



REPUBLIC OF THE PHILIPPINES

NATIONAL ECONOMIC AND DEVELOPMENT AUTHORITY



# Manila Bay Sustainable Development Master Plan

SITUATION ANALYSIS REPORT

# Upgrading Informal Settlements

December 2018



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**Manila Bay Sustainable Development Master Plan  
Situation Analysis Report | Focal Theme Reports**



# **Upgrading Informal Settlements**

December 2018

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## Acronyms and Abbreviations

CHED	Commission on Higher Education	MWWS	Metropolitan Waterworks and Sewerage System
BCDA	Bases Conversion & Development Corporation	NB	NEDA Board
BFAR	Bureau of Fishery and Aquatic Resources	NEDA	National Economic Development Authority
CSW	Completed Staff Work	NGA	National Government Agency
CWA	Clean Water Act	NHA	National Housing Authority
DA	Department of Agriculture	NPC	National Power Corporation
DENR	Department of Environment and Natural Resources	NRDC	National Resources Defense Council
DepEd	Department of Education	NWRB	National Water Resources Board
DILG	Department of Interior and Local Government	PAMB	Protected Area Management Board
DOH	Department of Health	PAPs	programs, activities, projects
DOST	Department of Science and Technology	PCG	Philippine Coast Guard
DOTC	Department of Transport and Communications	PER	Project Evaluation Report
DPWH	Department of Public Works and Highways	PIA	Philippine Information Agency
DRR	Dutch Risk Reduction	PPA	Philippine Ports Authority
DTI-BOI	Department of Trade and Industry - Board of Investments	PPP	Public Private Partnership
ECC	Environmental Compliance Certificate	PRA	Philippine Reclamation Authority
EIS	Environmental Impact Statement	PEZA	Philippine Economic Zone Authority
EO	Executive Order	PHIVIDECC	Philippine Veterans Investment Development Corporation
GOCC	Government Owned or Controlled Corporations	PNP	Philippine National Police
HLURB	Housing and Land Use Regulatory Board	PPA	Philippine Port Authority
IA	Implementing Agreement	PRRC	Pasig River Rehabilitation Commission
IEE	Initial Environmental Examination	PSA	Philippine Statistics Authority
ICC	Investment Coordination Committee	PWSSMP	Philippine Water Supply and Sanitation Project
IRR	Implementing Rules and Regulations	RA	Reclamation Agreement
JV	Joint Venture	RBCO	River Basin Control Office
LGU	Local Government Unit	RDC	Regional Development Council
LLDA	Laguna Lake Development Authority	RIZLAQUE	Rizal-Laguna-Aurora, Quezon
MBCO	Manila Bay Coordinating Office	SMBA	Subic Bay Metropolitan Authority
MBEMP	Manila Bay Environmental Management Project	WD	Water District
MBSDMP	Manila Bay Sustainable Development Master Plan	WQMA	Water Quality Management Area
MMDA	Metro Manila Development Authority		



## Preface

The Manila Bay Sustainable Development Master Plan (MBSDMP) is to be a comprehensive and sustainable master plan for Manila Bay and the immediate coastal zone together with its larger catchment area – the Manila Bay basin.

Consistent with the Philippine Development Plan (PDP) and contributes in achieving AmBisyon 2040, the master plan is to be instrumental in linking economic planning and development projects to environmental and resource management goals for Manila Bay and addressing social and ecological issues (such as poverty alleviation, food security, public health and biodiversity) through the rehabilitation and sustainable development of marine and coastal resources with appropriate financing/funding.

While the traditional plans for Coastal Management and Development assume public financing, the MBSDMP approach aims to make use of solicited private sector investments to achieve strategic management and development goals for five (5) focal themes, namely:

- inclusive growth,
- ecosystem protection,
- climate change adaptation and disaster risk reduction,
- water quality improvement, and
- upgrading informal settlements.

In preparing the Situation Analysis Report, five (5) Focal Theme Reports are prepared accordingly in preparation for the next step – the Strategy Building Phase.

The Situation Analysis Report consist of:

- Executive Summary of the 5 Focal Themes,
- Manila Bay Area 2018 | A Situational Atlas, and
- Five (5) Focal Theme Reports, namely:
  - Inclusive Growth
  - Ecosystem Protection,
  - Climate change adaptation and disaster risk reduction,
  - Water quality improvement, and
  - Upgrading informal settlements.

This is the **Focal Theme Report for Upgrading Informal Settlements**.

# 1 Introduction

This focal theme report is the first version dated September 2018 outlining the stage for Upgrading of Informal Settlements. This first version will be identifying and inventorying in nature. The focal theme report will be updated with new information and additional insights and will be made more specific and focused in two iterations in March 2019 and September 2019.

## 1.1 A Short Narrative

Informal settler families (ISF) are described in the PDP 2017-2022 as “households with no security of tenure vis-à-vis the land or dwellings they inhabit. Their neighborhoods usually lack, or are cut off from, basic services and city infrastructure, and their housing may not comply with current planning and building regulations and is often situated in geographically and environmentally hazardous areas.”

The UN Habitat also describes informal settlements as "residential areas where 1) inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing, 2) the neighborhoods usually lack, or are cut off from, basic services and city infrastructure and 3) the housing may not comply with current planning and building regulations, and is often situated in geographically and environmentally hazardous areas." (Habitat III Issue Paper 22 - Informal Settlements (2015) citing UN-Habitat (2003), The Challenge of Slums; U-Habitat (2013), The State of the World Cities Report 2012/13).

Urbanization is both opportunity and danger. Increased economic activities in urban centers attract people to find jobs, and to live where their jobs are. A large number of urban dwellers (recent migrants and long-term residents) create stiff competition for limited housing. Millions, especially low-income families, are pushed to live in informal settlements.

In the Philippines, poverty is more a result of low-paying and uncertain jobs, rather than unemployment. As of January 2016, the rate of urban unemployment was at 6 percent while urban underemployment reached 21 percent. It is for this reason that the urban poor cannot afford safe and secure housing with the necessary basic services.

Not all informal settlers are income poor - even those who earn relatively high income could end up in informal settlements for lack of available housing opportunities close to their work. They would rather suffer the inconveniences and dangers of poor living conditions than to live far away from, or risk losing their source of income. About 45 percent urban poor overall (and about 39 percent in Metro Manila) are able to afford dwellings constructed with strong quality of wall materials, as compared to 89 percent of non-poor (World Bank Group, 2017).

In upgrading informal settlements, the thrust of government is to address primarily the issue of **affordable housing that is safe, secure, conveniently located, and with access to basic services**. However, there are more dimensions to informality - social, economic, political - that must be addressed beyond the issue of housing. It requires a more nuanced understanding of poverty and job opportunities, access to basic services, tenure security, participation in decision-making processes, etc that affect the ability of informal settlers to ‘upgrade’ to formality.

## 1.2 Relevance of Upgrading Informal Settlement for Manila Bay

There are wide-ranging estimates of the number of ISFs in the country. What is clear is that the most number are in Metro Manila (39%) and Calabarzon (15%), with Central Luzon in 4th place (8%). A World Bank report estimates that up to three million individuals in Metro Manila (or about 1 in 4 residents) are dependent on informal housing (Singh and Gadgil, 2017).





Figure 1. Overview of Informal Settlers. Source: Karaos, 2017

A survey of informal settlers in Metro Manila shows that a majority (over 58.6%) are long-term residents who have lived in Metro Manila for more than a decade, with only 24.3% moved less than five years (World Bank Group, 2017). The finding is contrary to common assumptions that informal settlers are mostly migrants from rural areas.

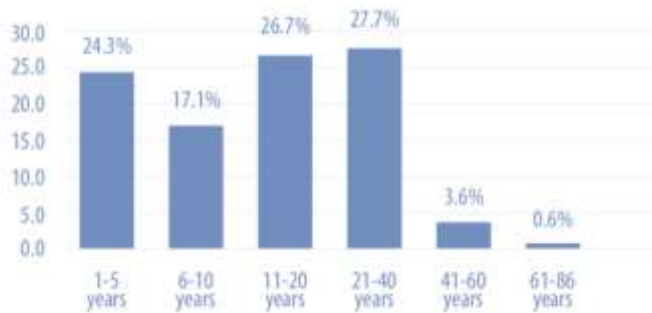


Figure 2. Number of Years Living in Informal Settlements. Source: World Bank (2016), Metro Manila Urban Slum Survey

Data from the World Bank shows that around three quarters (77.1%) of informal residents in Metro Manila have at least some high school education, with about a quarter have attended or graduated from college.

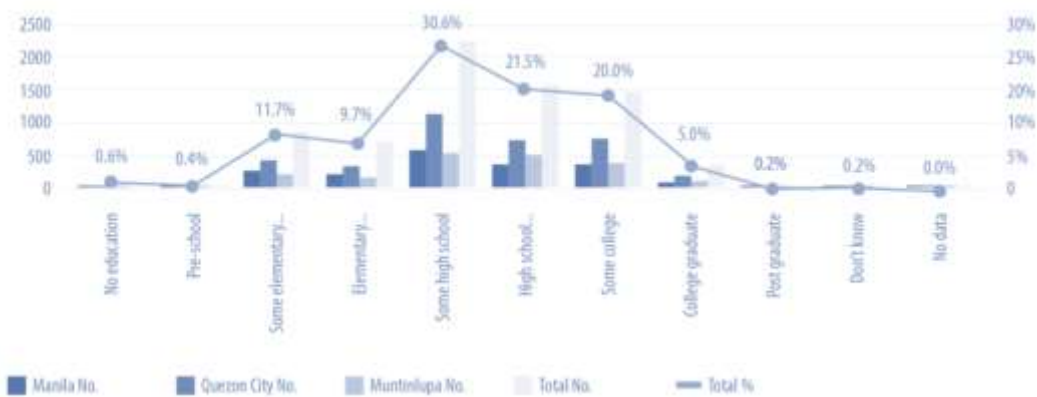


Figure 3. Educational Attainment of ISFs in Metro Manila. Source: Metro Manila Slum Survey.

While poverty incidence in Metro Manila and nearby regions are the lowest, a deeper analysis shows that even those that are not below poverty suffer a lot of deprivation in access to basic services (Singh and Gadgil, 2017).

For the MBSDMP, the issue of upgrading informal settlements has to be treated more comprehensively because informal settlements are a major source of pollution (solid waste and sewage) that adversely affect water quality and ecosystems. In addition, upgrading the status of informal settler families does not only mean availability of housing options, but ensuring that they also get an equitable share in future economic growth and to mechanisms to adapt to the long-term effects of climate change.

## 2 Policy

Informal Settlements are discussed with the International, National and Regional policy objective and legal frameworks.

### 2.1 The Legal Framework of Urban Poor Housing in the Philippines

The basic legal framework of policies on the provision of affordable, safe, and decent housing is the 1987 Constitution which states that:

- Article XIII, Section 9 which states that “The State shall, by law, and for the common good, undertake, in cooperation with the private sector, a continuing program of urban land reform and housing which will make available at affordable cost, decent housing and basic services to under-privileged and homeless citizens in urban centers and resettlement areas. It shall also promote adequate employment opportunities to such citizens. In the implementation of such program, the State shall respect the rights of small property owners.”
- Article XIII, Section 10 which states that “Urban or rural poor dwellers shall not be evicted nor their dwelling demolished, except in accordance with law and in a just and humane manner. No resettlement of urban poor or rural dwellers shall be undertaken without adequate consultation with them and the communities where they are to be relocated.”

Based on the above, the current legal and policy focus on upgrading informal settlements appear to prioritize the provision of affordable housing, and complementarily reducing risks from disasters.

Table 1. Relevant Laws and Regulations on Upgrading Informal Settlements

Law (Republic Act, Presidential Decree, etc.)	Relevant rules and regulations (Agency, Year Issued)
Revised Implementing Rules and Regulations for BP 220	<ul style="list-style-type: none"> <li>▪ Revised Implementing Rules and Regulations of BP220 (HLURB, 2008)</li> </ul>
Urban Development and Housing Act (1992) (RA 7279)	<ul style="list-style-type: none"> <li>▪ Implementing Guidelines for the Acquisition, Valuation, Disposition and Utilization of Lands for Socialized Housing (HUDCC, 1993)</li> <li>▪ IRR Governing the Registration of Socialized Housing Beneficiaries (DILG/HUDCC, 1993)</li> <li>▪ IRR to Ensure Observance of Proper and Humane Relocation and Resettlement Procedures (DILG/HUDCC, 1993)</li> <li>▪ IRR Governing Summary Eviction (DILG/HUDCC, 1993)</li> <li>▪ Local Finance Circular No. 1-97 - Incentives for Private Sector Participation in Socialized Housing (DOF, 1997)</li> </ul>
Comprehensive and Integrated Shelter Financing Act (1994) (RA 7835)	<ul style="list-style-type: none"> <li>▪ EO 272 - Creation of the Social Housing Finance Corporation (OP, 2004)</li> </ul>
Socialized and Low-Cost Housing Loan Restructuring Act (2008) (RA 9507)	<ul style="list-style-type: none"> <li>▪ IRR for RA 9507</li> </ul>

Other relevant laws and regulations on upgrading informal settlements are:

- RA 8368 Anti-Squatting Repeal Law (1997)
- RA 9653 Rent Control Act (2009)
- RA 10884 Balanced Housing Development Program Amendments (2016)

#### 2.1.1 Urban Housing and Development Act (RA 7279, UDHA)

RA 7279 sets the comprehensive framework of urban development, land use, and access of the underprivileged and homeless—the urban poor – to government financing for land acquisition and tenure. The law mandates the formulation of the National Urban Development and Housing Program in cooperation with the private sector to enable the underprivileged and homeless citizens to acquire decent housing at an affordable cost. The state policy on socialized housing (Article V) identifies the beneficiaries as underprivileged and homeless Filipino citizens that do not own any real property whether in the urban or rural areas and who are not professional squatters or members of

squatting syndicates (Sec.16). Occupants of areas for priority development, zonal improvement, slum improvement, and resettlement program sites are entitled to support services (Article VII).

The law also stipulated access to basic service by the local government unit or the NHA (Sec. 21), be located near areas of employment, and be served with livelihood programs and loans by relevant government agencies (Sec.22).

It also mandated the rational use and development of urban land to meet the needs and requirements of the underprivileged and homeless, workable policies for urban growth, equitable land tenure system for security of tenure for Program beneficiaries, people's participation in urban development process, and capability improvement of local government in undertaking urban development and housing programs and projects (Sec.2). The law called for the inventory of residential lands, government owned lands, unregistered or abandoned and idle lands, and other lands (Article IV Sec. 7); and prioritized the acquisition and disposition of land for socialized housing (Sec. 12). The law gave incentives for developers involved in balanced housing, development, the private sector participating in socialized housing, and for other forms of private sector participation. Exemptions from fees and charges for government agencies were also granted such as the NHA for its role in providing housing for the underprivileged and the homeless (Sec. 17-20).

The Community Mortgage Program (CMP) is another vital part of the UDHA and has implemented among an increasing number of families (SHFC portal 2014). The law describes the CMP as a mortgage financing program to assist legally organized associations of underprivileged and homeless citizens to purchase and develop a tract of land under the concept of community ownership (Article VIII). This allows the beneficiaries to move out of their blighted and depressed housing locations to relocate to and eventually improve their settlements (Sec.31). The strategy includes the beneficiaries' organizing into associations to secure the CMP housing loan (Sec.33).

The CMP supports the current ISF Projects of government through a financing scheme for land acquisition and security of tenure. The ISF resettlers must meet the criteria for the socialized housing to avail of the provisions of this law.

### 2.1.2 Balanced Housing Development Program (RA 10884)

RA 7279 was amended in 2015 by RA 10884 otherwise known as the Balanced Housing Development Program Amendments. Among others, RA 10884 provides for Balanced Housing Development (Sec. 18) "whereby owners and/or developers of proposed subdivision and condominium projects shall be required to develop an area for socialized housing equivalent to at least fifteen percent (15%) of the total subdivision area or total subdivision project cost and at least five percent (5%) of condominium area or project cost, at the option of the developer, in accordance with the standards as provided by law." This requirement may be complied with through (a) development of socialized housing in a new settlement, (b) joint-venture projects for socialized housing with either the LGUs or any of the housing agencies or with another private developer, and (c) participation in a new project under the CMP. RA 10884 further provides incentives to the private sector who are engaged in the provision of socialized housing (Sec. 20).

The Comprehensive and Integrated Shelter and Urban Development Financing Program (CISFA) or RA 7835 was legislated in 1994 and was declared as state policy cooperation with the private sector, with the following mandates:

- Sustaining government subsidies to housing programs for the underprivileged and homeless and low-income earners
- To continue program of urban land reform and housing that makes available affordable decent housing and basic services to the underprivileged and homeless citizens in urban centers and resettlement areas
- To continue funding support to implement government programs for urban and rural housing, resettlement, site development and services, and renewal of blighted areas
- Capability building for low income groups to acquire decent and low-cost housing units, public and private sector participation in investments for housing finance related to the National Shelter Program, and support for housing the underprivileged, as well as those employed who are not members of funding agencies such as the GSIS, SSS, and Pag-ibig
- Provides the basis for supporting the resettlement programs of the NHA, medium rise public and private housing by government and private developers, and the CMP

The guidance of the law is explicit on the fund requirements of the implementing agencies and programs, the sources of funds, and schemes for fund allocation. CISFA is an enabling context for the ISF Projects of the government as it provides the fund sources and stipulates the relevant programs--the CMP, resettlement and site

development. This provides a sustainable anchor for programs that can address the beneficiaries' needs, specifically for relocation, resettlement, land acquisition, security of land tenure, and site development and services.

### **2.1.3 Anti-Squatting Repeal Law (RA 8368)**

The Anti-Squatting Repeal Law (RA 8368) decriminalized the act of squatting, which was deemed discriminatory against the urban poor. However, under UDHA, professional squatters and squatting syndicates are subject to criminal penalties.

### **2.1.4 Socialized and Low-Cost Housing Loan Restructuring Act (RA 9507)**

Under the Socialized and Low-Cost Housing Loan Restructuring Act (RA 9507), borrowers of social housing with delinquent accounts can avail of loan restructuring, with a waiver of penalties and surcharges. This law sought to relieve the poor of the burden of delinquent loans and fear of being evicted from their homes.

### **2.1.5 Rent Control Act (RA 9653)**

The Rent Control Act (RA 9653) protects the poor who rely on rental housing. The law limits the increase in rental to a maximum 7% annually. The law also provides measures to protect poor lessees against abusive or unreasonable conditions for lease.

### **2.1.6 Balanced Housing Development Program Amendments (RA 10884)**

With the Balanced Housing Development Program Amendments (RA 10884), owners or developers of subdivisions and condominiums are required to set aside a portion of the development area or project cost for socialized housing. For residential subdivisions, 15% of subdivision area or project cost; and 5% for condominium developments.

### **2.1.7 Batas Pambansa 220**

Batas Pambansa 220 authorized the then Ministry of Human Settlements to establish and promulgate different levels of standards and technical requirements for economic and socialized housing projects in urban and rural areas under the Presidential Decree Nos. 1957, 1216, 1096, and 1185. This was approved on March 25, 1982.

The Rules and Standards for Economic and Socialized Housing Projects to Implement Batas Pambansa Blg. 220 were amended through Board Resolution No. 579 of the Housing and Urban Development Coordinating Council (HUDCC) and the Housing and Land Use Regulatory Board (HLURB) in October 1995. This amended law became the reference of developers and home-owners associations in the preparation of their respective "Deeds of Restrictions." For some community-based associations that pursued socialized housing concerns, this served as a basis for the formulation of their collective "Agreement for Community Living" or "Kasunduan ng Pampamayanang Pamumuhay."

## **2.2 Climate Change and Disaster Risk Reduction Considerations**

Two laws on climate change on climate change and disaster risk reduction and management complement the housing related laws in ensuring that socialized housing are safe and secure. **The Climate Change Act (RA 9729)** declares a "state policy of full protection and advancement of the right of the people to healthy ecology in accord with the rhythm and harmony of nature (Sec.2)." The law recognizes the vulnerability of local communities, particularly the poor, women, and children when exposed to the effects of climate change including rising seas, changing landscapes, droughts, fires, floods, storms, illnesses, diseases, ecosystem damages, and loss of biodiversity. The law requires the mainstreaming of the concept of climate change in policy formulation, development plans, poverty reduction, and other interventions. It charges the National Climate Change Action Plan with the identification of the most vulnerable communities/areas, including ecosystems to the impacts of climate change, variability and extremes (Sec.13). Local government units have been mandated to be the frontline agencies in climate change action planning (Sec.14).

The **Philippine Disaster Risk Reduction and Management Act (RA 101211)**, marks a milestone in the government's response to the ISF conditions in danger zones and exposure to environmental risks and natural disasters. This law "upholds the people's constitutional rights to life and property by addressing the root causes of vulnerabilities to disasters, strengthening the country's institutional capacity for disaster risk reduction and management, and building the resilience of local communities to disasters including climate change impacts" (Section 2). Among its provisions, the law requires the mainstreaming of disaster risk reduction and climate change in policy formulation, socioeconomic development planning, budgeting in the areas inclusive of environment, land use and urban planning, public infrastructure and housing (Sec.2).

These two laws imply a paradigm shift from mere security of land tenure, affordable and decent housing to safe and secure housing. These provide an enabling context for ISF programs as they address the root cause of vulnerability to disasters by relocating endangered ISFs to other sites. Both laws engage multi-stakeholder participation among government agencies, Local Government Unit (LGU), civil society organizations, private sector and individual volunteers are encouraged to participate in disaster risk reduction programs, to complement their resources, and cooperate in effective service delivery.

## 2.3 Institutional Arrangements for Socialized Housing Development

There are a number of national government agencies that regulate and provide assistance to socialized housing.

### 2.3.1 Housing and Urban Development Coordinating Council (HUDCC)

The Housing and Urban Development Coordinating Council (HUDCC) under the Office of the President created by Executive Order No. 90 (1986) serves as the oversight, over-all coordinator, initiator and facilitator of all government policies, plans and programs for the housing sector. It sets the overall direction and targets for the sector, and determines strategies, formulates appropriate policies, monitors, and evaluates the programs, projects and performance of the implementing shelter agencies.

The HUDCC has four major key result areas which include the formulation of plans and policies on housing and urban development, development and supervision of innovative strategies and programs for tenure security, urban renewal and other support services, provision of overall administration and supervision to Key Shelter Agencies (KSAs), and provision of technical assistance to the Local Government Units (LGUs) on the delivery of housing services to their constituents.

### 2.3.2 National Housing Authority

The NHA is tasked to develop and implement a comprehensive and integrated housing program which shall embrace, among others, housing development and resettlement, sources and schemes of financing, and delineation of government and private sector participation (Presidential Decree No. 747). Under Executive Order 195 (1999). NHA was mandated to focus on socialized housing through the development and implementation of a comprehensive and integrated housing development and resettlement program; fast-tracking the determination and development of government lands suitable for housing; and ensuring the sustainability of socialized housing funds by improving its collection efficiency, among others.

Under Executive Order No. 90 (1986), NHA is mandated as the sole national government agency to engage in shelter production focusing on the housing needs of the lowest 30% of the urban population. The role of NHA is further enhanced under the UDHA where it is tasked to provide technical and other forms of assistance to local government units (LGUs) in the implementation of their housing programs; to undertake identification, acquisition and disposition of lands for socialized housing; and to undertake relocation and resettlement of families in coordination with LGUs. Under CISFA, NHA was tasked with the implementation of the following components of the National Shelter Program - the Resettlement Program, Medium Rise Public and Private Housing, Cost Recoverable Programs and the Local Housing Program.

### 2.3.3 National Home Mortgage Finance Corporation

The National Home Mortgage Finance Corporation (NHMFC) was created by Presidential Decree 1267 (1977) to increase the availability of affordable housing loans to finance the Filipino homebuyer's on their acquisition of housing units through the development and operation of a secondary market for home mortgages. Executive Order 272 subsequently authorized the creation of the Social Housing Finance Corporation (SHFC), a subsidiary of NHMFC. In June 21, 2005, SHFC was entrusted with the Community Mortgage Program (CMP) and its amortization, as well as the developmental component of the Abot-Kaya Pabahay Fund (AKPF) Program of NHMFC. They have also assumed the implementation of the AKPF and CMP upon the mandate to be the leading government agencies to undertake social housing programs for low-income earners.

NHMFC is continuously seeking ways to continue to cater to the housing needs of the low-income and underserved sectors of the society. In 2016, two new sub-programs were launched with the aim of expanding the target market of Housing Loan Receivables Purchase Program (HLRPP). The Socialized Housing Loan Takeout of Receivables (SHeLTeR) program, rolled out in the second quarter of 2016, aims to purchase socialized housing loan receivables from socialized housing developers as well as microfinance institutions, cooperatives, LGUs, national government agencies and civic organizations. The SHeLTeR Program offers more affordable terms as it targets the socialized housing market. During the last quarter of 2016, the first ever reverse mortgage program in the Philippines was

launched through NHMFC's MAginhawang BUhay dahil sa baHAY (MABUHAY). The program is part of NHMFC's effort to address the needs of the senior members of our community. MaBuHay allows Senior Citizens to convert a portion of their home equity into cash in order to address their various needs.

### 2.3.4 Department of Interior and Local Government's (DILG) ISF Program

The DILG's ISF Program planning and implementation involves many parties that need to be coordinated and facilitated by the leadership and management of the DILG and its Project Management Office (PMO). Several national government agencies are members of the National Technical Working Group (NTWG)-ISF, namely:

- DILG and the Presidential Commission for Urban Poor (PCUP).
- National Anti-Poverty Commission (NAPC).
- National Housing Authority (NHA).
- Department of Social Welfare and Development (DSWD).
- Social Housing Finance Corporation (SHFC).
- Department of Environment and Natural Resources (DENR).
- Department of Public Works and Highways (DPWH)
- Metro Manila Development Authority (MMDA).
- Other relevant government agencies (Sec.6)

The composition of the NTWG-ISF takes into account the specific expertise of the different national agencies in the process flow to achieve the goal and final outcome of the ISFs' relocation, resettlement, and development (Sec.6). The PCUP and the NAPC constitute the Social Preparation Committee tasked to assist the organization and social preparation of ISFs. PCUP and the DENR as members of the Site Selection and Evaluation Committee are the agencies for technical evaluation of the resettlement site, including environmental and geo-hazard risks. Four agencies—Department of Finance (DOF), NHA, SHFC and HUDCC comprise the Finance and Affordability Committee to render advice and assistance on appropriate financing and affordability schemes based on capacity-to-pay of ISF beneficiaries.

Given the devolution mandated under the 1991 Local Government Code, there is a necessity for LGUs to integrate people's participation into their shelter planning process and preparation of their Local Shelter Plans. Informed by the Local Government Code and Urban Development and Housing Act, the representation and participation of peoples' organizations (PO) and non-government organizations (NGO) in local bodies allow access to the policy and planning processes for shelter.

### 2.3.5 Local Housing Board

The Local Housing Board (LHB) is the body involved in shelter concerns and formulation of housing and land development programs of the LGUs. In the absence of the LHB, recourse is made through the Local Inter-Agency Committee (LIAC) (DILG MC 2008-143) that is chaired by LHB and comprised by various NGAs as members (Table 2).

Table 2. Local Inter-Agency Committee (LIAC) Composition.

LIAC Representatives	Other Government Agencies
Chaired by LHB Members: <ul style="list-style-type: none"> <li>▪ DILG Central Office</li> <li>▪ PCUP</li> <li>▪ NAPC</li> <li>▪ DSWD</li> <li>▪ SHFC</li> <li>▪ NHA</li> <li>▪ DENR</li> <li>▪ MMDA</li> <li>▪ DPWH</li> <li>▪ HUDCC</li> </ul>	<ul style="list-style-type: none"> <li>▪ Department of Education (DepEd)</li> <li>▪ Technical Education and Skills Development Authority (TESDA)</li> <li>▪ Department of Labor and Employment (DOLE)</li> <li>▪ Department of Health (DOH)</li> <li>▪ PO/ISFs permanent and alternative representatives</li> <li>▪ Barangay Captain of Affected Area</li> <li>▪ Civil Society Organization (CSO)-NGO permanent and alternative representatives assisting the ISFs</li> </ul>

To implement the ISF Program of LGUs and National Government Agencies (NGAs), the LIAC is granted specific powers and functions pertaining to social preparation, beneficiary selection, formulation of the People's Shelter Plan (PSP) and the Relocation and Resettlement Action Plan (RRAP), and endorsements to the DILG Project Management Office (PMO). Four committees take charge of LIAC functions, respectively: Social Preparation, Relocation and Resettlement, Affordability and Finance, and Beneficiary Selection Arbitration and Award (Sec.8).

While the Operational Guidelines identify the multi-sectoral participants and prescribe institutional arrangements for the ISF Housing Program, there is a need for more detailed linkage and process flows between the DILG PMOs and the LIAC in local units, between the DILG and the national agencies in the NTWG, and between the DILG and local partner NGOs. The magnitude of the implementation suggests the need for capacity building for the DILG PMO, POs, CSOs-NGOs, and the LGUs. The functions of the DILG PMO include coordinating with involved agencies, assisting in pre-emptive evacuation, facilitating the endorsement of the People's Local Shelter Plan, and ensuring implementation of the RRAP and consultation among ISFs. The extent of involvement of the LIAC indicates the need for the strong coordination from the PMO.

## 2.4 Role of Local Government Units

### 2.4.1 Local Government Code (RA 7160)

The Local Government Code (RA 7160) mandates that LGUs protect the general welfare of the citizenry through the delivery of basic services and facilities. Shelter, a basic need, is mentioned specifically in the Code. Article 25 of the Implementing Rules and Regulations (IRR) assigns LGUs—especially municipalities, cities, and provinces—to act on the “planning and implementation of the programs and projects for low-cost housing and other mass dwellings.”

The UDHA also gives LGUs a significant role by encouraging them to undertake urban development and housing programs and projects for the benefit of their own constituents. UDHA is often referred to on matters pertaining to homelessness and squatting. It is the principal legal framework governing public policy on the urban poor and the provisions of socialized housing. While a number of national laws spell out the responsibilities of key national shelter agencies and the various possible sources of funding, the UDHA defines the following duties of LGUs relative to shelter:

- Prepare a comprehensive land use plan aimed at achieving the objectives of the UDHA (Sec. 6 and 39),
- Conduct an inventory of all lands and improvements thereon within their respective localities in coordination with the HLURB and with the assistance of the appropriate government agencies (Sec.7); Update the inventory every three years and furnish the HUDCC a copy of its inventory including updated ones for planning purposes (Sec. 7).
- Identify, in coordination with the NHA, the HLURB, the National Mapping and Resources Information Authority (NAMRIA), and the Land Management Bureau (LMB) of the DENR lands for socialized housing and resettlement for the immediate and future needs of the underprivileged and homeless in urban areas (Sec. 8).
- Certify as to the blighted status of lands, which shall be considered as one of the factors in the evaluation of the market value of land for socialized housing (Sec. 13).
- Identify and register all qualified socialized housing beneficiaries within their respective localities (Sec. 17).
- In pursuit of balanced housing development, enter into joint venture projects with private developers (Sec. 18).
- Provide basic services and facilities (potable water, power/electricity, adequate solid waste disposal system, and access to primary roads and transportation facility) in the socialized housing or resettlement areas in cooperation with the private sector and concerned agencies (Sec. 21).
- Provide the program beneficiaries or their duly designated representatives, in coordination with the PCUP and concerned government agencies, the opportunity to be heard and to participate in the decision-making process over matters involving the protection and promotion of their legitimate collective interests (Sec. 23).
- In cooperation with the Philippine National Police (PNP), the PCUP and PCUP-accredited urban poor organizations in the area, adopt measures to identify and effectively curtail the illegal activities of professional squatters and squatting syndicates (Sec. 27).

- In coordination with the NHA, implement the relocation and resettlement of persons living in danger areas such as esteros, railroad tracks, garbage dumps, riverbanks, shorelines, waterways and in other public places such as sidewalks, roads, parks and playgrounds (Sec. 29).
- Provide, in coordination with the NHA, relocation or resettlement sites with basic services and facilities, and access to employment and livelihood opportunities sufficient to meet the basic needs of affected families (Sec. 30).
- Assist the NHMFC in initiating the organization of CMP beneficiaries (Sec. 33).
- Promote, in coordination with the HUDCC, NHA, Technology Livelihood Resource Center (TLRC), Department of Science and Technology (DOST), and other concerned agencies in the production and use of indigenous, alternative, and low-cost construction materials and technologies for socialized housing (Sec. 34).
- Submit a detailed annual report, with respect to the implementation of the Act, to the President and House of Representatives (Sec. 41).
- May impose an additional one-half percent tax on the assessed value of all lands in urban areas in excess of P50,000 (Sec. 43).

## 2.5 Mandamus Case

In 1999, concerned residents of Manila Bay sued government agencies to demand the clean-up of Manila Bay arguing that the agencies had failed to keep the water quality in Manila Bay within the standards required by law. In its decision in **MMDA et al vs. Concerned Residents of Manila Bay (2008)**, the Supreme Court ordered:

*“defendant-government agencies to clean up, rehabilitate, and preserve Manila Bay, and restore and maintain its waters to SB level (Class B sea waters per Water Classification Tables under DENR Administrative Order No. 34 [1990]) to make them fit for swimming, skin-diving, and other forms of contact recreation.”*

The Supreme Court ordered national agencies to perform specific tasks in order to achieve the clean-up goal. In relation to informal settlements, the Court required the following actions:

Table 3. Agencies and its Tasks as ordered by the Supreme Court.

Agency	Responsibility	Date
DPWH and the LGUs in Rizal, Laguna, Cavite, Bulacan, Pampanga, and Bataan	<ul style="list-style-type: none"> <li>▪ Submit the names and addresses of the informal settlers in their respective areas who, as of September 30, 2010, own or occupy houses, structures, constructions, and other encroachments built along the Meycauayan-Marilao-Obando (Bulacan) Rivers, the Talisay (Bataan) River, the Imus (Cavite) River, the Laguna de Bay, and other rivers, connecting waterways and esteros that discharge wastewater into the Manila Bay</li> <li>▪ Jointly submit their plan for the removal of said informal settlers and the demolition of the aforesaid structures, constructions and encroachments</li> </ul>	<p>June 30, 2011</p> <p>Submit plan by June 30, 2011; Removal and demolition completed by December 31, 2012</p>
MMDA	<ul style="list-style-type: none"> <li>▪ Submit the names and addresses of the informal settlers in Metro Manila who, as of December 31, 2010, own and occupy houses, structures, constructions and other encroachments established or built along the Pasig-Marikina-San Juan Rivers, the NCR (Parañaque-Zapote, Las Piñas) Rivers, the Navotas-Malabon-Tullahan-Tenejeros Rivers, and connecting waterways and esteros xxx</li> <li>▪ Submit plan for the removal of said informal settlers and the demolition of the aforesaid houses, structures, constructions and encroachments, as well as the completion dates for said activities</li> </ul>	<p>June 30, 2011</p> <p>Plan submitted by June 30, 2011; completion of removal and demolition by December 31, 2015</p>

## 2.6 National Policies and Plans

The past administration has emphasized the priority for safe and better housing, protection and wellbeing of ISFs. Translating this pronouncement, then President Aquino issued Memorandum Order No. 57 Series of 2013 *“directing the Secretary of the Interior and Local Government to immediately spearhead the transfer of informal settler families*



(ISFs) living in danger and high risk areas to decent housing sites, as may be applicable, and pave the way for the clearing of clogged waterways, pursuant to the DILG’s mandate under RA No. 6975 and EO 262, and the provisions of RA No. 7279 UDHA.” Fifty billion pesos (Php50B) were allocated over five years until 2016, providing for “adequate, decent, affordable housing with basic services and facilities in settlements for said ISFs in Metro Manila under the developmental concept of on-site, in-city, and near city relocation wherever feasible (Operational Guidelines).”

The Operational Guidelines define the ISF Program of the DILG as the management of the Php50B funds (Sec.5f). It determines the qualifications of target beneficiaries and requires that they prepare PSP. The guidelines identified several national government agencies and engage local government units, civil society groups and citizens—the ISFs-beneficiaries in the implementation process.

The **Philippine Development Plan (PDP 2017-2022)** devotes a chapter on “building safe and secure communities” (Chapter 12) targeting mainly the provision of affordable housing, and also reducing risks from disasters. This is in line with achieving AmBisyon Natin 2040, where housing prominently appears among the aspirations of every Filipino. As the economy grows further, more people are attracted to remain or move to urban areas where the opportunities are found. If not managed well, urbanization can pose risks to health, life, and property and compound natural hazards that cause disasters. For the PDP period, the targets are to resettle 333,078 ISFs and upgrade 39,454 settlements.

In 2014, the HUDCC commissioned a study to prepare the National Informal Settlements Upgrading Strategy (NISUS) for the Philippines. Through a consultative process, the NISUS came up with a vision for 2025, three objectives and with corresponding strategies (GHK Consulting Ltd., 2014).

Table 4. National Informal Settlements Upgrading Strategy

Objectives	Targets	Strategies
Upgrading, relocation and incremental, affordable new homes for sale and rent	<ul style="list-style-type: none"> <li>ISFs living in danger areas rehoused in vibrant, resilient and connected communities;</li> <li>ISFs on public and private land live in fully upgraded communities and inclusive cities;</li> <li>annual demand for affordable socialized housing met through viable public-private-people partnerships.</li> </ul>	<ul style="list-style-type: none"> <li>Guiding future land development within the context of strategic city-wide planning and climate change adaptation and disaster risk reduction and management (CCA/DRRM);</li> <li>Adopting informal settlements upgrading with alternative secure tenure mechanisms within an urban renewal, CCA/DRRM, and income generating framework;</li> <li>Resettling people more selectively with appropriate compensation and choice in sustainable new towns;</li> <li>Engaging the private sector and civil society to produce and manage affordable new homes to ISFs,</li> <li>Encouraging a fully functioning private rental market</li> </ul>
Market-based housing and microfinance and targeted subsidies for ISFs	<ul style="list-style-type: none"> <li>A national financing facility for urban renewal and ISF housing capitalized and fully functional by 2016;</li> <li>Targeted housing subsidy program for ISFs designed, funded and operationalized by 2025;</li> <li>At least 20% of MFIs engaged in housing microfinance for ISFs by 2025; and</li> <li>At least 20% of ISF housing finance comes from commercial and thrift banks by 2025.</li> </ul>	<ul style="list-style-type: none"> <li>Shifting more to the market for ISF housing finance to facilitate guarantees, securitization, private sector participation in financing and cost recovery;</li> <li>Expanding the role of microfinance and community finance in urban renewal and ISF housing;</li> <li>Targeting subsidies to those in need based on household incomes; and</li> <li>Providing appropriate funding for urban renewal and ISF housing</li> </ul>
Strengthened sector governance, organizational, staff and resource capacity at the local and national levels	<ul style="list-style-type: none"> <li>At least 40% of cities are implementing city-wide urban renewal, upgrading, housing programs and have approved strategic urban development plans by 2025;</li> <li>Strengthened and fully equipped HUDCC providing sector leadership, monitoring and training in strategic urban planning and development, urban renewal, and ISF socialized housing by 2017;</li> </ul>	<ul style="list-style-type: none"> <li>Improving the capacity of LGUs as the lead agencies for urban renewal and ISF housing;</li> <li>Improving sector governance;</li> <li>Enhancing sector leadership, wider vision and improved skills for urban development and ISF housing at the national level;</li> <li>Setting-up, operationalizing and building capacity for appropriate data collection,</li> </ul>

Objectives	Targets	Strategies
	<ul style="list-style-type: none"> <li>▪ Strengthened NHA as government's housing production, IS upgrading and related training arm; SHFC as an autonomous corporation financing urban renewal and ISF housing; and DILG capacitated to support cities' urban renewal and ISF housing programs by 2020; and</li> <li>▪ Capacity of people's organizations, community-based organizations and homeowners' associations to engage in urban renewal and ISF housing developed by 2025</li> </ul>	<ul style="list-style-type: none"> <li>▪ mapping, knowledge management, and monitoring systems; and</li> <li>▪ Building the capacity of people's organization, community-based organizations, and homeowners' associations to engage more in ISF housing</li> </ul>

### 3 Targets and Indicators

The housing sector continues to provide decent shelter to the underprivileged while striving to keep up with growing housing needs and limited resources allotted to it. From 2011 to 2016, the NHA, SHFC, and HDMF provided 730,181 socialized and low-cost housing units. Under Oplan Likas 30, 8,456 ISFs were resettled in-city and 73,135 off-city, as of September 2016. [PDP p.294]

The table below gives an overview of targets and indicators related to informal settlements that have been identified so far (see Evaluation Matrix). Special reference is given to the Key Performance Indicator of the PDP, Operational Plan for Manila Bay Coastal Strategy (OPMBCS) (Mandamus process), and United Nations.

Table 5. PDP Indicators relevant to Upgrading Informal Settlements.

Goals	Indicators
Access to affordable, adequate, safe, and secure shelter in well-planned communities expanded.	<ul style="list-style-type: none"> <li>Proportion of urban population living in informal settlements decreased (% cumulative).</li> <li>Proportion of socialized housing targets met to housing needs improved (% cumulative).</li> </ul>
Reduce vulnerability of individuals and families	<ul style="list-style-type: none"> <li>Zero deaths due to natural and human-induced disasters achieved.</li> <li>Zero missing persons due to natural and human-induced disasters achieved.</li> <li>Percentage of families affected by natural and human-induced calamities provided with relief assistance.</li> <li>Percentage of emergency shelter assistance provided.</li> </ul>
Foundation for inclusive growth, a high trust society and a globally competitive economy created.	<ul style="list-style-type: none"> <li>Percentage of HHs with access to safe water supply increased.</li> <li>Percentage of HHs with access to basic sanitation increased.</li> <li>HHs with electricity increased, in percent</li> </ul>

Table 6. OPMBCS (Mandamus outputs and indicators).

Outputs	Indicators	Agencies/Data Source
Target 1: All structures, constructions, and other encroachments established or built in violation of RA 7279, and other applicable laws in the Manila Bay Region identified and mapped.	<ul style="list-style-type: none"> <li>100% structures, constructions, and other encroachments in the Manila Bay Region identified and mapped by CY 2020.</li> <li>100% of barangays along waterways identified and with geo-hazard maps by 2018.</li> <li>80% of easement areas along waterways delineated on ground by 2020; 100% by 2022.</li> <li>100% of affected LGUs, illegal structures, constructions, and other encroachments geo-tagged and inventoried.</li> </ul>	DILG, DENR-RO, LGUs, and NHA/ Manila Bay Database System (MBDS).
Target 2: Actual occupant-households within the delineated easement areas in the Manila Bay Region thru Tagging and Census Operations/ Validation (TCOs/TCVs) and encoding in the Manila Bay Database System (MBDS) for LGUs and DILG identified.	<ul style="list-style-type: none"> <li>100% of actual occupant-households within the delineated easement areas in the Manila Bay Region identified and data/results encoded in the MBDS for LGUs and DILG.</li> </ul>	NHA, LGUs, and DILG/ Census Report.
Target 3: Finalization and approval of the list of families, qualified vs. disqualified	<ul style="list-style-type: none"> <li>Master Lists covering all identified, censused and tagged ISFs (qualified/disqualified) finalized/approved by LGUs/other concerned agencies.</li> </ul>	NHA; LGUs and DILG/ Final List of qualified and disqualified ISFs.
Target 4: Formulated and implemented Relocation and Resettlement Action Plans (RRAPs) for areas covered and not covered by government projects.	<ul style="list-style-type: none"> <li>No. of RRAPs prepared and implemented by LGUs/concerned agencies.</li> </ul>	DILG and PCUP for areas not covered by government projects: NHA, MMDA (for NCR), DPWH (for Regions 3 and 4A) other concerned agencies for areas covered by government projects./ Copy of RRAPs.

Outputs	Indicators	Agencies/Data Source
Target 5: Mandatory requirements of UDHA complied prior to resettlement.	<ul style="list-style-type: none"> <li>100% compliance to the mandatory requirements of UDHA and other related laws/legal issuance: <ul style="list-style-type: none"> <li>Consultation with affected ISFs.</li> <li>Issuance of 30-day Dismantling Notice.</li> <li>Adequate Relocation/resettlement.</li> </ul> </li> </ul>	LGUs, NHA, DILG; DPWH; MMDA, and other concerned agencies/ Monitoring and Evaluation Reports, List of identified resettlement sites, and List of developed resettlement sites.
Target 6: Structures, constructions, and other encroachments established or built in violation of RA 7279, and other applicable laws in the Manila Bay Region dismantled and removed.	<ul style="list-style-type: none"> <li>100% of structures, constructions, and other encroachments established or built in violation of RA 7279, and other applicable laws in the Manila Bay Region removed and dismantled by 2022.</li> </ul>	DPWH (Region 3 and 4a) and MMDA (NCR) in coordination with LGUs/ Reports and Ground Validation.
Target 7: Relocated and resettled affected informal settler families, and removal of disqualified ISFs	<ul style="list-style-type: none"> <li>100% of qualified informal settler families resettled by 2022.</li> <li>100% of qualified informal settler families resettled by 2022.</li> <li>100% of disqualified ISFs subjected to appropriate legal action by 2022.</li> </ul>	DILF, LGUs, NHA, MMDA (for NCR), and DPWH (for Regions 3 and 4A)/ Approved RRAP, and Monitoring and Validation Reports.
Target 8: Illegal structures/ obstructions in easement areas within privately-owned lands cleared.	<ul style="list-style-type: none"> <li>100 % of illegal structures in easement areas within privately-owned lands subjected to appropriate legal actions by CY 2022.</li> </ul>	DILG, DENR, DPWH (Region 3 and 4a) and MMDA (NCR) in coordination with LGUs; DENR-MBCO in communication with DOJ/ Monitoring and Validation Reports, and Copy of legal action.
Target 9: Continued Monitoring, assessment and evaluation of resettlement activities.	<ul style="list-style-type: none"> <li>100% of LGUs and agencies have access to the MBDS by 2019.</li> <li>All resettlement activities monitored and reported/logged/ encoded in the MBDS.</li> <li>No. of reports and evaluation reports submitted.</li> </ul>	DILG, NHA, and LGUs/ Monitoring and Evaluation Reports.
Target 10: Turn-over of cleared areas to barangays/ LGUs/ other concerned government agencies.	<ul style="list-style-type: none"> <li>All cleared areas protected and free from returnees and other illegal entrants.</li> <li>Appropriate administrative case against non-compliant LGUs filed</li> </ul>	DILG, LGUs, and NHA/ MOA and Copy of administrative cases filed.

Source: Manila Bay Coordinating Office and Mandamus Lead Agencies. *Operational Plan for the Manila Bay Coastal Strategy 2017-2022*.

Table 7. UN Sustainable Development Goals

Goal	Target	Indicators
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	<ul style="list-style-type: none"> <li>Proportion of urban population living in slums, informal settlements or inadequate housing</li> </ul>
	By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	<ul style="list-style-type: none"> <li>Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities.</li> </ul>
Goal 6. Ensure availability and sustainable management of water and sanitation for all.	By 2030, achieve universal and equitable access to safe and affordable drinking water for all.	<ul style="list-style-type: none"> <li>Proportion of population using safely managed drinking water services.</li> </ul>
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all.	By 2030, ensure universal access to affordable, reliable and modern energy services.	<ul style="list-style-type: none"> <li>Proportion of urban population living in slums, informal settlements or inadequate housing.</li> </ul>

Source: United Nations. *Transforming our World: The 2030 Agenda for Sustainable Development*.

### 3.1 Proposed Short-list of Targets and Indicators

The targets and indicators for upgrading informal settlements can be divided into two categories: those that address the housing shortfall and those that improve the quality of life of informal settlement families, including access to basic services. The targets and indicators for improved quality of life are included under the theme of inclusive growth. The targets and indicators related to the environmental impact of informal settlements are included in the themes of protecting ecosystems and improving water quality. In this focal theme, the targets and indicators are focusing on availability of housing. It is recommended that these be made consistent with established international, national, and regional targets and indicators to facilitate the benchmarking of accomplishments of future interventions in the Manila Bay area.

Table 8. Short-List of Key Targets and Indicators

Target	Indicators
Manila Bay communities with access to safe, affordable, and formal housing with access to basic services and economic opportunities to reduce adverse environmental impact	<ul style="list-style-type: none"> <li>▪ Percentage of Manila Bay households with access to basic services</li> <li>▪ Percentage of easement areas with informal settlement</li> </ul>

## 4 Problem Analysis (Base Case)

### 4.1 Description of Present Situation (Historic)

The number of ISFs in the NCR in 2014 was reported to be more than 580,000 accounting for about 39% of the total in the country. In Regions IV-A and III, these were estimated to be more than 140,000 and 82,000 respectively. On a country-wide basis which could be said as representative of the situation in these three regions in the Manila Bay area, 51% were reported to be living in danger areas, 25% in privately-owned lands, and 18% in government-owned lands (Karaos, Anna Marie (Ed.). 2017. Housing the Poor: The Challenge of Urbanization. Intersect: Quick Facts. Vol IV No. 3, October 2017. John J. Carol Institute on Church and Social Issues. Quezon City.).

The above figure in the NCR was almost equal to the more than 550,000 ISFs estimated in 2010 which accounted for almost 19% of total households in the region in the same year. Many of these were reported to be in Quezon City mostly on private and government owned lands. Those located in danger areas are more prevalent in Quezon City and the City of Manila.

Table 9. Number Informal Settler Families in Metro Manila in 2010.

City/ Municipality	No. of Families					Total
	Danger areas	Areas affected by government infrastructure	Government owned lands	Private owned lands	Areas for priority development/ Others	
City of Manila	16,095		75,628	12,920		104,643
City of Mandaluyong	70		19,893	987		20,950
City of Marikina	933		119	524		1,576
City of Pasig	7,133					7,133
Quezon City	26,976	2,899	80,651	96,341	15,877	222,744
City of San Juan	4,886		2,518	4,043		11,447
Caloocan City	6,981	2,242	1,692	4,209	11	15,135
City of Malabon	7,630	953	12,554			21,137
City of Navotas	9,584	605				10,189
City of Valenzuela	3,611	2,552	1,408	11,006		18,577
City of Las Piñas	2,357		1,507	10,976	146	14,986
City of Makati	915		2,386	1,560		4,861
City of Muntinlupa	4,719		2,583	9,947	70	17,319
City of Parañaque	3,320		3,763	15,428	2,460	24,971
Pasay City	3,343	441	21,621	2,211		27,616
Pateros	2,580	516	1,009	3,500		7,605
Taguig City	1,273	4,873	810	16,724	1,957	25,637
Metro Manila	102,406	15,081	228,142	190,376	20,521	556,526
% of Total	18.4%	2.7%	41.0%	34.2%	3.7%	100.0%

Source: Almec Corporation.. 2014. Roadmap for Transport Infrastructure Development for Metro Manila and its Surrounding Areas (Region III & Region IV-A), Final Report, Main Text, citing 2010 data from MMDA.

It must be noted that there are also varying estimates on the number of ISFs such as those in the Census of the Philippines (POPCEN) and as given in PDP 2017-2022. These inconsistencies were raised in the NISUS which confirmed a need for a "more accurate and up-to-date system of estimating the number of ISFs to properly determine the scope and magnitude of the problem".

As of the 2nd quarter of 2018, the DILG reported that there were nearly 250,000 ISFs living in danger areas in cities and municipalities within Manila Bay area except for those in the NCR. More than 51% of these ISFs may be found in Region IV-A. The five cities/municipalities with most numbers include Pandi in Bulacan Province (60,130), Cavite City in Cavite Province (22,196), City of Calamba in Laguna Province (12,025), and Cainta and Angono in Rizal Province with 11,230 and 10,903 respectively.

- The World Bank developed a typology of informal settlements in order to have a more nuanced understanding of their concerns and needs.

- High dense: very dense informal settlements without any regular pattern, no or very few open spaces and composed of very small and compact objects. Largest settlement type in terms of area as well as settlement type with among the lowest levels of vegetation.
- Low dense: less dense informal settlements containing more open space or vegetation and mainly composed of small objects
- Mixed: less dense informal settlements composed of bigger buildings along with embedded small and dense objects. This class also concerns informal settlements which have grown inside residential areas. These settlements grow as new residential districts and road networks are built with some formal housing. Either remaining plots are not sold quickly enough or formal houses are not built quickly enough allowing informal settlers to come in and build structure between formal units.
- Linear: other informal settlement with a linear shape
- Linear along railways: informal settlements that have grown along railways and typically with a linear shape.
- Linear along rivers: informal settlements that have grown along rivers and typically with a linear shape.
- Pocket: small and very densely informal settlements which have grown in small vacant spaces often linked to commercial or industrial units or surrounded by big buildings. Traditionally overlooked in similar informal settlement identification exercises. Challenging to detect and likely present at a greater extent than measured.
- “Under the trees”: informal settlements composed of several polygons in informal settlements and in fact corresponding to only one informal settlement entity. This type of informal settlements are located below vegetation and thus not detected as one entity.

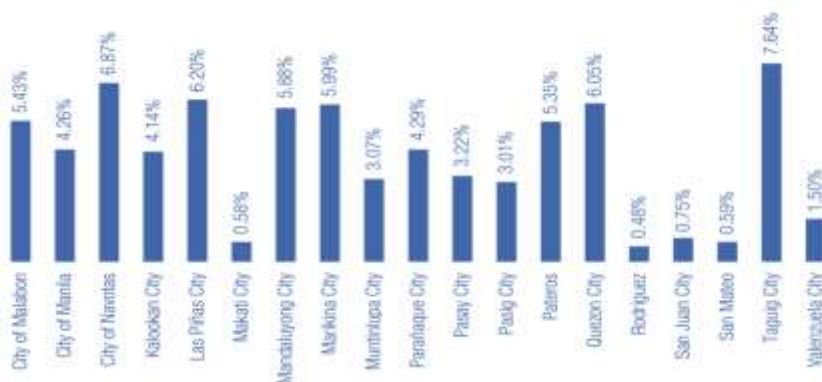


Figure 4. Areal Proportions of Informal Settlements in Each Municipality. Source: Singh and Gadgil, 2017.

#### 4.1.1 What are they most concerned of?

A major concern of ISFs is the threat of eviction. Most ISFs have no rights to the land or dwelling unit.

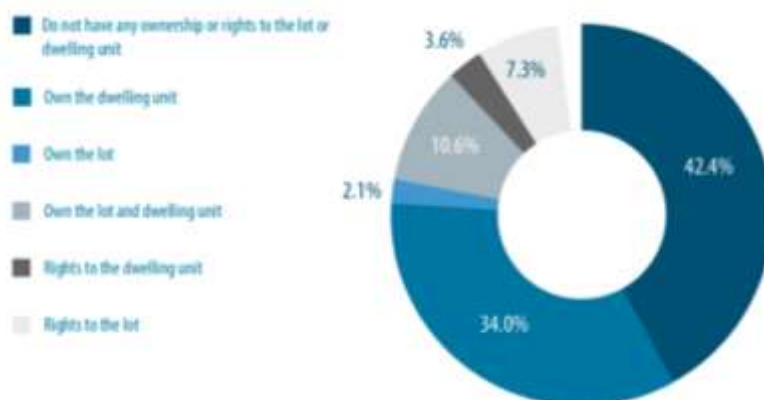


Figure 5. World Bank (2016). Metro Manila Urban Slum Survey.

In addition to the threat of eviction, ISFs are most concerned about crime and access to medical and other basic services.

When faced with natural calamities, such as floods, ISFs are most concerned about being unable to go to work, and for their children to miss school.

Access to transportation is a challenge, but since most ISFs choose to live near where their jobs are, the length of travel may be reduced. However, the cost of travel may be significant because they have to rely on multiple informal transportation (pedicab, tricycle) to get to work.

## 4.1.2 Projected Housing Needs

### 4.1.2.1 Housing Backlog

Housing backlog comprises doubled-up HHs as of the base planning year (2015) and number of displaced units based on composite estimates on the number of ISFs. Estimates on the number of doubled-up HHs were obtained from POPCEN 2015. The estimated number of ISFs accounted for Metro Manila alone since no information on the other areas is currently available. The numbers were based on combined data on (a) those living in danger zones as obtained from DILG's 2nd quarter 2018 data, and (b) those living in other areas (affected by government infrastructure projects and areas for priority development) obtained from the report Roadmap for Transport Infrastructure Development of Metro Manila and its Surrounding Areas. The total backlog in Manila Bay area is nearly 960,000 units with NCR accounting for almost 60%.

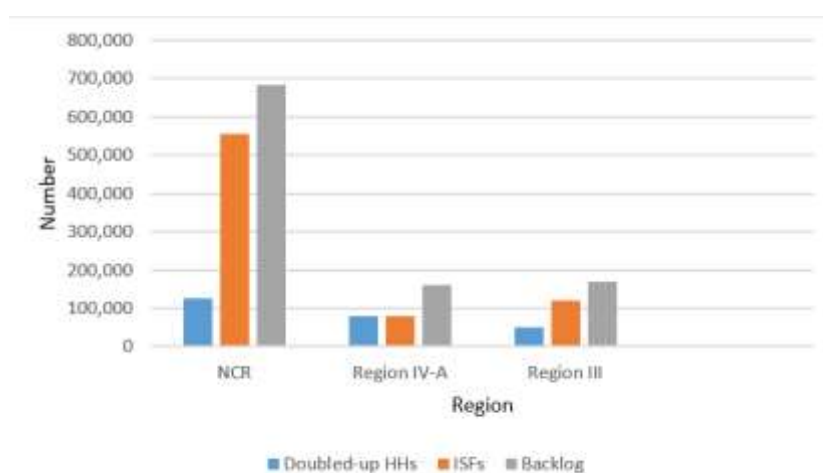


Figure 6. Housing Backlog by Region in the Manila Bay Area as of 2015.

### 4.1.2.2 Houses Needing Upgrading

Estimates on the number of houses that need upgrading are based on accessibility to basic services such as electricity for lighting and own use faucet as source of water for drinking. These were based on data from POPCEN 2015.

On the overall, the proportion of HHs in the Manila Bay area who use electricity for lighting is more than 97%. On the other hand, the proportion of HHs that have their own faucets as source of drinking water is quite low at less than 39%.

Table 10. Number of HHs with Electricity and Own Use Faucet for Drinking by Region, Province and City/Municipality, 2015.

Region	Total number of HHs	HHs with electricity for lighting		HHs with own use faucet community water supply system	
		Number	Share to total HHs	Number	Share to total HHs
Manila Bay Region	7,870,819	7,667,734	97.4%	3,061,716	38.9%
National Capital Region	3,095,484	3,047,198	98.4%	1,448,079	46.8%
Region IV-A	2,479,074	2,396,094	96.7%	936,576	37.8%
Region III	2,296,261	2,224,442	96.9%	677,061	29.5%

Source: PSA

The total number of HHs within Manila Bay area that needs electricity provision is almost 5 million. NCR accounts for the greatest need with a share of more than 34%. At the provincial level, the needs are greatest in Cavite (more than 28,000 HHs), Rizal (more than 28,000 HHs), and Laguna (almost 23,000 HHs).



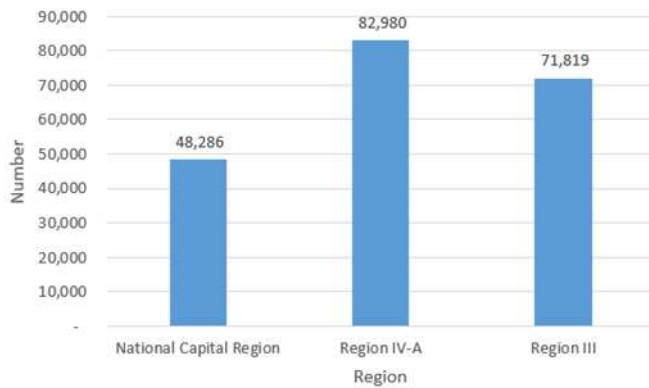


Figure 7. Number of Houses Needing Electricity Provision by Region, 2015.

The number of HHs needing tap water supply provision is greatest in NCR at more than 1.6 million. At the provincial level, the need will be greatest in Cavite (630,000), Bulacan (582,000), and Laguna (530,000).

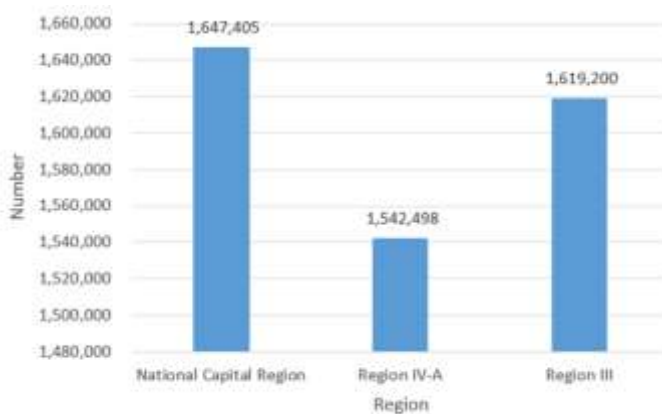


Figure 8. Number of HHs for Upgrading in Terms of Needing Tap Water Supply Provision, 2015.

#### 4.1.2.3 Housing Needs due to Future Household Formation

Assuming that the household sizes (varying per LGU) recorded in PSA’s 2015 census remains constant, the estimated housing needs due to future household formation in the Manila Bay area is estimated to be more than 3 million by 2040. The largest projected need shall be in Region IV-A which will account for about 50% of total housing needs in the Manila Bay area.

Table 11. Estimated Housing Needs due to Future HH Formation from 2022 to 2040 by Region in the Manila Bay Region.

Region	Year			Total	Share to total
	2022	2030	2040		
Manila Bay Region	1,007,209	922,758	1,113,522	3,043,489	100.0%
NCR	298,464	123,104	119,675	541,243	17.8%
Region IV-A	416,015	501,418	626,772	1,544,205	50.7%
Region III	292,730	298,236	367,075	958,041	31.5%

The three provinces with the greatest housing needs due to future HH formation include Cavite (586,000), Rizal (440,000), and Laguna (430,000). In terms of cities, the top five in terms of future needs are Quezon City (325,000), Caloocan City (199,000), Rodriguez (Montalban) in Rizal Province (134,000), Imus City in Cavite Province (134,000), and Antipolo City in Rizal (130,567).

#### 4.1.2.4 Estimated Total Housing Needs

The estimated total housing needs comprising housing backlog as of 2015 and future HH formation up to 2040 is about 4 million housing units. It is anticipated that the need will be greatest in Region IV-A which will account for almost 44% of the total. The total of existing units that need upgrading is, in turn, almost 5 million with the most number still in Region IV-A.

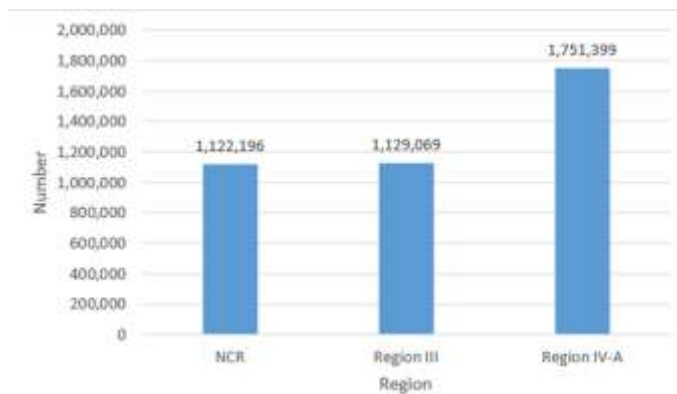


Figure 9. Estimated Total Housing Needs by Region

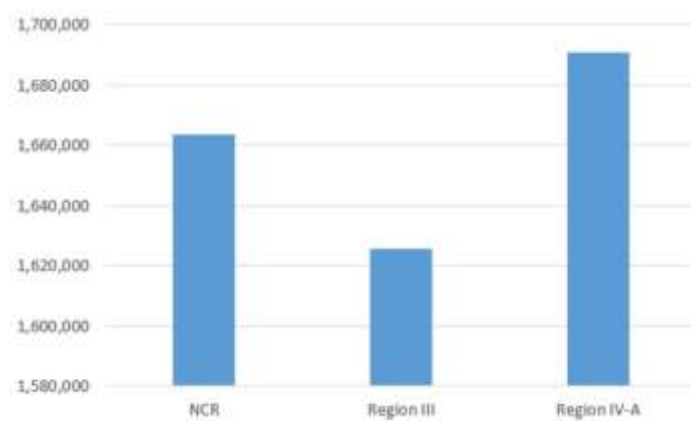


Figure 10. Estimated Existing Housing Units for Upgrading.

The summary table showing the total housing needs and those for upgrading according to Region and province is shown below.

Table 12. Estimated Total Housing Needs and for Upgrading by Region and Province.

Region/Province	New housing units			Existing units for upgrading
	Housing backlog	New HH formation	Total	
Manila Bay Region	959,175	3,043,489	4,002,664	4,979,937
NCR	580,953	541,243	1,122,196	1,663,440
Region IV-A	207,194	1,544,205	1,751,399	1,625,478
Batangas	6,963	82,977	89,940	58,069
Cavite	72,604	585,502	658,106	658,882
Laguna	77,269	430,415	507,684	551,798
Rizal	49,684	439,458	489,142	351,029
Quezon	674	5,852	6,526	5,700
Region III	171,028	958,041	1,129,069	1,691,019
Bataan	12,883	(266)	12,617	107,067
Bulacan	108,935	403,813	512,748	601,461
Nueva Ecija	12,666	182,091	194,757	362,257
Pampanga	30,572	252,190	282,762	361,023
Tarlac	5,533	100,807	106,340	210,098
Zambales	333	12,376	12,709	30,016
Aurora	106	7,030	7,136	19,097

### 4.1.3 Land Supply for Housing

#### 4.1.3.1 Overall Supply

The overall supply of land that may be used for housing developments are largely determined by designated residential lands provided in the respective zoning ordinances of cities and municipalities. This overall supply may further be distinguished between lands for open housing and those for socialized housing.

The supply of land for open housing development is largely shaped by decisions of property owners and by real estate developers. That for socialized housing is shaped by the balanced housing provision of UDHA and designated lands by the national government such as the NHA and local government units. The supply may further be augmented by unlocking privately owned land acquired by community groups through the CMP.

#### 4.1.3.2 Potential Lands for Socialized Housing in the NCR

Information were collected from the various Assessor's Offices in NCR to obtain an inventory of possible lands that may be used for socialized housing development.

##### Caloocan City

The Caloocan City Assessor's Office submitted the City's "Inventory of Idle Government Lands" as of July 2011. According to one of the tax mappers, most of the lots in the Dagat-Dagatan area have been awarded and that the LGU has yet to finish its computerization/updating of records.

The number of parcels in the Inventory List as of July, 2018 was 1,755 and lot sizes ranged from a low of 1,000 sq.m. to a high of 29,000 sq.m. Most of these have access roads or within a subdivision.

##### Las Piñas City

The Las Piñas City Assessor's Office submitted 12 possible lands which are mostly tax delinquencies. Land areas of these properties range from 2,000 sq.m. to 8,000 sq.m. The assessed value per square meter of these properties is approximately PhP5,000.00.

##### Mandaluyong City

The Mandaluyong City Assessor's Office submitted two Inventory Lists to the DILG City Director in Mandaluyong City and to DILG Undersecretary Francisco Fernandez, both dated April 15, 2014. The first of the two lists contained the following:

- Schedule of transfer certificate titles (TCT) not included in the Inventory Report as of December 31, 2013.
- Schedule of real properties in the Inventory Report without TCTs as of December 31, 2013.
- Schedule of real properties acquired through Donation without TCTs as of December 31, 2013. These are three parcels of land in Namayan and Poblacion as well as several parcels of road lots.
- Schedule of real properties acquired through purchase without TCTs as of December 31, 2013. These are parcels of land (road lots or residential lots) acquired in previous years, either bought or through a deed of sale. Some are part of the City Hall while others are housing projects. Some items are provided with land areas in square meters but assessed value were not indicated.

The second of the two lists contain a "List of Idle Lands" in the city. Owners are mostly corporations based outside Mandaluyong and one individual with an address in the city. Actual land uses are commercial or residential. Land areas range from 1,000 sq.m. to over 17,000 sq.m. The assessed value is from PhP 314,000 to a high of almost PhP 9,000,000. The unit values of properties per square meter range from a low of PhP70.00 to a high of PhP5,000.

##### Marikina City

The Marikina City Assessor's Office submitted a list consisting of undeveloped and vacant residential and residential/commercial lands. The list, however, did not include the assessed or market values of these properties. The owners include the Armed Forces of the Philippines (AFP) Mutual Benefit Association and private individuals. Land areas are from almost 10,000 sq.m. to 151,614 sq.m.

##### Muntinlupa City

The Muntinlupa City Assessor's Office submitted a list consisting of "Idle Properties." The actual uses of these properties are either residential, raw, agricultural, or commercial. Information provided are owner, location, tax declaration, TCT No., area (in sq.m.), unit value per sq.m., market value, assessed value, and actual use. Unit

values of land range from PhP512 to a high of PhP2,400 per sq.m. These are the most interesting prices of land in Metro Manila.

#### **Navotas City**

The Navotas City Assessor's Office submitted a list containing 16 parcels of land, with a low of 689 sq.m. to a high of 11,566 sq.m. and unit prices ranging from PhP600 to a PhP1,200 per sq.m. The City Assessor recommended four sites as suitable for socialized housing and mentioned it would be good if the DILG or Australian Aid could provide the LGU with financial assistance.

#### **Parañaque City**

The Parañaque City Assessor's Office submitted two lists, namely: an Inventory of Lands for Socialized Housing as of December, 2013 and Properties Acquired for Socialized Housing by the Local Housing Development Office. The lists were by barangay and land category/ area in square meters. The lists conformed to the DILG's information requirements which include the owner's name, TCT No., Tax Declaration No., Location, Land Category/area (in sq.m., zoning classification, actual land use, market value, and assessed value). The unit value per square meter is PhP1,000 up.

#### **Pasay City**

The Pasay City Assessor's Office submitted an Inventory of Lands for Socialized Housing as of December 31, 2013. Three owners were cited in the inventory, namely a certain Mr. Florencio Reyes, Philippine Government, and a certain Mr. Charles Case.

#### **Pasig City**

The Pasig City Assessor's Office submitted a list containing 23 parcels with location drawings.

#### **Pateros Municipality**

The Pateros Municipality Assessor's Office wrote a letter saying that the LGU has no available lands for ISF housing.

#### **Quezon City**

The Quezon City Assessor's Office submitted a listing of Real Properties 5,000 sq.m. and above as per DILG Letter dated 03 December 2013. The list totaled 759 parcels of land for taxation purposes and these are to be verified if available for ISF resettlement.

#### **San Juan City**

The San Juan City Assessor's Office submitted a list containing three properties with no land category or area. Two parcels are residential in zoning classification and actual land use. The third parcel has a residential zoning classification and an industrial actual land use. There is only one property owner for the three parcels and they are private individuals/corporation.

#### **Taguig City**

The Taguig City Assessor's Office submitted a list containing 78 parcels.

#### **Valenzuela City**

The Valenzuela City Assessor's Office submitted a list containing 115 parcels. Most of the properties identified are rice lands while others are either rice land, residential, industrial, or commercial.

#### **Other NCR LGUs**

The respective Assessor's Offices of Makati, Malabon, and Manila are yet to submit their Land Inventory Lists.

### **4.1.4 Key Issues and Concerns**

Key issues and concerns regarding the implementation of the National Shelter Plan particularly with regard to ISFs have been identified in PDP 2017-2022 to include:

- Slow process in land acquisition, licensing, and agency/ LGU clearances, among others.
- Weak urban planning and unclear rules among government agencies, as well as national and local policies.
- Limited appropriations for housing which is one of the lowest among Southeast Asian countries.

- Institutional limitations among the KSAs.

Issues regarding informal settlements were likewise identified in the NISUS. These include the following:

Table 13. Key Issues Regarding Informal Settlements.

Issue	Cited reasons
Weak enforcement and monitoring of local land use planning & standards for informal settlements.	Weak technical capability at the local level. Ineffective planning standards. Weak planning for informal settlements. Weak review of CLUPs/CDPs by the national planning agencies.
Inadequate, unharmonized, and unfocused socioeconomic development policies and programs.	Un-sustained efforts on local economic growth and job creation. Weak coordination among government agencies and private sector. Lack of targeted programs and social protection measures for ISFs.  Limited investments in education, health and human capital.
Limited access of informal settlers to and availability of affordable housing finance.	Low affordable limits of ISFs. Low income primary housing mortgages are not investable commodities. Limited lending facilities and financing programs for ISFs. Housing microfinance has not achieved scale.
Insufficient supply of affordable and adequate housing for informal settlers.	Unsuitable land use, building regulations, and the mismatch of high demand, low purchasing power. Inadequate supply of new housing units. Reduction in housing stock. Legal /Regulatory and other weaknesses. Lack of information/database.
Unclear delineation of accountabilities of institutions.	Inefficient and fragmented institutional framework for informal settler housing. Unintegrated and ineffective policies for tackling informal settlements. Inadequate financial model. Limited staff weaknesses

## 5 Base Case and Gap Analysis (Quantitative, Snapshot)

During the strategy building phase, scenarios of what may be the plausible future conditions will be developed using historical analogues from available historical datasets and modelling as may be appropriate and needed. The aim is to be able to estimate the variations of the business as usual future from the desired future state of the Manila Bay. This section provides some of the statistics currently available for the proposed set of indicators to gauge at any given future time the progress in reducing the gap between the current state and the desired state of Manila Bay (Table 14). These proposed indicators will be subject to expanded discussions of the study team and iterative interactions with various stakeholder groups during the initial stages of the strategy building to agree on the final sets of indicators. To the extent possible uncertainties about the future state shall be quantified otherwise the expert judgments of the study team and key stakeholders shall be consulted so that decisions during the strategy building can be appropriately informed.

Table 14. Base Case and Reference Case Indicators for Various Targets in Upgrading Informal Settlements.

Target	Indicator	Base case 2015	Reference case 2022	2030	2040	2100
Access to affordable, adequate, safe, and secure shelter in well-planned communities expanded.	Proportion of urban population living in informal settlements decreased (% , cumulative).	40.9% (2009, UN-Habitat)	22% (PDP)	15%	5%	0%
	Proportion of socialized housing targets met to housing needs improved (% , cumulative).	47.87% (PDP)	85% (PDP)	90%	95%	100%
Structures, constructions, and other encroachments established or built in violation of RA 7279, and other applicable laws in the Manila Bay Region dismantled and removed.	100% of structures, constructions, and other encroachments established or built in violation of RA 7279, and other applicable laws in the Manila Bay Region removed and dismantled by 2022.	To be obtained from MBCO				
			100% (OPBMCS)	100%	100%	100%
Relocated and resettled affected informal settler families, and removal of disqualified ISFs.	100% of qualified informal settler families resettled by 2022.	To be obtained from MBCO	100% (OPBMCS)	100%	100%	100%
	100% of qualified informal settler families resettled by 2022.	To be obtained from MBCO	100% (OPBMCS)	100%	100%	100%
	100% of disqualified ISFs subjected to appropriate legal action by 2022.	To be obtained from MBCO	100% (OPBMCS)	100%	100%	100%
Illegal structures/ obstructions in easement areas within privately-owned lands cleared.	100 % of illegal structures in easement areas within privately-owned lands subjected to appropriate legal actions by CY 2022.	To be obtained from MBCO				
			100% (OPBMCS)	100%	100%	100%

Target	Indicator	Base case 2015	Reference case 2022	2030	2040	2100
Turn-over of cleared areas to barangays/LGUs/ other concerned government agencies.	All cleared areas protected and free from returnees and other illegal entrants.	To be obtained from MBCO	100% (OPBMCS)	100%	100%	100%
	Appropriate administrative case against non-compliant LGUs filed.	To be obtained from MBCO	% of administrative cases filed and resolved, cumulative	% of administrative cases filed and resolved, cumulative	% of administrative cases filed and resolved, cumulative	% of administrative cases filed and resolved, cumulative

## 6 Summarizing and Concluding Problem Statement for Upgrading Informal Settlements

### 6.1 System Analysis: Drivers and Outcomes

Informal settlements are human habitation that is usually below the standards for what is considered as decent for people to live in. It is largely characterized by predominance of houses made of light materials, overcrowding, absence of facilities for waste management, poor access to transportation systems, high exposure to climate change and natural hazards, and families living at or below the poverty line. All these undesirables in informal settlements notwithstanding, people continue to flock to these areas. Alongside the persistence and unstoppable growth of informal settlements are the worsening degradation of the physical and social environment inside these settlement areas to the detriment of the health, security and overall quality of life of ISFs. These problems spill over to the adjoining areas, such as rivers, lakes, coastal and marine areas as are observed in the MBA. The drivers and outcomes of the growth of and conditions in informal settlements are illustrated in Figure 1.

The main driver of the expansion of informal settlements is the unregulated migration of people to the urban areas primarily to search for livelihood opportunities that are otherwise unavailable from where they originated. These migrants to GMMA though yet without empirical evidences are mostly from the provinces where agriculture has become unviable due to loss of farmlands to land conversion, loss of productivity due to lack of irrigation or persistent damages from calamities, and lack of non-agricultural related livelihoods. As mentioned previously, not all residents in informal settlements are not really poor to begin with but were forced to live there because it is the only option to be able to stay close to their place of work. For poor ISFs this is the only affordable option.

Migration is driven by uneven distribution of development investments that tend to concentrate within the greater metropolitan areas where most of the livelihood opportunities are generated. Spread of investments to outskirts of the metropolis has been recognized and planned but implementation has been slow and inadequate to generate enough development opportunities to keep the local labor force where they are. This is aggravated by the fragmentation of plans and programs amongst NGAs that makes the push for investment to spread out of Manila a difficult process. There is also the tendency of the LGUs to accommodate influx of migrants in informal settlements as these are known as rich sources of votes during election period.

To improve the conditions of the ISFs the ultimate intervention appears to be the supply of adequate and affordable housing units away from climate change and disaster risks, and away from areas where irreversible and calamitous damages to the ecosystems that may arise from informal settlements. This will need to be coupled with diligent enforcement of laws and ordinances that will prevent further expansion and establishment of new informal settlements. In the interim before the ideal long-term solutions take its full effect, there is a need to address the drivers of worsening living conditions in informal settlements. Their access to basic services need to be improved including adequate access to viable livelihoods. The ISFs should be assisted in developing its capacity to adapt to climate change impacts and to avoid damages from natural calamities.

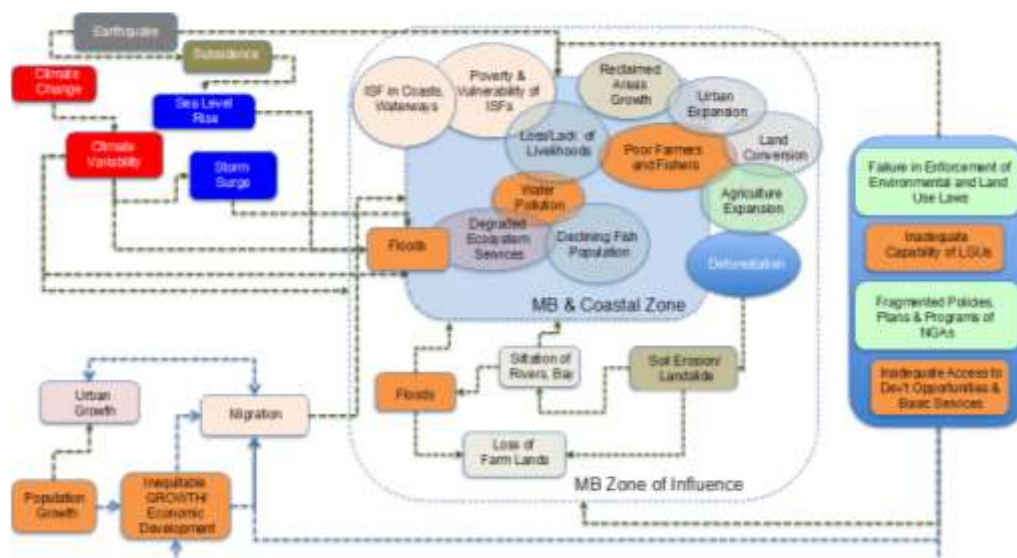


Figure 11. Drivers and Outcomes of the State and Conditions in Informal Settlements in the MBA.



## 6.2 Relationships to Other Focal Themes

Informal settlements are characterized by environmental poverty where bad living conditions impact on health, livelihood and social fiber. Bad living environment thus deepens poverty, increases the vulnerability of both the poor and non-poor living in slums and excludes the slum poor from growth. (Ballesteros, 2010).

With up to 1 in 4 residents of Metro Manila depending on informal housing, improving the lives of ISFs will contribute significantly to inclusive growth.

ISFs in waterways and other danger zones should be the priority. They are the most vulnerable in case of natural calamities. Informal settlements are a major source of pollution and decline in water quality because of their lack of access to sanitation, garbage collection and septage services. The target is to move all of them to safe, convenient locations where their jobs are.

The informal settlements are also beneficiaries of the provisioning and protective services of ecosystems. Many of the ISFs dependent on fishing and related coastal and marine-based livelihoods. Likewise the informal settlements are also protected by mangroves from strong winds and storm surges. Enhancing the resiliency and security of ISFs should therefore be in synergy with the efforts of protecting the ecosystems.

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