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Efficiency and Effectiveness Review of the National Housing Authority (NHA) Resettlement Program

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Marife M. Ballesteros and Jasmine V. Egana

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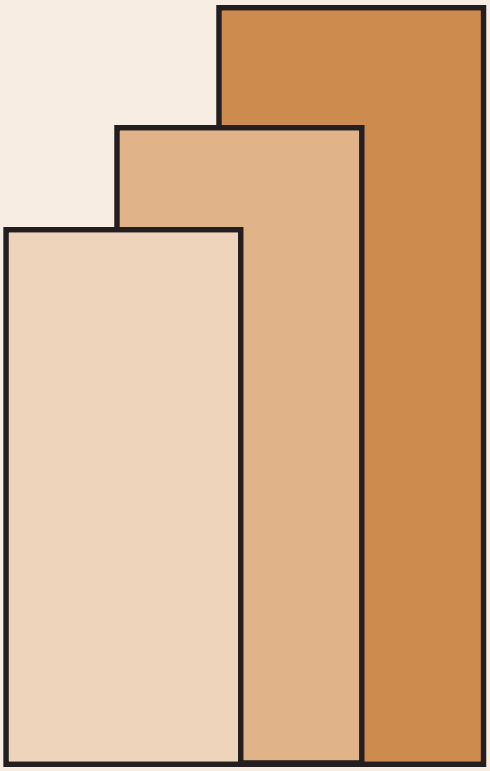

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EFFICIENCY AND EFFECTIVENESS REVIEW OF THE NATIONAL HOUSING AUTHORITY (NHA) RESETTLEMENT PROGRAM

Marife M Ballesteros and Jasmine V Egana

Final Report
31 December 2012

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Efficiency and Effectiveness Review of the National Housing Authority (NHA) Resettlement Program

Marife M. Ballesteros and Jasmine Egana

Abstract

This paper examines the effectiveness and efficiency of implementation of NHA resettlement programs. The review focuses on the recent operations of NHA covering the period between 2003 and 2011, which covers one of the largest resettlement projects of NHA involving about 93,000 families for the North and South Rail infrastructure project. During this period, the resettlement program received about 85% of NHA budget. NHA has executed the development of 88 resettlement projects nationwide of which 45 project sites are located in Metro Manila and the peripheral areas (or the Greater Manila Area) and 43 in the Regions. The dominant scheme in GMA is the Completed Housing Project (CHP) with more than 70% (32 sites) of total projects developer-constructed. The balance consists of Incremental Housing Projects (IHP) (6 sites) and mixed projects (7 sites), which combined the CHP and IHP methods. By location, there are more in-city projects (68 sites) than off-city projects (20 sites). However, in-city projects are dominant only in the regions and provinces outside Metro Manila. In the highly urbanized cities of Metro Manila, large scale resettlement was not provided due to land constraints. Based on actual cost per unit, it cost less to produce a unit of housing using the CHP scheme than IHP by about 17% or about P25,000 per unit, on the average. However, cost benefit ratio (CBR) analysis shows that IHP is more cost effective considering the value of developments and the greater participation and investments of households and community in maintenance of housing estates. Between In-city and Off-city CHP projects, the average total project cost is higher for in-city projects compared to off-city projects mainly due to higher cost of land but in-city projects are more sustainable and acceptable to both households and local government units. It is recommended that the most effective and efficient approach to resettlement is a combined approach of in-city and incremental housing. However, there are necessary conditions, which require specific actions not only from NHA but other stakeholders as well, to implement this approach such as: (1) land for socialized housing has to be made available by the LGU or national government especially in highly urbanized cities such as Metro Manila; (2) the feasibility of vertical developments in-city should be considered; and (3) the need for the NHA to improve the production process for incremental housing.

Key words: housing, resettlement program, Philippines

Efficiency and Effectiveness Review of the National Housing Authority (NHA) Resettlement Program

Marife Ballesteros and Jasmine Egana[1]

Executive Summary

Resettlement involves the relocation of informal families on government and public lands into developed sites with housing component. The NHA has implemented resettlement projects since the 1970s as a major housing program for the low-income sector. Overtime, resettlement has been minimalized as slum upgrading and CMP programs became the models in housing development policy. However, priority infrastructure programs specifically in urbanized areas usually require relocation of families. More recently, the adverse impact of climate change also created an urgency to relocate families living in danger zones.

Resettlement in certain circumstances is thus unavoidable. The objective of this paper is to examine conditions for an effective and efficient implementation of resettlement programs. The review focuses on the recent operations of NHA specifically covering the period between 2003 and 2011. This period coincides with one of the largest resettlement projects of NHA involving about 93,000 families for the North and South Rail infrastructure project.

During this period, the resettlement program received about 85% of NHA budget. This amounted to a total resettlement program budget of P 5.6 billion from 2007 to 2011 with 96% spent for project development works (including housing support). Of the resettlement budget, 94% benefited mostly informal settlers in Metro Manila and peripheral areas (i.e. Bulacan, Pampanga, Cavite, Laguna and Rizal), also referred to as the Greater Manila Area (GMA) and the balance of 6% allocated to regions (or areas outside GMA). This expenditure pattern reflects the huge resettlement needs resulting from the North and South Rail Project specifically the relocation of families in Metro Manila. It is expected that resettlement budget and its regional allocation would likely reflect the prioritization of national infrastructure program.

A major component of the resettlement budget is housing support, which includes capital outlay for livelihood facilities. Livelihood assistance is provided in consideration of the displacement or dislocation of families due to relocation. The livelihood expenditure includes the capital outlay for construction of livelihood facilities usually consisting of livelihood center, tricycle, jeepney or transport shed and/or market "talipapa" center. In addition to livelihood infrastructure, NHA also allocates about P3,000 per beneficiary household for capacity building

[1] Research Fellow and Research Assistant, Philippine Institute for Development Studies (PIDS). We are grateful to Mr Jakub Galuzka, PIDS intern from the University of Drarnstradt, Germany for his assistance in the site visits and discussions on community based approach.

or skills training from its administrative budget. NHA acts as facilitator, resource integrator and planner. NHA basically links the resettled communities to skills training, job placements, scholarship programs, livelihood-based projects including credit or loan assistance of concerned agencies. So far, the NHA has served or assisted a total of 63,000 beneficiaries of resettlements sites in Cavite, Laguna and Rizal on skills training, job placements, livelihood programs and grants but this represents only at most 20% of households in the mentioned resettlement sites.

Land acquisition/land banking is another key component of the NHA resettlement budget. However, while NHA has the mandate to engage in land acquisition and land banking, these activities have been minimized since the 1990s. This move is in line with the NHA decentralization policy that was started with the implementation of the LGU-NHA joint venture resettlement program (or the RAP-LGU) in regions outside GMA. The corresponding budget for land acquisition/land banking during the period reflects payments for previous acquisition and for projects with available development funding.

With the policy shift of NHA's role in land banking, the NHA identifies and selects resettlement sites based on the list provided by NHA accredited developers or sites identified by the LGUs. Site acceptability (upon endorsement of community and local committees) is evaluated by the NHA based on a terms of reference (TOR) that requires conformity with environmental standards and the subdivision standards based on BP220. However, there are no criteria on accessibility of site to employment centers or employment availability in the area. Neither are there criteria on access to existing social facilities. One possible reason for this is that the resettlement program is designed to address this concern through construction of social facilities (schools, health centers) as well as livelihood facilities/programs. Whether these livelihood and social interventions have resulted in employment or improved welfare cannot be determined from the information available and thus would require further study.

Resettlement projects are undertaken in four phases- (1) Pre relocation/Social Preparation (2) Relocation; (3) Post relocation and (4) Estate Management. Phases 1 to 3 cover the project development activities. Estate management starts upon turnover of the site and housing to the families or community. The first phase is the most critical stage in project development consisting of twelve (12) main sub activities and involves the creation of committees and sub committees at the local government and community level. This phase requires the longest time because of the several activities as well as agreements that have to be made by NHA with the LGU, community and developer and NHA and developer. Overall, for site with about 1,000 families, project development can be undertaken within one year. However, project development may be delayed due to several factors notably the following: (1) resistance from communities; (2) longer social preparation because households may take longer time to get their acts together; (3) failed bidding (4) termination of subcontractors by winning bidder. Based on annual utilization of NHA budget allocated for new works, it appears that many planned projects

for the budget year are not completed or possibly even not started on the same year. Average utilization rate for 2007 to 2011 is roughly 40%.

The NHA employs different modalities for resettlement. This can be categorized in terms of the method or in terms of location. Classification by method distinguishes resettlement projects as follows: (1) Completed Housing Projects (CHP) or developer-constructed projects; (2) Housing Material Loan or Incremental Housing Projects (IHP); (3) NHA-LGU joint venture or the Resettlement Assistance Program (RAP-LGU). Classification by location distinguishes resettlement projects into- (1) In-City Resettlement and (2) Off-City Resettlement. In City refers to a resettlement site within the same LGU while off-city refers to resettlement sites outside of the administrative boundaries of the LGU and is usually considered distant relocation (possibly 20 to 30 kilometers from original settlement). Resettlement by location may involve either completed housing or incremental housing strategies or both.

Completed Housing Resettlement Project is a developer-constructed approach whereby NHA accredited developer(s) offers to the community association(s) resettlement sites or sale of housing units in developed sites. The community selects the site and executes a formal agreement with the developer upon the proper endorsement of the Local Interagency Committee (LIAC) and the NHA of the selected site. Loan finance for the acquisition of the housing unit by individual beneficiary is provided by the NHA and the loan proceeds are paid to the developer upon delivery of housing unit and formal acceptance by the individual beneficiary. Upon relocation thus, the housing unit is ready for occupancy.

The incremental housing resettlement project is a sites and services approach whereby developed lots are allocated to individual beneficiary. The resettlement is undertaken on lands acquired by NHA or on LGU/GOCC owned or administered property. The land maybe from NHA's existing land inventory or maybe acquired by NHA based on the recommendation of the affected community and LGU. The NHA contracts out the development of site through a bidding process or negotiated contract (i.e. memorandum of agreement). Bidding is not required for negotiated contracts but this arrangement is allowed only between two government agencies. NHA provides interest free housing material loan (HML) amounting to a maximum of P50,000 per family (this was increased to P75,000 in 2008) payable in 30 years. This loan is for the construction of core housing. Unlike in the developer-constructed approach wherein completed house and lot package is delivered to households, in the incremental scheme, the family builds the core house based on agreed specifications and families may add or improve housing based on their preferences and resource availability. The housing construction process for incremental housing thus requires staging areas while the families build their houses.

The LGU and NHA Joint venture scheme covers primarily local government units outside the Greater Metro Manila (GMA) area. It is pursued as a joint undertaking between the

LGUs and NHA in terms of shared resources and expertise. The LGU contributes the land and is the lead implementer with overall responsibility in the selection of beneficiaries and in the operation and management of the resettlement sites. On the other hand, NHA contribute funds for the development of site and housing construction and provide technical expertise for the preparation of project plans and formulation of policies and guidelines for implementation of resettlement projects. In some cases the LGU contribution may include land plus cash amount for land development. The sharing in terms of project cost varies by LGU as well as by resettlement project. The development of the site goes through a bidding process and bidding may be undertaken by the NHA or the LGU depending on agreed arrangement. In general, NHA as the source of funds undertakes the bidding but NHA may opt to transfer the funds to the LGU in which case, the LGUs takes responsibility for bidding.

It is important to note that among the three methods, it is only under RAPs that NHA is able to disengage itself from the resettlement project. NHA has no estate management in regions since the LGU also takes on the responsibility of cost recovery and project maintenance.

Between 2003 and 2010, the NHA has executed the development of 88 resettlement projects nationwide of which 45 project sites are located in GMA and 43 in the Regions. The dominant scheme in GMA is the Completed Housing Project with more than 70% (32 sites) of total projects developer-constructed. The balance consists of incremental housing projects (6 sites) and mixed projects (7 sites), which combined the CHP and IHP methods. In the Regions, resettlement projects (excluding emergency housing due to calamities) were implemented only through the joint venture scheme, mostly through funds transfer by the NHA to the LGU.

By location, there are more in-city projects (76 sites) than off-city projects (20 sites) developed for the period 2004 to 2011. All regional projects are in-city while GMA projects consist of 25 in-city sites and 20 off-city sites. Off city projects were applied mainly to NCR residents affected by the North South rail project. In provinces outside NCR, in-city resettlement was the norm. It appears that the choice of location for resettlement is primarily dictated by land availability. Land availability for socialized housing is a major constraint in highly urbanized areas such as Metro Manila thus the off city option is evident.

A cost efficiency comparison was undertaken for the resettlement modalities employed by the NHA. The comparison is mainly applied to GMA resettlement projects since regional projects are essentially LGU led. Moreover, evaluation of the joint venture scheme would require assessment of individual LGUs for which the study did not cover.

The GMA cost efficiency comparison was based on the following indicators: cost benefit ratio, the nature and rate of housing investments (or housing condition) in relocation sites, collection efficiency and welfare conditions. Comparisons were made on two levels- one, by

method Completed Housing Project versus Incremental Housing Project controlling for location and time (i.e. we compared only in-city projects and deflated cost across time); and two, by location, In-City versus Off-City (i.e., controlling for method and time (i.e. we compared only completed housing projects). The results of comparison are as follows:

- The completion time (in number of years) for the developer constructed approach is more defined (at most 2 years) than the incremental housing for resettlement projects consisting of 1000 to 3000 families. This reflects the comparative advantage of developers in housing construction than that of individual households. This time advantage becomes more evident for larger-sized settlements (about 5,000 families or higher). The completion period for incremental housing is variable with no clear pattern. The production process can be tedious as also reflected in the Asian experiences on incremental housing.

- The investment cost for the developer-constructed approach is lower compared to incremental housing. On the average, the investment cost for incremental housing is higher by P25,610 per household or 17% higher than that of the developer-constructed average unit cost. The higher cost in incremental housing is due to the need for staging areas, problems in purchase of construction materials and additional labor support to households. As mentioned earlier, the process of construction by households is tedious. Administrative and coordination costs can significantly increase if the production process is not well coordinated. However, as also pointed out in literature, improving the planning and organization of space, material inputs and design of housing can reduce the operational bottlenecks.

- A critical weakness of the developer-constructed approach is that NHA has no real influence on the settlement location. The only thing that binds the developer on the site selection is the Terms of Reference (TOR), which considers primarily environmental standards. Aside from environmental requirement, the TOR does not require assessment of the employment potential in the area or access to existing social services. This practice can lead to moral hazard problem with private developers offering cheap sites that are unattractive to the formal housing market and are usually located far from the city centers.

- Considering long-term benefits and welfare implications, the incremental housing approach is much better compared to the developer-constructed scheme. Cost benefit ratio (CBR) shows that it cost the government more to produce a peso of housing unit under the completed housing scheme. The CBR for completed housing projects in NCR and Bulacan are P7.4 and P19.8, respectively. For the incremental housing, the CBR for the NCR project is 6.0 and the 5.7 for the Bulacan project. This ratio is reduced for both

modalities if we assume that at the end of a 30-year period, the land will still be owned by the government. Under this assumption, the CBR ratios are lowered to P 5.1 and P 9.6 for the two completed housing projects and to 4.4 and 4.1 for the incremental housing projects.

- Incremental housing results in higher benefits due to the higher market value of housing overtime. Resettlement sites with incremental housing are found more progressive compared to developer-constructed projects. There is an observed increase in housing investments by the households within a period of 5 years upon turnover compared to developer-constructed projects. Thus, the market value of the subsidy is higher than the developer row-housing construction. In the completed housing approach, improvements are not evident and limited to "beautification" (i.e. painting, putting grills on front of house for security).

- Incremental housing approach can address the need of family for bigger space as family size increase and thus reduces urban sprawl. The greater involvement of the community in housing construction and the higher investments provided by families are incentives for community participation and effective homeowners association. This could translate into lesser dependence on operational and maintenance subsidy from government. The socioeconomic differences in the community is also apparent allowing the LGU and NHA to better assess the resources available in the community and to target those households that are clearly welfare cases for additional subsidy.

- Another advantage of the incremental housing process is the involvement of the LGU in the initial stage of site selection by the community association. The process facilitates in-city relocation as indicated by the mostly in-city locations of incremental housing projects.

- The incremental housing project also indicated higher collection performance. However, it is also apparent that collection efficiency is affected by several factors and modality is just one factor. The implications however of incremental housing on collection is that nonpayment of amortization can be compensated by improvements in housing in the future. As the household increases investment in housing, the probability of abandonment or default tends to decline.

- Between In-city and Off-city projects based on a completed housing modality, the average total project cost is higher for in-city projects compared to off-city projects mainly due to higher cost of land. However, in-city projects are more cost effective due to higher benefits in the long-term especially for projects located in Metro Manila. The cost benefit ratio shows that while the sample sites were designed as row houses, it cost

the government P 6.5 to P 7.4 to produce a peso of housing unit in in-city relocation compared to P 20 to P 25 for off-city developments. The market value of subsidy is higher in in-city because of higher market rental value than off city locations, which are usually outside the city or town centers.

- The difference between in-city and off-city cost effectiveness tends to increase the farther the distance of off-city sites from Metro Manila. However, locations outside Metro Manila whether in-city or off-city show higher cost for community facilities implying that the cost of community facilities are also dependent on the existing facilities in relocation sites and the size of the resettlement. As the resettlement site increase beyond 3,000 beneficiaries, the requirement for social and livelihood facilities also rises.

- Collection efficiency is also better for in-city with an efficiency and performance rate of 17% and 39%, respectively. Off city collection efficiency and performance rate is 4% and 8% respectively. As mentioned above collection efficiency is affected by several factors. The overall low repayment rates of resettlement projects should be further evaluated.

- While resettlement is a scheme to address informal settlements in infrastructure projects and in danger areas, it is also meant to contribute to solving the housing problem in the country. Thus, for efficiency and effectiveness, the resettlement approach should ensure that project benefits are long-term.

Based on results of analysis, it is recommended that the most effective and efficiency approach to resettlement is a combined approach of in-city and incremental housing. However, there are necessary conditions to implement this approach and these conditions require specific actions not only from NHA but other stakeholders as well.

First, land for socialized housing has to be made available especially in highly urbanized cities such as Metro Manila. NHA implements in-city resettlements in areas where land is not a binding constraint. With the advance of decentralization in the country and the minimalized role of NHA in land acquisition and land banking, the LGUs have the critical role of identifying socialized housing sites and ensuring an effective shelter plan for the locality. The national government needs to strengthen the implementation of LGU shelter plans. The government has to be clear with national land policy for social housing and should support the strengthening of the balanced housing Act.

Second, the feasibility of horizontal development in-city should also be considered. Urbanization brings about the need for more efficient utilization of land and other resources through higher density and planned developments. This development pressure implies that in-

city developments would likely result in vertical developments. Incremental housing approach is effective under conditions of horizontal development. In vertical developments, households would need the expertise of contractors, builders, and developers. The Habitat for Humanity model of MRBs combined with sweat equity is one approach that can be considered.

Third, where horizontal development is feasible, there is a need for NHA to improve the production process of households. Given the several sites where incremental housing was implemented, NHA can put together lessons learned and address the bottlenecks rather than rely on completed housing scheme. While timing is critical to infrastructure projects, the more appropriate approach to this concern is for the national government to ensure that approval of national infrastructure projects should have clear resettlement plans and concerned LGUs are involved in the development of this plan. In this way, NHA can plan way ahead of the timeline of the infrastructure project.

With the greater role of LGUs in housing, the NHA should move to implementation of RAP-LGU in Greater Manila Area. This means shift to an LGU-led joint venture modality. Despite the availability of RAP, this strategy is not widely practice in GMA. One can surmised that this could be tied to land constraints and would need the national government's actions to look into incentives as well as regulations on affordable housing development in cities. The key advantage of this scheme is that it compels LGUs to undertake its role of local housing manager. Another advantage is that it frees NHA from estate management so it can focus on community development, collection to improve funding for other development projects as well as monitoring and evaluation. In particular, community organizations need to be strengthened. Unlike Thailand, we do not have mature housing cooperatives and social preparation for communities takes a long time. This is a role that the NHA may have comparative advantage.

Beyond, the comparison of modalities an important policy issue is the strategy of developing "new towns", that is, large resettlement sites for relocated families. In Chile, this approach only led to the development of the largest ghetto, outside the capital city of Santiago (Dumas 2011). Receiving LGUs noted the increase crimes and other social problems in massive resettlements. These observations suggest an optimum size of resettlement sites.

This study is an initial step to assess resettlement on a program basis. The results of the study are indicative given that information and data are scarce. The need for NHA to develop its monitoring and evaluation system cannot be overemphasized.

Efficiency and Effectiveness Review of the National Housing Authority (NHA) Resettlement Program

Marife Ballesteros and Jasmine Egana[2]

I. Introduction

The NHA is the sole central government agency mandated to engage in direct shelter production for the lowest 30% of income earners. In line with this mandate, the NHA implements five housing development programs, which are: resettlement, slum upgrading, sites and services, core housing and medium rise housing (MRBs). In the last decade, NHA focused on the resettlement program in line with the relocation need of the North and South Rail Infrastructure Project, which required the relocation of close to 100,000 families. Moreover, intense typhoons (Reming, Pepeng, Ondoy) hit the country during this period causing major disasters specifically in the Bicol region and Metro Manila. The affected families specifically those left homeless were among the beneficiaries of NHA resettlement projects. Between 2001 and 2011, the resettlement program received the largest budget and accounted for about 75% of NHA production outputs for the period.

However, the resettlement program has been implemented with doubtful performance. There have been complaints on the lack of livelihood opportunities and deficient basic services (power, water) in resettlement sites. Some families abandoned or sell their rights and return back to the city to squat. The COA Annual Audit Report (2010) noted the poor collection efficiency for most resettlement sites. In the North and South Rail resettlement sites, collection performance is less than 50% of targets. This performance deprives the agency of much needed funds for other development programs.

The resettlement program is implemented primarily as a necessary condition for the infrastructure program of government. While slum upgrading and CMP schemes are considered the models of housing policy for the low-income sector, resettlement is in some cases unavoidable. The intent of this paper thus is not to compare resettlement with other housing programs but to assess the effectiveness and efficiency in the implementation of the resettlement program. The paper provides a cost benefit analysis and qualitative indicators of effectiveness and efficiency based on site visits, case studies and review of relevant studies.

[2] Research Fellow and Research Assistant, Philippine Institute for Development Studies (PIDS). We are grateful to Mr Jakub Galuzka, PIDS intern from the University of Drarnstradt, Germany for his assistance in the site visits and discussions on community based approach.

The paper is organized as follows. Section II presents an overview of the NHA Resettlement program. The next section discusses the conduct of NHA Resettlement projects focusing on expenditure details, work program and procedures and resettlement approaches. Section IV presents comparative cost benefit ratios and qualitative operational efficiency assessment of alternative resettlement modalities. The last section concludes and provides recommendations for improvement.

II. Overview of NHA Resettlement Program

The NHA classifies its housing programs as follows:

(1) Resettlement program = involves the acquisition and development of large tracts of raw land to generate serviced lots and/or housing units for families displaced from sites earmarked for government infrastructure projects and those occupying danger areas such as waterways, esteros, and railroad tracks.
(2) Slum upgrading program = an on-site housing development program where NHA acquire occupied lands and provides on-site improvement through introduction of roads or alleys and basic services such as water and power. Land tenure issue is resolved through sale of homelots to bonafide occupants.
(3) Sites and Services = involves the development of raw land into service homelots to serve as catchment area for informal settlements. The intent is to help families acquire housing on an incremental basis. This program can be tied up with resettlement program.
(4) Completed/Core housing = this program provides service lots with core housing specifically targeted to low-salaried government and private sector employees. The projects are implemented under joint venture arrangement with private sector or LGUs.
(5) Medium rise housing = an in-city housing program that entails the construction of two - to five-storey buildings utilizing funds allocated under Republic Act No. 7835 or the Comprehensive and Integrated Shelter Financing Act of 1994 (CISFA). The units are made available under lease or lease to own arrangements. Standard unit cost is about P 485,000 to P 580,000 for a 4-storey and 5-storey building, respectively. This amount excludes the cost of land. Lease rates per month range from P 750 to P 4,000, more or less.

Resettlement is targeted to informal settlers. Among other housing programs, resettlement has been the main strategy in the last ten years. Between 2001 and 2010, resettlement accounted for 74% of NHA housing development outputs (Table 1). This share increased from less than 70% in 2004 to an average of 80% from 2005 to 2010. Comparatively,

the resettlement program has allowed NHA to produce mass housing, which is needed in case of massive relocation. Massive resettlement is also possible under sites and services but usually the NHA or government has no land readily available for socialized housing development. Medium rise housing is also constrained by land availability and land prices in cities. Under the resettlement option NHA can buy from private developers existing socialized housing subdivisions. Some private developers are engaged in socialized housing developments partly as compliance to the UDHA (or RA 7279), which requires developers of non-socialized housing subdivisions to allocate 20% of total project for socialized housing development.

The focus on the resettlement program is also reflected in NHA budget expenditure of which roughly 80% was utilized for resettlement projects (Table 2). By 2011, although project development cost for new works has shifted to other programs, expenditure for resettlement is still highest on a per program basis. On a regional scale, most resettlement projects benefited informal settlers in Metro Manila and peripheral areas of Central Luzon and CALABAR. This is expected considering the magnitude of informal settlers in the NCR compared to those in the provinces. Moreover, the prioritization of infrastructure projects would likely affect the regional allocation of budget. In 2004, the government identified the development of the rail system linking the Northern and Southern part of Manila as a priority infrastructure project. This project would involve the clearing of the existing railroad system covering the cities of Manila, Caloocan, Valenzuela, Taguig, Muntinlupa, and Makati of informal settlers. It was estimated that more than 100,000 families needed assistance and this required substantial resources for resettlement. Thus, for the period 2004 to 2010 regions/provinces outside the expanded Metro Manila area received only on average 5% of the resettlement budget (Table 3).

The bulk (96%) of resettlement budget is used for project development and housing support and the balance for land acquisition and other related capital outlay (Table 4). The budget for land acquisition/land banking during the period reflects payments for previous acquisition and for projects with available development funding. The much lower expenditure on land acquisition reflects the minimalized role of NHA on land banking. Since the 1990s, NHA pursued a decentralized scheme with aims to promote greater participation of the LGU in local housing development. This policy shift was initially operationalized in regional resettlement projects under the RAP-LGU where land is to be provided by LGUs as contribution to the housing project and in joint venture schemes of NHA with the LGU or private landowners, where existing land of NHA, LGU or private sector can be used as equity for the project.

Aside from site development and land cost, resettlement programs are provided housing support subsidy. Housing support refers to all other expenses over and above site development and housing cost. This expenditure component is non-recoverable and is part of the subsidy component for resettlement in addition to the housing price subsidy and interest subsidy on the

housing loan. This includes utilities expense which is the amount paid by the NHA to install power and water utilities in the area either by provision of deep wells or power generators or as advance payment to utility companies to facilitate individual household connections.[3]

An important housing support component for the resettlement program is livelihood assistance. Livelihood assistance is unique to the resettlement program and is justified in support of the displacement or dislocation of families. The livelihood expenditure includes only the capital outlay for construction of livelihood facilities usually consisting of livelihood center, tricycle, jeepney or transport shed and/or market "talipapa" center.

In addition to livelihood infrastructure, NHA also allocates about P3,000 per beneficiary household for capacity building or skills training. This budget is not included in the livelihood item expenditure and is part of administration costs. For livelihood programs, NHA acts as facilitator, resource integrator and planner. NHA basically links the resettled communities to skills training, job placements, scholarship programs, livelihood-based projects including credit or loan assistance of concerned agencies. This role is critical to enable the resettled communities to be mainstreamed into local and national programs. NHA observed that the devolution of the programs of the Department of Trade and Industry and Department of Labor has created a gap on support and linkage at the micro or barangay level. In many cases LGUs have focused their attention on the macro investment aspect (i.e. attracting locators) without clear programs on the micro aspects thus NHA is engaging the LGUs to ensure that resettled communities, in particular, are not left out.

So far, the NHA has served or assisted a total of 63,000 beneficiaries of resettlements sites in Cavite, Laguna and Rizal on skills training, job placements, livelihood programs and grants (Table 5). However, only at most 20% of households in the mentioned resettlement sites are able to avail of livelihood enhancement programs at any one time. Also, information about the use of the livelihood infrastructure constructed is limited.

Whether these livelihood interventions have resulted in employment or improved welfare cannot be determined from the information available and thus would need further study. So far, NHA has no standard monitoring and evaluation system to assess the impact of these support programs nationwide. It is often the case that the proportion of unemployed labor force in informal settlements is high. Based on the pre-census conducted for the North and South rail project about 47% of labor force are unemployed. While livelihood is already a problem even in the original site, it is argued that settlers are more industrious or ingenuity in looking for employment or livelihood primarily because in urban centers, networks are numerous, easily established and active. In cities, people acquire skills and knowledge sharing through face-to-

[3] Deep wells are installed in areas that are not yet serviced by existing local water system and generators provided for temporary power utility.

face encounter (Glaeser 2011). In the case of resettlement sites, the locations are often far from city centers and establishing networks can be difficult or limited. Thus, there is a greater need for third parties such as the NHA to facilitate the establishment of these links. But the effectiveness of this approach in improving the livelihood situation in the area is doubtful specifically when sources of employment are far from the area.

III. Resettlement Modalities, Process and Procedures

A. Resettlement Work Program

Resettlement projects are undertaken in four phases. Phases I to III covers the project development stage while Phase IV is monitoring and estate management. The first phase is the Pre-Relocation or Social Preparation Phase, which involves the identification of beneficiaries and resettlement sites and mobilization of resources. This phase is the most critical stage in resettlement projects. It consists of twelve (12) main sub activities and involves the creation of committees and sub committees at the local government and community level (Table 6). It also require the longest time line because of the several activities and agreements that have to be made by NHA with the LGU, community and developer as well as between the developer and NHA (Figure 1). While the entire phase can be accomplished within three (3) to six (6) months depending on number of affected families, delays occur due to several stakeholders involved in the preparatory works and the causes are usually not within the internal controls of the NHA. For instance, there could be prolonged resistance or disagreements between communities on the resettlement plan or that longer time is needed for social preparation of communities. In regional projects, failed bidding, the bureaucratic procurement process, disagreements between winning bidder and subcontractors are some of the causes of delays.

Phase II of resettlement operation is the relocation phase. This Phase starts when NHA, Community and developer have signed contract agreements. It includes preparatory works such as period of dismantling structures at evacuated sights and preparation for staging areas if needed. In most cases, the site has been prepared prior to relocation except for individual power and water connections, which are usually provided at a later period.[4] Upon completion of the preparatory activities, actual relocation can take one month for about 1000 beneficiaries (an average relocation rate of 50 families per day). Weather conditions can slow down relocation. There are relocation guidelines based on UDHA that have to be followed and the NHA together

[4] Utility companies usually require 90% occupancy of subdivisions prior to connections. In some cases, the utility company (specifically) water companies has no existing connections in the area hence the NHA/developer provides deep well system in the area.

with representatives from the Commission on Human Rights (CHR) and the Presidential Commission for the Urban Poor (PCUP) ensures that relocations are undertaken within the legal guidelines. The NHA takes the lead in relocation activities with support from the sending LGU. The sending LGU provides financial assistance not less than P1000 per family. Some LGUs specifically richer cities provide additional assistance such as a week supply of groceries and/or extending health privileges to their former constituents for a period of one year. At the resettlement site, the host LGU together with NHA and community representatives receives the relocatees.

Phase III or the Post relocation phase starts with the termination of relocation operation and the turnover of the evacuated sites to concerned government agency. It also involves the integration of different groups into a Federation. The resettlement operation is deemed completed at this stage although the development of the site and provision of community facilities do not necessarily end at this Phase. The sites may be further improved and NHA has an Estate Management phase to handle maintenance, livelihood and monitoring and evaluation in resettlement sites.[5] In general, NHA has not been able to disengage from resettlement sites. One reason is that NHA collects amortization due from the 30-year housing loan to resettlement beneficiaries. Another reason is that host LGUs in particular third class municipalities needs the technical and financial support to service these "new communities". It is also possible that the changes in LGU leadership would have an adverse effect on the support given to resettlement sites.

Overall, for site with less than 1000 families, project development consisting of Phases I to III can be undertaken in a period of one year. However, due to delays mentioned earlier, the one-year timeframe is ideal rather than realistic. Based on the utilization of NHA budget allocated for new works, many planned projects for the budget year are not completed or possibly not even started on the same year. Table 7 shows that on average, utilization rate of roughly 40%. Except for 2008 and 2009, the utilization rate in other years had been below average.

A comparison of budget utilization in GMA and regions shows similar conditions. Utilization higher than 100 percent for the regions in 2009 can be explained by the infusion of funds for emergency (or unplanned) resettlements, which arise due to disasters. For instance, in 2008, NHA led the Bicol CARE resettlement project to assist families affected by Typhoon Reming. [6]

[5] The Monitoring and Evaluation system of NHA is limited to occupancy and collection performance and does not include a system that allows for welfare analysis. The NHA also do not monitor the sites evacuated whether beneficiaries have gone back to these areas or new informal families have settled in the area. Upon turnover of the evacuated site to the requesting government agency, the site becomes the responsibility of proponent agency.

[6] Typhoon Reming hit the Bicol region in Nov 26, 2006. Preparatory works including technical aspects was completed in 2007 with some delays due to election. Thus, construction phase was started only in 2008.

B. Resettlement Modalities

Resettlement projects are implemented by NHA through different modalities. Classification by modalities maybe distinguished in terms of method of location. BY method, there are basically three approaches: (1) Completed Housing Resettlement Projects or Developer-Constructed projects; (2) Home Material Loan Project or Incremental Housing Project; (3) the LGU-NHA joint venture scheme or RAP-LGU. BY location, resettlement projects may be classified as: (1) In-City projects; and (2) Off-City Projects. In City refers to a resettlement site within the same LGU while off-city refers to resettlement sites outside of the administrative boundaries of the LGU and is usually considered distant relocation (possibly 20 to 30 kilometers from original settlement). Resettlement by location may involve either completed housing or incremental housing strategies or both.

The Completed Housing Project is a developer-constructed approach, which was started in 2004. It is now the dominant modality for resettlement projects specifically for informal settlers in Metro Manila. Under this modality, NHA acquires developed lots and completed housing from private developers. NHA accredited developers initially offers to communities the resettlement sites or sale of housing units. Community members select among the sites after site visits. The Community Association (CA) then formally endorses the selected site to the Local Inter Agency Committee (LIAC), which in turn endorses the same to NHA. After the agreement between CA and developer for the acquisition of housing has been finalized, the CA requests NHA for funding. Figure 2 shows a schematic picture of the flow process.

This approach does not require bidding since the community beneficiary does the final selection. However, it is important to note that NHA does the initial selection of developers. NHA accredits the developers offering their property for resettlement site and the community chooses from the sites of NHA selected developer (or developers). The community's choice is confined to the developers' list, which in some cases could just be a choice of two sites.

The NHA also evaluates the site primarily in terms of site suitability. The criteria for site suitability include the following: (1) the site has been zoned as residential and for socialized housing; (2) the topography is flat or rolling; (3) a road right of way exist; (4) the property has clean title; (5) the property is not prone to flooding, liquefaction, landslide or within earthquake fault line as reflected in Environmental Clearance Certificate and soil tests. The site criteria do not include indicators for employment availability or access to major social services. One possible explanation to this is the inclusion of livelihood and social facilities support as part of the resettlement budget. However, this practice can lead to moral hazard problem with private developers offering sites with low acceptability or demand in the formal housing market for resettlement.

Sans the concerns on poor "quality" of sites offered by developers, the developer-constructed approach has its advantages. In one sense this scheme is an alternative to land banking and a means to promote private sector participation. Moreover, it is less tedious since developers have readily available land usually with the accompanying location and zoning clearance from the concerned local government. It also allows for massive relocation since developers have the expertise and resources to develop housing subdivisions. Another advantage is the developer advances capital investments since full payment is made upon delivery of outputs.

In contrast to the developer-constructed approach, the incremental housing approach is undertaken on lands acquired by NHA or on LGU/GOCC owned or administered property. The land maybe from NHA's existing land inventory or maybe acquired by NHA based on the recommendation of the affected community and endorsement of the LGU. The NHA contracts out the development of site through a bidding process or bilateral agreement. Bidding is not required for bilateral contracts but this arrangement is allowed only between two government agencies. In this case NHA contracts out either the Department of Publics Works and Highways (DPWH) or the AFP Engineering Brigade. The NHA issues a Conditional Contract to Sell with the individual beneficiaries for the developed homelots. The beneficiaries are also provided with interest free housing material loan (HML) amounting to a maximum P50,000 per family payable in 30 years. This loan is for the construction of core housing. Unlike in the developer contract, families construct their own houses based on their preferences and resource availability. The minimum requirement of NHA is for every house to have latrines or septic tanks built according to the subdivision plan. In resettlement areas built through incremental housing, there is incentive for in-city development because the LGU at the initial stage assists the community in identifying land within the locality. Also, the social difference among settlers is made evident from differences in the level of housing investments. However, the incremental approach has some disadvantages: One, land availability can be a major constraint. Two, the process is tedious since households build the houses themselves. The construction process tends to be messy due to lack of coordination and organization of spaces and materials. Figure 3 is a flowchart of the incremental housing process for resettlement operation.

Compared to the other two modalities, the LGU and NHA Joint venture scheme covers primarily local government units outside the Greater Metro Manila (GMA) area. This scheme is also known as the Resettlement Assistance Program (RAPs) for LGUs. It is pursued as a joint undertaking between the LGUs and NHA in terms of shared resources and expertise. The LGU contributes the land and is the lead implementer with overall responsibility in the selection of beneficiaries and in the operation and management of the resettlement sites. On the other hand, NHA contributes funds for the development of site and housing construction and provide technical expertise for the preparation of project plans and formulation of policies and guidelines for implementation of resettlement projects. In some cases the LGU contribution may include

land plus cash amount for land development. The sharing in terms of project cost varies by LGU as well as by resettlement project.

The development of the site goes through a bidding process and bidding may be undertaken by the NHA or the LGU depending on agreed arrangement. In general, NHA as the source of funds undertakes the bidding but NHA may opt to transfer the funds to the LGU in which case, the LGU takes responsibility for bidding. Funds transfer can be an efficient scheme specifically when LGUs also contributes cash amount for the project. Moreover, NHA centralized procurement process has caused delays in the delivery of the Projects. One reason is that NHA allows Metro Manila based developers in the bidding process and these developers tend to subcontract these projects to the local developers. Disagreements between the winning bidder and the subcontractors usually result in non-delivery of project.[7] Figure 4 shows the flowchart of resettlement activities for RAPs.

Under RAP-LGU, NHA prioritized LGU projects based on the following guidelines: (1) urgency of need for relocation and resettlement, for instance need for relocation due to disasters or potential threat from disaster; (2) magnitude of resettlement requirement; (3) impact of projects on national programs and projects; and (4) LGU readiness to participate in the program. It is necessary that LGUS have available land that is unencumbered. Usually in LGUs where magnitude of informal settlers is also substantial (e.g. Cebu, Bacolod, Iloilo, etc), there can be several proposals. NHA also prioritized the sites based on suitability.

It is important to note that among the three modalities, it is only under RAPs that NHA is able to disengage itself from the resettlement project. NHA has no estate management in regions since the LGU also takes on the responsibility of cost recovery and project maintenance. While this is the intent for the other modalities, in practice the LGU and community remain dependent on NHA. Moreover, NHA is unable to disengage because recovery of the loan component of the program is done by the agency.

IV. Comparison of Production Efficiency and Welfare Implications of Resettlement Modalities

In general, resettlement has been considered less welfare enhancing compared to slum upgrading primarily due to economic and social displacement from relocation. Relocation also tends to require more resources in terms of land, building and infrastructure as resettled families need or demand more additional services. And the greater the distance of relocation site to the

[7] There is a recent move by the NHA Board to allow regional AMO to undertake overall supervision and monitoring of site development which will localized the bidding process in the event that fund transfer is not possible.

original site or the city proper, the resource requirement rises exponentially specifically when there are pre existing conditions of land supply distortions (e.g. bad zoning or land use practices; topography) and credit market constraints (Dasgupta and Lall, 2006). Resettlement programs, however, can be made effective. The effectiveness and efficiency of the approaches can be assessed based on the following indicators or measures:

Cost Effectiveness Ratio. The cost effectiveness of housing programs involves a comparison of the total cost of providing the housing with its market rent. This is usually measured as the ratio of the present value of the cost to the present value of market rents at some appropriate interest rate (Olsen 2000). The ratio is not intended to capture positive or negative effects of resettlement (e.g. neighborhood effects, infrastructure benefits, etc) but mainly to show how outputs are provided from the point of view of efficient production.

The resettlement program basically is a sale of developed lots and completed housing units and the approach is straightforward since all of the costs associated with providing the house during a period occur in that period. However, resettlement also involves project-based assistance, primarily operation and maintenance of subdivisions and livelihood assistance that are considered indirect costs and usually difficult to measure because the time path of cost bears no relation to market rents and also because records are often not available.

Fiscal Costs and Subsidy Level. The fiscal impact of resettlement modalities is another indicator of efficiency of resettlement approaches. Resettlement projects are targeted to low-income families and both capital and finance subsidies are provided. In addition, "new" residential developments create new service demands and how these services will be met or who pays for these services are relevant efficiency considerations.

Socioeconomic Effects. A key indicator of efficiency and effectiveness of resettlement is welfare impact of the program. In the absence of household survey and impact evaluation, the study relied on site visits, case studies and existing literature to examine the following indicators: (1) level of housing investments by beneficiary; (2) collection efficiency; (3) substitution or replacement and (4) welfare perceptions of program beneficiaries.

A. Production Efficiency/Cost Effectiveness Comparisons

Between 2003 and 2010, NHA has undertaken 88 resettlement projects nationwide, of which 45 projects sites were developed in GMA and 43 sites in regions (excluding emergency housing). Most of these projects have been completed as of end 2011 with and average completion rate of 91% in GMA and 84% in regions (Table 8 and Table 10). A project site is considered completed when land development and housing construction are fully completed and

the beneficiaries have been relocated to the site. About 80% of community facilities have also been provided and at least 80% of planned power and water utilities are met.

The dominant modality for GMA resettlement projects is the completed housing or developer constructed approach. About 17% or 32 of the developed sites are CHP and only 6 projects are exclusively incremental housing approach (Table 8). It is important to note that incremental housing usually occur in city, which could be the result of LGU assistance on the CA in the identification of site. There are also resettlement sites that are considered mixed with varying shares of CHP and IHP.[8] Unfortunately, we are unable to classify the lots or beneficiaries by method due to lack of information.

By location, there are more in-city projects than off-city projects developed for the period 2004 to 2011 (Table 9). Except for Metro Manila, the resettlement sites for affected households in the peripheral area (i.e. Bulacan, Pampanga, Laguna, Cavite) are all in-city. Off city site is mainly an option for the Metro Manila residents. The dominance of in-city sites suggests that in areas where land is not a binding constraint, NHA has implemented in-city relocation and it is only in Metro Manila where land availability and land prices are critical concerns that off-city settlement becomes the alternative strategy.

Similar findings are shown in the case of Regions. In Regions, the dominant strategy is the RAP-LGU and the resettlement sites are developed within the same LGU or in-city (Table 10). While land availability is not a binding constraint in most regions, the RAP scheme has facilitated the process. The joint venture with LGUs has apparently led to greater participation and responsibility among LGUs specifically in providing land for socialized housing.

The major challenges facing resettlement is very evident in Metro Manila. Despite the availability of RAP, this strategy is not widely practice in GMA. One can surmised that this could be tied to land constraints and would need the national government's actions to look into incentives as well as regulations on affordable housing development in cities.

With the limited implementation of RAP in GMA, NHA relies on the developer-constructed approach. One of the advantages of the later is the ready availability of resettlement sites, which can facilitate the process of development and relocation of households. This appears to be translated in shorter implementation time of developer-constructed projects. On the average, it takes about two years to complete developer-constructed projects compared to highly variable completion time for incremental housing (Table 11). The actual timeline of project completion under each modality show that for smaller and medium sized areas i.e. between 1000 to 3000 housing units, project completion is between one to two years for developer-constructed

[8] As of this writing, NHA has yet to determine percentages of beneficiaries under incremental and developer contract for some sites.

approach compared to 2 to 3 years for incremental housing. This time difference and the production process efficiency of developer-constructed approach imply that it would be difficult to use incremental housing for projects with large number of beneficiaries, i.e. greater than 3000.

We further compared the CHP and IHP approach in terms of cost effectiveness. Based on actual cost per unit, it cost less to produce a unit of housing using the CHP scheme than IHP by about 17% or about P25,000 per unit, on the average (Table 13). The cost differences vary by project and the variation can be higher than 17% for specific projects. For instance, a comparison of NCR resettlement sites using CHP and ICP shows that ICP cost is twice that of CHP cost.[9] Similarly, the comparison between two resettlement sites in Bulacan (Sta Maria and Balagtas) shows unit cost of ICP higher by 30% than CHP.

The analysis shows that the cost of development and housing cost per unit is lower for the developer-constructed approach. This may reflect the efficiency and scale economy in the production process of developers. As indicated in both the average costs and specific project costs, the cost difference is noticeably in the relocation cost per unit. The higher relocation cost reflects the cost of staging area and other services needed to organize the construction process.[10] It also include additional administrative or subsidy to assist the families (e.g. additional labor cost) to complete the construction process. In addition to relocation cost, the cost difference between ICP and CHP also reflects difference in cost of developed lots, which is affected by several factors such as location, topography and land availability in the locality.

However, the cost benefit ratio (CBR) shows that in the long-term it cost the government more to produce a peso of housing unit using the developer-constructed scheme than the incremental housing approach. This is because the market value of housing in the incremental approach is relatively higher than that of the CHP. Based on total cost, the ratio for developer is P7.4 and P19.8 for Northville 2B (Caloocan) and Northville 5A (Bulacan), respectively. For IHP, the estimated CBR are P 6.0 (Northville 2, Valenzuela) and P5.7 (Northville 6, Bulacan) (Table 14). This ratio is reduced for both modalities if we assume that at the end of a 30 period, the land will still be owned by the government. The value of land at the end of the 30 year period is estimated based on assumption of annual land price increase of 4%.[11] Under this assumption, the cost benefit ratio is lowered to P5.1 and P 9.6 for the two CHP sites and to P4.4 and P4.1 for the IHP projects. The higher long-term benefits of the incremental approach reflects the better housing design and conditions under incremental housing due to efforts of the households to improve housing based on their resource availability, thus, the probability of

[9] The unit cost was adjusted to account for differences in project years using CPI. See Notes on Table 13.

[10] NHA is unable to breakdown this cost item but it includes staging area, administrative cost and perhaps other support services.

[11] Colliers real estate trends in the Philippines,

higher rents compared to the developer-constructed scheme where there is less incentive to improve housing.

Figure 5 shows the physical difference in the built environment under a developer contract and that of incremental housing arrangement. It can be observed that the level of improvement of households is higher and more common in incremental approach than the row house settlements. The incremental housing reflects socioeconomic differences across households, which can provide the needed socioeconomic vitality in the site. In the developer approach, improvements are not evident and limited to "beautification" (i.e. painting, putting grills on front of house for security). One possible reason for the limited expansion is the design of row house wherein modifications can affect neighbors housing units. In the IHP, the design provides flexibility that supports modifications and continuing improvements.

It should also be pointed out that the higher cost of incremental housing is caused primarily by operational problems. Experiences of incremental housing in Asia show that the smoothness of the incremental process has yet to be perfected (Vastu Shilpa Foundation 1990). In particular, the layout and organization of spaces, materials and construction techniques is usually the problem but these systems can be made more efficient. This means the housing support cost can be substantially reduced if operation and organization of production can be worked out better. Second, the greater incentive of households to improve housing indicates acceptability of the resettlement sites and improved welfare conditions. This further implies greater willingness to participate in the maintenance of the subdivision. Under the developer approach, there is dependence on NHA or LGU on operation and maintenance cost. Overtime, this cost is expected to increase once developer's guarantee on site development has expired.

A critical weakness of developer-constructed approach is that NHA has no real influence on the settlement location. The only thing that binds the developer responsible for the site selection is the Terms of Reference (TOR). Aside from environmental requirement, the TOR also does not require assessment of the economic potential of the area. Thus, there is a tendency by developers to offer the cheapest locations or locations unattractive to the formal market, which usually are located far outside of the city centers.

For regional projects, no analysis was made due to insufficient data that will allow cost benefit comparisons. There were only few projects for the period when data was made available (2006 to 2010) and the analysis would require assessment of individual LGUs.

Resettlement sites may also be classified based on location, i.e., in-city or off-city resettlements. In-city resettlements means that relocation sites of affected families are still within the same local government unit while off-city resettlements are relocation sites usually far from evacuated sites and in a different local government unit. A comparison of cost per unit

shows that on the average, off-city projects cost less per unit than in-city projects by about P13,000 per unit (Table 15). The cost difference arises mainly from the land cost. There is also significant difference in the cost of community facilities. Controlling for size of resettlement site, it appears that resettlement sites in NCR have much lower cost for community facilities compared to resettlement outside NCR regardless of location or approach. However, community cost is also affected by the size of settlement as reflected in the case of NBP, Muntinlupa. Compared to other resettlement size in NCR, NBP Muntinlupa received the most number of facilities possibly due to the size (more than 6,000 families) of the project.

In terms of cost benefit ratio (CBR), the results show that while both locations were designed using the CHP approach, in-city developments specifically resettlements in Metro Manila are more cost effective. For in-city development, it costs the government P 7.4 and P6.5 to produce a peso of housing unit in NCR. On the other hand, off-city development costs government around P21 to P25 per unit (Table 16). This is due to the difference in the long-term benefit of relocation within Metro Manila compared to that outside NCR. The CBR is lowered under assumption that government still owns the land after 30 years. In-City relocations within Metro Manila show CBR of P5.1 and P4.8 compared to off city CBR of P9.5 and P10.

The long-term benefit is higher in-city because of the location and economic benefits from resettlement. It is important to note that in-city has higher market rental value than off city locations, which are usually outside the city or town centers. The cost effectiveness of projects is affected by the economic potential of the area as well as the value that beneficiaries attached to the resettlement project.

Relatedly, collection performances of resettlement projects are poor. This adds to concerns about the effectiveness of the program. Tables 17 and 18 show the collection performance by modality. The data shows better collection performance of incremental housing compared to developer-constructed approach. For instance, for the three-year period 2009 to 2011, collection performance rate is 72% for Northville 1 compared to 39% for Northville in-city developer projects (Table 17).[12] Collection efficiency is also better for in city given an efficiency and performance rate of 17% and 39%, respectively (Table 19). Off city collection efficiency and performance rate is 4% and 8% respectively. However, it is also apparent that there are factors other than the type of modalities that affect the low performance. This requires further study and the need for NHA to improve its monitoring and evaluation system cannot be overemphasized.

[12] As of this writing comparison for collection rates can only be made for these two sites since collection performance is not monitored by site but are lump with other sites. In some cases, the monitoring and recording is done by area based on AMO discretion and it can be tedious to separate these accounts by site.

B. Fiscal Implications

New subdivision resettlements create new service demands and a basic consideration in resettlement program is how these services will be funded. For in-city development, the LGUs have been more open in accepting these responsibilities specifically with regards to social services since the settlers have been residents in the area. The LGU is also more involved in the process of site selection and beneficiaries' identification and it is expected that the period of disengagement of the NHA from the project would be shorter.

However, in-city sites that are developer-constructed could be a problem especially if the LGU is only partially involved. It is possible that developers offer their inventory of socialized housing sites, which have not been taken out fully by the Home Development and Mutual Fund (HDMF) because of limited buyers. Although the law allows for the turnover of these sites, LGUs considers these subdivisions as private thus operation and maintenance is the responsibility of the homeowners or in the case of resettlement of the NHA or developer. The LGUs cannot derive tax from these subdivisions specifically when housing conditions have not been improved beyond the core house. The estimated minimum annual operating expense for in-city development amount to P1,100 per household. This translates to P1.1 million a year for a minimum resettlement site of 1000 households.

The problem of funding for operation and maintenance is worse in cases of off-site resettlements because the additional expenditure is not only on maintenance but also social services. The assumption is for the receiving LGU to take this responsibility but off site resettlements are often in lower class municipalities where the LGUs do not have the capacities to improve the relocation site and take care of beneficiaries' welfare. These LGUs will definitely require aid and support from the national government and the situation can increase the period of engagement of NHA from the project. LGUs in Metro Manila that have substantial incomes have provided aid for their former constituents however, this arrangement is dependent on agreements with the current local executive and sustainability can be an issue without the appropriate institutional instruments in place.

These fiscal concerns have to be considered in evaluating the efficiency of resettlement modalities. The developer-constructed approach creates problems of acceptability and fiscal dependence since these subdivisions usually requires higher maintenance due to the socialized nature of its development. In the case of incremental housing, the LGU assistance to CA on site selection increases the probability of in-city relocation.[13] Moreover, the greater involvement of the community in housing development and the higher value of housing due to investments provided by these families are incentives for community participation and effective homeowners association. The scheme facilitate faster improvements and enlargement of houses and the

[13] The 6 sites identified exclusively as incremental housing projects or HML Projects are all in-city.

socioeconomic differences in the community made apparent in the housing structures, would help the LGU and NHA to better assess the resources available in the community. Combined with in city development, incremental housing has greater potential to generate support from the beneficiaries and local government.

On the other hand, the LGU and NHA joint venture does not face issues on LGU support since these projects are from the start LGU driven. NHA's role is mainly that of a technical advisor and finance partner. As mentioned earlier, the NHA can disengage itself upon completion of project since collection and estate management is also the responsibility of the LGU. This modality actually highlights the importance of greater LGU involvement in housing projects in the locality and NHA has to strengthen this partnership component even for modalities using the developer-constructed or incremental housing approach. The involvement of the LGUs should not only be confined to committee memberships and chairmanship but also on site selection, development and estate management through schemes that will provide incentives and income to the LGU. Another advantage of the LGU and NHA joint venture is that it supports in-city development and compels LGUs to take greater responsibility in land use planning, in identifying land for socialized housing and in addressing local housing issues.

C. Socioeconomic Effects

In general, resettlement projects have led to improvements in housing conditions and shelter environment of the beneficiaries. Many of these beneficiaries used to live in inhabitable and unhealthy conditions and are highly vulnerable to both natural and man-made disasters. However, there are significant social and economic effects, which may be aggravated by the specific approach to resettlement. Several case studies point to the poor and unhealthy conditions in resettlement sites (Table 19). While flooding has been minimized and shelter environment is better, there are areas with absence of potable water and insufficient power system. In less than five years drainage systems are clogged. Specifically for row house design, there is no provision for expansion of families thus this design creates urban sprawl and could lead to slum-like conditions.

Resettlement areas have also been provided with infrastructure facilities to compensate for the distance of relocation sites. Access to these facilities is high but in some case, the facilities remained unused. One possible reason is the lack of personnel for health facilities or lack of teachers for elementary or high school. The other reason is that the facilities are being built without assessment of the needs of the community and the current demographic characteristics of residents (Apostol 2006).

Another social concern in resettlement site is the peace and order situation. Even among in-city dwellers, the highest record of case digests is reported to come from resettlement areas.

Putting together different groups in one community can lead to bigger "gangs" which if uncontrolled will disrupt peace and order and security in the community. Thus, aside from health and education services, LGUs have also to provide resources to strengthen police activities in these areas.

The lack of employment and livelihood can further incite crimes and the livelihood problem is more evident in off-city relocation compared to in-city resettlements. Off city resettlement results in significant dislocation and displacement. A decline in employment has been reported in several sites. A study of Southville 7 (Calauan) Resettlement Site, for instance, indicated a 43% loss of income and livelihood programs both by government and NGO did not result in significant employment (IPC 2009). Unemployment in the community is at 20% and underemployment at 27%. Decline in income and expenditure on basic needs have also been reported in a resettlement site in Montalban, Rizal (Apostol 2006). Livelihood opportunities in the area or near the vicinity are very limited due to absence of access infrastructure and the geographical limitations of the municipality.

The presence of both skilled and unskilled workers as well as white collar and blue-collar jobs within the vicinity is needed for a community to thrive. Socioeconomic differences provide opportunities for livelihood. The incremental housing approach supports this concept. By allowing flexibility in housing, households with higher incomes can hire people in the area either for housing construction, cottage industry or other small-sized entrepreneurial activities. Encouraging activities of people with different socioeconomic standing can partly address joblessness in the area

V. Conclusions and Recommendations

The resettlement program while used as a scheme to address informal settlements in infrastructure projects and in danger areas is also a program meant to improve housing conditions and the welfare of informal settlers. The objective of a resettlement is not to simply evacuate or clear areas for development or disaster reduction but to contribute to solving the housing problem in the country. For efficiency and effectiveness, resettlement approach should ensure that the project benefits are long-term.

There are basically two models of development that have been used in NHA resettlement program, the (a) completed housing developer-constructed approach and (b) home lending incremental housing approach. These developments maybe located In-city or Off-City. The developer modality has been the dominant scheme in GMA for both in-city and off-city. Comparatively, the investment cost is lower for the developer-constructed approach than incremental housing by 17%, on the average, but the cost difference can reach to more than

100%. The developer-approach also facilitates relocation because of more defined production schedules and processes than incremental housing. However, in the long-term, the benefits from incremental housing are higher and the value of development increases overtime, thus is more cost effective than the completed housing approach. The incremental housing process is also associated with in-city locations since the LGU assists the CA in identification of resettlement sites at the initial phase. This compels LGU to take greater responsibility on the resettlement site. Another indicator worth looking into is the level and rate of improvements observed in incremental housing settlements. The level of housing investments is higher and more common among households despite the fact that at the beginning of resettlement they had only temporary shelters. Within a period of 5 years after completion, the rate of improvement in IHP sites as reflected in the improvements on housing is significant compared to developer-constructed sites for the same period. This creates less dependence on government either on NHA or the LGU overtime since households' greater involvement and investments in housing are incentives for community participation and effective homeowners association. The higher repayment performance in incremental resettlements also reflects the greater value given by the beneficiary to the project. The housing improvement indicator can be used by the NHA or LGU to detect those households who value the resettlement the most and also to identify welfare cases for better targeting of subsidy and livelihood programs.

It has been argued that the weaknesses attributed to incremental housing (e.g. messy process, takes longer time, higher administrative cost) are primarily operational issues. Experiences of incremental housing in Asia recognize that the process has yet to be perfected and the higher cost is mainly due to poor planning and organization of space, materials and construction design. The operational bottlenecks can be improved to address the higher initial cost of the resettlement project.

Overall incremental approach has better welfare implications. Faster improvements and enlargement of household is essential element to urban development since it can help avoid sprawl of resettlement projects and address the need for bigger space as household expands. It also shows income differences among household in the area, which is needed to enhance socioeconomic environment in the community. The process of incremental construction of houses can address joblessness in the area. Households with more resources can employ people from the community for construction works on theirs lots or as workers in cottage industries that may put up by the higher income families.

The cost effectiveness of incremental resettlement projects can further be improved when combined with in-city developments. It is equally important to consider the site of relocation and determine the economic viability of the area. People moved where there are jobs and in areas where networks and skills can be effectively acquired. In cities, people acquire skills and knowledge sharing through face-to-face encounter. In the case of resettlement sites that are far

from city centers, establishing networks and skill can be difficult or limited. Thus, there is a greater need for third parties such as the NHA to facilitate these linkages. But the effectiveness of this approach in improving the livelihood situation in the area is doubtful specifically when sources of employment are far from the area.

There is a need to compel LGUs to take greater responsibility for shelter in the locality. The best way to do so is to promote RAP in GMA. At present, RAP is employed on a limited scale in GMA specifically Metro Manila. Based on experience in Regions, the RAP has several advantages: (1) it compels LGUs to contribute land thus ensuring in-city relocations; (2) LGUs take greater responsibility in land use planning and in ensuring land allocation for socialized housing. This would address the land availability constraint attributed to incremental housing. (3) NHA can disengage itself from resettlement programs and focus on community development, both for pre and post resettlement, collection and loan recovery, and monitoring and evaluation of projects.

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Site Visits and Interview:

- NHA Corporate Planning Office

  Panel Interview headed with officers from Corplan, Resettlement and Development Services, Community Relations Information and Operations Department, Livelihood Department, Estate Management and Financial Management

- NHA Visayas Area Management Office (VAMO)

  Engr. Virgilio V. Dacalos- Deputy Area Management Officer of Visayas Area Management Office (VAMO)

- NHA Mindanao Area Management Office (MAMO)

  Arch. Ma. Alma T. Valenciano- Group Manager of Mindanao Management Office (MMO)

- Sites: Southville 2-Trece Martirez City and Southville 5-Timbao, Biñan

  Arch. Susana V. Nonato- Deputy Area Management Officer of Region IV (CALABARZON / MIMAROPA)

  Officers and Representatives of Southville 2 Homeowners' Association

  Officers and Representatives of Southville 5 Homeowners' Association

- Site: Northville 4-4A-4B, Marilao, Bulacan

  Engr. Romuel P. Alimboyao- Deputy Area Management Officer of Central Luzon (Region 3A & 3B)

  Engr. Ramon S. Paragas- Division Manager of Bulacan Province

  Ines C. Gonzales- Project Manager of Pabahay 2000 Project Bo. Muzon San Jose del Monte City, Bulacan

  Mr. Arman Cruz- Marilao Municipal Planning Department Staff

- Site: Northville 2- Bignay, Valenzuela City
  Arch. Ma. Teresa P. Oblipias- Sector Head, North Sector II DAMANAVA Projects
  Officers and Representatives of Northville 2 Homeowners' Association

- Site: Southville 3- NBP, Muntinlupa, City
  Engr. Juanito B. Coronel- Officer-in-Charge, SV3RP, New Bilibid Prison, Muntinlupa
  Officers and Representatives of Southville 3 Homeowners' Association

Tables and Figures

Table 1 NHA Housing Production by Program, 2001 to 2010

Program	2001		2002		2003		2004		2005		2006	
	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share
Resettlement	6,840	44%	4,381	40%	4,131	61%	11,760	65%	16,960	73%	15,390	78%
Slum Upgrading	5,961	38%	5,019	46%	1,505	22%	1,395	8%	4,136	18%	1,338	7%
Sites And Services	1,435	9%	1,085	10%	470	7%	2,036	11%	1,192	5%	2,061	10%
Core Housing	-	-	280	3%	511	8%	2,871	16%	1,033	4%	927	5%
Medium-Rise Housing	1,280	8%	180	2%	180	3%	-	-	-	-	105	1%
Total	15,516	*100%*	10,945	*100%*	6,797	*100%*	18,062	*100%*	23,321	*100%*	19,821	*100%*

Program	2007		2008		2009		2010		Total (2001-2010)	
	Units	Share	Units	Share	Units	Share	Units	Share	Units	Share
Resettlement	28,655	77%	36,830	83%	22,044	84%	19,459	84%	166,450	74%
Slum Upgrading	3,707	10%	6,231	14%	2,187	8%	2,068	9%	33,547	15%
Sites And Services	4,036	11%	1,361	3%	1,463	6%	1,142	5%	16,281	7%
Core Housing	721	2%	41	0%	456	2%	572	2%	7,412	3%
Medium-Rise Housing	60	0%	-	-	-	-	-	-	1,805	1%
Total	**37,179**	100%	**44,463**	100%	**26,150**	100%	**23,241**	100%	**225,495**	100%

Source: HUDCC, NHA

Table 2 Share of Resettlement Program to NHA Expenditure, 2007-2011

In Percent

Item	2007		2008		2009		2010		2011		2007-2011	
	Resettlement	Other Programs[a]	Resettlement	Other Programs[a]	Resettlement	Other Programs[a]	Resettlement	Other Programs[a]	Resettlement	Other Programs[a]	Resettlement	Other Programs[a]
Project Development (Including Housing Support)*	78.93	21.07	97.41	2.59	90.49	9.51	98.92	1.08	49.46	50.54	80.80	19.20
Land Acquisition/Assembly	61.97	38.03	49.14	50.86	22.75	77.25	33.77	66.23	9.20	90.80	38.31	61.69
Other Project Related Capital Outlay [b]	-	-	-	100.00	-	100.00	32.03	67.97	62.64	37.36	52.40	47.60
Total (Project Related Expenditure)	78.49	21.51	96.91	3.09	89.52	10.48	92.07	7.93	50.83	49.17	78.92	21.08

Source: NHA Corporate Operating Budget

Notes:

[*] The NHA corporate budget presents housing support as separate expenditure item but according to NHA this amount is still part of project development cost.

[a]Other Programs include: Slum Upgrading, Sites and Services, Completed/Core Housing, Medium Rise Housing

[b]Other Project Capital Outlay: Socialized Housing Units Participation (SHUP), Local Housing, Socio Economic and Environmental Programs, Program Administration

Table 3 Resettlement Expenditure Share by Region

Item	2007		2008		2009		2010		2011		2007-2011	
	GMA	*Regions*	*GMA*	*Regions*	*GMA*	*Regions*	*GMA*	*Regions*	*GMA*	*Regions*	*GMA*	*Regions*
Project Development (including Housing Support)	95%	5%	97%	3%	95%	5%	96%	4%	86%	14%	94%	6%
Land Acquisition/Assembly	52%	48%	87%	13%	93%	7%	100%	0%	100%	0%	74%	26%
Other Project Related Capital Outlay	-	-	-	-	-	-	41%	59%	86%	14%	77%	23%
Total (Project Related)	*94%*	*6%*	*97%*	*3%*	*95%*	*5%*	*95%*	*5%*	*86%*	*14%*	*93%*	*7%*

Source: NHA Corporate Operating Budget

Notes:

*GMA refers to Greater Manila Area which covers Metro Manila (NCR), and the provinces of Rizal, Bulacan, Pampanga, Cavite and Laguna

**Regions cover CAR, Region I, Region II, Region V, Visayas and Mindanao

Table 4 Distribution of Resettlement Budget by Type of Expenditure, 2007-2011

Item	2007	2008	2009	2010	2011	2007-2011
Project Development	**96.73**	**98.99**	**99.28**	**95.63**	**84.83**	**95.09**
New Works	51.26	45.13	29.30	52.57	63.84	45.86
Carry-Over Works	48.74	54.87	70.70	47.43	36.16	54.14
Housing Support	**1.21**	**0.50**	**0.36**	**0.79**	**0.81**	**0.73**
Utilities	15.58	8.99	9.60	34.63	6.97	16.35
Survey & Titling	8.47	10.20	10.89	1.63	10.28	7.85
Repair Works	11.76	3.81	4.06	2.51	2.76	5.06
Others[a]	57.46	67.76	65.57	55.12	73.31	63.30
EHAP	-	-	-	-	-	-
Gender and Development	-	-	-	-	-	-
Livelihood Assistance for Northrail Southrail Relocatees	6.73	9.24	9.87	6.11	6.69	7.45
Land Acquisition/Assembly	**2.06**	**0.51**	**0.36**	**0.36**	**0.07**	**0.67**
Land Acq.-Proj. Dev't	70.01	29.81	24.62	-	-	42.52
Land Acquisition-Others	5.23	12.24	13.15	17.29	100.00	11.97
Land Assembly	24.76	57.95	62.24	82.71	-	45.51
Other Project Related Capital Outlay [b]	**-**	**-**	**-**	**3.22**	**14.29**	**3.50**

Source: NHA Corporate Operating Budget

Notes:

*As stated in Table 2, the NHA corporate budget show separate item for housing support but this budget is considered part of project development cost

[a]Others include: Land Improvement Capital Outlays

[b]Other Project Capital Outlay: Socialized Housing Units Participation (SHUP), Local Housing, Socio Economic and Environmental Programs, Program Administration

Table 5 Livelihood and Affordability Enhancement Program

Values in Number of Persons Benefitted

Percent refers to persons benefited to total number of households in the resettlement site

As of December 2011

LIVELIHOOD PROGRAMS / PROJECTS	NV VALENZUELA / CALOOCAN	SV MUNTINLUPA	Total NCR	NV BULACAN	NV PAMPANGA	Total NCL	NV CAVITE	NV LAGUNA	NV RIZAL	Total SLB	GRAND TOTAL
A. Capacity Building Skills Training	**6,762**	**9,616**	**16,378**	**36,751**	**11,975**	**48,726**	**5,713**	**50,569**	**6,189**	**62,471**	**127,575**
I. Income/Employment Generation:	**1,999**	**4,470**	**6,469**	**14,105**	**7,922**	**22,027**	**1,842**	**26,129**	**3,194**	**31,165**	**59,661**
a. Skills Training											
TESDA, LGU, DON BOSCO, Dream Inc., Soroptimist,etc.)	372	1,987	**2,359**	5,586	2,719	**8,305**	687	9,329	1,499	**11,515**	**22,179**
	6%	*29%*	***18%***	*21%*	*21%*	***21%***	*18%*	*29%*	*8%*	***21%***	***21%***
Skills Training on Basic Cosmetology (Splash Inc.)	-	-	**-**	402		**402**	-	-	-	-	**402**
				1%	*0%*	***1%***					***0.4%***
b. Job Placement (DOLE/PESO)	977	703	**1,680**	2,512	1,869	**4,381**	253	6,898	1,319	**8,470**	**14,531**
	16%	*10%*	***13%***	*9%*	*14%*	***11%***	*7%*	*21%*	*7%*	***16%***	***14%***
c. Credit/Loan Assistance[a]	622	1,045	**1,667**	4,201	1,334	**5,535**	163	7,324	314	**7,801**	**15,003**
	10%	*15%*	***13%***	*15%*	*10%*	***14%***	*4%*	*23%*	*2%*	***15%***	***14%***
d. Scholarship Programs	-	218	**218**	491	1,197	**1,688**	333	205	-	**538**	**2,444**
	0%	*3%*	***2%***	*2%*	*9%*	***4%***	*9%*	*1%*	*0%*	***1%***	***2%***
e. Livelihood Home-Based Projects	28	517	**545**	913	803	**1,716**	406	2,373	62	**2,841**	**5,102**
	0.5%	*7%*	***4%***	*3%*	*6%*	***4%***	*11%*	*7%*	*0.3%*	***5%***	***5%***
II. Other Assistance Extended with Livelihood Opportunities	**3,066**	**4,873**	**7,939**	**13,211**	**3,402**	**16,613**	**974**	**16,600**	**2,995**	**20,569**	**45,121**
a. Job Referral	1,555	3,338	**4,893**	8,309	2,650	**10,959**	311	9,829	2,541	**12,681**	**28,533**
	26%	*48%*	***38%***	*31%*	*21%*	***27%***	*8%*	*31%*	*14%*	***24%***	***27%***
b. Seminars/Orientation/Trainings[b]	1,511	1,207	**2,718**	3,624	643	**4,267**	68	3,630	178	**3,876**	**10,861**
	25%	*17%*	***21%***	*13%*	*5%*	***11%***	*2%*	*11%*	*1%*	***7%***	***10%***
c. Vegetable Seeds Distribution / Urban Gardening	-	328	**328**	1,278	109	**1,387**	595	3,141	276	**4,012**	**5,727**
	0.0%	*5%*	***3%***	*5%*	*1%*	***3%***	*15%*	*10%*	*2%*	***7%***	***5%***
III. Grants Received from Various Agencies	**1,697**	**273**	**1,970**	**9,435**	**651**	**10,086**	**2,897**	**7,840**	**-**	**10,737**	**22,793**

a. Sewing Machines sourced for garments production project	20	-	**20**	17	-	**17**	-	8	-	**8**	**45**
	0.3%	*0%*	***0.2%***	*0.1%*	*0%*	***0.04%***	*0%*	*0.02%*	*0%*	***0.01%***	***0.04%***
b. 8 Gardening tools (United Architect of the Philippines)	-	270	**270**				-	-	-	-	**270**
	0%	*4%*	***2%***								***0.3%***
c. Hollow Blocks Machine (Beneficiaries)	-	-	**-**	20	-	**20**	-	-	-	-	**20**
				0.1%	*0%*	***0.05%***					***0.02%***
d. Acquisition of tools and materials for TODA (LGU/PESO/NHA)	-	-	**-**	1		**1**	-	-	-	-	**1**
				0.004%	*0%*	***0.002%***					***0.001%***
e. Acquisition of 50 Cofta Chairs for NV 15 Relocatees Mutual Help (LGU)	-	-	**-**	-	70	**70**	-	-	-	-	**70**
				0%	*1%*	***0.2%***					***0.07%***
f. Acquisition of tools and materials for fashion accessories trainees	-	-	**-**	-	20	**20**	-	-	-	-	**20**
				0%	*0.2%*	***0.05%***					***0.02%***
g. KASAUP Handycraft Makers of PNR-SVQ	-	-	**-**	-	30	**30**	-	-	-	-	**30**
				0%	*0.2%*	***0.07%***					***0.03%***
h. Samahan ng Kababaihan sa Pulung Bulu	-	-	**-**	-	28	**28**	-	-	-	-	**28**
				0%	*0.2%*	***0.07%***					***0.03%***
i. Aslag Parol Sta. Lucia	-	-	**-**	-	30	**30**	-	-	-	-	**30**
				0%	*0.2%*	***0.07%***					***0.03%***
j. SEA K Group of Northville 14 (CSWD-LGU)	-	-	**-**	-	20	**20**	-	-	-	-	**20**
				0%	*0.2%*	***0.05%***					***0.02%***
k. Nego-Kart (DOLE)	-	-	**-**	-	13	**13**	-	-	-	-	**13**
				0%	*0.1%*	***0.03%***					***0.01%***
l. Rolling Cart Program (Clark Dev't. Corp.)	-	-	**-**	-	2	**2**	-	-	-	-	**2**
				0%	*0.0%*	***0.005%***					***0.002%***
m. Sasso Chicken Program (Los Pueblos Foundation/Phoenix Foundation)	-	-	**-**	277	-	**277**	100	-	-	**100**	**377**
				1%	*0%*	***0.7%***	*3%*	*0%*	*0%*	***0.2%***	***0.353%***
n. Unlad sa Kabuhayan (groceries / starter kit) (LGU)	-	-	**-**	162	-	**162**					**162**
				1%	*0%*	***0.4%***					***0.2%***
o. NFA Tindahan Natin [c]	2	3	**5**	15	4	**19**	4	13	-	**17**	**41**
	0.03%	*0.04%*	***0.04%***	*0.1%*	*0.03%*	***0.05%***	*0.1%*	*0.04%*	*0%*	***0.03%***	***0.04%***
p. Bigas at Pagkain (KSK-KBBP)[d]	1,675	-	**1,675**	8,941	434	**9,375**	2,792	7,714	-	**10,506**	**21,556**
	28%	*0%*	***13%***	*33%*	*3%*	***23%***	*72%*	*24%*	*0%*	***20%***	***20%***
q. Bigasang Bayan	**-**	-	**-**	2	-	**2**	1	-	-	**1**	**3**
				0.01%	*0%*	***0.005%***	*0.03%*	*0%*	*0%*	***0.002%***	***0.003%***

r. NHA-LDD - grant of used clothes	**-**	-	**-**				-	5	-	**5**	**5**
							0%	*0.02%*	*0%*	***0.009 %***	***0.005%***
s. LGU-Pasig & Marikina's grant to Ondoy victims	**-**	-	**-**				-	100	-	**100**	**100**
B. Community-Based Enterprise Organization	**20**	**197**	**217**	**873**	**924**	**1,797**	**0**	**774**	**0**	**774**	**2,788**
a. Guilds Formation [e]	20	197	**217**	873	924	**1,797**	-	774	-	**774**	**2,788**
	0.3%	*3%*	***2%***	*3%*	*7%*	***4%***	0%	0.001%	0%	***1.4%***	***2.6%***
b. Cooperative Formation / Strengthening (CDA, Cooperative Devt. Office LGU)	4 MPC registered with CDA	3 MPC registered with CDA;	**7 coops registered w/ CDA**	7 coops registered w/ CDA	1 coop registered w/ CDA	**8 coops registered w/ CDA**	2 coops organized	5 coops registered w/ CDA	2 asso. Organized; 1 Tricycle Drivers Assn. for registration (SIMTODA)	**5 coops registered w/ CDA**	
C. Savings/ Payment Program											
a. Impok Pabahay Program (Savings Program)											
a. Orientations	707	-	**707**	3,366	865	**4,231**	95	724	57	**511**	**5,449**
b. Enrolees	802	-	**802**	3,329	852	**4,181**	95	461	32	**588**	**5,571**
c. Savings/Payment (PhP)	1,558,862	-	**1,558,862**	2,801,281	225,604	**3,026,885**	6,844	336,848	-	**118,130**	**4,703,877**
% Enrolees/Orientations	113%			99%	98%		100%	64%	56%		
%Payment/Total Amount Due [f]	12%			4%	1%		0.2%	0.5%	0.0%		

Source: NHA Livelihood Development Department

[a]Credit Loan Assistance: Amount released: PhP 5,778,731 (NV Valenzuela/Caloocan); PhP 3,991,700 (SV Muntinlupa); PhP 25,121,040 (NV Bulacan); PhP 7,169,500 (NV Pampanga); PhP 775,000 (SV Cavite); PhP 20,217,814 (SV Laguna); PhP 914,000 (SV Rizal)

[b]Seminars: Credit Facilities Orientation with MFIs, Cooperative Development / Organizing, Pre Employment Orientation Seminar, Business Management Seminar, Values Formation Seminar, Entrepreneurship Development Seminar/ Business Opportunity Seminar, Waste Recycling Orientation

[c]NFA Tindahan Natin: Amount released: PhP 20,000 (NV Valenzuela/Caloocan); PhP 270,000 (NV Bulacan); PhP 80,000 (NV Pampanga)

[d]Bigas at Pagkain (KSK-KBBP): Amount- cost of goods sold/purchased): PhP 184,000 (NV Valenzula/Caloocan); PhP 914,703 (NV Bulacan); PhP 61,523 (NV Pampanga); PhP 261, 750 (SV Cavite); PhP 733,908 (Sv Laguna)

[e]Number of Guilds: 2 (NV Valenzuela/Caloocan); 2 (SV Muntinlupa); 38 (NV Bulacan); 17 (NV Pampanga); 14 (SV Laguna)

[f]Total Amount Due: PM 12.615 (NV Valenzuela/Caloocan); PM 67.791 (NV Bulacan); 24.068 (NV Pampanga); PM 68.260 (SV Laguna); PM 16.454 (SV Rizal); PM 4.052 (SV Cavite)

Values in Italics: Percentage to Households, where: Northville Valenzuela and Caloocan: 5,995; Southville Muntinlupa: 6,946; Northville Bulacan: 27,236; Northville Pampanga: 12,903; Southville Cavite: 3,861; Southville Laguna: 32,091; Southville Rizal: 17,837

Table 6 Major Activities in Resettlement for Sending and Receiving LGUs

Phase	Activity	
	Sending LGU	Receiving LGU
I. Pre- Relocation/ Social Preparation Phase		
A. Identification of Resettlement Site and Other Housing Options	1. Project Partnering 2. Organization of the Local Inter-Agency Committee (LIAC)/ Task Force (Sending LGU) 3. Formulation of Resettlement Action Plan (RAP) and Relocation Entitlements 4. Community Organizing for Identified Housing Options 5. Acceptance and Evaluation of Project Proposals 6. Preference Survey on Housing Options	1. Coordination with Receiving LGU re: Proposed Resettlement Site, Terms of Reference (TOR), Roles and Responsibilities 2. Organization of LIAC/ Task Force for basic socio-economic services (Receiving LGU) 3. Formulation of an Incentive Plan for the Receiving LGU to include consultation and public hearing with and or among local stakeholders 4. Consultation with the Host Community for the Absorption of the Potential Relocatees 5. Evaluation of Project Proposals
B. Pre-Census	1. Completion of Data Requirements 2. Physical/ Boundary Survey 3. Community Relations/Information Dissemination (Consensus Building)	1. Land Acquisition and Development/ Procurement of Housing Units 2. Formulation of Basic Socio-Economic Program 3. Continuing Networking with Socio-Economic Service Providers
C. Census/ Census Validation/ Occupancy Verification (as may be required)	1. Tagging & Mapping of Strcutures 2. Interview per Household/ Household Listing 3. Preparation of Masterlist of Households 4. Formulation of Code of Policies for Beneficiary Selection 5. Validation thru Posting of Census Masterlist 6. Pre-qualification of Families (NHA) 7. Formulation of Arbitration Rules & Procedures 8. Organization of Awards and Arbitration Committee (AAC) 9. Arbitration and Processing of Census Claims	1. Continuing Networking with Socio-Economic Service Providers
D. Information Drive on Resettlement Site	1. Distribution of Resettlement Project Flyers 2. Conduct Field Trip 3. Prepare and Issue Letter of Advice to Project Proponent	1. Coordination with Host LGU/Community Field Trip 2. Conduct Orientation on Project 3. Issuance of Certificate of Unit Availability
E. Consultation Proper	1. Organization of Community Speaker's Bureau	
	2. Conduct of Community Meetings (at least 3 meetings)	
F. Issuance of 30-Day Notice of Dismantling	1. Distribution of Notices to Individual Household (Res.	1. Organization of Receiving/Welcome Group

	Structures)	
	2. Submit List of Families for Relocation to Receiving Project	
G. Application for Certificate of Compliance (CoC) per EO 708	1. Completion of Requirements for Submission to LGU/Local Housing Board	
H. Resource Mobilization	1. Inter-Agency Meeting 2. Networking/Coordination for resource mobilization 3. Media Relations	1. Resource Mobilization
I. Completion of Pre-Relocation Documents/ Requirements	1. Ensure Completeness of Documents/ Requirements of Relocatees	1. Processing of Housing Materials Loan (HML) Application
J. Voluntary Relocation	1. Dismantling of Structures 2. Movement of Families	
K. Welcome and Relocation		1. Acceptance of Relocatees by Project Team/ Host LGU/ Community Representative
L. Processing of Documents and Lot/ Unit Assignment		1. Review of pre-relocation documents 2. Distribution of Housing Materials thru the HML Program, if applicable
II. Relocation Phase A. Preparations Before Massive Relocation	1. Inter-Agency Meeting 2. Confirmation of Actual Date of Relocation 3. CoC 4. Organization and Orientation of Manpower Assistance Teams 5. Networking/ Coordination for Resource Mobilization 6. Media Relations	1. Coordination with Receiving LGU 2. Inter-Agency Meeting with Social Service Providers 3. Resource Mobilization
B. Actual Relocation (Place of Origin)	1. Dismantling of Structures/ Movement of Families 2. Monitoring of Project Partners	
C. Issuance of Entry Pass/Permits	1. Issuance of Resettlement Papers 2. Release of benefits or entitlements, if applicable	
D. Loading of Materials and Personal Belongings	1. Final inspection of truck/loaded materials 2. Issuance of Trip Ticket	
E. Welcome and Reception		1. Acceptance of Relocatees by the Project Team/ Host LGU/ Community Representative
F. Processing of Documents and Lot/ Unit Assignment		1. Review of Pre-relocation documents/ requirements 2. Distribution of Housing Materials thru HML Program, if applicable
		3. Orientation on the Occupancy Rules and Regulations
III. Post Relocation Phase	1. Termination of Relocation Operation 2. Trun-over of cleared Area to Project Proponent	1. Community Integration and Development 2. Advise Sending Project on Total Families Relocated

	3. Development/ Maintenance of Cleared Area	3. Estate Management
		4. Ensure and Monitor Provision of Basic Socio-Economic Services 5. Coordination/Networking with other agencies/institutions for the planning and implementation of socio-economic programs/projects 6. Monitor Constructions of Houses, (if HML is provided)

Source: NHA Corporate Planning Office

Figure 1 Work Program for Resettlement Projects, Phases I to III (assumption of 1000 families)

Activities	Year 1											Year 2
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
I. PRE-RELOCATION PHASE												
LIAC Mtgs., Census Validation						(Output: Masterlist of Beneficiaries)						
Site Selection/Consultation							(Output: Site Selected/Resource Mobilized)					
Completion of Pre-Relocation Doc./ Lot Unit Assign/ CA Acquisition of Dev. Res. Lots								(Output: Masterlist of HH Subdivision Plan)				
Bidding Process (only for LGU-NHA modality)												
II. RELOCATION PHASE												
Movement of Families												
Provision of HML												
Food Assistance												
Staging Area/Power/Water												
Provision of Community Facilities												
III. POST-RELOCATION PHASE												
Turnover of cleared area to proponent community/ Community Integration and Development/ Start of Estate Management												

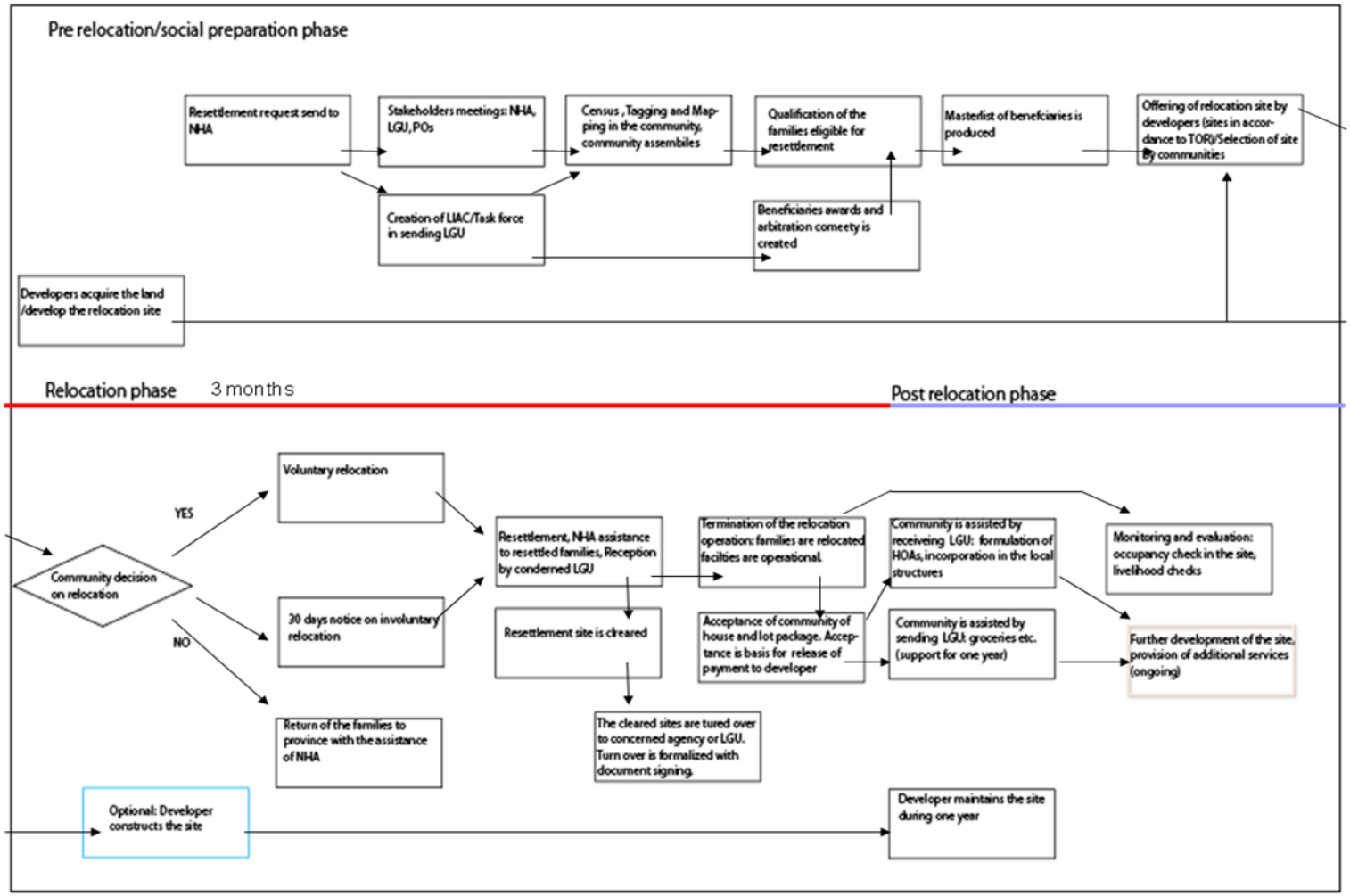

Figure 2 FlowChart – Completed Housing Projects

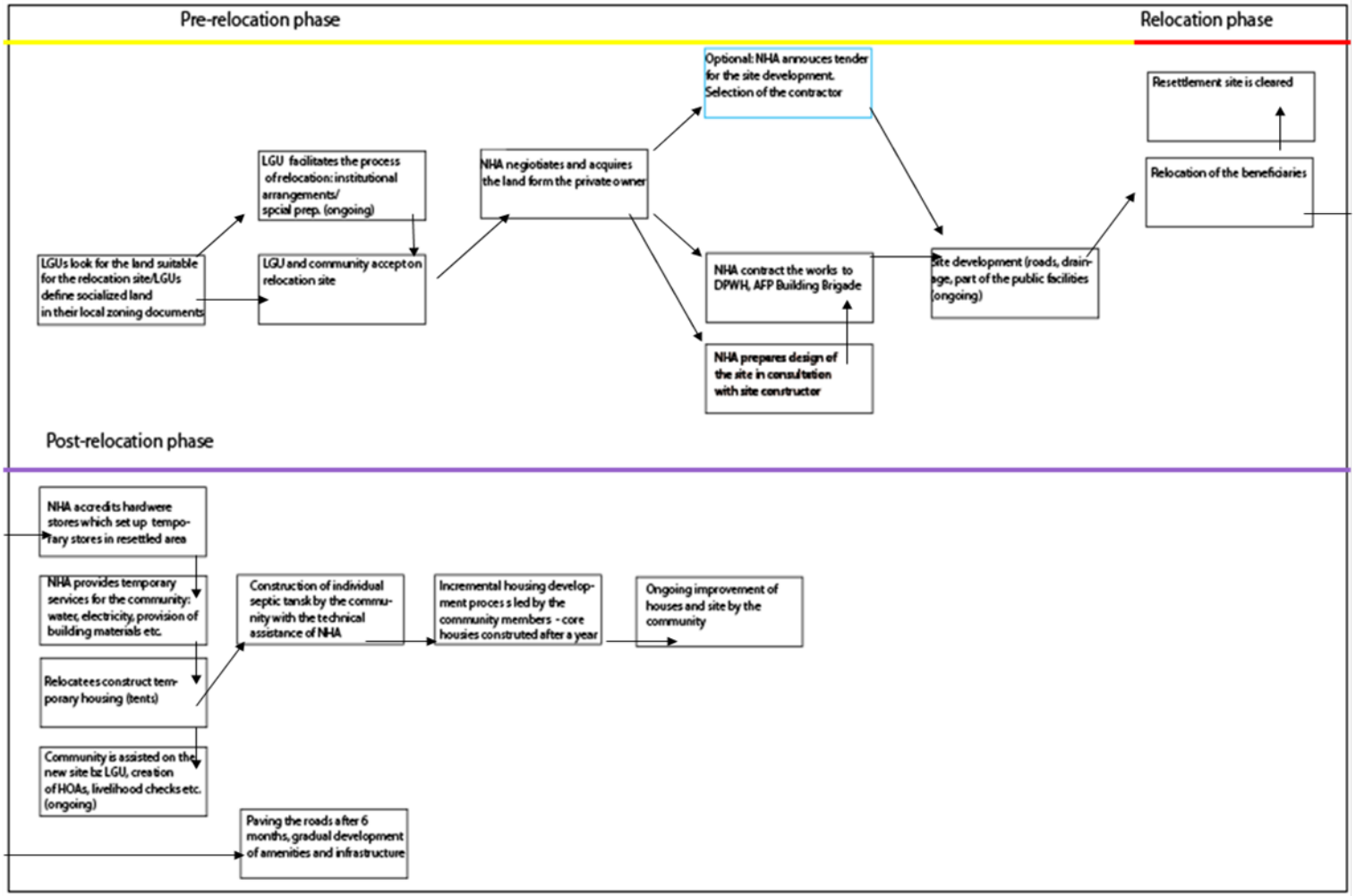

Figure 3 FlowChart – Housing Materials Loan Projects

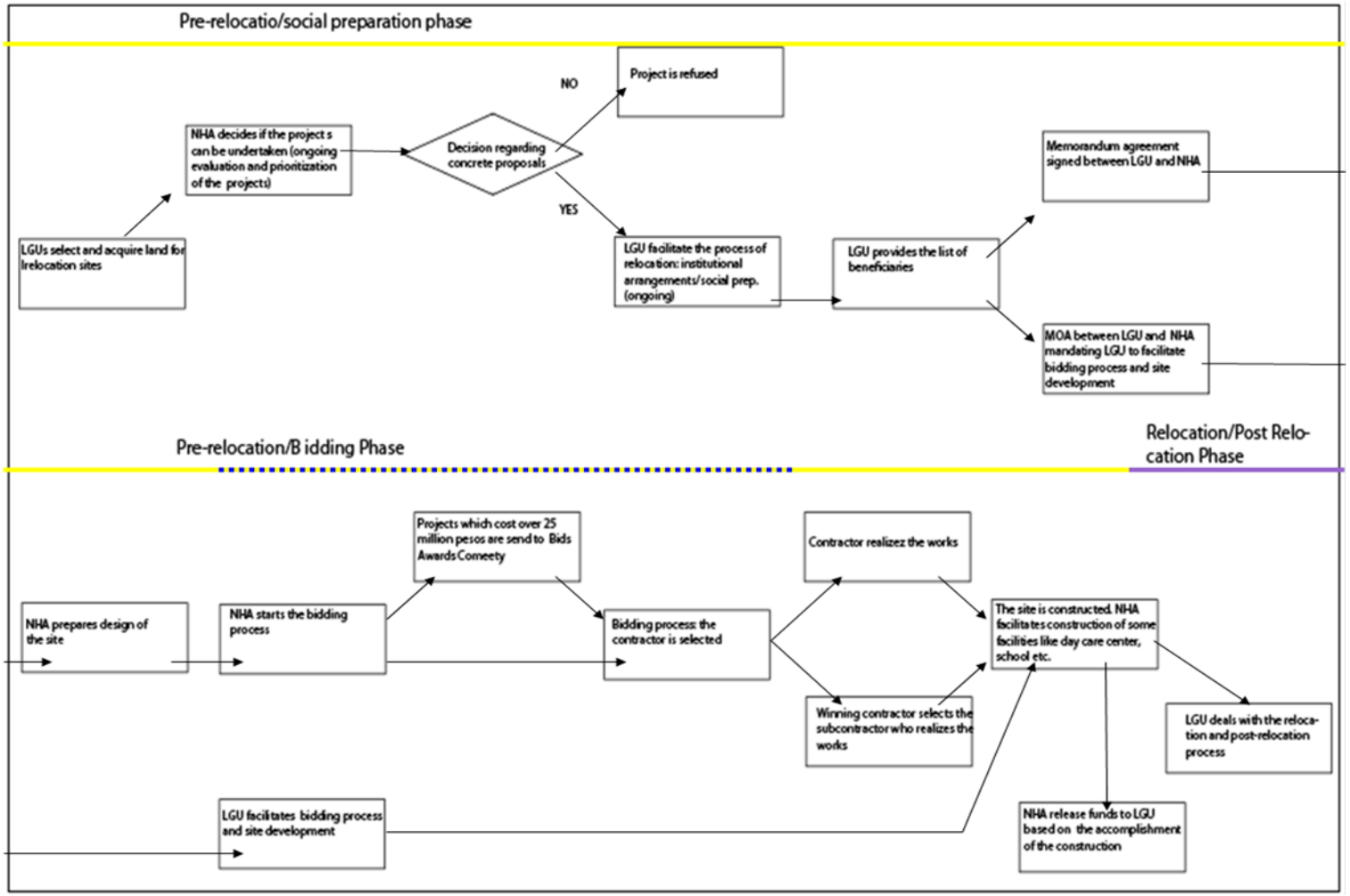

Figure 4 FlowChart - NHA-LGU Joint Venture

Table 7 Utilization of Project Development Resettlement Budget for New Works, 2007-2011

Year	Utilization (in Percent)		
	Total	*GMA*	*Regions*
2007	20.56	20.79	58.19
2008	71.38	71.70	31.56
2009	69.34	64.88	139.89
2010	37.77	39.40	24.37
2011	30.89	27.86	61.62
Average (2007-2011)	38.86	37.82	53.50

Source: NHA Corporate Operating Budget

*Note: *New works refer to programmed resettlement projects for the year. Does not include carry over resettlement works*
Utilization above 100% in regions reflects the unprogrammed projects or emergency projects usually resulting from disasters.

Table 8 Number of Resettlement Projects by Method: GMA, 2003-2011

Project	Sites Developed				Sites Completed		
	Total	*Completed Housing Projects*	*Housing Materials Loan Projects*	*Mixed**	*Completed Housing Projects*	*Housing Materials Loan Projects*	*Mixed**
GMA	**45**	**32** *(71%)*	**6** *(13%)*	**7** *(16%)*	**28** *(88%)*	**6** *(100%)*	**7** *(100%)*
NCR	6	3	3		1	3	
Bulacan	14	7	3	4	7	3	4
Pampanga	6	6			6		
Laguna	9	6		3	5		3
Cavite	2	2			1		
Rizal	8	8			5		

Source: NHA Corporate Planning Office: Status Report on Resettlement Projects for ISFs in Metro Manila and Environs, 2003-2011

Notes:

*Completed Housing Projects refer to the modality whereby beneficiaries are relocated in developed sites with completed row housing units

**Housing Material Loan (HML) Projects refer to the modality where beneficiaries are relocated in developed sites and provided housing material loan for construction of core housing.

***Mixed Projects refer to sites with combined completed housing and HML projects. These sites are as follows:

Northville 3, Meycauayan: 86% of the Housing Cost is for Housing Materials Loan
Northville 5, Bocaue: 62% of the Housing Cost is for Housing Materials Loan
Northville 8, Malolos: 83% of the Housing Cost is for Housing Materials Loan
Northville 9, Calumpit: 34% of the Housing Cost is for Housing Materials Loan
Cabuyao Projects Southville 1,1A and 1B; no breakdown

****A site or resettlement is considered completed when land development, housing construction and relocation are 100% completed; at least 80% of community facilities are completed and at least 80% of planned power and water utilities targets are met.

*****Figures in Parenthesis:

Sites Developed: Percent Share to total number of developed sites
Sites Completed: Percent of sites completed to total number of developed sites

Table 9 Number of Resettlement Projects by Location, In-City vs Off-City, 2003-2011

Project	Sites Developed			Sites Completed	
	Total	In-City	Off-City	In-City	Off-City
GMA	**45**	**25** *(56%)*	**20** *(44%)*	**22** *(88%)*	**19** *(95%)*
NCR	6	6	0	4	-
Bulacan	14	8	6	8	6
Pampanga	6	6	0	6	-
Laguna	9	4	5	3	5
Cavite	2	1	1	1	0
Rizal	8	0	8	-	5

Source: NHA Corporate Planning Office: Report on Resettlement Projects for ISFs in Metro Manila and Environs, 2003-2011

Notes:

*In City refers to the resettlement of beneficiary households in developed sites within the same LGU of their previous settlement while, off-city is the relocation of beneficiary households in developed sites outside the LGU of their previous settlement.
** Off-City resettlements in areas outside NCR are usually sites for informal settlers from NCR.
***"-" not applicable
****Figures in Parenthesis: Sites Developed: Refer to % share to total number of developed sites
Sites Completed: Refer to % of sites completed to total developed sites

Table 10 NHA-LGU Joint Venture Resettlement Projects (or RAPs), 2006-2011

Project	Sites Developed			Sites Completed	
	Total	Funds Transfer	Bidding	Fund Transfer	Bidding
Regions	**43**	**33** *(77%)*	**10** *(23%)*	**27** *(82%)*	**9** *(90%)*
CAR	1	1		1	
Region II	2	2		1	
Region III	12	12		11	
Region V	3		3		3
Region VI	5	3	2	2	1
Region VII	4	3	1	3	1
Region VIII	1	1		1	
Region X	5	4	1	3	1
Region XI	3	3		3	
Region XII	2	2		1	
Region XIII	2	1	1	1	1
ARMM	3	1	2	0	2

Source: NHA Corporate Planning Office: National Housing Authority Other Resettlement Projects, 2006-2011

Notes

*Emergency Housing Projects are not included

**Funds Transfer refer to a scheme whereby NHA transfers national government contribution to the resettlement project to the LGU in which case bidding process is undertaken at the LGU level. Under the "Bidding Scheme" NHA manages the disbursement of funds and undertakes the bidding process for identified LGU projects.

***Figures in Parenthesis:

Sites Developed: Percent Share % share to total number of developed sites

Sites Completed: Percent of sites completed to total developed sites

Table 11 Implementation Period of Completed Resettlement Sites by Method, GMA
(in number of years)

Project Size	Modality		
	Completed Housing Projects	Housing Materials Loan Projects	Mixed*
100-1000 Units	2	1	3
1100-2000 Units	2	2	2
2100-3000 Units	2		1
3100-4000 Units	2		3
4100-5000 Units	1		
5100-6000 Units	3		
6100-7000 Units	4		7

Source: NHA Corporate Planning Office: Report on Resettlement Projects for ISFs in Metro Manila and Environs, 2003-2011

Table 12 Implementation Period of Completed Resettlement Sites, NHA-LGU Joint Venture
(in number of years)

Project Size	Modality	
	Funds Transfer	Bidding
< 100 Units	1	1
200-300 Units	2	
400-500 Units	2	2
600-700 Units		2
800-900 Units		1
1000-1200 Units	1	1

Source: NHA Corporate Planning Office: National Housing Authority Other Resettlement Projects, 2006-2011
Note:
*Emergency Housing Projects are not included

Table 13 Comparative Cost for In-City Projects by Method

Item	Reference Cost per Beneficiary[a]	Completed Housing Projects (Pesos per unit)	Housing Materials Loan Projects (Pesos per unit)
Total Project Cost/Unit	200,000	146,487	172,097
Lot Cost/Unit	100,000	71,677	85,284
Housing Cost/Unit	75,000	49,443	38,628
Housing + Lot Cost/Unit	175,000	121,120	123,912
Relocation Cost/Unit	12,500	15,275	42,434
Utilities Cost/Unit	2,500	2,833	2,390
Community Facilities Cost/Unit	10,000	7,259	3,362

Specific Projects:

Item	Completed Housing In-City Projects		Housing Materials Loan In-City Projects	
	Northville 2B, Bagumbong Caloocan City	*Northville 5A Sta Maria, Bulacan*	*Northville 1, Bignay, Valenzuela City*	*Northville 6, Balagtas, Bulacan*
Total Project Cost/Unit	203,346	138,336	437,827	176,769
Lot Cost/Unit	98,039	63,918	169,695	92,972
Housing Cost/Unit	74,068	47,681	90,087	52,203
Housing + Lot Cost/Unit	172.107	111,599	245,783	145,175
Relocation Cost/Unit	25,376	14,025	173,710	26,684
Utilities Cost/Unit	5,200	3,236	3,594	2,804
Community Facilities Cost/Unit	663	9.477	740	2,107
Number of Housing Units	2,184	1,943	1,299	1,206

Source: NHA Corporate Planning Office: Report on Resettlement Projects for ISFs in Metro Manila and Environs, 2003-2011 and Financial Management Department

Notes:

* Average costs for CHP and HML does not include mixed sites. As of this writing, NHA has yet to determine the number of beneficiaries for each modality or the breakdown of other costs in these sites thus costs by modality cannot be estimated

[a] Reference cost refers to the standard allocation per Family under NHA Relocation Program HML of Php 75,000.00 per Board Resolution No. 5114 dated July 18, 2008;

**Cost values deflated to allow comparison across different years. Deflator is CPI for Housing Base 2000

*** Completed In-City Housing Projects include:

NCR: Northville 1B-Punturin, Valenzuela City, Northville 2B- Bagumbong Caloocan City, Southville 3,-NBP, Muntinlupa City;

Bulacan: Northville 5A-Sta.Maria;

Pampanga: Northville 10-Apalit, 11-Minalin, 12-Sto. Tomas, 14- San Fernando, 15-Angeles, 16-Mabalacat;

Laguna: Southville 3A-San Pedro, 4-Sta. Rosa City, 5A-Langkiwa, Binan, 6- Calamba

**** Housing Materials Loan In-City Projects include:

NCR: Northville 1, 2, 2A-Valenzuela, City

Bulacan: Northville 4-Marilao, 6-Balagtas, 7-Guiguinto

Table 14 Cost Benefit Ratio (CBR) Comparison for <u>In City</u> Projects by Method

Cost Item (in Pesos per Unit)	**Completed Housing In-City Project**		**Housing Material Loan In-City Project**	
	Bagumbong, Caloocan City	Sta Maria, Bulacan	Bignay, Valenzuela	Balagtas, Bulacan
Total Project Cost/unit	203,346	138,336	437,827	176,769
School building (for 1000 units; 15 class, 3-storey)	23,000	23,000	23,000	23,000
Total Investment Cost	**226,346**	**161,336**	**460,000**	**199,769**
Other cost				
Interest subsidy on interest free housing loan component, PV 30 years, 8%	34,715	34,715	34,715	34,715
O&M, 1% of investment cost, PV 30 years, 8%	25,482	18,163	51,879	22,490
MOOE and PS of school = P1409/yr, PV 30 yrs, 8%	15,862	15,862	15,862	15,862
Livelihood program, non-infrastructure	3,000	3,000	3,000	3,000
Total interest and operating subsidy	**79,059**	**71,740**	**105,456**	**76,067**
TOTAL COST, PV	**305,405**	**233,076**	**566,283**	**275,836**
MARKET RENT (MR), PV 30 years (see notes)	**41,139**	**11,748**	**95,000**	**48,665**

CBR (TOTAL COST/MR)	**7.4**	**19.8**	**6.0**	**5.7**
CBR (Total Investment Cost/MR)	**5.5**	**13.7**	**4.9**	**4.1**
CBR (with land) [a/]	5.1	9.6	4.4	4.1

Source: Author's calculations

a/ Assume government owns land at end of 30 year period. PV based on value of land at year 1 and annual land price increase of 6% in NCR and 4% outside NCR.

Notes:

* Market rent based on average rental rates Urban Phil and NCR from FIES 2009 and rental rate Index of

** Rental rate HML is weighted average of urban phil rental rate and imputed house rental rates.

*** HML rental weights based on assumption of progressive home improvements within a 30-year period. By the 25th year about 50% of households have structurally improved housing

**** In City based on rental rates NCR and off city based on urban Philippines average rental rates

Table 15 Comparative Cost of Completed Housing Projects by Location: In-City vs. Off-City

Cost (in Pesos per Unit)	**In-City**	**Off-City**
Total Project Cost/Unit	146,487	133,038
Lot Cost/Unit	71,677	73,543
Housing Cost/Unit	49,443	34,607
Housing + Lot Cost/Unit	121,120	108,150
Relocation Cost/Unit	15,275	17,368
Utilities Cost/Unit	2,833	1,953
Community Facilities Cost/Unit	7,259	5,568
Specific Project		
Cost	**In-City Projects**	**Off-City Projects**

(In Pesos per Unit)	Northville 2B, Bagumbong Caloocan City	Southville 3, NBP, Muntinlupa City	Southville 2, Trece Martirez, Cavite	Southville 5, Timbao, Biñan
Total Project Cost/Unit	203,346	169,119	146,942	191,886
Lot Cost/Unit	98,039	73,973	69,913	87,708
Housing Cost/Unit	74,068	57,852	43,270	65,781
Housing + Lot Cost/Unit	172.107	131,825	113,183	153,489
Relocation Cost/Unit	25,376	21,101	23,091	23,314
Utilities Cost/Unit	5,200	3,352	2,658	4,473
Community Facilities Cost/Unit	663	12,840	8,011	10,697
Number of Housing Units	2,184	6,496	3,999	1,822

Source: NHA Corporate Planning Office: Report on Resettlement Projects for ISFs in Metro Manila and Environs, 2003-2011 and Financial Management Department

Notes:

* Cost values deflated to allow comparison across different years. Deflator is CPI for Housing Base 2000deflated using CPI for housing base 2000

** In-City Completed Housing Projects:

NCR: Northville 1B-Punturin, Valenzuela City, Northville 2B- Bagumbong Caloocan City, Southville 3,-NBP, Muntinlupa City;

Bulacan: Northville 5A-Sta.Maria;

Pampanga: Northville 10-Apalit, 11-Minalin, 12-Sto. Tomas, 14- San Fernando, 15-Angeles, 16-Mabalacat;

Laguna: Southville 3A-San Pedro, 4-Sta. Rosa City, 5A-Langkiwa, Binan, 6- Calamba

*** Off-City Completed Housing Projects:

Bulacan: Towerville 4, 4A, 4B, 5, 6- San Jose del Monte, Northville 4A and 4B-Marilao;

Laguna: Southville 5-Timbao, Binan;

Cavite: Southville 2-Trece Martirez

Rizal: Southville 8,8A, 8B, 8C-Rodriguez, 9-Baras

Table 16 Cost Benefit Ratio (CBR) Comparison Completed Housing Projects by Location: In-City vs. Off-City

Cost item (in Pesos per Unit or HH)	In-City Project		Off-City Project	
	Bagumbong, Caloocan	NBP, Muntinlupa City	Southville 2, Trece Martires	Timbao, Biñan
Total Project Cost/unit	203,346	169,119	146,542	191,886
School building (for 1000 units; 15 class, 3-storey)	23,000	23,000	23,000	23,000
Total Investment Cost	**226,346**	**192,119**	**169,942**	**214,886**
Other cost				
Interest subsidy on loan financing component, PV	34,715	34,715	34,715	34,715
O&M, 1% of investment cost, PV 30 years, 8%	25,482	21,628	19,132	24,191
MOOE and PS of school = P1409/yr, PV 30 yrs, 8%	15,862	15,862	15,862	15,862
Livelihood program, non-infrastructure	3,000	3,000	3,000	3,000
Total interest and operating subsidy	**79,059**	**75,206**	**72,709**	**77,769**
TOTAL COST, PV	**305,405**	**267,325**	**242,651**	**292,655**
MARKET RENT, PV 30 years	**41,139**	**41,139**	**11,748**	**11,748**
CBR (TOTAL COST/MR)	7.4	6.5	20.7	24.9
CBR (Total Investment Cost/MR)	5.5	4.7	14.5	18.3
CBR (with land) [a/]	5.1	4.8	9.5	10.0

Source: Author's calculations

Notes: Same assumptions for CBR computation in Table 14

Table 17 Collection Efficiency of In-City Projects by Method

Year	Efficiency Rate		Performance Rate	
	Completed Housing Projects	Housing Materials Loan Projects	Completed Housing Projects	Housing Materials Loan Projects
	Northville 10-16	Bignay, Valenzuela	Northville 10-16	Bignay, Valenzuela
2009	-	20%	-	92%
2010	-	20%	-	79%
2011	9%	20%	39%	45%
Average (2009-2011)	**9%**	**20%**	**39%**	**72%**

Source: NHA Treasury Department

Note:

*Collection data for other sites not available or not disaggregated by phase

Table 18 Collection Efficiency of Completed Housing Projects by Location, In-City vs. Off-City

Year	Efficiency Rate		Performance Rate	
	In-City	Off-City	In-City[a]	Off-City
	Northville 2B Bagumbong Caloocan City	Southville 2 Trece Martirez Cavite	Northville 2B Bagumbong Caloocan City	Southville 2 Trece Martirez Cavite
2009	-	-	-	-
2010	30%	-	67%	-
2011	21%	13%	51%	23%
Average (2009-2011)	**17%**	**4%**	**39%**	**8%**

Source: NHA Treasury Department

Note: Collection data for other sites not available or not disaggregated by phase

Figure 5 NHA Resettlement Sites, GMA

Table 19 Socioeconomic Conditions in Selected Resettlement Sites

	Resettlement Project								
Feature	**Kasiglahan Village Montalban, Rizal**	**Marikina Resettlement**	**Mulanay RS, Quezon, Zamboanga del sur**	**Nazareth RS Pagadian, Zamboanga del Sur**	**Pasig River Envi Mgt and Rehab Sector Dev (ERAP)**	**Tibungco resettlement Site**	**Southville 7 (Calauan, Laguna)**	**Southville 9 (Baras, Rizal)**	**NTA Village (Montalban, Rizal)**
Distance from original settlement (km)	Off City (from Payatas, Quezon City)	In-city (within 5 km radius)	In-city (across the road from former location)	Off city (5 km away from evacuated site)	Off City	Off city (7 km from site)	Off city- (from Pasig and Marikina)	In-city (within 10 km)	In-City
Implementor	NHA	LGU with CMP financing	DPWH-ADB Sixth Road Project	NHA and Provincial government	NHA, PRRC, HUDCC	Airport Development Project , Davao City	ABS-CBN Foundation Inc. and NHA	Rizal provincial government and the NHA	NHA
Ave stay in the area when visited	5 years		2 years		5 years from 2000/2001	2 years	3 years	2 years	15 years (since 1997)
Number of relocated families		30,015 families	7,309 families	79 families voluntary resettlement in NHA existing site	6,095 in 3 relocation sites (Rodriguez, Rizal; Gen Trias Cavite and Trece Martires)	360 informal settlers	3,571 families	2,800 families	
Housing area (sqm)	32 sqm	24 sqm		Lots only 95 sqm, 100 and 120 sqm			60-square meter per lot	40 square meters per lot	
Access to Water	Available but lack piped water	Available piped water	Water system not fully operational. Several households not yet connected to piped water	Individual piped water	Overall satisfaction with access to utilities – 46%		Spring in a private land. There were no provisions for potable water that have resulted in the re-settlers' high water supply cost	Commercial	Rationing: HOA facilitated installation
Access to Electricity	Available and accessible to	Available connections to	Some portion of site have no	Individual power supply			Generator; 3AM-10PM (5 hours	Generator; 6PM-10PM (4	Generator: nighttime;

	residents	individual households	power connections yet				daily brownout). Duration of supply from the generators vary mainly on the capability of the re-settlers' to pay which is costlier than regular power source.	hours supply a day)	Individual Metering facilitated by the HOA
Employment/Livelihood Opportunities	Limited livelihood opportunities in the area or town. According to LGU, they have difficulty attracting investors and locators in the area	Livelihood opportunities to improve income and provide savings among settlers are needed	Households continued with their current occupation. Relocation did not affect livelihood as fisherfolk (no livelihood risk)	Thriving community	Large number of unemployed. Some gainfully employed lost their livelihood. Lost jobs like part time helpers; Training programs have not resulted in significant income generation and stable employment since training programs only suitable for entrepreneurship	Most maintained their jobs prior to relocation. A few reported change of job due to old age or some non related factors to relocation (e.g. mgt change). A significant number reported decrease in income due to the ff: (a) loss of income-generating opportunities; (b) inc in transport cost which	There were livelihood projects provided for the resettlement. Despite livelihood programs implemented by the government and NGOs, the employment data is not promising. 53% (Employed);20%(Unemployed; and 27% (underemployment). The currently employed decreased by 11.8% compared to employment data prior to relocation. About		3 years minimum recovery period but many of the original settlers have moved out , only about 30% of original settlers in 1997 remained

						also prevents double jobs; (c) absence of livelihood in the area.	43.6% reported income loss		
Access to Public Schools	Elementary and high school adequately provided in the area				52% satisfied with access to services		4 Elem Schools in the area but resettlement resulted in congestion. Student to classroom ratio increased as follows: Day Care- from 1:26 to 1:40 Primary-1:35 to 1:50 Secondary-1:40 to 1:60		
Access to Transportation	Has access to national highway and public transportation	Accessible to main roads and public transportation			64% not satisfied due to difficulty to get to destinations		Difficulty to get to workplace		
Housing condition and shelter environment	Improved from light materials to concrete. Better sewerage, ventilation and garbage disposal system.	Concreting and cementing of roads and alleys. Improvement of drainage system. Better sewerage and garbage disposal	Concrete road network including pedestrian paths. Concrete septic tanks and drainage system. Access road, 8 m; road network, 6.5 m and alleys 4.5m.	Internal road system mostly unpaved. Only the main road is paved. Overall satisfaction in terms of provision of utilities (water, power, drainage	Basic utilities were not provided immediately and took several years (2 years) to be completed. 78% satisfied with orderliness and 88%	Informal settlers mentioned outstanding concerns on development of site (a) problems of inadequate water supply due to non-			

			Overall living conditions improved but the area can still get flooded	system and septic tank) and orderliness of surrounding.	satisfied from absence of flooding.	installation of water tanks; (b) poorly designed and dysfunctional drainage system; (c) poor internal and access roads; (d) lack of open space; (e) shallow latrines with foul odor			
Tenure	Provided legal status on land but land ownership still with government.	With legal status and ownership of land transferred to community		Only lots were provided. Structures built by household from using compensation money from resettlement. Lot sizes range from 95 sqm, 100 and 120. Land cost amortized for 5 to 10 years with monthly amor of P183 (10 yrs) or P403 (5 yr)					
LGU assistance	Rated poor	Substantial= allocates 10% of budget for resettlement infrastructure							

Sources:

Apostol (2006); Baac, V. and Librea, R. (2006); World Bank (2008); Institute for Popular Democracy (IPD).