



Stakeholder Feedback on the Manila Bay Sustainable Development Master Plan

Results of consultations conducted by CARE and ACCORD





A local of Barangay Potrero, Malabon paddles through Typhoon Ondoy's floodwaters in 2009. (Jes Aznar)

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Cover photo: View from Malabon City: Tullahan River in the foreground, Manila Bay in the background.

ACRONYM**DEFINITION**

ACCORD	Assistance and Cooperation for Community Resilience and Development
CAMANA	Caloocan, Malabon, Navotas
CAMANAVA	Caloocan, Malabon, Navotas, Valenzuela
CCA	Climate Change Adaptation
CDP	Comprehensive Development Plan
CENRO	City Environment and Natural Resources Office
CLUP	Comprehensive Land Use Plan
DENR	Department of Environment and Natural Resources
DOH	Department of Health
DPWH	Department of Public Works and Highways
DRR	Disaster Risk Reduction
ECC	Environmental Compliance Certificates
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statements
EWS	Early Warning System
IEC	Information, Education, and Communication
ISF	informal settlement family
KBA	Key Biodiversity Area
LCE	Local Chief Executive
LGU	Local Government Unit
LWUA	Local Water Utilities Administration
MANATUTI	Malabon-Navotas-Tullahan-Tinajeros
MBCRP	Manila Bay Clean-Up Rehabilitation and Preservation
MBSDMP	Manila Bay Sustainable Development Master Plan
MRF	Materials Recovery Facility
MWSS	Manila Bay Clean-Up Rehabilitation and Preservation
NAMRIA	National Mapping and Resource Information Authority
NEDA	National Economic Development Authority
NGA	National Government Agency
NGO	Non-Government Organization
NHA	National Housing Authority
NIPAS	National Integrated Protected Areas Systems
OPMBCS	Operational Plan for Manila Bay Coastal Strategy
PAP	Programs, Activities, Projects
PD	Presidential Decree
RA	Republic Act
RILHub	Resilience and Innovation Learning Hub
SJRS	San Juan River System
STP	sewage treatment plants
SWM	Solid Waste Management
WQMA	Water Quality Management Area
WTE	waste-to-energy

This paper presents the feedback of several groups of stakeholders from Caloocan, Malabon, Navotas, Valenzuela, Quezon City, and the City of Manila on the Final Report of the Manila Bay Sustainable Development Master Plan (MBSDMP).

Throughout August of 2019, CARE and ACCORD, through Partners for Resilience, conducted focus group discussions in six barangays, three cities, and two Water Quality Management Area (WQMA) bodies. The goal was to familiarize Manila Bay stakeholders with the MBSDMP and gather feedback from them to help ensure that the concerns and recommendations of those who may be affected by the master plan are brought to the fore. Participants were composed of community members, sectoral representatives, barangay and city local government units (LGUs), and members of the San Juan River System (SJRS) and Malabon-Navotas-Tullahan-Tinajeros River System (MANATUTI) WQMA.

The consultations consisted of one-day sessions per area, with two main parts: in the first half of the session, facilitators presented the fundamentals of Integrated Risk Management and the Rights-Based Approach before presenting the contents of the MBSDMP itself; in the second half, participants were divided into several focus groups to discuss and provide feedback on the MBSDMP.

The results of the consultation process were submitted to the technical consultants leading the formulation of the master plan.

In this paper, the results of the consultations are organized into:

A. General feedback on and cross-cutting issues affecting the MBSDMP

B. Specific feedback on each of the eight measures outlined in the MBSDMP

- 1. Issues and challenges – both internal to the MBSDMP itself and external factors that may affect its implementation**
- 2. Good practices identified by participants (if any)**
- 3. Current practices and future plans (if any)**
- 4. Recommendations from participants**



One of Partners for Resilience's engagements with Caloocan City included this community risk assessment conducted with members of vulnerable sectors.

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PAMPANGA

BULACAN

BATAAN

**METRO
MANILA**

MANILA BAY

CAVITE

LAGUNA

BATANGAS

A. GENERAL FEEDBACK ON THE MBSDMP AND ISSUES THAT MAY AFFECT ITS IMPLEMENTATION

1. The plan is not inclusive and lacks community consultation.

Respondents express that there is a general lack of consultation with and involvement of communities and LGUs in the problem-solving and planning for developments and solutions.

Community members say that they were not aware that a master plan for the entire Manila Bay region was being crafted. They believe that there should have been ample consultation with communities especially those who will be affected once the plan will be implemented. Gaps and issues were also deemed inevitable in the crafting of the plan since the process started with a technical working group – composed of experts and not factoring in community experiences.

Representatives from city departments in Navotas and Manila were able to attend consultations and meetings spearheaded by the study team and the National Economic and Development Authority (NEDA), but lament that they could not voice out their concerns due to the big number of attendees and limited time provided for feedbacking. Others also express concern over how their comments about the master plan would be heard and responded to by the National Government.

2. The plan lacks transparency in terms of budgeting and accounting systems.

The master plan includes a series of programs, activities, and projects (PAPs) for the implementation of LGUs and national government agencies (NGAs). However, according to the respondents, there is a need for transparency in terms of whether the budget will come from LGUs, NGAs, or other sources.

City department representatives say that funds allocation and implementation will trickle down to them, and barangay officials likewise agree that they would be the ones expected to implement these PAPs and would also be held accountable if implementation fails.

“Ang trabaho at implementasyon ay nasa barangay, pati na rin ang sisi (The work and implementation lie with the barangay, and so does the blame),” one barangay official said.

3. There is a lack of harmonized planning and coordination between and among LGUs, between LGUs and NGAs, and between different initiatives relating to the Manila Bay zone of influence.

Respondents refer to this harmonized, holistic approach as “landscape approach” or “ridge-to-reef approach,” which is a more comprehensive view of how various facets of the development landscape act, interact, and react to inputs and stimuli.

3.1. The plan did not factor in existing plans and programs of its target communities and cities.

Representatives from city departments and offices are concerned about how existing city plans and programs were considered in identifying PAPs in the master plan. They urge a more careful review of the local plans, because the suggested PAPs might have already been implemented or are currently being implemented and would just need to be sustained.

Another respondent believes that not enough research was done to incorporate existing plans. Thus, the recurring question of what happens to existing initiatives and plans and how the MBSDMP aligns with these.

The MBSDMP targets are also perceived to be slightly vague and noticeably lower compared to WQMA targets. Members of the SJRS and MANATUTI WQMA Governing Boards express that some of the targets were already achieved by some LGUs, as indicated in their action plans.

3.2. The plan focuses only on coastal cities and municipalities and did not include tributaries and inland communities.

Members of the SJRS WQMA governing board say that tributaries were not considered in the proposal of programs and initiatives. They add that both coastal waterways and tributaries need to be taken into account to ensure that the plan has a holistic and comprehensive view of the overall landscape, and looks at how efforts and developments in one area may impact other areas.

“Where does it all converge? How are our efforts contributing to the overall plan?”, says a representative from the LGU of Quezon City.

Better indicators should be set as well to aptly map out and harmonize the efforts and plans of the LGUs and the MBSDMP.





One of several community consultations conducted in Caloocan City in August 2019.

3.3. There is a lack of DRR-CCA consciousness and mainstreaming in development planning.

3.4. There is a need to improve convergences between stakeholders and between the various efforts to rehabilitate Manila Bay.

At the stakeholder level, there is a need for inter-city planning in response to the masterplan. There is also a need to coordinate with various NGAs for monitoring of related projects.

At the policy level, there is a need to harmonize the MBSDMP with existing Manila Bay rehabilitation plans by NGAs such as the Department of Interior and Local Government’s Manila Bay Clean-Up Rehabilitation and Preservation (MBCRP) and the Department of Environment and Natural Resources’ (DENR) Operational Plan for Manila Bay Coastal Strategy (OPMBCS).

4. There is a need to identify implementors of the plan as well as clarify the roles of LGUs in the master plan.

LGU representatives say that the master plan should clarify the roles of the LGU and what is expected from them in its implementation. They express concern over the support that would be provided by NGAs to aid implementation. As an addendum to this, local executives say they need to build their capacities, anticipating that they will be tasked to implement the plans.

However, LGU representatives also point out that priorities of the local chief executives (LCEs) should be considered in the planning process as it might vary, especially since LCEs tend to prioritize high-impact, short-term projects deliverable within their term of office over long-term ones.

5. NGAs tasked with rehabilitating Manila Bay face difficulties in performing their mandate.

There is a perception that the DENR faces difficulties in performing its role as the lead agency in environmental protection. City-level respondents observed that city-level DENR offices (CENRO) are understaffed, have very little budgets, are unable to enforce environmental laws, and have no access to monitoring mechanisms on a wide variety of issues they need to address. The same could be said in all other levels of DENR.

In the Supreme Court issued Writ of Continuing Mandamus (2008), the DENR was designated as lead agency, particularly in the issue of the clean-up and rehabilitation of the Manila Bay area (OPMBCS). However, the respondents believe that, in the same way that their local CENROs are plagued with difficulty in the mere enforcement and management of local-level environmental concerns, the entire DENR also needs to make a lot of improvements and get more local-level support in the performance of its mandate, particularly in the address of the Manila Bay landscape.

As regards the Mandamus NGAs that are mandated to rehabilitate the Manila Bay, respondents report that there seems to be a lack of monitoring, decisive movement, and overall progress in the performance of their tasks.

A photograph of a riverbank. The foreground is filled with a large amount of trash, including plastic bags, a red container, and other debris. The middle ground shows a calm river reflecting the sky. The background is a dense line of green mangrove trees and other vegetation. The sky is clear and blue.

MANAGEMENT OF PROTECTED AREAS AND CRITICAL HABITATS

Despite some environmental degradation,
a small patch of mangroves thrives along the
Tullahan River in Barangay Longos, Malabon.

B. SPECIFIC FEEDBACK ON MEASURES 1 TO 8 OF THE MBSDMP

1. Management of Protected Areas and Critical Habitats

1.1. ISSUES AND CHALLENGES

1.1.1. Using key biodiversity areas (KBAs) rather than protected areas as the basis for planning may be more beneficial to the Manila Bay.

Respondents observe that the basis for MBSDMP planning are protected areas and critical habitats and not KBAs. The whole Manila Bay has been declared as KBA yet remains unprotected. DENR has issued directives for enhancement but not specifically for the protection of KBAs; hence, there are difficulties with enforcement and imposition of penalties on violators. Manila Bay's KBA classification should be a primary consideration in planning measures. Moreover, this can be strengthened further by improving the KBA's status as protected.

1.1.2. There is no provision in the MBSDMP for inland habitats or terrestrial ecosystems, e.g. forests.

The MBSDMP does not include inland habitats or terrestrial ecosystems whose conditions impact the Manila Bay. Inland communities and local government units have difficulty relating to the measures which focus on fishery. They recognize however that the quality of inland ecosystems has a direct impact on the overall quality of Manila Bay, and, as such, planning will benefit from following a ridge-to-reef approach.

1.1.3. The presence of proposed land reclamation projects along protected areas and key biodiversity areas in the plan

Between competing needs and priorities, the MBSDMP must be clear on how to strike a good balance. In relation to reclamation projects and proposals, respondents stress the need to conduct proper environmental impact assessments as prerequisite to approving reclamation projects.

1.1.4. Lack of reference to the Philippine Fisheries Code

City and WQMA respondents opine that this particular measure will do well to refer to Republic Act 10654, or The Amended Philippine Fisheries Code of 1998, which is said to have very relevant provisions on the management of Manila Bay's habitats. Doing so could make the MBSDMP's efforts more specific and appropriate to the situation.

1.1.5. A lack of information and awareness of people's rights and responsibilities over protected areas and critical habitats

Barangays are unable to identify protected areas located within their cities' territorial limits. In many instances, protected areas are not demarcated at the city level. LGU respondents also point to a lack of information on specific areas demarcated as protected and critical habitats within their cities. WQMA representatives, meanwhile, identified overlapping boundaries between protected areas and KBAs.

Such information gaps cause confusion and prevent community members from taking pertinent action towards environmental protection and the management of protected areas.

Community members point out "behavioral problems" or "attitudinal problems" observed among other community members – for instance, the habitual dumping of garbage on land and into waterways – which respondents attribute to a lack of awareness of ones' responsibilities to the environment. These habits contribute to the deterioration of the state of the Manila Bay and its environment.

1.1.6. Lack of directives and guidelines on the implementation of the National Integrated Protected Areas Systems (NIPAS) Law

Community respondents cite a lack of "political will" and/or "police powers" among barangay officials to enforce laws pertaining to the care of protected areas. These factors are seen to contribute to poor monitoring and management of protected areas in cities.

City officials reiterate the need for delineation and demarcation of protected areas / critical habitats (perceived to be the task of NAMRIA) to further guide them in their zoning and land use plans. The lack of clear and specific directives on the scope, targets, and implementation of the NIPAS law and on the corresponding roles and responsibilities of various sectors of the community (national and local DENR, LGUs, NGAs, etc.) make the management and monitoring of protected areas in the localities difficult.



The consultations involved stakeholders at the subnational level of government, such as the San Juan River System Water Quality Management Area (WQMA) formation.

1.1.7. Lack of monitoring mechanisms and corresponding sanctions over encroachers on easement areas

Jurisdiction over the enforcement of easement provisions as discussed in the NIPAS law is a pressing question and is usually a source of confusion among community members. Barangay respondents claim that encroachers, who are typically private individuals and commercial establishments, have been issued permits by the LGUs. This is perceived to give some form of legitimacy to an otherwise clear violation of the law and deters deputized personnel from enforcing easement regulations.

1.1.8. Lack of support for mangrove forestry and protection

The increasing loss of mangrove cover in Malabon City is a cause for concern among community members. Barangays propose that the MBSDMP include mangrove reforestation and tree planting activities as part of the PAPs. Furthermore,

activities and projects to be implemented within and immediately adjacent to mangrove forests should focus on restoration and rehabilitation.

In Navotas City, community members are seeking clarity on the status of a World Summit/San Miguel Corporation project that can potentially impact on the city's mangrove area. To the communities' knowledge, the DENR has put on hold the issuance of an environmental compliance certificate (ECC) for the project.

The mangrove areas are key biodiversity areas but not considered part of critical habitats and are, therefore, not governed by policies pertinent to critical habitats. As a consequence, mangrove areas are not sufficiently covered by funding for their upkeep and maintenance. It is recommended that mangrove areas in the cities be considered for enhancement activities, along with protected areas and critical habitats.

There is a need for funding and skilled staff devoted to mangrove forests and their upkeep.

1.1.9. Key biodiversity areas are negatively affected by some projects of the national government

LGUs have identified previous reclamation projects that impact negatively on key biodiversity areas. Mangrove planting in Dampalit, Malabon City, has been negatively affected by a slope protection project implemented by the Department of Public Works and Highways (DPWH). The Skyway Infrastructure project currently in full swing adds to the pollution load along the San Juan River. Centuries-old trees have also been cut down to give way to the Skyway project.

Malabon City representatives stress the value of engaging LGUs in the planning and implementation of national government agency projects that have the potential of adversely affecting local priorities, such as the protection and rehabilitation of mangrove areas. Malabon City officials suggest opting for development alternatives that are ecosystem-sensitive, such as the cited DPWH project incorporating the enhancement and protection of mangroves in the slope protection strategy.

1.1.10. The occurrence of land subsidence and its effects on activities in protected areas / KBAs

In Navotas and Malabon, land subsidence is attributed by barangay residents to excessive ground water extraction, or to sea level rise. An Ateneo de Manila Study reveals that land subsidence in Malabon and Navotas is pegged at the rate of 2-3 cm/year.

Aside from rising vulnerabilities and exposure to more hazards, communities are also beset with legal questions: Could titled/owned but now-submerged land be reclassified and declared as “protected area” and be managed as such? What rights and obligations can persons exercise over submerged land?

1.1.11. Differing positions on the issue and impacts of reclamation

There are differing positions regarding the issue of reclamation. Malabon City is looking at reclamation as a solution to land subsidence that might increase

the risk of flooding inland. Reclamation can also result in the loss of mangroves and the ecosystem services they provide.

Navotas City, on the other hand, sees reclamation as a solution to their lack of space. Neighboring cities tend to be more apprehensive because of the increased risks of flooding in their own communities.

1.2. RECOMMENDATIONS

1.2.1. The MBSDMP planning process should be more participatory and harmonized.

City-level respondents propose a more localized and coherent approach to the MBSDMP planning process, i.e. for the CENRO to draft plans and develop flood control designs that incorporate appropriate mangrove protection components, with technical advice from DENR. These plans would then be considered in the overall planning for MBSDMP PAPs.

Local government units propose a more inclusive process of planning and implementing national government initiatives such as the MBSDMP, and closer coordination between LGUs and NGAs.

1.2.2. The MBSDMP should seek to work towards declaring Manila Bay as a protected area to secure the gains of this and concurrent plans of rehabilitation.

1.2.3. Include mangrove forestry and protection in MBSDMP PAPs.

1.2.4. Consider a landscape approach to planning where activities not only along the coastal areas but also in inland and upland are taken into account.

1.2.5. Study the environmental impact of reclamation before it is considered part of any MBSDMP component.

1.2.6. Consider the installation of effective monitoring and evaluation mechanisms across all levels of implementation of the plan.



SOLID WASTE MANAGEMENT

A Waste Warrior from Barangay Potrero, one of several barangays in Malabon that joined the consultations.

2. Solid Waste Management

2.1. ISSUES AND CHALLENGES

2.1.1. No provision in the plan for waste management along the major waterways, river systems, and coastal waters

Respondents are of the impression that the plan does not address the management of waste along waterways, river systems, and coastal waters. WQMA respondents suggest the need for MBSDMP technical consultants to carefully look at whether result areas would actually meet the objectives of this measure.

2.1.2. Plan needs convergence with existing local efforts in solid waste management (SWM)

Respondents also opine that the elements in Measure 2 have not factored in existing efforts in SWM conducted at the local level by communities and cities. They believe that further harmonization of the MBSDMP with existing efforts and plans has to be done through consultation sessions with communities.

2.1.3. “Ningas-cogon” (superficial) implementation of Ecological Solid Waste Management Act (RA 9003) by LGUs

Barangay-level respondents express their dismay at the perceived lack of commitment of their LGUs to implementing SWM. As symptoms of this lack of commitment, they cite the LGU’s inadequacies in the come up of the following:

- city-wide SWM plan
- waste segregation system and proper implementation
- provisions and/or directives for Materials Recovery facilities
- sanitary landfill facilities

They also mention factors that prevent effective garbage management in their communities. For example, households do not adhere to waste segregation and disposal because garbage collectors do not strictly enforce the supposed scheduled collection of biodegradable and non-biodegradable waste anyway. Since collectors collect all types of garbage all of the time, people do not learn the value of segregation and/or the consequence of non-segregation.

Respondents also cite the lack of planning, consultation, and appropriate response from LGUs. Large garbage dump trucks acquired by the LGUs are unable to navigate narrow and congested city streets, and this is often used as an excuse for non-collection of garbage in particular areas.

2.1.4. Lack of monitoring mechanisms among LGUs for strict implementation of proper SWM

City-level respondents, on the other hand, feel ill-equipped to strictly implement RA 9003 because of a perceived need for workable monitoring mechanisms for the following:

- households and communities
- commercial establishments and their compliance with the EIA system of the DENR
- Waste disposal by factories, hotels, and other commercial establishments go largely unmonitored. Respondents propose that proper waste disposal schemes should form part of the requirements for the annual issuance of business permits.
- junkshop operations and their waste disposal schemes (residual waste)
- segregation of garbage and monitoring of residual waste



Stakeholders from the San Juan River System discuss the master plan’s solid waste management provisions.



Houses along the bay in a Navotas City fishing community.

2.1.5. Lack of directives and clear standards for the establishment of proper Materials Recovery Facilities (MRFs) and effective Materials Recovery System

Currently, barangays and LGUs establish MRFs merely for compliance but are not fully aware of how the MRFs are to function for the benefit of the environment and the people. Many MRFs are too small and function as mere holding areas for negligible amounts of recyclable waste, usually plastic water bottles. Some MRFs are located along sidewalks and pose hazards to pedestrians.

WQMA respondents are quick to point out that the establishment of large-scale composting facilities, which is indicated in the PAPs of the MBSDMP, are not feasible in urban areas due to a lack of space.

2.1.6. Lack of space, guidelines, and standards for Sanitary Landfills and Transfer stations

City-level respondents lament the difficulty of finding a proper place to establish sanitary landfills in their cities. Current transfer stations, aside from being overloaded, are inappropriately situated in areas of high traffic, overpopulation, and KBAs. In Navotas, a transfer station stands beside a mangrove area and leakage from the trash compromises the mangroves.

2.1.7. Lack of coordination, policies, and directives on SWM in waterways and the need for a river-system-wide approach

LGU respondents cite weekly coastal clean-ups as a way towards waste management in waterways but they also mention problems such as the lack of coordination with other LGUs along the riverway,

the lack of equipment, and the perennial problem of garbage-choked lines of water pumping stations. WQMA respondents point out the need for a river-system-wide effort to address garbage along waterways.

2.1.8. Need for continuing public awareness campaign on SWM

Respondents mention the need to shift the attitudes of people in the communities towards more responsible disposal of their waste.

2.1.9. Increasing health concerns from lack of proper waste disposal system in communities

The lack of a clear city-wide waste disposal system also becomes a concern among communities because of diseases that could be contracted from unsanitary environs.

2.1.10. Need to model SWM good practices in all levels of governance, beginning with the DENR

City-level and WQMA respondents point out that part of developing and promoting a consciousness of proper SWM involves having people in national government, particularly those from national agencies such as the DENR, to stand as models of good SWM practices. Respondents are quick to note how some local and national DENR offices are not compliant with SWM requirements.

2.1.11. Difficulties in implementing a ban on single-use plastics

Respondents from Valenzuela City point out their dilemma over advocating against the use of plastics when a substantial portion of their city's income comes from the plastic manufacturing industry.



Other LGUs, however, have resolved to minimize single-use plastics, encourage buy-back programs among manufacturers, and support the Extended Stakeholder's Responsibility Bill, which states that all stakeholders i.e., manufacturers, producers and consumers, should be responsible for managing their plastic wastes. The Extended Stakeholder's Responsibility Bill was also discussed during the MANATUTI and SJRS WQMA consultations.

Barangays respondents agree with having a ban on single-use plastics, adding that trash collected are mostly single-use plastics. However, some cities and representatives from the private sector are against the ban and instead suggest advocating for other practices to address the problem of plastic pollution.

WQMA respondents believe in prohibiting local manufacturers from using non-recyclable packaging.

2.1.12. Lack of continuing research and policy advocacy on waste-to-energy (WTE) projects

LGU respondents welcome the idea of WTE projects but are aware that many NGOs oppose this due to adverse environmental impact of such projects. WQMA respondents posed the need to push for more significant research to come up with workable WTE projects in the future.

2.2. GOOD PRACTICES

2.2.1. Sustainable community-based waste management projects

Respondents cite successful barangay-level waste management projects such as the "Tapat Ko, Linis Ko project" (where households are held responsible for keeping their residential perimeters clean), "Balik Plastik" (plastics recovery program), and "Ecobricks" making (plastics recycling) in schools.

2.2.2. Assistance from other stakeholders in the implementation of SWM projects in the community

Respondents also cite the valuable assistance of Mother Earth Foundation, an NGO implementing community-based solid waste management projects.

2.3. RECOMMENDATIONS

2.3.1. MBSDMP should support a more effective implementation of SWM and lobby for specific measures addressing waste management along the water ways, river systems, and tributaries in its target communities and even in inland communities.

2.3.2. Help in the set-up of effective monitoring mechanisms for SWM implementation within the Manila Bay landscape

2.3.3. Support scientific research and development of WTE projects and similar projects for recycling waste materials.

2.3.4. Invest and engage many stakeholders in community level research, education, and implementation of SWM practices



EASING POLLUTION LOAD

3. Easing Pollution Load

3.1. ISSUES AND CHALLENGES

3.1.1. Unrealistic targets for sewerage and sewage treatment plants (STPs) in the MBSDMP

City-level respondents believe that MBSDMP targets of sewerage and STP coverage would be difficult to realize, judging by the PAPs identified in the master plan. A more careful review of the PAPs and the current batting average of LGUs in sewerage and STP management was suggested.

3.1.2. Lack of Liquid Waste Database to aid in planning

City-level respondents cite a lack of data on liquid waste generated in the communities. This data could help the LGU set realistic targets. WQMA respondents mention the unavailability of resources and the lack of access to technologies to gauge the toxicity of their municipal waters.

3.1.3. Lack of monitoring system, guidelines, and powers for local-level officials for both household and commercial wastes

Respondents say there is unclear delineation of responsibilities between CENRO and the Health and Sanitation Office as regards Liquid Waste Monitoring (note: both government agencies were issued specific directives as regards water quality upkeep in Manila Bay by the Supreme Court's Writ of Continuing Mandamus).

Suggestions as to how local septage ordinances may be aligned with monitoring of industries and establishments for compliance were also put forward in WQMA and city-level discussions.

Densely populated urban areas and communities of informal settler families (ISFs) have no provisions for toilets, much less septic tanks. Most ISFs practice open defecation. City-level respondents, on the other hand, experience problems related to connecting sewage and septage of old houses and establishments to the city sewage treatment system. Some decades-old houses could not even locate their septic tanks within their properties.

Respondents also believe that commercial and industrial establishments largely go unmonitored but generate the bulk of liquid waste found along the waterways, such as run-off waste from food processing factories. Small-scale businesses such as eateries and cafeterias, which proliferate in the highly populated urban settlements and along industrial zones, also contribute significantly to liquid pollutants that eventually find their way into the Manila Bay.

Respondent await directives from DENR or the Department of Health for measures to apprehend or penalize these establishments but they say, "*walang ngipin ang batas* (the law has no teeth)."



ACCORD conducts a primer on integrated risk management, the rights-based approach, and the fundamental concepts of disaster risk reduction prior to focus group discussions in Caloocan City in August 2019.

3.1.4. Lack of guidelines on sewage and septage management

City-level and WQMA respondents lack information on the directives of government offices/national agencies for septage management, from standards for the construction of septic tanks in households to sewage.

3.1.5. Lack of funds and suitable space for construction of Sewage Treatment Plants

City-level and WQMA respondents disclose that the municipalities of Caloocan, Malabon, and Navotas (CAMANA) share in the services of one STP while Valenzuela City has already set up its own facility. (Note: the writ of continuing mandamus requires all LGUs around the Manila Bay Zones to set up Sewage Treatment Facilities connected to the main city drainage pathways).

Cities currently sharing STPs have not built their own STPs due to a lack of funding and appropriate sites. Some city respondents cite that embarking on the construction of STPs these days is bound to worsen traffic in the urban centers.

3.1.6. Lack of coordination between LGUs and NGAs

Respondents discuss how national government projects in the pipeline negatively impact on local/stop-gap efforts in drainage and sewage management. In most cases, residual waste from DPWH projects easily clog waterways previously cleaned up by barangays.

3.2. CURRENT PRACTICES AND FUTURE PLANS

3.2.1. Barangays periodically schedule the de-clogging of sewers. Some households are now equipped with grease traps to prevent clogging the sewers.

3.2.2. Water service providers (MWSS / Maynilad) help with the regular emptying of septic tanks for their serviced customers (part of their added services).

3.2.3. Navotas City has a Storm Water Drain Project in the pipeline while also working on an ordinance on septage management. Malabon City is looking into upgrading its roads and repairing canals/drainage in Barangay Panghulo.

3.3. GOOD PRACTICE

An ordinance requiring households to connect to city sewage lines/sewage treatment plants has already been drawn and approved (note: for verification).

3.4. RECOMMENDATIONS

MBSDMP Measure 3 should consider the following in its PAPs:

3.4.1. Assist in the development of Metro Manila-wide drainage master plan, involving MWSS and Maynilad and LWUA.

3.4.2. Help develop a comprehensive and unified plan for utilities – electricity, water, communications, septage – and implement a dig-once policy within the Manila Bay Zone of influence.

3.4.3. Work towards the development of national standards and strengthen the linkage between LWUA and MWSS programs on septage management.

3.4.4. Coordinate with and form cluster LGUs for coordinated efforts on septage and sewage management.

3.4.5. Help develop linkages for NGAs involved in water quality management (e.g., DOH working together with DENR)





ADDRESSING CONCERNS OF INFORMAL SETTLEMENTS IN EASEMENTS

4. Addressing Concerns of Informal Settlements in Easements

4.1. ISSUES AND CHALLENGES

4.1.1. Biased view in the MBSDMP that informal settlers are the main encroachers along easements

Respondents opine that the measure singles out the informal settler sector as a major obstruction along the Manila Bay easement areas even though there are bigger establishments and private entities also encroached along these areas. Planning should therefore be for all obstructions along easements.

4.1.2. Lack of consultation by the government and project planners

Barangay-level respondents raised that they receive no formal communications from both national and local government units as to proposed developments affecting their communities.

“Hinuha nila na pinapadaan ito sa munisipyo at barangay pero hindi na sila kasama sa usapan (There is only the ritual mention of such plans coursed through LGUs and barangay units but there are no authentic discussions).”

4.1.3. Lack of a comprehensive plan and coordinated action for ISFs

Respondents point to government (local and national) inadequacies in coming out with responsive plans to address ISF concerns. Such concerns include the provision of appropriate housing, livelihood opportunities near the relocation sites, access to basic utilities, and social services (hospitals, schools, barangay centers).

Respondents recognize that informal settlers flock to the city centers for work opportunities. During the “bagoong” (anchovy paste) production season, rural folk from as far as Samar (in the Visayas, south of Manila) migrate to Navotas for work, albeit without job security. Most of them earn just enough for their daily subsistence and are forced to stay on, eventually becoming ISFs.

Respondents raise the point that NGAs and LGUs responsible for housing and relocation of ISF families have no coordination of function and responsibilities and fail to address the problem of ISFs. For instance, in the Dampalit area, the National Housing Authority is tasked with building and maintaining the housing settlements; the LGUs are tasked with site location and monitoring; but it is unclear who is tasked with the provision of other services. Maintenance services almost never reach the resettlement areas because of too many backlogs within national agencies.



Informal settlements are typically made of light materials. (Jes Aznar)

4.1.4. Failed relocation into the provinces

Respondents cite experiences of failed relocation efforts due to ineffective strategies such as:

- Lack of coordination between cities involved in the Balik-Probinsya Program (Return to the Provinces) – Respondents point out that efforts at relocating ISFs to neighboring provinces are in vain since host municipalities/cities have insufficient carrying capacities and no programs for the proper integration of incoming ISFs.
- Inappropriate or unrealistic payment schemes – Relocation packages offered to ISFs are sometimes beyond reach. Households are unable to afford Php1,200.00 per month. This is exacerbated by the lack of employment opportunities near resettlement/relocation areas.

4.1.5. Lack of in-city relocation sites

City-level and WQMA respondents believe that the LGU should provide for relocation sites within the city centers where there is better access to jobs and basic services. However, they lament that their cities are already too congested and there is very little space to do in-city relocation.

4.1.6. Current resettlement sites are exposed to various hazards, increasing the vulnerability of ISFs

City-level and WQMA respondents disclose that current resettlement areas tend to be located in hazard-prone places with haphazardly constructed structures.

4.2. CURRENT PRACTICES

4.2.1. Resilient housing structures for relocation – Valenzuela City representatives share that the local government has adopted risk reduction measures and built resilient shelter for their resettlement beneficiaries.

4.2.2. Consultation among all stakeholders in the crafting of a city-level shelter plan – Malabon City respondents disclose that their city shelter planning process involved ISFs, as well as agencies in charge of health, livelihood opportunities, and other social services.

4.3. RECOMMENDATIONS

Respondents suggest that the MBSDMP Measure 4 should be able to:

4.3.1. Conduct relevant and exhaustive consultation sessions with ISFs and how they can be involved in the MBSDMP PAPs. “As one WQMA respondent reiterated in the consultation, “They may be part of the problem but they can also be part of the solution.”

4.3.2. Implement housing and payment schemes that are appropriate to ISFs’ capacity to pay.

4.3.3. Invest in environment-based projects that can maximize the abundant labor force available in ISF communities. Work more relevantly with LGUs and other agencies involved in addressing the general situation of ISFs (note: may also be part of Measure 7 and 8 activities).



IMPLEMENTING DRR PROJECTS AND PROGRAMS

A pumping station in Malabon City
helps mitigate perennial flooding.

5. Implementing DRR Projects and Programs

5.1. ISSUES AND CHALLENGES

5.1.1. The MBSDMP only addresses flooding but there are many other hazards to which the communities in Manila Bay are exposed.

Barangay, city, and WQMA respondents were quick to ask why other hazards were not considered in the MBSDMP plan for disaster risk reduction (DRR). Although many recognize that flooding is an immediate and perennial threat to communities along the Manila Bay areas and waterways, they also believe that other hazards, such as health issues from poor water quality and garbage dumping, need to be taken into account in the masterplan.

5.1.2. The MBSDMP does not focus on nature-based solutions.

Respondents observe that there was only a subtle mention of nature-based mitigation and no actual Climate Change Adaptation (CCA) PAPs.

5.1.3. Difficulty of finding alternative water sources, especially in anticipation of a major Metro Manila-wide earthquake (the so-called “Big One”)

Respondents affirm the measure’s focus on finding alternative sources of water as a stop-gap measure to prevent excessive water extraction and in anticipation of a bigger hazard in the offing.

5.1.4. Increasing community vulnerabilities due to development projects, lack of or improper implementation of policies, and climate change

Barangay-level respondents have observed that changes in the environment – for instance, due to changes in land use, establishment of factories, reclamation projects in Dagat-Dagatan, and increasing population – have instigated or exacerbated flooding in their communities.

They also note the rapid loss of mangrove cover in their area because no laws have been passed to protect these or declare them as part of protected areas.

Climate change is also perceived to have lessened the volume of fish caught by small fisher folk.

There is also the problem of garbage which increases health risks in the communities.

Perennial dig-ups from Maynilad is also perceived to exacerbate flooding and traffic.

5.1.5. Flood protection measures are typically hard infrastructure, not nature-based

Respondents also mention the past administration’s bias for hard infrastructure because of the impression that they are more durable. Instances when existing mangrove cover had been sacrificed to make way for river wall construction were cited. Flood-mitigating infrastructure projects are also acknowledged for their efficacy in abating risks, but respondents point out that their negative impact in the long run have to be considered, as well.

Elevating and reconstructing roads to mitigate flooding have been observed to bring flooding to lower-lying areas. Respondents also mention how the upgrading of roads cause flooding. A respondent from Barangay Tangos recounts how residual materials from a road upgrade project blocked their drainage systems. “Nagpapalala ito sa sitwasyon ng pagbaha at pagkaipon ng basura sa mga mabababang lugar (The reconstruction worsened flooding and garbage build-up in low-lying areas),” he says. Road dikes constructed in Navotas also gave access along the waterways to trucks and heavy equipment and worsened flooding altogether.



A row of houses in Navotas City, as seen from across the river in Malabon City.

Meanwhile, flooding in many areas persist due to garbage clogging the drainage systems. Floodgates and pumping stations have helped alleviate flooding in the communities to some degree, but problems arise when floodgates have to be opened during high tide and occasions of monsoon rain. Garbage from beyond the gate is then flushed back into the communities. Likewise, pumps tend to get clogged up by garbage and, as such, fail to operate properly.

5.1.6. Lack of funding among LGUs for DRR infrastructure projects in their localities

City-level respondents assert that, although they craft master plans for drainage and other mitigating infrastructure, the DPWH still has the mandate and budget for construction and maintenance of infrastructure along roads and highways. Local budgets are only for the establishment of city parks and similar areas.

Some flood control gates in CAMANAVA that are not working properly likewise await maintenance from the DPWH.

5.1.7. Lack of LGU consultation with communities on projects such as road upgrade

5.1.8. LGU DRR budgets prioritize the procurement of equipment over increasing people’s capacities

Respondents observe that most local DRR budgets are invested in response and emergency equipment rather than on developing people’s capacities. Thus, there is an impression that “binibigyan lang ng sobrang materyales o pondo para sa DRR (too much is spent on DRR) without relevant and lasting results.”

Some also view reclamation as a solution to the lack of land for relocation without fully considering its negative impacts. Lack of land particularly plagues the city of Navotas. Reclamation has been identified as a solution to this problem and has resulted in a number of fish ponds being reclaimed for urban resettlement purposes. Neighboring municipalities fear that this would worsen land subsidence in their areas or aggravate flooding. Other respondents point out that past reclamation projects along the Manila Bay have worsened flooding inland.

5.2. GOOD PRACTICES

According to respondents, existing good practices in DRR-CCA include the following:

5.2.1. Coordinated upgrading of roads and drainage

5.2.2. Construction of river wall in accordance with 50-year climate projection



ACCORD staff conduct a transect walk in Malabon City in 2019 as part of the Partners for Resilience Project.

5.2.3. Having appointed evacuation centers along with other social projects

5.2.4. DRR-CCA incorporated in CLUP and CDP

5.2.5. Disaster Preparedness and Adaptive Capacity

5.2.6. EWS at evacuation facilities are in place

5.2.7. Documentation and damage reporting systems are in place

5.2.8. Conduct of infrastructure audit for resilience

5.2.9. Safe relocation for ISFs

5.2.10. Approved ordinance on pre-emptive evacuation

5.3. RECOMMENDATIONS

5.3.1. Coordinate national and local efforts at mapping out and planning for hazards not only among coastal communities but also with inland communities whose activities affect the whole Manila Bay landscape.

5.3.2. The enhancement of EWS and evacuation facilities should be done at the barangay level.

5.3.3. Mechanisms and institutions should be strengthened. Barangay-level mechanisms and structures should be fortified and enhanced, and disaster preparedness efforts should be tailor-fit to local contexts. Work towards more efficient planning and coordination of efforts across all levels of governance, making sure to mainstream DRR-CCA.

5.3.4. Support IECs on DRR-CCA mainstreaming in the activities of the various stakeholders of Manila Bay.

5.3.5. Conduct further studies on reclamation and its impact on the environment.

5.3.6. Adoption of more community-based efforts and “soft-skills,” which are perceived to create more sustainable and lasting DRR.



SUSTAINABLE FISHERIES

Navotas fisherfolk coming ashore from Manila Bay.

6. Sustainable Fisheries

6.1. ISSUES AND CHALLENGES

6.1.1. The MBSDMP needs to take into account the multiple causes of decreasing fish stock.

Participants affirm the observation that fish stock is diminishing even in fish ponds. The plan partly identifies overfishing and illegal fishing as a cause of this but respondents also point out that a large part of it can be attributed to the over-pollution of waters, land conversion, reclamation projects, and the increase in the number of commercial establishments and industries that release toxic waste into the waters.

6.1.2. The MBSDMP does not take into account the impact of commercial fishing vessels in coastal waters.

6.1.3. There is a need for alternative livelihoods for fisherfolk during off season.

6.1.4. There are no consultations conducted among fisher folk for reclamation projects.

In Malabon, for instance, respondents reveal that consultations with fisherfolk were done only after the passage of the amended law.

6.1.5. The fisheries code favors commercial vessels over small fisherfolk.

Barangay respondents experience decreasing volumes of fish catch. They say that their fishing activities are restricted by municipal boundaries and are thus unable to fish beyond these borders. The problem is that very little fish remain within these boundaries.

WQMA respondents disclose that commercial fishing vessels allowed to operate in the more open areas get to catch most of the fish but their fine-meshed nets trap smaller fish that ought to be allowed to grow bigger.

6.1.6. It is unclear who is accountable for abandoned and sunken vessels

Respondents report an increasing number of abandoned and sunken vessels along the shoreline. They cite instances where families begin to occupy these abandoned vessels due to a lack of shelter options. They add to the populations at risk yet respondents do not know which particular agency is responsible for addressing this problem.



The consultation with communities in Navotas City involved representatives from vulnerable sectors.

6.1.7. Negative impact of DRR infrastructure on fisherfolk

Respondents observe that dikes built to mitigate flooding make access to the waters more difficult for small fisherfolk on boats. “Walang madaanan ang bangka ng mga mangingisda (fisherfolk’s boats have no entry point along the dike).” They resort to carrying their boats over the dikes to get to the waters. Respondents also observe that industries and commercial establishments benefit more from using the dikes than the fisherfolk.

6.1.8. Fisherfolk are apprehended beyond fishing boundaries

Several respondents discuss the experiences of fisherfolk being arrested for fishing near commercial vessels or further from their home bases. Some also cite instances where maritime police apprehend them and try to extort money.



ENVIRONMENTALLY SOUND DEVELOPMENT

A view of the bay from atop Malabon City Hall.

7. Environmentally Sound Development

7.1. ISSUES AND CHALLENGES

7.1.1. MBSDMP PAPs are unclear regarding food and water security, and land conversion and reclamation

Barangay respondents cite that the PAPs in this measure tend to be unclear. The PAPs on food security do not clearly link with the provision of basic food needs of the nation but is focused more on investments in high value crops.

The respondents also express uncertainty on the merits and demerits of reclamation. They cite a number of their experiences about the negative impact of reclamation projects. For instance, Malabon respondents share that reclamation in Navotas and Bulacan (Obando) will cause more flooding and the eventual destruction of mangroves in neighboring cities, particularly Malabon.

Barangay respondents from Navotas, although aware of the problems of lack of space and land subsidence in their areas, also expressed apprehension about reclamation projects in the pipeline, which might worsen flooding in other areas in the city.

A perspective to consider on the issue of reclamation, according to a respondent from the City Engineer's office, is to view it as "Parang nagpalit lang tayo ng land-use – mga dating palaisdaan ang i-re-reclaim (Look at it as a mere shift in land use – former fish ponds will be the ones targeted for reclamation)."

Valenzuela City officials underscored their experience of having a reclamation project shelved due to its non-compliance with standards dictated by the Environmental Impact System.

7.1.2. Environmentally sound development planning should consider the characteristics of the entire landscape (including coastal areas and waterways, inland and upland communities).

Barangay, city, and WQMA representatives all believe that the MBSDMP should factor in the impact of activities in inland municipalities/cities on the situation in Manila Bay.

They mention the following factors which, they posit, would worsen the situation in their localities and the state of Manila Bay in general:

- Planned and existing development projects in some municipalities cause problems for neighboring municipalities/cities

As a case in point, respondents cite the Bulacan Aerotropolis Project, a 2,500 hectare commercial airport project in Barangay Taliptip, Bulacan, Bulacan, which shall reclaim land formerly devoted to fisheries and which shall displace traditional mangrove forests.

City officials surmise that, on the one hand, while the project may contribute to the economy of nearby cities – by creating jobs and enhancing infrastructure and road networks – it will also increase their populations, possibly beyond the carrying capacity of the cities, and worsen problems with traffic, garbage, and other issues.

Other on-going projects cited for the same concern include the construction of the Skyway, the Frabelle factory extension, and a proposed factory and mall.

- Lack of inter-city planning and coordination on how LGUs are to handle developments that impact on contiguous cities

Respondents from Malabon express their concern over whether the project is aligned with the CLUPs of the cities in the area. They anticipate that the project will worsen flooding, traffic, and a host of other issues related to short-sighted urban development projects.

7.1.3. Outdated guidelines under P.D. No. 1586 on the issuance of Environmental Compliance Certificates (ECC) and a lack of monitoring system for Environmental Impact Statements (EIS)

City-level respondents brought up the need for LGU officials and concerned agencies to update the Environmental Impact System to improve its implementation. Respondents also mention the lack of a system to monitor ECC compliance. Currently, DENR relies on the self-monitoring of establishments.

7.1.4. There are pending projects and initiatives that may affect Measure 7

- Reclamation projects in the pipeline in Tanza Uno (5 hectares) and Tanza Dos (10 hectares)
- Sustainable tourism projects in the pipeline: jogging lane and park along Pulo River (Valenzuela); linear parks connected to Centennial Park (Navotas); Dampalit
- Innovative solutions to SWM / food wastage in Quezon City



7.2. RECOMMENDATIONS

7.2.1. Review of current Environmental Impact Assessment process, with particular emphasis on:

- Establishment of monitoring mechanisms
- Review of EIA of proposed reclamation projects
- Identify relevant agencies responsible for the implementation and monitoring of PAPs under this measure
- Review and amend P.D. No. 1586 (EIS)

7.2.2. Implement a coordinated rational planning of development projects in cities

Conduct inter-city planning to enable cities to respond more effectively to the environmental impacts of development projects. As one respondent says, “Ikonsidera ang kalikasan na maaapektuhan bago magpatayo ng government infrastructure (Consider the environment that will be affected before constructing government infrastructure).”

7.2.3. Develop monitoring mechanisms to ensure that development projects will have minimal environmental impacts

- Monitoring of zoning regulations for demarcation from NAMRIA
- Resolution of demarcations to facilitate zoning ordinances
- MWSS respondent suggests that the establishment of STPs should be included in every proposed reclamation project. “Kung magsasagawa man ng reclamation, siguruhin na may plano para sa pagpapatayo ng STP (Should reclamation be conducted, ensure that there is a plan for the construction of STP).”

An aerial photograph of Metro Manila, Philippines, showing a dense urban landscape. In the foreground, a river (the Tullahan River) flows through the city, with several buildings and structures built along its banks. The buildings are mostly multi-story, with colorful roofs in shades of green, blue, and red. In the background, a hazy skyline of modern skyscrapers is visible against a grey, overcast sky. The overall scene depicts a highly populated and congested urban environment.

DECONGESTING METRO MANILA

Metro Manila, as seen from across the Tullahan River.

8. Decongesting Metro Manila

8.1. ISSUES AND CHALLENGES

8.1.1. Continuing influx of people into Metro Manila due to the lack of work opportunities in provinces

City-level and WQMA representatives believe that the migration of people into Metro Manila is inevitable. “Nandito ang trabaho, dito kumikita, kaya hindi mapipigilan ang pagdagsa ng tao (Jobs are here, income opportunities are here, so we cannot stop the influx of people),” says one respondent.

However, they believe that if livelihood opportunities can be enriched in the provinces, people would choose to stay in the provinces: “Unahin ang pagbibigay ng kabuhayan sa probinsya para hindi na kailangang lumuwas ng Maynila (Prioritize the provision of livelihoods in provinces so that there will be no need to migrate to Manila).”



A Manila Bay sunset by the breakwater in Navotas City.

8.1.2. Lack of harmonized planning and coordination between LGUs and NGAs in the conduct of resettlement programs

City representatives identify gaps in coordination between the LGUs tasked with finding suitable locations for resettlement programs and the National Housing Authority, which is tasked with the construction of housing facilities. They realize that no agency is explicitly tasked with site development, or the agency responsible for it is unaware of its task, which leaves resettlement sites wanting in basic services, from utilities to schools and places of leisure and recreation, and other vital services for decent community life.

“Hindi alam ng city ang mga plano at progress ng NHA (City officials are aware of the plans and progress of projects under the NHA),” says one respondent.

8.2. RECOMMENDATIONS

8.2.1. Revive the Balik-Probinsiya Program but ensure that host municipalities and provinces are prepared with jobs and livelihood, comprehensive and affordable resettlement plans, and the like.

8.2.2. A more comprehensive review and implementation of Oplan Likas with clear targets and implementation strategies from the NHA

8.2.3. Create incentives for LGUs to craft programs and policies that promote environmentally sound development in their cities/municipalities.

8.2.4. Study and explore strategic in-city relocation options to ease the problem of informal settlements in urban centers.

8.2.5. Empower rural areas with enabling policies that address minimum wage standards, investments in agriculture, and food security.

8.2.6. Consider investing in more capability-building programs for people in the communities to support a more sustainable and environmentally sound development.

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