | 290,000 |
| Balagtas | 10,000 |  | 208,000 |
| Bocaue | 0 |  | 0 |
| Marilao | 0 |  | 0 |
| Meycauayan | 0 |  | 0 |
| Valenzuela | 1,000 |  | 23,400 |
| Caloocan | 0 |  | 0 |
| Manila | 0 |  | 0 |
| **Total** | **29,000** |  | **521,400** |

**Cost for Income Loss, Other Forms of Assistance and Rehabilitation Assistance**

Table 12.9 Estimated allowance for Income Loss

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Entitled Person** | No. | Average Monthly Income (PhP) | No. of Months/days to be subsidized | Total  (PhP) |
| PAPs with Business (Micro) |  |  |  |  |
| PAPs with Business (Small) |  |  |  |  |
| PAPs with Business (medium) | 108 | 65,000.00/ month | 1 month | 7,020,000.00 |
| PAPs with Business (large) |  |  |  |  |
| Workers employed in affected business in Bulacan | 18 | 380/day2 | 26 working days | 177,840.00 |
| Workers employed in affected business in Manila | 24 | 491/day3 | 26 working days | 306,384.00 |
| **Total** | | | | **7,504,224.00** |

Table 12.10 Estimated allowance for Livelihood Rehabilitation Assistance

| **Entitled Person** | No. | Estimated allowance  (PhP) | Total Cost  (PhP) |
| --- | --- | --- | --- |
| Vulnerable households | 173 | 15,000.00 | 2,595,000.00 |
| PAPs who will engage in new income activity | 48 | 15,000.00 | 720,000.00 |
| Total | | | 3,315,000.00 |

Table 12.11 Estimated Rental Subsidy

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Entitled Person** | Number (residential) | Current rental fee | No. of months to be subsidized | Total, PhP |
| PAFs in Manila whose structure are severely affected |  | 1,950.00 | 3 |  |
| PAFs in Caloocan |  | 1,950.00 | 3 |  |
| PAFs in Valenzuela |  | 1,950.00 | 3 |  |
| PAFs in Bulcan |  | 1,950.00 | 3 |  |
| TOTAL |  | 1,950.00 | 3 | 666,900.00 |

Table 12.12 Estimated allowance for Transportation Assistance

|  |  |  |  |
| --- | --- | --- | --- |
| **Entitled Person** | **Number** | Lump sum budget per household, (PhP) | Total  (PhP) |
| PAFs to be transported | 91 PAFs | 5,000.00 | 455,000.00 |

##### Inconvenience Allowance for Vulnerable Groups

Table 12.13 Allowance for Vulnerable Group

|  |  |  |  |
| --- | --- | --- | --- |
| **Entitled Person** | **Number** | **Allowance**  **(PhP)** | **Total**  **(PhP)** |
| Vulnerable Groups | 173 | 10,000.00 | 1,730,000.00 |

Table 12.14 Estimated allowance to commute to current working place

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Entitled Person** | | **Number** | **Allowance**  **(PhP)** | **Total**  **(PhP)** |
| Vulnerable Groups | 91 | 10,000.00 | 910,000.00 |

Table 12.15 Estimated Cost for Livelihood assistance

for selected PAFs in the Northrail Project

|  |  |  |  |
| --- | --- | --- | --- |
| **Entitled Person** | **Number** | Lumpsum budget, PhP | Total |
| PAFs in Northrail Project | 173 | 15,000.00 | 2,595,000.00 |

**Cost for Relocation Package**

Table 12.17 Estimated cost for relocation site development

|  |  |  |  |
| --- | --- | --- | --- |
| **Entitled Person** | **Number** | NHA Relocation Package  (PhP) | Amount  (PhP) |
| structure owners opted for relocation | 91 | 726,000.00 | 66,066,000.00 |

**Cost for RAP Implementation and Monitoring**

##### LIAC Coordination

Organizing and making LIAC function through meetings and other related activities at affected cities.

Table 12.18 Estimated cost for LIAC Coordination

|  |  |  |
| --- | --- | --- |
| No. of LIAC Meetings | Lumpsum budget for LIAC Meetings per city/municipality, (PhP) | Total  (PhP) |
| 9 | 600,000 | 5,400,000.00 |

Source: JICA Study Team

##### Internal Monitoring Cost (During RAP Implementation)

For 2017 to 2021, there will be in total of 23 reports including monthly reports, semiannual report, final reports for internal monitoring prepared by NSCR PMO.

Table 12.19 Estimated Cost for Internal Monitoring

|  |  |  |  |
| --- | --- | --- | --- |
| Type of report | No. | Lump sum budget per external monitoring  (PhP) | Total  (PhP) |
| Monthly Monitoring and Reporting | 14 | 200,000.00 | 2,800,000.00 |
| Semiannual Report | 8 | 200,000.00 | 1,600,000.00 |
| Final evaluation | 1 | 200,000.00 | 200,000.00 |
| Total | 23 |  | 4,600,000 |

Source: JICA Study Team

##### External Monitoring Cost

For 2017 to 2022, there will be in total of 11 reports including, a inception report, semi-annual reports, final report, and final evaluation and proposal report prepared by the third party:

Table 12.20 Estimated Cost for External Monitoring

|  |  |  |  |
| --- | --- | --- | --- |
| Type of report | No. | Lump sum budget per external monitoring  (PhP) | Total  (PhP) |
| Inception Report | 1 | 200,000.00 | 200,000.00 |
| Semiannual Report | 8 | 200,000.00 | 1,600,000.00 |
| Final evaluation | 1 | 200,000.00 | 200,000.00 |
| Final Evaluation and Proposal Report | 1 | 200,000.00 | 200,000.00 |
| Total | 11 |  | 2,200,000.00 |