CITY RESOLUTION NO. 2024-443
Series of 2024

A RESOLUTION ADOPTING THE LOCAL SHELTER PLAN (LSP) FROM 2024 UP TO 2032 OF THE CITY GOVERNMENT OF BACOOR, CAVITE.

Sponsored by:

Hon. Alde Joselito F. Pagulayan

Co-Sponsored by:

Hon. Roberto L. Advincula, Hon. Palm Angel S. Buncio, Hon. Simplicio G. Dominguez, Hon. Catherine S. Evaristo, Hon. Reynaldo M. Fabian, Hon. Randy C. Francisco, Hon. Adrielito G. Gawaran, Hon. Alejandro F. Gutierrez, Hon. Rogelio M. Nolasco, Hon. Reynaldo D. Palabrica, Hon. Michael E. Solis and Hon. Levy M. Tela.

WHEREAS, a letter dated 29 January 2024 from the Office of the City Mayor was received by the Sangguniang Panlungsod, endorsing the City of Bacoor Urban Development and Housing Board- CBUDHB Resolution No. 11, Series of 2023, of the Housing Urban Development and Resettlement Department, relative to the adoption of the Local Shelter Plan (LSP) for 2024 up to 2032.

WHEREAS, the existing Local Shelter Plan (LSP) of Bacoor City is a nine-year plan from the year 2015 up to the year 2023, which was adopted by the Sangguniang Panlungsod through City Resolution No. 2014-121 that aims to address the problems of the informal settler families living in danger areas within the city by providing them with decent and affordable housing.

WHEREAS, there is a pressing need to update the existing Local Shelter Plan (LSP) of the City of Bacoor thus, the Office of the City Mayor, through Executive Order No. 56 series of 2023 created the technical working group for the formulation of the Local Shelter Plan from the year 2024 up to 2032 which covers the following aspects:

a) Overview of the Housing Problem in the City of Bacoor;
b) Analysis of the Shelter Needs and its Affordability Levels;
c) Land Requirement for Housing; and
d) Resource and Strategies.

DISTRICT I

HON. CATHERINE SARINO-EVARISTO
City Councilor

HON. MICHAEL E. SOLIS
City Councilor

HON. ADRIELITO G. GAWARAN
City Councilor

HON. VICTORIO L. GUERRERO, JR.
City Councilor

HON. ALEJANDRO F. GUTIERREZ
City Councilor

HON. LEVY M. TELA
City Councilor

DISTRICT II

HON. ROBERTO L. ADVINCULA
City Councilor

HON. REYNALDO D. PALABRICA
City Councilor / President Pro-Tempore

HON. REYNALDO M. FABIAN
City Councilor

HON. ROGELIO M. NOLASCO
City Councilor

HON. ALDE JOSELITO F. PAGULAYAN
City Councilor

HON. SIMPLICIO G. DOMINGUEZ
City Councilor

HON. RANDY C. FRANCISCO
Liga ng mga Barangay Vice President

HON. PALM ANGEL S. BUNCIO
SK Federation President

Attested by:

ATTY. KHALID A. ATEGA, JR.
Sangguniang Panlungsod Secretary

Certified by:

HON. ROWENA BAUTISTA-MENDIOLA
City Vice Mayor

Approved by:

HON. STRIKE B. REVILLA
City Mayor

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City Vice Mayor

Approved by:

HON. STRIKE B. REVILLA
City Mayor

WHEREAS, the proposed nine-year Local Shelter Plan was crafted to ensure that the provision of basic services and facilities be planned and provided at the most cost-efficient rates and shall set a mechanism to coordinate operationally the thrusts, objectives and activities of other government projects and infrastructures.

NOW THEREFORE, on motion of Hon. Alde Joselito F. Pagulayan and duly seconded by all the members present, **BE IT RESOLVED, AS IT IS HEREBY RESOLVED**, by the 5th Sangguniang Panlungsod to approve and adopt the Local Shelter Plan (LSP) from 2024 up to 2032 of the City Government of Bacoor, Cavite.

RESOLVED FURTHER, to furnish the Office of the City Mayor, the Housing Urban Development and Resettlement Department, the University of Philippines-Office of the National Administrative Register (UP-ONAR), and other government agencies concerned with copies of this resolution.

APPROVED this 12th day of February, 2024 by the 5th Sangguniang Panlungsod at the City of Bacoor, Cavite.

I hereby certify that the foregoing Resolution was approved and that the contents hereof are true and correct.

Certified Correct:

HON. ROWENA BAUTISTA-MENDIOLA
Presiding Officer

Attested by:

ATTY. KHALID A. ATEGA, JR.
Sangguniang Panlungsod Secretary

Approved by:

HON. STRIKE B. REVILLA
City Mayor

Republic of the Philippines
Province of Cavite
City of Bacoor

MESSAGE

It is primarily the duty of the local government unit to plan for shelter and take care of constituents' housing needs, as embodied in the 1991 Local Government Code (Republic Act 7160) and the 1992 Urban Development and Housing Act (RA 7279).

This year, the City of Bacoor is up against a formidable battle; we have 30,974 informal settler families (ISFs) residing in Mandamus areas, affected by government infrastructure projects and occupying private properties, without security of tenure and with potential to be displaced in the future. This data comes from the recently formulated Bacoor City Local Shelter Plan (LSP) for 2024-2032 which was developed in the second quarter of 2023.

Thus, the City committed to address these housing needs and ensure that underprivileged and homeless citizens will have an access to adequate, secure, decent, sustainable and affordable housing. We are truly grateful for the completion of Bacoor's LSP for 2024-2032, as it will serve as the City's housing development strategy as we strive to build sustainable communities.

President Ferdinand R. Marcos Jr.'s Pambansang Pabahay Para sa Pilipino Program (4PH), one of his administration's flagship programs, aims to address the housing needs of more than six million families in the country by 2028. With the support of concerned government agencies and our fellowmen, this will hopefully guarantee the success of affordable housing policies, promote peace and empower communities.

I am also pleased to share that the City of Bacoor has signed a Memorandum of Understanding (MOU) with the Department of Human Settlement and Urban Development (DHSUD) indicating its support to the 4PH program and commitment in terms of land allocation for housing projects for Bacooreños. To date, there are four identified priority areas for the 4PH project in the city: Barangays Alima, Zapote, Salinas and Dulong Bayan. With these projects, the concept of township development approach emerges featuring commercial and residential properties with adequate community facilities like parks, schools, markets, health centers and other establishments, as well as building allocation for government or city services.

The City of Bacoor is constantly seeking out prospective housing sites, defining new strategies and innovations on housing developments geared towards modern township communities. We owe our fellow Bacooreños this commitment and service.

Let us move in one direction, with unwavering commitment and passion, for the City of Bacoor's continued progress, as we Strike as One... dahil Sa Bacoor, At Home Ka Dito! Maraming salamat po. To God be the glory.

MAYOR STRIKE B. REVILLA
City of Bacoor

STR1KE AS

SCAN ME

ACKNOWLEDGEMENT

The Bacoor Local Government extends its heartfelt appreciation to the Department of Human Settlements and Urban Development for their invaluable contribution to this endeavor. Special recognition goes to Mr. Joshua Lorenzo Layog, the Acting Division Chief of DHSUD, whose guidance and counsel provided unwavering support to the researchers throughout the entire planning process.

Furthermore, the LGU of Bacoor expresses gratitude to the entire DHSUD team, including EnP. Jenica Hosingco, EnP. Jennalyn Buising, EnP. Lowieann Hinanay, and Ms. Noriza June Hernandez. Their involvement provided the researchers with a significant opportunity for personal growth, fostering qualities such as perseverance, teamwork, resilience, cooperation, and an unceasing pursuit of knowledge. The City of Bacoor would also like to express its gratitude towards the National Housing Authority (NHA), Social Housing Finance Corporation (SHFC), Commission on Human Rights (CHR), Pag-IBIG Fund (HDMF), Department of Interior and Local Government ((DILG), Presidential Commission for the Urban Poor (PCUP), and all concerned agencies for their endless support and provisions that helped in the completion and success of writing this Plan.

The LGU of Bacoor is grateful for the researchers from the Housing Urban Development Department (HUDRD), E-Governance, City Social Welfare and Development Office (CSWDO), City Planning and Development Office (CPDO), City Engineering Office (CEO), City Assessor's Office (CAO), Office of the Building Official (OBO), City Budget Office (CBO), City Environment & Natural Resources Office (CENRO), City Health Office (CHO), Bacoor Disaster Risk Reduction & Management Office (BDRRMO), and Bacoor Zoning and Land Development Department (BZLDD) for providing extensive research and effort throughout the completion of this Local Shelter Plan.

Finally, we give all thanks and glory to our Almighty God for giving the planners' strength, knowledge, ability and opportunity to undertake this research and planning for the betterment of Bacoor City and its constituents.

DEFINITION OF TERMS

Adaptation - The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Adequate power supply - Defined as having the presence of primary and secondary lines of a legitimate power provider in the area.

Adequate safe and potable water - Water from the local water district; government monitored water systems and licensed commercial water refilling stations.

Adequate sanitary toilet facility - Refers to water-sealed and waterless sanitary toilets with depository (septic tanks) that is exclusively used by a household.

Affordability - The potential amount of income that could be made available for housing investment after excluding basic necessities such as food, clothing, education, medical expenses, transportation, income tax and recurrent costs of housing (electricity, water, garbage disposal).

Backlog - The number of dwelling units needed at the beginning of the planning period due to doubled-up HHs, displaced units and homeless HHs/individuals

Base Year - The year before the first planning period or the last census year

Capacity - Combination of all strengths and resources available within a community, society or organization that can reduce the level of risk, or effects of a disaster. Capacity may include infrastructure and physical means, institutions, societal coping abilities, as well as human knowledge, skills and collective attributes such as social relationships, leadership and management. Capacity may also be described as capability.

Climate Change - A change in climate that can be identified by changes in the mean and/or variability of its properties and that persists for an extended period typically decades or longer, whether due to natural variability or as a result of human activity.

Disaster - A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources. Disasters are often described as a result of the combination of: the exposure to a hazard; the conditions of vulnerability that are present; and insufficient capacity or measures to reduce or cope with the potential negative consequences. Disaster impacts may include loss of life, injury, disease.

Disaster Mitigation - The lessening or limitation of the adverse impacts of hazards and related disasters. Mitigation measures encompass engineering techniques and hazard-resistant construction as well as improved environmental policies and public awareness.

Disaster Risk Reduction - The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposures to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

Displaced units - Units located in:

1) Danger areas such as esteros, railroad tracks, garbage dumps, riverbanks and flood prone areas or households/individuals living in public places such as sidewalks, roads, parks, playgrounds;
2) Areas where government infrastructure projects are to be implemented; and
3) In areas where there is a court order for eviction and demolition.

Doubled-up households - Also known as double occupancy and exists when one dwelling unit is shared by two or more households

Exposure - The degree to which the elements at risk are likely to experience hazard events of different magnitudes.

Hazard - A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihood and services, social and economic disruption, or environmental damage.

Future need - Refers to the number of new dwelling units needed to supply the demand of new household formed due to population increase.

Homeless - The individuals or households living in parks, along sidewalks, and all those without any form of shelter

Household - As defined by NSO is a social unit consisting of a person or a group of people who sleep in the same dwelling unit and have common arrangement for the preparation and consumption of food.

Housing stock - The number of occupied dwelling units at the beginning of the 1st planning period. It can be computed as the number of households during the beginning of the first planning period minus the number of homeless households and/or individuals, and divide the difference by the number of households per dwelling unit.

Local Shelter Plan - A document that analyzes the current local housing situation, including identifying housing issues, addressing current and future housing needs, determining household affordability, and making use of available local resources including land, financing, and basic services. The LGU formulates the shelter plans after analyzing and comparing the needs and resources that are already available. An implementation, monitoring and evaluation plan will complete the local shelter plan.

Mandamus - Encompasses the tributaries leading into the Bay. Agencies and LGUs were instructed to dismantle structures encroaching upon these waters, necessitating the eviction and resettlement of thousands of ISFs living along the 3-meter easement of rivers and esteros.

Number of households needing tenurial upgrading - Composed of on-site and off-site qualified recipients of LGU housing assistance through direct purchase and other housing strategies and programs of the government, non-government organizations and private entities whose documents are still being processed or soon to be processed towards granting them adequate land tenure status

Planning period - Covers the duration that will be needed to realize the housing vision of the LGU expressed through this Local Shelter Plan

Program period - The time frame set by the LGU to meet the target housing needs due to backlog, population growth and upgrading needs.

Relocatees - Refers to the households, especially ISFs, who have been resettled to a permanent dwelling place with the help of LGUs and NGAs

Resilience - The ability of a system, community or society exposed to hazards to resist, absorb, accommodate and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

Shelter needs 1. The new housing units needed (lot, basic services and dwelling unit); and, 2. The upgrading needs (either land tenure, some of basic services, or structural improvement of unit or combinations of these).

Shelter strategy - A plan of action which defines the objectives for the development of shelter conditions; identifies the resources available to meet the objectives and the means by which they can be used most cost-effectively. It also sets out the responsibilities and time frame for implanting the various measures.

Upgrading need – Defined as the need for improving land tenure status, (e.g., provision of minimum security of tenure as in a written contract to possessing a title to the land); access to basic services, (e.g., macadam road to paved road); and house condition, (e.g., from a semi-permanent structure to a permanent one).

Vulnerability - The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. Vulnerability may arise from various physical, social, economic, and environmental factors such as poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise environmental management.

LIST OF ABBREVIATIONS

4PH	-	Pambansang Pabahay Para sa Pilipino Housing Program
4Ps	-	Pantawid Pamilyang Pilipino Program
ACPOPS	-	Abatement, Clearing and Preservation of Public Spaces
BDRRMO	-	Bacoor Disaster Risk Reduction Management Officer
BZLDD	-	Bacoor Zoning and Land Development Department
CAO	-	City Assessor's Office
CBD	-	Central Business District
CBMS	-	Community Based Monitoring System
CBO	-	City Budget Office
CENRO	-	City Environment & Natural Resources Officer
CHO	-	City Health Office
CLUP	-	Comprehensive Land Use Plan
CMP	-	Community Mortgage Program
CPDC	-	City Planning and Development Coordinator
CSWDO	-	City Social Welfare & Development Officer
CTO	-	City Treasurer's Office
DENR	-	Department of Environment & Natural Resources
DHSUD	-	Department of Human Settlements and Urban Development
DPWH	-	Department of Public Works and Highways
DOTr	-	Department of Transportation
Has.	-	Hectares
HDMF	-	Home Development Mutual Fund
HH	-	Households
HOA	-	Homeowner's Association
HUDRD	-	Housing, Urban Development and Resettlement Department
IRA	-	Internal Revenue Allotment
ISFs	-	Informal Settler Families
KSAs	-	Key Shelter Agencies
LGU	-	Local Government Unit
LHB	-	Local Housing Board
LSP	-	Local Shelter Plan
MWSI	-	Maynilad Water Services, Inc.
MERALCO	-	Manila Electric Railroad and Light Company
MGB	-	Mines and Geosciences Bureau
NAPOCOR	-	National Power Corporation
NAMRIA	-	National Mapping and Resource Information Authority
NGO	-	Non-Government Organization
NHA	-	National Housing Authority
NSO	-	National Statistics Office
PAG-ASA	-	Philippine Atmospheric Geophysical & astronomical Services Administration
Pag-IBIG	-	Pagtutulungan sa Kinabukasan: Ikaw, Bangko, Industriya at Gobyerno
PPAs	-	Program / Project / Activities
SHFC	-	Social Housing Finance Corporation
Sqm	-	Square meter
TWG	-	Technical Working Group
UDHA	-	Urban Development & Housing Act (R.A. 7279)

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CHAPTER 1
INTRODUCTION

The 1987 Philippine Constitution mandates 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 underprivileged and homeless citizens. It shall also promote adequate employment opportunities for such citizens.

In addition, Republic Act No. 7160 also known as the Local Government Code of 1991 and Republic Act No. 7279 or the Urban Development and Housing Act of 1992 mandates the Local Government Unit (LGU) to provide a comprehensive and continuing urban development and housing program by establishing a mechanism for its implementation and for other purposes. (RA 7279) implementing programs and projects on low-cost housing and other socialized dwellings for the underprivileged and homeless citizen.

The importance of local shelter planning has proven itself in sustaining and guiding local government units in solving the increasing number of housing demand both from average income earners to the low-income groups. The shelter plan aims not only to address the housing needs by providing security of tenure to the urban poor communities but also to improve their standard of living.

This nine (9) year Local Shelter Plan analyzes the present housing situations faced by the city. It was realized that as the urbanization in the City of Bacoor advances, one of the problems encountered by the city is the population growth and overwhelming housing demand. Numerous Informal Settler Families (ISFs) are affected by various government projects and infrastructures.

The City Government of Bacoor through the mandate of the aforementioned laws crafted this nine (9) year Local Shelter Plan (LSP) to ensure that the provision of basic services and facilities such as health, education, communication, security, recreation, relief and welfare be planned and provided at the most cost-efficient rates and shall set a mechanism to coordinate operationally the thrusts, objectives and activities of other government agencies concerned with providing basic services to housing project.

The City Government of Bacoor is navigating the communal endeavors of various stakeholders to ensure a balanced, sustainable and socially responsive development of this city. Along with continuously pursuing infrastructure development and streamlining public governance, the city government is also enticing private foreign and local investments to spur commerce, trade and industrial growth thus providing employment and livelihood. Various programs were also being implemented to improve the agricultural sector. In addition, the city is undertaking programs and projects towards poverty alleviation, environmental protection with full participation of the sector, vital to the City's sustainable development.

With the foregoing premises, the City Government of Bacoor with the assistance Department of Human Settlement and Urban Development IV-A and in coordination with the NHA, DILG, PCUP, CHR formulated this Local Shelter Plan for the year 2024-

2032 which covers the following aspects: Overview of the Housing Situation in the City of Bacoor; Analysis of the Shelter Needs and its Affordability Levels; Land Requirement for Housing; Resource and Strategies.

A. RATIONALE

The City of Bacoor is currently on the cusp of its urban awakening. More people now venture into income-generating projects. Different establishments and buildings rise in key locations. Small-scale and large-scale businesses prosper. Brought about by these events, a great number of inhabitants have been moving into the city with hopes of seeking better economic opportunities. Consequently, this movement has had an impact on the city and its development.

The migration of these residents only aggravates the current crisis in the city by becoming an addition, together with the natural growth of the population and the already existing informal settlements, to the list of major housing problems the City Government has been facing.

The immediate need for action mainly arose when the City Government saw the risks that shelter insufficiency, land tenure security, and the growing number of informal dwellers entail, as they might put the lives of the Bacooreños in jeopardy. These issues demanded a solution that would provide the residents of Bacoor with safe and sustainable housing units.

Implementation of strategies for rehabilitation, conservation and development of Manila Bay is one of the most important objectives of this Local Shelter Plan. All structures, constructions, and other encroachments established or built in violation of RA 7279, and other applicable laws in Manila Bay is one of the issues and concerns faced by the City. In addition to this concern, dismantling and removal of structures, constructions and other encroachments established or built in violation of the aforementioned law is one of the challenges faced by the City.

One of the strategies adopted by the City of Bacoor is the creation of Executive Order No. 56 series of 2022, a taskforce that will act as the enforcement and maintenance arm of the city in matters pertaining to clearing, abatement, eviction and in restoring and preserving cleared/abated public spaces.

In addition, the Sangguniang Panlungsod of Bacoor passed City Ordinance No. 6-2018, known and referred to as the "City of Bacoor Housing Urban Development and Resettlement Department (HUDRD)". This department integrates all socialized housing-related efforts, projects and activities of various offices and units in the City of Bacoor, most importantly in providing low-cost and socialized housing programs.

The City of Bacoor recognizes that one of the best solutions to the identified housing problems of the city is the establishment of in-city low-cost housing township communities. The formation of such viable, comprehensive and sustained action entails a systematic approach, wherein the escalation of unplanned communities will be controlled, and ultimately all available resources will be redirected and focused on planned economic activities and urban development.

Coincidentally, the Department of Human Settlement and Urban Development (DHSUD), launched its flagship program, the Pambansang Pabahay Para sa Pilipino Housing (4PH) Program, which aims to service the housing needs of the Philippines for over six million families by 2028. The 4PH Program implements inventive approaches to maximize land resource utilization, specifically focusing on vacant, idle, blighted, and underutilized government and privately-owned lands for housing and mixed-use development. It aims to enhance land utilization, particularly in densely populated urban areas and component cities, by prioritizing vertical housing and embracing township development models.

Relative to this, as the City of Bacoor aspires to provide decent shelters to its homeless and underprivileged citizens, the Sangguniang Panlungsod (SP) passed a City Ordinance No. 2023-294 declaring various properties identified by the Housing Urban Development and Resettlement Department (HUDRD) as priority area for socialized housing projects under the Pambansang Pabahay Para sa Pilipino Housing (4PH) Program. The inclusion of these properties in the 4PH Program is consistent with the duty of the City Government of Bacoor under Republic Act No. 10160 known as the Charter of the City of Bacoor which is to ensure provision of basic services including those that promote the health and safety of its residents.

In addition, the City Government of Bacoor have entered a Memorandum of Understanding (MOU) with DHSUD towards the implementation of the 4PH Program which aims to pool together technical, financial and manpower resources to develop a Low-cost township housing projects for the benefit of the residents of the City of Bacoor, especially the Informal Settler Families (ISFs), both for residential and commercial purposes.

B. OVERVIEW

The Local Shelter Plan is an essential document to assess present and future local housing needs of the city. It provides development strategies and identifies feasible solutions to address prolonged housing issues in the City of Bacoor aggravated by climate change related hazards.

Everyone has the right to decent housing and access to basic amenities. Housing projects are not just building a structure but a package of a sustainable community. LGUs are mandated to provide basic services and facilities to its constituents. Section 17 of the Local Government Code defines the scope of these services to include: (1) extension and on-site research services and facilities related to agriculture and fishery activities; (2) implementation of community-based forestry projects; (3) health services; (4) social welfare services; (5) information services; (6) solid waste disposal system; (7) Infrastructure facilities; (8) Public markets, slaughterhouses and other city enterprises; (8) Public cemetery; (9) Tourism facilities; and (10) sites for police and fire stations and substations and city jail.

The City of Bacoor also takes into account the suitability of identified areas for housing development. This plan, likewise, ensures that housing development will not increase disaster risk by eliminating hazard prone areas in the list resource inventory.

C. VISION

City of Bacoor: A model first-class city, home of resilient, empowered, environment-friendly citizens, proud of their rich history and culture ably led by people-centered public servants united and guided by the rule of law, love of country, and of GOD.

D. MISSION

"To institute good governance, promote culture, trade, and investment in the city through modern technology towards a safe and sound environment".

E. GOAL AND SHELTER PLANNING OBJECTIVES

For the city to achieve the city vision and for the purposes of the Local Shelter Plan, the Following goals were identified:

GOAL 1: INFRASTRUCTURE

1. To acquire/access 35.49 hectares of land for housing and resettlement beginning 2024 until 2029;
2. To craft a master-planned community for a residential neighborhood with adequate community amenities and government service facilities;
3. To have zero (0) backlogs by 2032 and create communities that are socially responsible with livable, decent, affordable, disaster- and climate change-resistant and sustainable settlements and access to urban amenities and opportunity;
4. To relocate the 4,027 identified ISFs residing in danger zones;
5. To relocate the 705 ISFs residing in areas affected by government projects;
6. To assist the 26 identified households with court order for demolition/eviction;
7. To relocate 319 ISFs residing in areas affected by climate change and other situations such as fire incident;
8. To assist the 2,567 ISFs occupying land whose real property owners are willing to sell their property to the occupants;
9. To relocate urban poor communities not classified under the first five (5) categories but is in danger of being displaced;
10. To provide sufficient access to target population's dwellings by the end of 2032
11. To ensure that all target households will have the necessary access to basic services by the end of the planning period (2032);
12. To generate adequate employment/ livelihood opportunities to the displaced population and institute good governance, promote culture, trade, and investment in the city through modern technology towards a safe and sound environment;
13. To reduce Bacoor's susceptibility to Risks and Disasters.

GOAL 2: INSTITUTIONAL

1. To act on the devolved functions of Housing & Urban Development related functions to the LGUs pursuant to RA 7160 of the Local Government Code of 1991 and RA 7279 or the Urban Development and Housing Act (UDHA);
2. To establish an effective local enforcement, inspection, monitoring and evaluation of the implementation of the Bacoor Local Shelter Plan 2024-2032 and other related programs, projects and activities (PPAs).

F. TARGET POPULATION

The primary target group of Bacoor City's Shelter Plan 2024-2032 housing program are the urban poor households that are presently situated in informal settlements on idle private and public lots, waterways, road easements. These include households in slum conditions along danger zones such as, but not limited to, riverbanks, creeks, shorelines, road-right-of-way; rent-free occupants within private lands with threats of being demolished or evicted by virtue of a court order or government projects, and those occupying parks and open spaces and government properties.

Table 1 shows a total of 25,991 displaced households. Among these, there are is an estimated 20,914 Informal Settler Families (ISFs) in Bacoor City, primarily identified through their membership in Urban Poor Associations. Additionally, 4,027 ISFs are situated in areas identified as danger zones, 705 ISFs are affected by various government projects such as revetment, LRTA Extension, diversion roads, and others and 319 households have been endorsed by the CSWDO due to being victims of fire accidents and another 26 families involved in Civil Cases. Among this population intended for relocation, 7,096 households are part of the **Pantawid Pamilyang Pilipino Program (4Ps)**, and another 2,800 households are earmarked by the CSWDO for validation and registration.

Table 1 Summary of Displaced Population for Relocation

CAUSE OF DISPLACEMENT	# OF HOUSEHOLDS
Danger/Hazard Areas	4,027
Families/Households to be Affected by Infrastructure Projects	705
Families/Households that will be Displaced/Affected Due to Climate Change and Other Situation	319
other displaced households not classified but are in danger of being displaced	20,914
Families/Households with Court Order for Demolition/Eviction	26
TOTAL DISPLACED	**25,991**

On the contrary, **Table 2** shows the count of households seeking assistance from the Local Government to secure their property rights using a viable mortgage financing program provided by National Agencies. This initiative is aimed at aiding legally recognized groups of disadvantaged citizens in acquiring and developing a plot of land through the concept of community ownership.

Table 2 Summary of Households Requiring Assistance in Securing Their Tenure

CAUSE OF DISPLACEMENT	# OF HOUSEHOLDS
Families/Households Occupying a Land Whose Owners are Willing to Sell their Property to the Occupants	2,567

G. PLANNING AND FORMULATION PROCESS

KEY PLAYERS: THEIR ROLES & RESPONSIBILITIES

1. Local Chief Executive and Sangguniang Panlungsod

The activities in the formulation of the LSP is supported by the local leaders and policy makers of the city. Funds and other necessary resources were allocated

to complete the LSP process, specifically, primary data collection. The Sangguniang Panlungsod shall be responsible for the review and approval of the LSP upon submission by the LSP Technical Working Group (TWG). The LSP – TWG was created through The City of Bacoor's Executive Order No. 56, s. 2023 designating the following as members:

- Chairman, SP Committee on Housing Land Use and Utilization
- Head, Housing Urban Development and Resettlement Department
- Head, City Planning and Development Office
- Head, City Engineering Office
- Head, City Assessor's Office
- Head, City Social Welfare and Development Office
- Head, City Budget Office
- Head, City Legal Office
- Head, City Disaster Risk Reduction and Management Office
- Head, City Environment and Natural Resources Office
- Head, Zoning and Land Development Office
- Head, Office of the Building Official

2. Department Heads and LSP Technical Working Group

The City departments as members of the technical working group (TWG), largely participate in the collection and validation of data, situational analysis, and decision-making including formulation of strategies. The following shall also be responsible for plan implementation and crafting monitoring and evaluation schemes.

- Housing Urban Development and Resettlement Department (HUDRD)
- City Planning and Development Office (CPDO)
- City Engineering Office (CEO)
- City Assessor's Office (CAO)
- City Social Welfare and Development Office (CSWDO)
- Zoning and Land Development Office (ZLDO)
- Office of the Building Official (OBO)
- City Environment and Natural Resources Office (CENRO)
- Bacoor Disaster Risk Reduction and Management Office (BDRRMO)
- City Health Office (CHO)
- City Budget Office (CBO)

3. DHSUD and Key Shelter Agencies

DHSUD Region IV-A CALABARZON rendered technical assistance through the conduct of workshops and writeshop for the updating and formulation of LSP. Together with other Key Shelter Agencies (KSAs), DHSUD may assist in the plan implementation through financial assistance for housing development such as loans and grants. Each has unique housing programs and schemes that may be accessed for the implementation of this plan. Partner KSA's are as follows:

- National Housing Authority
- Home Development Mutual Fund, Inc. or PAGIBIG Fund
- Social Housing Finance Corporation
- National Home Mortgage Finance Corporation

4. **Data Collection Team**
   The primary data gathering and survey were executed by HUDRD Field Operations Team, CSWDO, CPDC, Barangay Leaders and Committees and the Community-based Monitoring System (CBMS) Focal Persons.

THE PROCESS

The shelter plan formulation process involves six (6) main activities hereunder enumerated and described:

1. **Data Gathering.** It involves data collection through survey, mapping, tagging, house listing, profiling and validation is mainly facilitated by the HUDRD Field Operations Team.

2. **Situational analysis.** It is a process of looking into the current housing situation, e.g., housing need; housing-related problems of the locality; and the initial assessment of the LGU's capability to implement housing projects. In this phase, an assessment of affordability and resources is done. The information and outputs of this particular phase will be the basis for formulating the main strategies.

3. **Goal and Objectives** Formulation. At this stage, alignment of the housing development perspective with the CLUP and CDP was made. Vision from CLUP was lifted as a general development guide including the goals. The objectives and targets specific for shelter development were crafted considering the vision and related goals of the LGU's mother plan.

4. **Generating Shelter Strategies.** A comprehensive assessment of housing needs, affordability and local resources provides a good basis for the local planners and decision makers on how to respond to local housing situations. The decision was translated into shelter strategies. Demand-affordability-resource matching analysis backed-up the crafting of shelter strategies.

5. **Developing the Implementation Plan.** This operationalizes the strategies identified based on the situational analysis.

6. **Monitoring and Evaluation.** This stage facilitates the identification of milestones, the determination of the timeframe and manner by which actions should be monitored and the desired results or outcomes to be measured.

PLANNING PERIOD

The Plan will be implemented during a nine-year (9) period, from 2024 to 2032. This is divided into three (3) Planning Periods, which are as follows:

1. First Planning Period (PP1) covering 2024 to 2026;
2. Second Planning Period (PP2) covering 2027 to 2029; and,
3. Third Planning Period (PP3) covering 2030 to 2032

Table 3. Timeframe of the Shelter Plan

ACTIVITIES	Base Year (2023)				Planning Period 1			Planning Period 2			Planning Period 3		
	Q1	Q2	Q3	Q4	2024	2025	2026	2027	2028	2029	2030	2031	2032
Data Gathering													
Updating of LSP													
Finalization of LSP													
Approval of Sangguniang Panlungsod													
Implementation of the Approved LSP													
Monitoring and Evaluation													

CHAPTER 2
BACOOR OVERVIEW

A. HISTORICAL BACKGROUND

Bacoor was once merged with the bustling town called Palanag, or Paranaque as it is called today. Eventually, on September 28, 1671, Bacoor was incorporated and was officially separated to become a town that wedges the bigger neighboring towns of Paranaque, Cavite el Viejo (now Kawit), and Silang. Its township was officially recognized two years after the influx of the first settlers from Paranaque.

From its ancient name Bacoor, which is derived from the Tagalog word "bakod", which means fence, Bacoor is suggestive of its role as a suburb of Paranaque. It constitutes the boundary between the mother town and Cavite el Viejo. In early Spanish times, Bacoor was thickly covered with bamboo groves that ran from Sitio Zapote to SitioTalaba, which many speculate is another reason behind Bacoor's name; bakoor is actually a subspecies of bamboo.

Bacoor became the setting of numerous historical encounters in Philippine history. The town became the site of Aguinaldo's first defeat on September 2, 1896, during the Revolution against Spain. Fortunately, due to a miscalculation by the Spanish General Aguirre whose troops rested one day in Bacoor Plaza while awaiting reinforcements from Manila, Aguinaldo was able to prepare the defense of Imus that night. A battle ensued at a bridge near the Recollect Estate House, which also became the former Philippine Constabulary Headquarters. Aguinaldo's spectacular victory in this historic battle of Imus on September 3, 1896, started the Aguinaldo legend in his military career.

Three fierce battles that took place in Bacoor also provided popular historical mention of the town. The "Battle(s) of Zapote Bridge" in 1897 and 1899 became encounters of revolting Filipinos against the Spanish and Americans, respectively. One battle took place on February 17, 1897, when the Filipino Revolutionary Army held back the advance of the Spanish invaders. It was in this battle that General Edilberto Evangelista, who was a European-educated Filipino engineer, fought and heroically died from an enemy sniper while repulsing the advance of Spanish forces. In May 1898, the second Philippine Revolution started. The Spanish volunteers detained in the Roman Catholic Church and Convent of Bacoor, as well as the Spanish soldiers detained in Mabolo-Banalo Bridge, were attacked by the revolutionists headed by Gen. Mariano Moriel. The attack on Mabalo-Banalo Bridge was headed by Lt. Col. Gil Ignacio who was aided by Capt. Ignacio "Gandong" Francisco who attacked the eastern side of the bridge. After about twenty-four hours of fighting, the Spanish soldiers and volunteers surrendered, but in the ensuing engagement, Kapitan Gandong lost his life. The height of the Filipino-American War in 1899 was the second encounter by Filipino revolutionary forces in the Zapote Bridge.

"Gargano" was the revolutionary name of Bacoor in line with the victory of the Magdalo Government based in Imus to abolish every vestige of the country's colonial past. At that time, Gil Ignacio was the Katipunan Leader in Bacoor. Fierce battles ensued, and

on March 26, one day after the fall of the Magdalo capital of Imus, Bacoor was recaptured by the Spaniards during a counter-offensive launched by the Spanish General Jose Achambre.

The town is also noted in history as the first capital of the Revolutionary Government under General Emilio Aguinaldo. On July 4, 1898, General Aguinaldo relocated his headquarters from Maximo Innocencio's mansion in today's Cavite City to the home of Juan Cuenca and Candida Chavez in Bacoor. This move was a result of the general's suspicion of imminent colonialization by the Admiral Expeditionary Force of the Americans after their failure to commit to the recognition of Philippine Independence already proclaimed on June 12, 1898, in Kawit, Cavite.

Bacoor as Aguinaldo's seat of government did not remain long. On September 9, the revolutionary capital was again transferred beyond cannon range of Admiral Dewey's American Naval Squadron moored in Manila Bay. Three weeks after the perfidious capture of Manila by the American forces in connivance with Spanish Governor and Captain General Jaudines, General Aguinaldo's new capital then became Malolos, Bulacan.

Like other towns in Cavite Province, Bacoor also produced great names, among whom are the late Governor Pedro Espiritu and the late Julian Cruz Balmaceda, noted Filipino writer and Director of the Institute of National Language. The original families and settlers had the following last names: Cuenca, Payao, Farolan, Pagtakhan, de Ocampo, Gregorio, Guevarra, and Garcia. Belonging to the principalia class as early as the first decades of the nineteenth century were the Cuencas, the Espiritus, the Cuevases, the Mirandas, the Pagtakhans, and the Narvaezes. Most of them were Chinese mestizos. Felix Cuenca, the first Municipal President of Bacoor, was a direct descendant of one of the original settlers.

The historic town of Bacoor was converted into a city through the signing by President Benigno Aquino of Republic Act 10160 (also known as the "Charter of the City of Bacoor") on 25 July 2011. On 23 June 2012, the said law was overwhelmingly ratified by 36,226 of the town's 40,080 registered voters. Bacoor's conversion into a component city of Cavite Province bodes well for its sustained development. The City Government of Bacoor wasted no time in upgrading its institutional capabilities to respond to the City's rapidly increasing population. The relocation of the City's government center from the historic town plaza in Barangay Tabing Dagat to the newly constructed City of Bacoor Government Center along the newly constructed Bacoor Boulevard in Barangay Bayanan would decongest the "Old Bacoor" which is prone to flooding and traffic congestion and spur new development in the southern portion of the young City.

The following are the leaders of the town in its early years:

Andres Javier	Bonifacio Antonio
Florentino Cuevas	Epifanio Gomez
Domingo dela Cuenca	Benigno de Guia
Francisco Magtibay	Benito Marquez
Adriano de Cuenca	Justo Narvaez
Gregorio de Guia	- 1903; 1913 to 1915

Mariano Noriel	-1906
Luis Landas	-1906 to 1908; 1910 to 1912
Hilarion de Guzman	-1916 to 1918
Simon Reyes	-1919 to 1921
Marcela Cuenca	-1922 to 1924
Francisco Gaudier	-1925 to 1927
Marcelo Miranda	-1928 to 1930
Eduardo Ocampo	-1931 to 1934
Francisco Pagtakhan	-1934 to 1940
Marcelo Miranda	-1942 to 1945
Rosalino Francisco	
Macario Gawaran	inter-change -1944
Generoso Sarino	
Generoso Sarino	-1946 to 1947
Arsenio Castillo	-1948 to 1954
Benigno Guinto	-1952
Benigno Guinto	-1954 to 1960
Pablo Sarino	-1960 to 1963; 1964 to 1967
Benigno Guinto	-1968

From 1980 to date, the following are the Mayors and Vice-Mayors of the City of Bacoor:

Mayor	**Vice-Mayor**	**Term**
Pablo C. Sarino	Benedicto Antonio	1980-1986
Benjamin Enriquez	Leopoldo Tolentino	1986
Evelyn S. Maniquis	Marion Ignacio	1987
Angelito Miranda	Buencamino Cruz	1987
Buencamino M. Cruz	Villamor G. Espiritu	1988-1991
Victor Miranda	Cecilia R. Buhain	1991-1994
Victor Miranda	Jose M. Francisco	1994-1997
Jose M. Francisco	Gaudencio Gawaran	1997-1998
Jessie B. Castillo	Edwin Malvar	1998-2007
Strike B. Revilla	Rosette Miranda-Fernando	2007-2013
Strike B. Revilla	Catherine Sarino-Evaristo	2013-2016
Lani Mercado Revilla	Catherine Sarino-Evaristo	2016-2022
Strike B. Revilla	Rowena B. Mendiola	2022-present

B. PHYSICAL AND NATURAL ENVIRONMENT

GEOGRAPHIC LOCATION OF THE CITY

Bacoor is in the northeastern most part of the province of Cavite, approximately 17.5 kilometers southwest of Manila (from kilometer zero) and approximately 27 kilometers northeast of the provincial capital, Trece Martires City.

Bacoor's northern section is a coast fronting Bacoor Bay and is bounded on the east and west by the Zapote and Imus rivers, respectively. These rivers have consistently supplied salt water to Bacoor's salt farms, which also serve as fishponds during the

wet season. Bacoor is bounded to the west by the cities of Imus and Kawit, to the south by the city of Dasmarinas, to the north by Bacoor Bay, and to the east by the cities of Las Pinas and Muntinlupa.

The Sangguniang Panlungsod of the City of Bacoor passed an ordinance merging various barangays of the city to ensure their economic growth and development. From seventy-three (73) barangays, it was narrowed down and subdivided into forty-seven (47) barangays which are grouped into two (2) local electoral districts as shown in the map.

CITY LAND AND POLITICAL SUBDIVISIONS

Bacoor is the 14th largest city in Cavite Province, with a total size of roughly 4,687.76 hectares (or 46.87 square kilometers) according to ground survey (H.O. Noveloso Surveying). Bacoor's original land area, however, is 52.4 square kilometers and is surrounded by the Imus and Zapote rivers.

GEOLOGY AND TOPOGRAPHY

Bacoor City's topography is characterized by a flat to a slightly-rolling terrain. Its land area is nearly entirely covered by a slope grade of zero to three percent (0 to 3%). According to the Bureau of Soils and Water Management (BSWM), the soil types

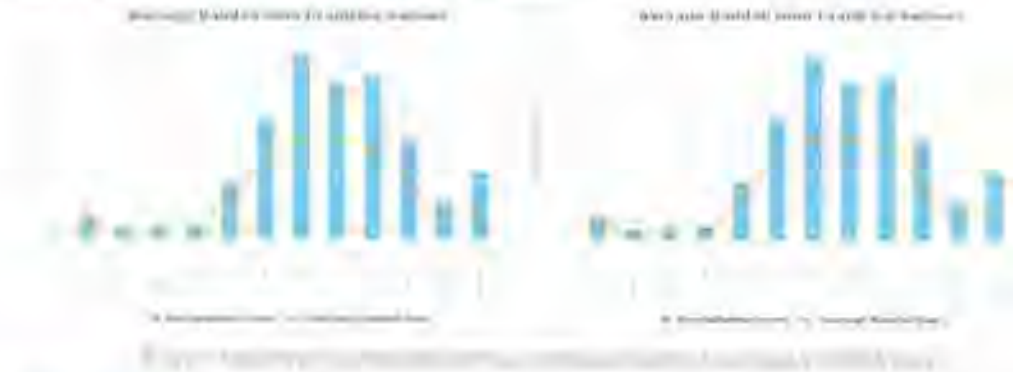
present in Bacoor City differ only in surface soil texture. Bacoor City contains a variety of soil types, including Hydrosol, Guadalupe Clay, Guadalupe Clay Adobe, Guadalupe Silt Loam, Obando Sand, and Carmona Clay Loam.

The popular Cavite Hydrosol and Obando Sand, which are native to Bacoor, are submerged marsh soils that are easily converted into fishponds and salt beds. While the Guadalupe Clay Adobe soil type in Bacoor is best suited for creating multi-level, high-rise constructions. Structures erected on these soils can have up to five-storeys and more if they are the dominating stratum. Obando Sand and Carmona Clay Loam are two other Bacoor soil types that are suitable for a multi-level development. The remaining varieties are suited for rice production.

CLIMATE

Bacoor City's climate is monsoonal and has two (2) pronounced seasons namely, the dry (from January to May) and wet seasons. The annual average total rainfall is 1,864.1 millimeters. The weather averages for the month of August, temperature averages around 30°c and at night it feels like 26°c. In August, Bacoor gets on an average 306.26mm of rain and approximately 25 rainy days in the month. Humidity is close to 80%. The average number of wet days per year is 139.

Bacoor City's yearly temperature is reported to be 31 degrees Celsius. May is the warmest month, with monthly average temperatures of 33°C. In contrast, the coldest month is January, with a monthly average temperature of 24 °C.



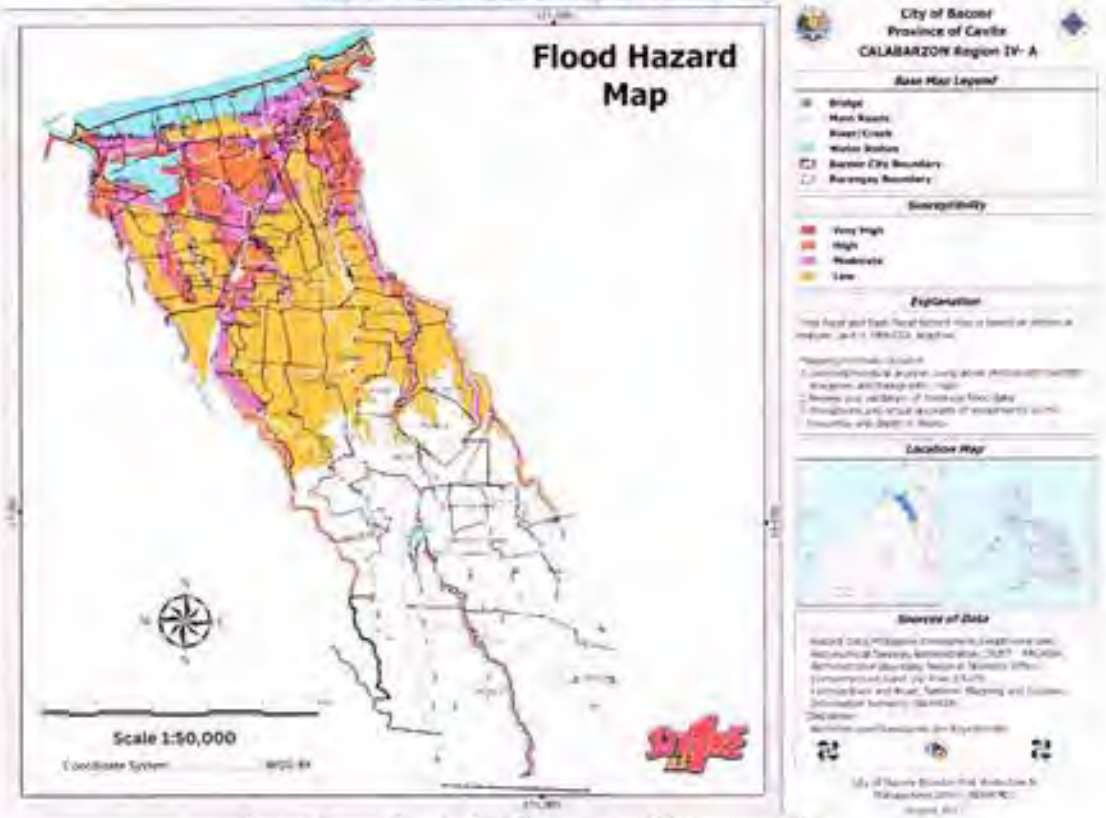
HAZARDS

Considerations concerning the suitability of permanent relocation areas for human occupancy and safety against environmental calamities must be taken into account in addition to the necessary integration of risk reduction and adaptation strategies. This is particularly true now that the effects of climate change are increasingly apparent.

In this regard, the vulnerability of different places in Bacoor City to geological hazards has been researched, and the results have been utilized and applied in scouting for probable resettlement areas.

FLOOD HAZARD:

Map 7. Flood Hazard Map of Bacoor City



Source: Bacoor City Disaster Risk Reduction and Management Office

Table 4. Bacoor Flood Hazard Assessment (see Map 2 and Table 10)

LOCATION	REMARKS
Maliksi 1, Salinas 1 Dulong Bayan, Habay 1, Habay 2, P.F. Espiritu 3, P.F. Espiritu 1, P.F. Espiritu 5 Ligas 2,P.F. Espiritu 6 San Nicolas 1, San Nicolas 2 San Nicolas 3, Bayanan, Mambog 1, Mambog 3 Mambog 4, Molino 1 Molino 6, Molino 5 Molino 2, Molino 7 Molino 3, Zapote 3 Talaba 2, Queen's Row West Molino 4, Sinbanali Poblacion, Kaingen DIgman Mabolo, Salinas 2 Maliksi 2,Zapote 1 Zapote 2, Talaba 1 Talaba 3, Aniban 1 Aniban 2, Mambog 2 Niog, Ligas 1 Real, P.F. Espiritu 2 P.F. Espiritu 4	1. Raise the house 1-2M above the road 2. Preparing facilities for dealing with floods 3. Non-structural measures to reduce damage by possible relocation and removing of property out of risk areas, these includes elevated structures, permanent relocation, property buyouts, zoning, building codes. 4. Flood mitigation dams 5. Planting vegetation to retain excess water 6. Hold community training events to learn basis disaster response skills 7. Develop an evacuation plan 8. Installation of Rip Rap 9. Provision of housing for the affected families in the revetment projects. 10. Establishment of early warning systems & formulation of flood contingency plans for Zapote River related hazard 11. Available assistance from NGA (UPAO, NHA, HLURB, LIAC, DPWH) in the provision of housing for low-income families

Source: DOST-PAG-ASA, CLUP, NAMRIA

STORM SURGE HAZARD:

Map 3. Storm Surge Hazard Map of Bacoor City

Source: Bacoor Disaster Risk Reduction and Management Office

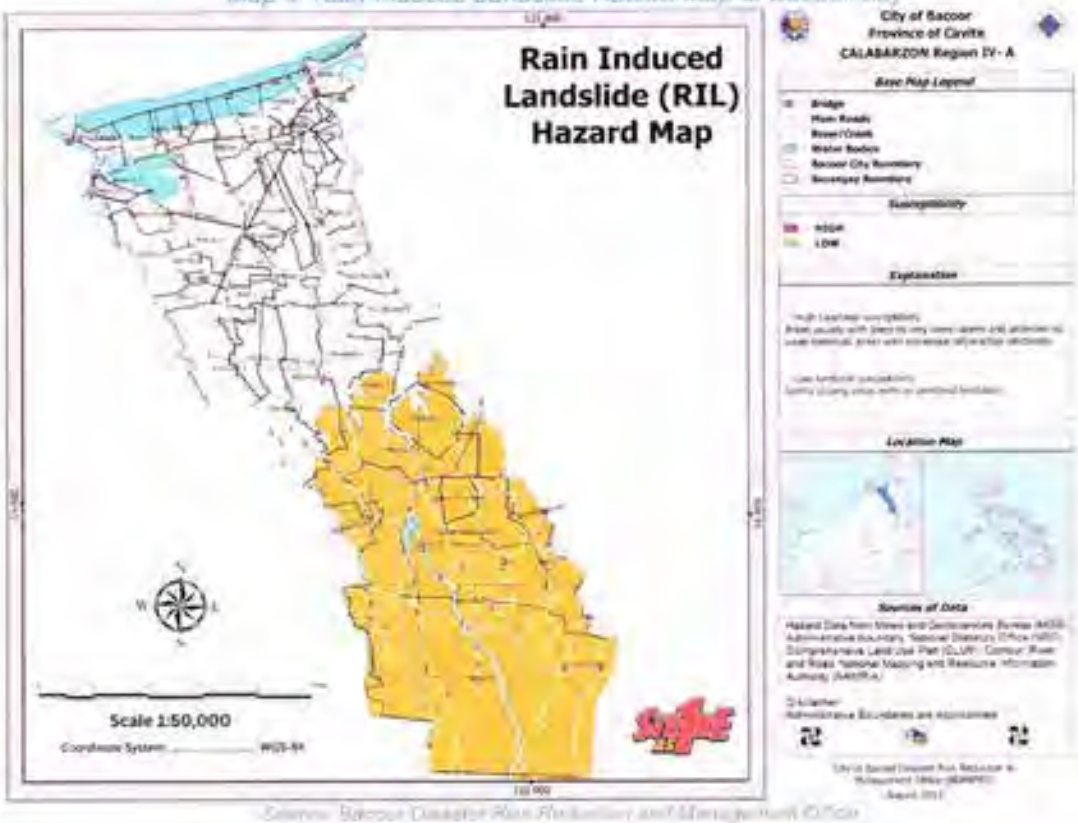
Table 5. Bacoor Storm Surge Hazard Assessment (see Map 3 and Table 11)

LOCATION	REMARKS
Maliksi 1, Zapote 3, Talaba 2, Sinbanali, Poblacion, Kaingen Digman, Maliksi 2	1. Discourage development in undeveloped, hazard prone areas 2. Enforcement of building elevation requirement 3. Enhance resiliency to natural disasters along the coastal areas 4. Combination of nature-based approaches to coastal risk reduction using or expanding dunes, mangroves, reefs and seagrass to mitigate flooding and erosion and hard structures to maximize storm surge risk reduction 12. Seawalls and other shore- parallel structures (such as revetments and bulkheads) are built to reduce coastal risk to infrastructure where the natural beaches and dunes have been eliminated.

Source: [illegible] PAG-ASA, GLUP, NAMRIA

RAIN-INDUCED LANDSLIDE HAZARD:

Map 4. Rain-Induced Landslide Hazard Map of Bacoor City



Source: Bacoor Disaster Risk Reduction and Management Office

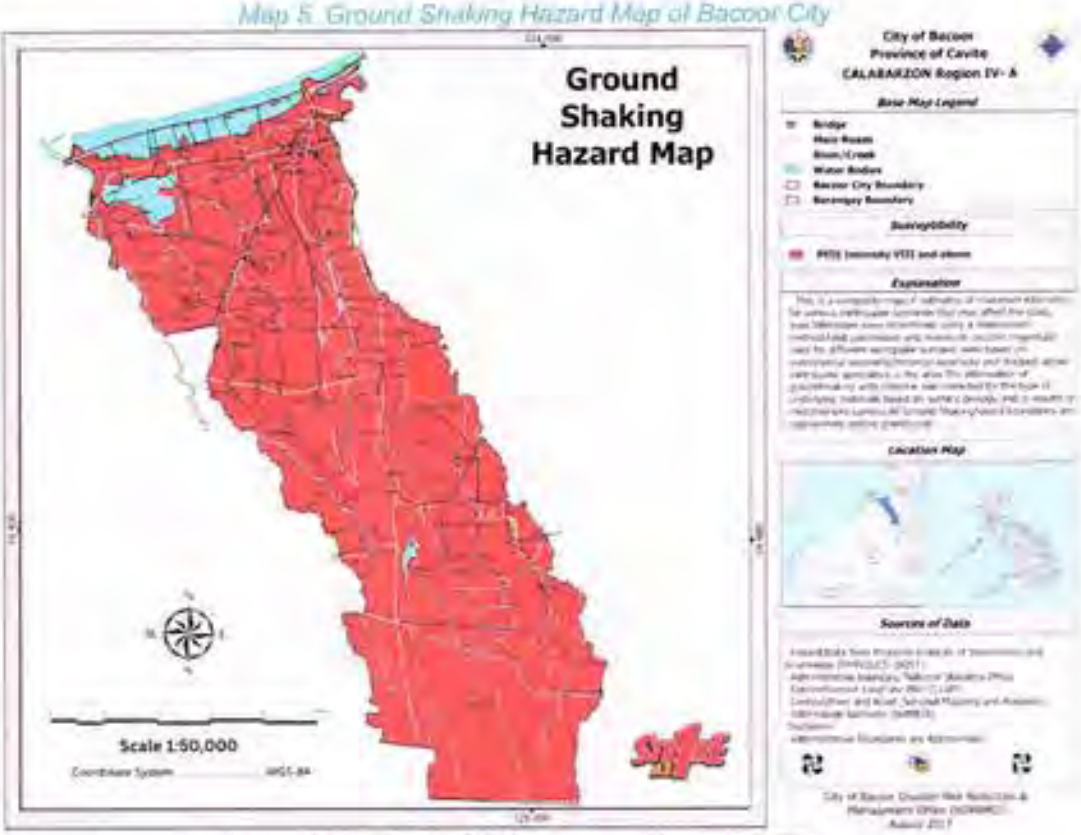
Table 6. Bacoor Rain-Induced Landslide Hazard Assessment (see Map 4 and Table 13)

LOCATION	REMARKS
San Nicolas 3 Bayanan, Mambog 3 Mambog 4, Molino 1 Molino 6, Molino 5 Molino 2, Molino 7 Molino 7, Molino 3 Queen's Row West Queens's Row Central Queen's Row East Molino 4	1. Installing structures such as piles and retaining walls 2. Rerouting surface and underwater drainage 3. Maintain as much as vegetation as possible on the slope to help retain the soil 4. Do not put yard waste on the slope 5. Rainfall infiltration into a partially saturated slope of infinite extent can lead to either a decrease or complete elimination 6. Do not build near steep slopes, near drainage ways 7. Get a ground assessment of property before building the structures

Source: MGB, NSO, CLUP, NAMRIA

GROUND SHAKING HAZARD:

Map 5. Ground Shaking Hazard Map of Bacoor City



Source: Bacoor Disaster Risk Reduction and Management Office

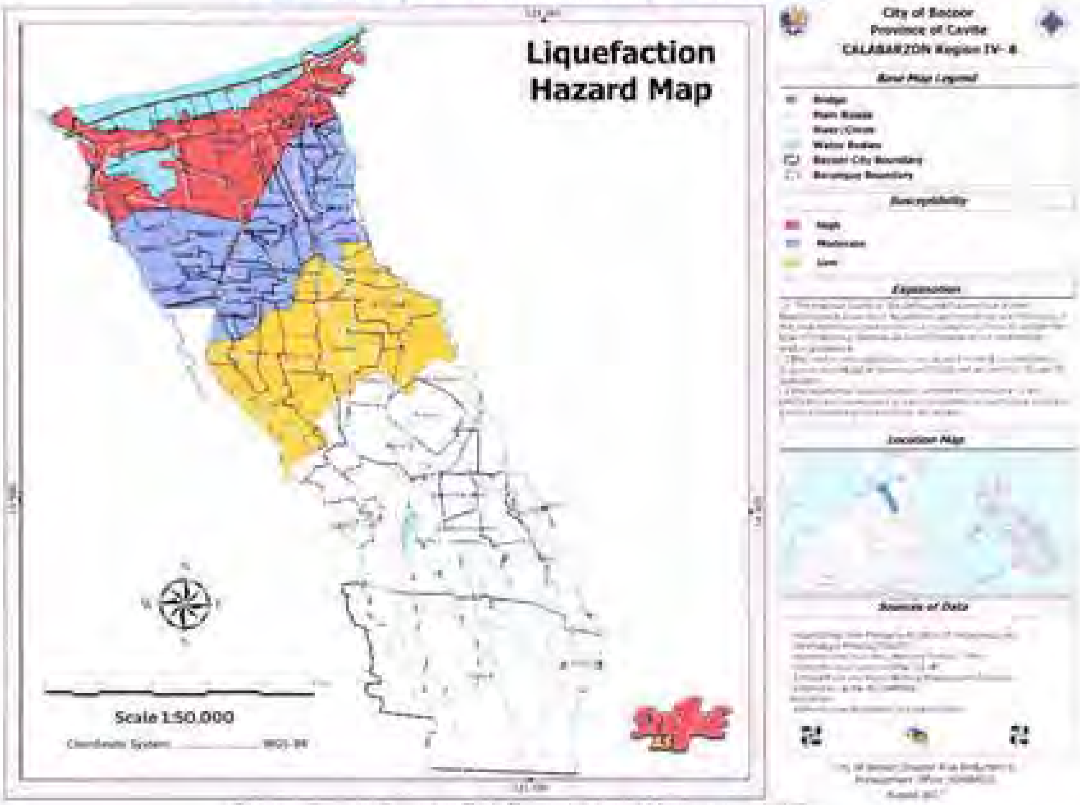
Table 7. Bacoor Ground Shaking Hazard Assessment (see Map 5 and Table 13)

LOCATION	REMARKS
Aniban 1, Aniban 2 Bayanan, Dulong Bayan Habay 1, Habay 2, Kaingen- Digman,Ligas 1, Ligas 2, Mabolo, Maliksi 1, Maliksi 2, Mambog 1 Mambog 2, Mambog 3 Mambog 4, Molino 1 Molino 2, Molino 3 Molino 4, Molino 5 Molino 6, Molino 7 Niog, P.F. Espiritu 1-6, Poblacion, Queen's Row East, Queen's Row West; Queens's Row Central Real, Salinas 1, Salinas 2 San Nicolas 1, San Nicolas 2, San Nicolas 3, Sinbanali, Talaba 1-3, Zapote 1-3	1. Retrofitting of critical structures of buildings 2. Enforcement of the building code 3. Adoption of zoning 4. Land use practices 5. Enforcement of Seismic codes

Source: PHILVOLCS-DOST, NSO, CLUP, NAMRIA

SOIL LIQUEFACTION HAZARD:

Map 6. Soil Liquefaction Hazard Map of Bacoor City



Source: Bacoor Disaster Risk Reduction and Management Office

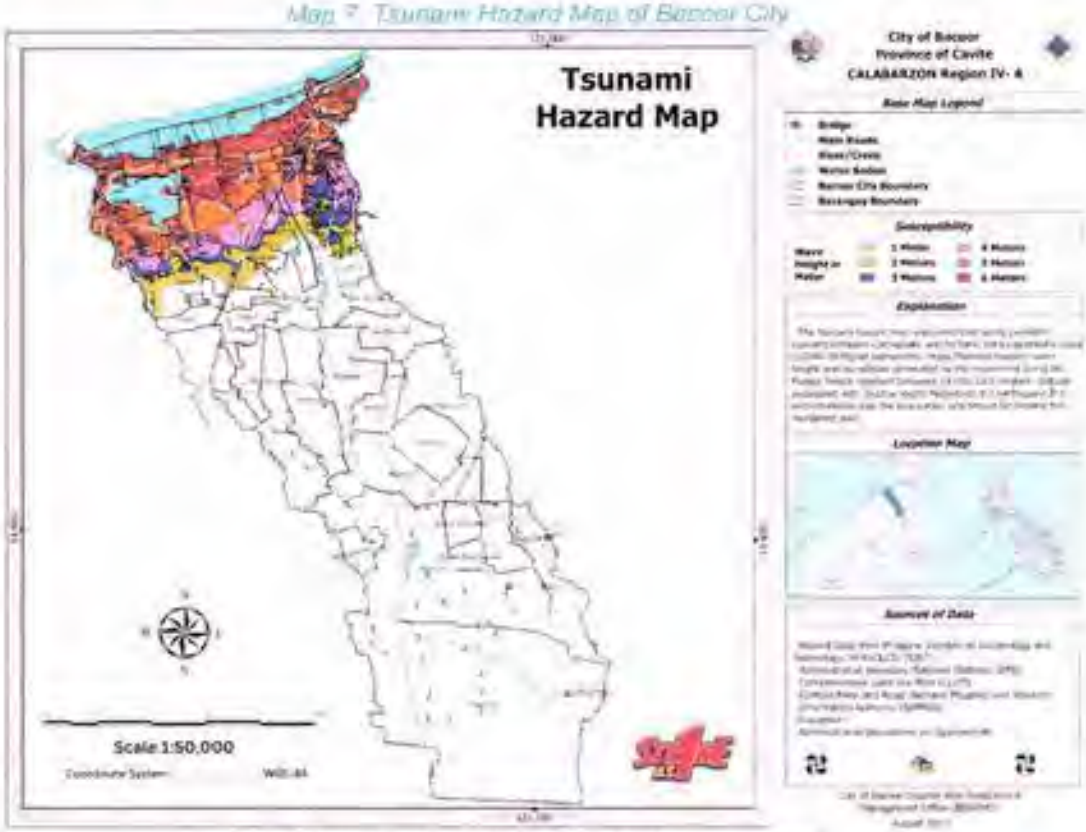
Table 8. Bacoor Soil Liquefaction Hazard Assessment (see Map 6 and Table 14)

LOCATION	REMARKS
Aniban 1, Aniban 2; Bayanan, Dulong Bayan, Habay 1; Habay 2, Kaingen Digman,Ligas 1, Ligas 2, Mabolo; Maliksi 1, Maliksi 2 Mambog 1, Mambog 2, Mambog 3, Mambog 4, Molino 1; Molino 6, P.F. Espiritu 1; P.F. Espiritu 2, P.F. Espiritu 3, P.F. Espiritu 4, P.F. Espiritu 5, P.F. Espiritu 6, Poblacion; Real, Salinas 1 Salinas 2, San Nicolas 1, San Nicolas 2; San Nicolas 3, Sinbanali, Talaba 1 Talaba 2, Talaba 3 Zapote 1, Zapote 2	1. Avoid construction on liquefaction susceptible soils 2. Make the structure liquefaction resistant by designing the foundation elements to resist the effects of liquefaction 3. Improving the strength, density and or drainage characteristics of the soil 4. Soil replacement 5. Retrofitting a house to withstand the effects of liquefaction typically improving the foundation and density of the soil around and under the house 6. Foundation reinforcement

Source: PHIVOLCS-DOST, WAO-13 UP WAMRIR

TSUNAMI HAZARD:

Map 7 Tsunami Hazard Map of Bacoor City



Source: Bacoor Disaster Risk Reduction and Management Office

Table 9. Bacoor Tsunami Hazard Assessment (see Map 7 and Table 10)

LOCATION	REMARKS
Maliksi 1, Salinas 1 Dulong Bayan Habay 1, Habay 2 P.F. Espiritu 3, P.F. Espiritu 1 P.F. Espiritu 5 Ligas 2, Zapote 3 Talaba 2, Sinbanali Poblacion Kaingen Digman Mabolo, Salinas 2 Maliksi 2, Zapote 1 Zapote 2, Talaba 1 Talaba 3, Aniban 1 Aniban 2, Niog Ligas 1, P.F. Espiritu 2, P.F. Espiritu 4	1. Avoid Inundation Areas: Site buildings or infrastructure away from hazard area or locate on a high point. 2. Development of a network of local knowledge centers along the coast lines to provide necessary training & emergency communication during crisis time. 3. Development of well-designed break waters along the coast to provide necessary cushion against cyclone and tsunami hazards. 4. Plantation of mangroves and coastal forest along the coastline. 5. Creating Tsunami walls, flood gates and channels, coral reefs and mangrove forests. 6. Conserving natural defenses such as mangroves and building man-made defenses such as sea walls or other such methods of decreasing the velocity of the wave. 7. Early Warning Systems can also be kept in place for monitoring seismic activity and also pressure differences. 8. Educate those who live in coastal areas at risk on what to do when they receive a warning, and what signs to look out for such as the tide receding dramatically because no matter how good the warning system is, it will be useless if people don't know

Source: PHIVOLCS-DOST, NSO, CLUP, NAMRIA

POPULATION EXPOSURE ASSESSMENT TO HAZARDS

1. Risk Profile of Bacoor to Hazards – Two categories of hazards are considered in this land use plan. Hydrometeorologic hazards are brought about by typhoons such as flood, rainfall-induced landslide, and storm surge; while geologic hazards are triggered by earthquakes which include ground shaking, liquefaction, and tsunami.

2. Hydrometeorologic Hazards – A typhoon is a violent cyclone, which features heavy rains and winds that maintain speeds equal to or greater than 119 kilometers per hour. Being located in Cavite, which is significantly more at risk to typhoons than other southern areas in the country, Bacoor is strongly affected by monsoon winds, which blow from the southwest between May to October and from the northeast from November to February.

3. Flood – Flooding in the City of Bacoor is caused either by river overflow flood or inland flood. Floods affect many people and cause damage to properties more than any other hazard. This is because of several factors: a) overflow of rivers and creeks as a result of the accelerated runoff of heavy rains on denuded watersheds; b) decreasing permeable spaces due to overdevelopment of structures on floodplains; c) silting of canals and riverbeds; and d) intrusion of seawater during high tide.

The City of Bacoor has low to very high susceptibility ratings to flood. More than half of the city's land area is prone to flooding. Low susceptibility to flooding is experienced in twenty-two (22) barangays that are located at the elevated portion of the City at the south. Meanwhile, five (5) barangays in the northern side have very high susceptibility to flooding, and eighteen (18) barangays have high to moderate susceptibility to flooding.

Table 3 Flood Susceptibility Per Barangay

Barangay	Area (H)	Population	Flood Susceptibility	Affected Area	Affected Area (%)
Aniban 1	51.874	6,892	HIGH	51.874	100
Aniban 2	19.051	5,180	VERY HIGH	19.051	100
Bayanan	128.382	11,168	LOW	121.566	94.690845
Dulong Bayan	46.048	6,744	LOW	46.047	99.997828
Habay 1	157.589	19,965	HIGH	157.589	100
Habay 2	56.287	11,888	LOW	56.116	99.6962
Kaingen Digman	36.825	5,581	LOW	36.408	98.867617
Ligas 1	50.69	9,827	VERY HIGH	50.69	100
Ligas 2	36.547	8,219	LOW	36.547	100
Mabolo	65.045	5,071	HIGH	65.045	100
Maliksi 1	33.737	5,273	MODERATE	30.214	89.557459
Maliksi 2	33.592	8,898	LOW	32.551	96.901048
Mambog 1	54.925	12,330	MODERATE	54.831	99.828858
Mambog 2	80.229	10,961	LOW	79.821	99.491456
Mambog 3	172.453	21,445	LOW	147.555	85.562443

Barangay	Area (ha)	Population	Flood Susceptibility	Affected Area	Affected Area (%)
Mambog 4	156.52	13,868	LOW	135.019	86.263097
Molino 1	73.071	16,627	LOW	37.521	51.348688
Molino 2	177.81	42,395	LOW	20.697	11.639953
Molino 3	522.49	60,495	VERY HIGH	40.089	7.672683
Molino 4	1051.311	66,886	VERY HIGH	38.52	3.663997
Molino 5	45.938	6,562	HIGH	2.704	5.886194
Molino 6	125.193	20,125	LOW	34.042	27.191616
Molino 7	124.026	12,883	VERY HIGH	5.039	4.062858
Niog	156.03	16,726	LOW	156.029	99.999359
P.F. Espiritu 1	29.504	4,304	LOW	29.504	100
P.F. Espiritu 2	64.275	6,988	HIGH	64.275	100
P.F. Espiritu 3	31.45	11,694	HIGH	31.45	100
P.F. Espiritu 4	51.182	8,407	LOW	51.182	100
P.F. Espiritu 5	21.6	3,682	MODERATE	16.892	78.203704
P.F. Espiritu 6	86.429	7,876	LOW	86.428	99.998843
Poblacion	32.294	7,592	MODERATE	30.637	94.869016
Queen's Row West	48.394	10,610	HIGH	0.231	0.477332
Real	76.727	9,981	LOW	75.483	98.378667
Salinas 1	83.682	19,658	LOW	81.709	97.642265
Salinas 2	51.119	8,925	LOW	51.035	99.835678
San Nicolas 1	54.785	8,003	LOW	54.785	100
San Nicolas 2	91.819	12,038	LOW	91.819	100
San Nicolas 3	202.386	37,462	LOW	129.999	64.233198
Sinbanali	64.341	14,048	MODERATE	58.942	91.608772
Talaba 1	14.876	6,362	MODERATE	14.876	100
Talaba 2	35.776	14,623	MODERATE	32.518	90.893336
Talaba 3	20.53	7,464	HIGH	20.53	100
Zapote 1	11.244	10,983	HIGH	11.244	100
Zapote 2	14.904	4,331	HIGH	14.904	100
Zapote 3	65.252	19,117	HIGH	63.288	96.990131

(1) Storm Surge – Storm surge is the abnormal rise in seawater level during a storm, measured as the height of the water above the normal predicted astronomical tide. The surge is caused primarily by a storm's winds pushing water onshore. The amplitude of the storm surge at any given location depends on the orientation of the coastline with the storm track; the intensity, size, and speed of the storm; and the local bathymetry. Seven (7) barangays within the city will be affected by the storm surge.

Table 11. Storm Surge Hazard per Barangay

Barangay	Area (H)	Population	Inundation	Affected Area	Affected Area (%)
Kaingen Digman	36.825	5,581	>1m surges	17.847	48
Maliksi 1	33.737	5,273	>1m surges	21.131	63
Maliksi 2	33.592	8,898	>1m surges	12.84	38
Poblacion	32.294	7,592	<1m surges	12.843	40
Sinbanali	64.341	14,048	<1m surges	42.841	67
Talaba 2	35.776	14,623	>1m surges	23.772	66
Zapote 3	65.252	19,117	<1m surges	34.435	53

Source: Bacoor City Disaster Risk Reduction and Management Office

4. Rain-Induced Landslide (RIL) – Rain-induced landslide (RIL) is often triggered by heavy rains, typhoons, earthquakes, eroding force of rivers, mining activities, road construction, and inappropriate land use and deforestation. Landslides destroy and bury structures, people, farmlands, and roads. Many rainfall-induced landslides transform into debris flows (fast-moving slurries of water, soil, and rock) as they travel down steep slopes, especially those that enter stream channels where they may mix with additional water and sediment. Their effects are death, damage to structures, partial damage or loss to livelihood, disruption of economic activities and flow of supplies.

   Almost half of the landmass of the City of Bacoor are prone to rain-induced flooding. Fourteen (14) barangays have low susceptibility to rain-induced landslides, while one (1) barangay have high susceptibility to RIL. All these barangays are located at the southern portion of the City of Bacoor where the terrain is rolling.

Table 12. Rain-Induced Landslide Hazard per Barangay

Barangay	Area (H)	Population	Landslide Susceptibility	Affected Area	Affected Area (%)
Bayanan	128.382	11,168	Low	7	5.452
Mambog 3	172.453	21,445	Low	5	2.899
Mambog 4	156.52	13,868	Low	21	13.417
Molino 1	73.071	16,627	Low	36	49.267
Molino 2	177.81	42,395	Low	157	88.296
Molino 3	522.49	60,495	Low	480	91.868
Molino 4	1051.311	66,886	Low	994	94.55
Molino 5	45.938	6,562	Low	43	93.604
Molino 6	125.193	20,125	Low	91	72.688
Molino 7	124.026	12,883	Low	114	91.916
Molino 7	124.026	12,883	High	1	0.806
Queen's Row East	73.917	18,370	Low	73.917	100
Queen's Row West	48.394	10,610	Low	48	99.186
Queens's Row Central	34.902	6,098	Low	34.902	100
San Nicolas 3	202.386	37,462	Low	72	35.576

Source: Bacoor City Disaster Risk Reduction and Management Office

5. Geologic Hazards – An earthquake is the shaking of the surface of the Earth, resulting from the sudden release of energy in the Earth's lithosphere that creates seismic waves. At the Earth's surface, earthquakes manifest themselves by shaking and sometimes displacement of the ground. When the

epicenter of a large earthquake is located offshore, the seabed may be displaced sufficiently to cause a tsunami. Earthquakes can also trigger landslides

c. Ground Shaking – Shaking and ground rupture are the main effects created by earthquakes, principally resulting in more or less severe damage to buildings and other rigid structures. The severity of the local effects depends on the complex combination of the earthquake magnitude, the distance from the epicenter, and the local geological and geomorphological conditions, which may amplify or reduce wave propagation. The ground-shaking is measured by ground acceleration.

Specific local geological, geomorphological, and geostructural features can induce high levels of shaking on the ground surface even from low-intensity earthquakes. This effect is called site or local amplification. It is principally due to the transfer of the seismic motion from hard deep soils to soft superficial soils and to effects of seismic energy focalization owing to typical geometrical setting of the deposits.

The City of Bacoor is underlain by alluvium deposits resulting into a higher degree of vulnerability to effects of an earthquake. The City of Bacoor is about 6 kilometers from the Marikina Fault System. The entire City is highly susceptible to PHILVOLCS Earthquake Intensity Scale (PEIS) Intensity 8 of ground shaking.

Table 13 Ground Shaking Hazard per Barangay

BARANGAY	Area (ha)	Population	Affected Area	Inundation
Aniban 1	51.874	6,892	51.874	Intensity 8
Aniban 2	19.051	5,180	19.051	Intensity 8
Bayanan	128.382	11,168	128.382	Intensity 8
Dulong Bayan	46.048	6,744	46.048	Intensity 8
Habay 1	157.589	19,965	157.589	Intensity 8
Habay 2	56.287	11,888	56.287	Intensity 8
Kaingen Digman	36.825	5,581	36.825	Intensity 8
Ligas 1	50.69	9,827	50.69	Intensity 8
Ligas 2	36.547	8,219	36.547	Intensity 8
Mabolo	65.045	5,071	65.045	Intensity 8
Maliksi 1	33.737	5,273	33.737	Intensity 8
Maliksi 2	33.592	8,898	33.592	Intensity 8
Mambog 1	54.925	12,330	54.925	Intensity 8
Mambog 2	80.229	10,961	80.229	Intensity 8
Mambog 3	172.453	21,445	172.453	Intensity 8
Mambog 4	156.52	13,868	156.52	Intensity 8
Molino 1	73.071	16,627	73.071	Intensity 8
Molino 2	177.81	42,395	177.81	Intensity 8
Molino 3	522.49	60,495	522.49	Intensity 8
Molino 4	1051.311	66,886	1051.311	Intensity 8
Molino 5	45.938	6,562	45.938	Intensity 8
Molino 6	125.193	20,125	125.193	Intensity 8
Molino 7	124.026	12,883	124.026	Intensity 8
Niog	156.03	16,726	156.03	Intensity 8
P.F. Espiritu 1	29.504	4,304	29.504	Intensity 8
P.F. Espiritu 2	64.275	6,988	64.275	Intensity 8
P.F. Espiritu 3	31.45	11,694	31.45	Intensity 8
P.F. Espiritu 4	51.182	8,407	51.182	Intensity 8
P.F. Espiritu 5	21.6	3,682	21.6	Intensity 8
P.F. Espiritu 6	86.429	7,876	86.429	Intensity 8

BARANGAY	Area (H)	Population	Affected Area	Inundation
Poblacion	32.294	7,592	32.294	Intensity 8
Queen's Row East	73.917	18,370	73.917	Intensity 8
Queen's Row West	48.394	10,610	48.394	Intensity 8
Queens's Row Central	34.902	6,098	34.902	Intensity 8
Real	76.727	9,981	76.727	Intensity 8
Salinas 1	83.682	19,658	83.682	Intensity 8
Salinas 2	51.119	8,925	51.119	Intensity 8
San Nicolas 1	54.785	8,003	54.785	Intensity 8
San Nicolas 2	91.819	12,038	91.819	Intensity 8
San Nicolas 3	202.386	37,462	202.386	Intensity 8
Sinbanali	64.341	14,048	64.341	Intensity 8
Talaba 1	14.876	6,362	14.876	Intensity 8
Talaba 2	35.776	14,623	35.776	Intensity 8
Talaba 3	20.53	7,464	20.53	Intensity 8
Zapote 1	11.244	10,983	11.244	Intensity 8
Zapote 2	14.904	4,331	14.904	Intensity 8
Zapote 3	65.252	19,117	65.252	Intensity 8

Source: Bacoor Disaster Risk Reduction and Management Office

7. **Soil Liquefaction** – Soil liquefaction occurs when, because of the shaking, water-saturated granular material (such as sand) temporarily loses its strength and transforms from a solid to a liquid material. Soil liquefaction may cause rigid structures, like buildings and bridges, to tilt or sink into the liquefied deposits. Thirty-seven (37) out of forty-seven (47) barangays in the City of Bacoor are susceptible to soil liquefaction.

Table 14. Soil Liquefaction Hazard per Barangay

Barangay	Area (H)	Population	Hazard	Affected Area	Affected Area (%)
Aniban 1	51.874	6892	Moderate	51.874	100
Aniban 2	19.051	5180	Moderate	19.049	100
Bayanan	128.382	11168	Low	119.716	93
Dulong Bayan	46.048	6744	High	46.048	100
Habay 1	157.589	19965	High	157.589	100
Habay 2	56.287	11888	Moderate	56.287	100
Kaingen Dlgman	36.825	5581	High	36.015	98
Ligas 1	50.69	9827	Moderate	49.84	98
Ligas 2	36.547	8219	Moderate	35.657	98
Mabolo	65.045	5071	High	65.045	100
Maliksi 1	33.737	5273	High	27.698	82
Maliksi 2	33.592	8898	High	32.207	96
Mambog 1	54.925	12330	Low	54.925	100
Mambog 2	80.229	10961	Low	80.197	100
Mambog 3	172.453	21445	Low	147.795	86
Mambog 4	156.52	13868	Low	136.513	87
Molino 1	73.071	16627	Low	33.447	46
Molino 6	125.193	20125	Low	6.893	6
P.F. Espiritu 1	29.504	4304	Moderate	29.504	100
P.F. Espiritu 2	64.275	6988	High	64.275	100
P.F. Espiritu 3	31.45	11694	High	31.45	100
P.F. Espiritu 4	51.182	8407	Moderate	51.182	100

Barangay	Area (H)	Population	Hazard	Affected Area	Affected Area (%)
P.F. Espiritu 5	21.6	3682	Moderate	21.6	100
P.F. Espiritu 6	86.429	7876	Moderate	86.429	100
Poblacion	32.294	7592	High	30.694	95
Real	76.727	9981	Moderate	76.727	100
Salinas 1	83.682	19658	Moderate	83.683	100
Salinas 2	51.119	8925	Moderate	51.119	100
San Nicolas 1	54.785	8003	Low	52.583	96
San Nicolas 2	91.819	12038	Low	88.662	97
San Nicolas 3	202.386	37462	Low	87.021	43
Sinbanali	64.341	14048	High	57.947	90
Talaba 1	14.876	6362	High	14.876	100
Talaba 2	35.776	14623	High	32.055	90
Talaba 3	20.53	7464	High	20.531	100
Zapote 1	11.244	10983	High	11.244	100
Zapote 2	14.904	4331	High	14.251	96

8. Tsunami – Tsunamis are long-wavelength, long-period sea waves produced by the sudden or abrupt movement of large volumes of water--including when an earthquake occurs at sea. In the open ocean the distance between wave crests can surpass 100 kilometers (62 mi), and the wave periods can vary from five minutes to one hour. Such tsunamis travel 600-800 kilometers per hour, depending on water depth. Large waves produced by an earthquake or a submarine landslide can overrun nearby coastal areas in a matter of minutes. Tsunamis can also travel thousands of kilometers across ocean and wreak destruction on far shores hours after the earthquake that generated them.

   Ordinarily, subduction earthquakes under magnitude 7.5 on the Richter magnitude scale do not cause tsunamis, although some instances of this have been recorded. Most destructive tsunamis are caused by earthquakes of magnitude 7.5 or more. In case the tsunami approaches, about a quarter of the City may be affected. Areas in twenty-eight (28) barangays are susceptible to tsunami.

Table 15. Tsunami Hazard per Barangay

Barangay	Area (H)	Population	Tsunami Height	Affected Area	Affected Area (%)
Aniban 1	51.874	6892	3	32	62
Aniban 2	19.051	5180	5	7	37
Dulong Bayan	46.048	6744	5	44	96
Habay 1	157.589	19965	6	131	83
Habay 2	56.287	11888	2	35	62
Kaingen Dlgman	36.825	5581	6	36.825	100
Ligas 1	50.69	9827	3	40	79
Ligas 1	50.69	9827	5	1	2
Ligas 2	36.547	8219	1	6	16
Mabolo	65.045	5071	5	65.045	100
Maliksi 1	33.737	5273	6	33.737	100
Maliksi 2	33.592	8898	6	33.592	100

Barangay	Area (Ha)	Population	Tsunami Height	Affected Area	Affected Area (%)
Niog	156.03	16726	5	50	32
P.F. Espiritu 1	29.504	4304	1	15	51
P.F. Espiritu 2	64.275	6988	5	64	100
P.F. Espiritu 3	31.45	11694	5	3	10
P.F. Espiritu 4	51.182	8407	1	28	55
P.F. Espiritu 5	21.6	3682	1	2	9
Poblacion	32.294	7592	5	32.294	100
Salinas 1	83.682	19658	1	46	55
Salinas 2	51.119	8925	2	19	37
Sinbanali	64.341	14048	6	64.341	100
Talaba 1	14.876	6362	5	11	74
Talaba 2	35.776	14623	6	35.776	100
Talaba 3	20.53	7464	5	16	78
Zapote 1	11.244	10983	5	10	89
Zapote 2	14.904	4331	5	9	60
Zapote 3	65.252	19117	5	55	84

NATURAL RESOURCES

The City Environment and Natural Resources Office (CENRO) of Bacoor is the primary department of the city responsible in protecting the environment.

Urbanization is something unrelenting to an area as promising as the City of Bacoor. Given this reality, it is a must to safeguard parts of the city which are rich in aquaculture.

Based on the Cavite Socio-Economic Profile 2017, the City of Bacoor has no forestlands. As such, the following are the only present forestlands in the province: Sangley Point, Corregidor Island, Mts. Palay-palay, and *Mataas na Gulod* Protected Landscape, all of which are classified lands. The Tagaytay ridges are unclassified lands.

1 COASTAL RESOURCES

Mangrove Forest – Based on the Cavite Socio-Economic and Physical Profile 2017, the province has the lowest extent of lowland area particularly in the cities of Cavite and Bacoor, and municipalities of Kawit, Noveleta, and Rosario. These areas have extremely low ground levels of 0 to 2-meter elevation (warm lowland), and 0.8-meter elevation (high tie level) from the Mean Sea Level (MSL). According to the Bio-Ecological Assessment of DENR-Manila Bay Coordination Office (MBCO), the City of Bacoor has 17.528 existing mangrove areas that comprise the 88.47 hectares of the assessed area by the said office. The following mangrove species have been identified by DENR-MBCO in the City of Bacoor, to wit:

i) Bakawan Babae (R. mucronata);
ii) Bakawan Lalake (Rhizophora apiculata);
iii) Bakawan bato (R. stylosa);
iv) Api-api (Avicennia officinales);
v) Bungalon (A. marina);

2. FRESH WATER RESOURCES

a) **Ground Water Resources** – Wells – Artesian wells and deep wells provide water supply for both domestic and irrigation purposes in the City of Bacoor and generally in Cavite. The over extraction of water due to the increasing population and water demand has caused salt water intrusion in the aquifers particularly in areas facing the Manila Bay as evidenced by the decreasing piezometric levels. The City of Bacoor (together with City of Imus, Kawit, Noveleta and Rosario) forms part of the Manila Bay Alluvium aquifer system, one of the four major aquifer systems in Metro Manila alongside other major cities particularly those bordering Manila Bay.

Infiltrated rainfall is another groundwater source. It serves as the direct source of most near surface aquifers. Inflow from surface water reservoirs and irrigation water also contributes to the ground water. This is exemplified by the Molino Dam which was primarily built by the National Irrigation Administration to address the City of Bacoor's irrigation requirements.

b) **Watersheds** – The watersheds that feed the City of Imus, City of Bacoor, and Zapote Rivers are referred to as Imus River Watershed, Bacoor River Watershed and the Zapote River Watershed.

i) **The Imus River Watershed** – The Imus Wastershed covers areas at the mouth of the Imus River, which is its discharge point in Bacoor Bay, and originates in the south in the foothills of the elevated areas of Tagaytay City. It drains portions within the Cities of Imus, Bacoor, Dasmarinas, Silang, Amadeo and Tagaytay totaling approximately 60.84 km

ii) **The Bacoor River Watershed** – On the other hand, the Bacoor River Watershed located in the central portion of City of Bacoor has an approximately coverage area of 26.63 sq.km. reaching lower elevation areas of the coastal and northern barangays. Some of Bacoor River's tributaries cross the municipal boundary with Dasmarinas City. However, its extent narrows as some of the water drains into other adjacent watersheds.

iii) **The Zapote River Watershed** – Lastly, the Zapote River watershed consists of areas drained by the Zapote River (approximately 22.52 sq.km.) and the Molino Dam River Systems (approximately 15.01 sq.km.), which when combined have a total land area of 37.53 sq.km. The Zapote River drains areas of Bacoor, Las Pinas, Muntinlupa and the northern portions of Gen. Mariano Alvarez. The watershed of the Molino Dam River System drains the combined southern portions of the City of Bacoor and the central portions of Dasmarinas City.

c) **The Molino Dam** – The Molino Dam is fed by two river systems, namely the Don Cella River which drains the eastern portion of the southern watershed, and the Molino River which drains the western portion of the southern watershed. Spills from the Molino Dam's major spillway flow through the numerous creek systems and join the Zapote River in San

Nicolas. Several gates of the Molino Dam discharge waters to other creeks within the City of Bacoor previously intended for agriculture. The aggregate watershed area totals approximately 1,250 has when all watershed areas feeding the surface waters flowing into the City of Bacoor are combined.

3. RIVERS AND CREEKS

The City of Bacoor has many rivers, creeks, and other tributaries. The Zapote River passes through Barangays Zapote, Aniban, Ligas, San Nicolas, and Molino on the eastern boundary of Bacoor. One tributary to the Zapote River runs across the Zapote River and the Talaba area while another tributary of the same river goes out directly to Bacoor Bay by traversing Barangays Zapote, Talaba, and Maliksi. The Molino River which comes all the way from the Dasmariñas City area (meeting with the Don Cella River at the Molino Dam), spills into the Zapote River in the area of Barangay San Nicolas. Ilat Creek is another tributary to the Zapote River which also comes all the way from the Dasmariñas City area. The Zapote River serves as the boundary between Las Piñas City and the City of Bacoor and consequently, between Metro Manila and Cavite.

On the other hand, the Imus River traverses Barangays Sineguelasan, Banalo, Mabolo, Salinas, Real and parts of Molino on the western boundary. It serves as the boundary between the cities of Imus and Bacoor on the western side. Imus River runs all the way from the foothills of Tagaytay City, crossing portions of Silang, Dasmariñas City, City of Imus and the City of Bacoor until it discharges finally to Bacoor Bay.

Within the City of Bacoor, its major tributary is the Bacoor River (also known as Mestizo River), which drains areas of Barangays Alima, Banalo, Mabolo, Daang Bukid, Habay and other parts of P.F. Espiritu. The Daang Bukid Creek, which is a tributary of Bacoor River, traverses many coastal barangays such as barangays Alima, Campo Santo, Daang Bukid, Dulong Bayan, Kaingin and Maliksi. The Imus River has many other tributaries throughout the town.

EXISTING LAND USE AND CLASSIFICATION

Land use categories can be broadly divided or classified into two types, built-up and open space. This section describes the actual land uses of the City of Bacoor in 2020. The actual land uses in 2020 were derived from Google Earth images and validated through land use surveys conducted within the same year

1. Built-up Area - Comprising the built-up areas are various land uses with the residential category as the dominant use. Other land uses include commercial, institutional, industrial, and utility uses. The built-up area in 2020 occupied 4,292.07 has. or 74.45% of the total land area of City of Bacoor, Key components of the built-up area are briefly discussed as follows:

   a) **Residential Area** – The area of the City of Bacoor is dominantly residential in character. Occupying a total of 2,964.44 has. or 51.42% of total land area, the residential use is sprawling uniformly across the entire City. Of this area, about 543.88 has. (9.43%) are low density residential zone, and about 2,395.25 has. (41.55%) are medium density residential zone. Heritage

houses are concentrated in the old town proper traversed by the E. Evangelista Road. Meanwhile, newer residential subdivisions flourish in the southern barangays where new road infrastructures have developed.

b) **Commercial Areas** – In 2020, commercial land uses occupy only about 746.34 has. or 12.95% of the total land area. Of the commercial use areas, about 0.000074 has. (0.00%) are low density commercial zone, 523.00 has (9.07% are medium density commercial zone while 223.33 has. (3.87%) are high density commercial zone. Most of these commercial uses are located along the following major thoroughfares that traverse the City of Bacoor: mainly along Evangelista Road, Tirona Highway, E. Aguinaldo Highway, Niog Road, and the Bacoor-Dasmariñas National Road.

The new Molino Blvd. has also seen the rapid development of some new commercial establishments such as neighborhood-sized malls and stand-alone shops and restaurants. Among the other major malls that invested in the area is SM Bacoor at the corner of E. Aguinaldo and Tirona highways, while another SM Supermarket is in Brgy. Molino 4, and across it is the All Home Mall along Daang Hari Road.

c) **Institutional Areas** – Institutional uses include all national and local government offices as well as academic institutions such as colleges and universities, elementary and high schools, vocational schools, places of worship, and similar services. The majority of the barangays have a barangay hall, day care center, and senior citizen center. These places are also considered institutional uses. These collectively occupy 74 has. (1.6%) of total land area of the City of Bacoor. The old municipal hall along Evangelista Road is still being used for government uses, while a new Bacoor Government Center has been built in a newly developed area of Brgy. Bayanan.

The majority of the barangays have a barangay hall, day care center, and senior citizen center. These places are also considered institutional uses. These collectively occupy 12.80 has. (0.22%) of total land area of the City of Bacoor. The old municipal hall along Evangelista Road is still being used for government uses, while a new Bacoor Government Center has been built in a newly developed area of Brgy. Bayanan.

d) **Industrial Areas** – Only 36.91 has. or 0.64% of the City's total land area are occupied by industrial land uses. Many of these medium-sized manufacturing industries and storage facilities are located in Brgy. Niog 3, while the rest are dispersed in other barangays, particularly along Aguinaldo Highway and Tirona Highway.

e) **Mixed Use Development** – Mixed land uses occupy only 487.43 has or 8.63% of the total land area. The mixed-use land areas are located in Brgys. P.F. Espiritu 4, P.F. Espiritu 3, Maliksi 2, Daang Bukid and Habay 1 and Molino 4.

f) **Major Socialized Housing** – In 2020, the major socialized housing areas occupy a total land area of 34.14 has or 0.59%. These are located mainly in Brgys. Salinas 1, Salinas 2, Mambog 2, Molino 1, Molino 2, Molino 3, Molino 4, Molino 6, Molino 7, Habay 2 and Queens Row.

2. **Open Space** – On the other hand, open spaces in the City of Bacoor occupy a land area of 1,472.64 has. or 25.55% of the City's total land area Open space plays a vital role in the proper functioning of the built-up area. In Bacoor, land uses categorized under open space include the following: agricultural land, fishpond, fishing ground-aquaculture, cemetery, reclamation, mangrove sanctuary and Molino dam. The major open spaces are briefly described as follows:

a) **Agricultural land** – Lands dedicated to agriculture occupy 80 has. (3.32%) of the City's total land area. The majority of the remaining pockets of agricultural lands are located close to the rivers at the eastern portion of the City where support infrastructure for irrigation is also developed.

b) **Fishpond** – Aquaculture thrives in the old downtown area, with fishponds occupying 45 has. (3.38%). The area is enclosed by Evangelista Road, P.F. Espiritu Road, Tirona Highway, and Aguinaldo Highway. It is bisected by Daang Bukid Road, a short and narrow inner road. Residential and commercial developments have already encroached on some of these areas, putting on more pressure for some residents to fill the ponds for the land uses.

c) **Cemetery** – Approximately 30.40 has. (0.53) of the total City land area have been developed into public and private cemeteries. These cemeteries are located in Brgys. Molino 2 & 3, Ligas 2, Camposanto, Kaingin and P.F. Espiritu 7, Bayanan and Maliksi 3.

d) **Navigational Zone** – Covers the Municipal water with the area of 320 meters in width bordering the barangay's of Alima and Zapote.

e) **Fishing Ground** – Covers the area of 233 hectares (approx) located in the northern municipal waters excluding reclamation area and aquaculture.

f) **Aquaculture Zone** – Covers the area of 156 hectares (approx) located in the northern municipal waters excluding mangrove area, reclamation area and fishing ground.

g) **Reclamation Area.** – The reclamation land use areas cover the total area of 420 hectares. They are located on both sides of CAVITEX along Bacoor Bay.

- The bigger area of 230 hectares is in the eastern half of the fishing ground area.
- The smaller area of 100 hectares is in the western half of the fishing ground area.
- The area of 90 hectares is located below CAVITEX in Brgys. Alima, Tabing Dagat, Digman, Kaingin, Maliksi 3, Maliksi 1 and Talaba 2.

Map 8. Reclamation Plan

Source: City Planning & Development Coordinator Office (CPDC)

h) **Buffer Zone** – The Mangrove Buffer Zone covers an area of 100 meters beyond Cavitex and Reclamation Buffer Zone covers an area of 200 meters.

i) **Marina** – Covers the area of 25.7 hectares (approx) located in the eastern part of municipal waters beyond CAVITEX.

j) **Mangrove Sanctuary** – Covers the area of 40 hectares of shoreline of Sitio Dulong Pulo Barangay Sineguelasan declaring as Bacoor Bay's Marine Protected and Bio-Diverse Area and a portion of the City's Artificial Reef zone.

k) **Fisherman's Wharf** – Located in Brgy. Sineguelasan in the western part of the City coastal area near the Mangrove Sanctuary.

l) **Molino Dam** – The dam is located on the border between Brgy. San Nicolas 1 and Brgy. Talon Dos of Las Piñas. The land area occupies 17.93 has. (0.31%) of the total land area of the City of Bacoor.

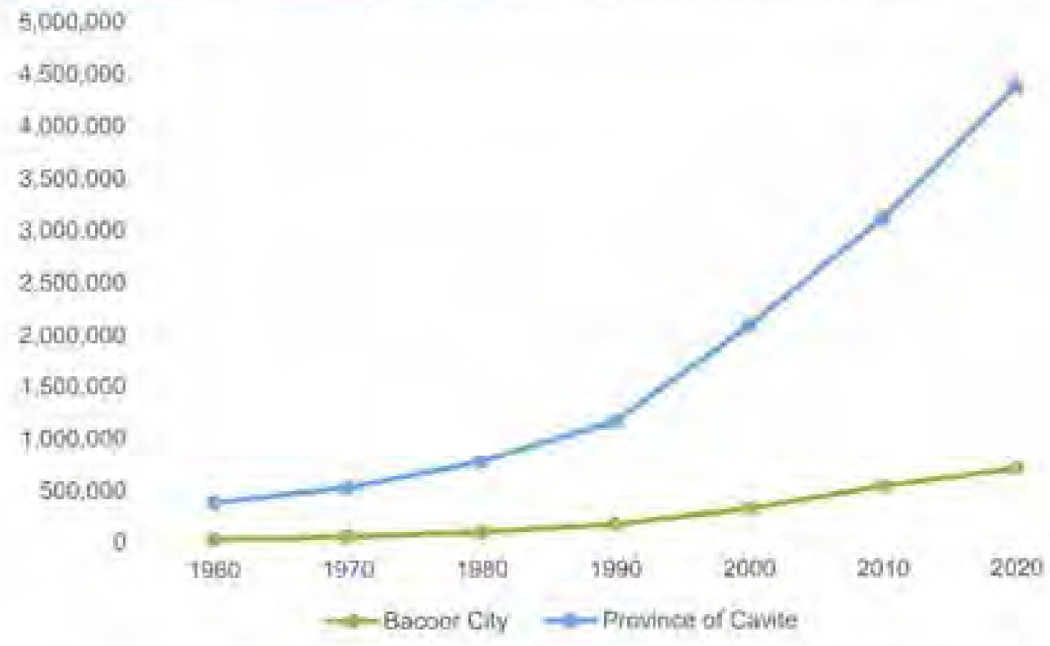
C. DEMOGRAPHY

HISTORICAL POPULATION GROWTH

The earliest recorded census in Bacoor was in 1903 which indicates that the LGU was the fourth most populated municipality among Cavite's then 20 towns. Population started to decrease in the census years 1960, 1975, 1990, 2000, and 2015 (Figure 9). The most recent decrease was noted in the 2015 census year.

From 1903 to 1918, the population of the City of Bacoor grew at the rate of 0.10%. Subsequently, the rates increased drastically starting from years 1970 to 1990 and much more in 2000 to 2010. In the years 2010-2015, the rate of growth was about 2.77%.

Figure 2. Historical Population Growth of Bacoor City and the Province of Cavite



[illegible]

As recorded by PSA in 2020, the City of Bacoor has a population of 664,625. The average annual growth rate from 2010-2020 was 2.48%. The population of the City is projected to be at 822,168 by 2030 and the population is expected to double in 24 years given the average annual growth rate of 2.48 %.

Table 16. Population Growth Rate (%) of Bacoor City

Year	Population	Increase or Decrease	Growth Rate (%)
1903	10,925		
1918	11,090	165	0.10%
1939	16,130	5,040	1.80%
1948	20,453	4,323	2.67%
1960	27,267	6,814	2.43%
1970	48,440	21,173	5.91%
1975	62,225	13,785	5.14%
1980	90,364	28,139	7.75%
1990	159,685	69,321	5.86%
1995	250,821	91,136	9.45%
2000	305,699	54,878	4.04%
2010	520,216	269,395	5.46%
2015	600,609	80,393	2.77%
2020	664,625	64,016	2.15%

Source: [illegible]

POPULATION DISTRIBUTION

The household population distribution of the City in 2020 consisted of 331,228 males and 332,164 females. Males accounted to 49.93%, while females accounted to 50.07%. Below is the Age-sex Population Distribution of Bacoor (Table [illegible]). The City of Bacoor is already considered urban in its entirety. It has a total population of 663,392 in 2020 distributed in the different 73 barangays.

Table 17. Population by Age Group and Age Sex Distribution, 2020

Age Group	Both Sexes	Male	Female
Total	663,392	331,228	332,164
0 – 4	60,043	31,033	29,010
5 – 9	61,010	31,757	29,253
10 – 14	59,786	30,937	28,849
15 – 19	57,610	29,481	28,129
20 – 24	62,606	31,520	31,086
25 – 29	59,961	30,255	29,706
30 – 34	53,737	27,107	26,630
35 – 39	50,299	24,928	25,371
40 – 44	45,948	22,655	23,293
45 – 49	38,075	19,183	18,892
50 – 54	33,302	16,183	17,119
55 – 59	27,195	12,979	14,216
60 – 64	21,668	10,079	11,589
65 – 69	14,120	6,419	7,701
70 – 74	8,987	3,702	5,285
75 – 79	4,559	1,667	2,892
80 years and over	4,486	1,343	3,143

Source: Philippine Statistics Authority, 2020 Census of Population and Housing

POPULATION COMPOSITION

The demographic characteristics of Bacoor, Cavite is about the description of size, characteristics and how the population is changing in a given boundary. The demographic characteristics of the City impacts all the sectors such as social, economics, physical-infrastructure and utilities and transportation, and institutional development.

SOCIAL COMPOSITION AND CHARACTERISTICS

Historical Growth – Having a population of 664,625 and an annual growth rate of 2.48%, in 2020. The projected population of the City will be 891,756 by year 2032.

The total number of households in the City of Bacoor grew to 164,263 from 120,092 in 2015. Barangay Molino IV had the largest number of household (16,246), followed by Barangay Molino III (15,045), and Barangay Molino II (10,004) based on the 2020 Census of the Philippine Statistics Authority. The average household size of the city is 4.00.

Population projections are basic requirements in planning a locality. These projections are primarily used as basis for estimating future needs for basic services (e.g., housing, education and health services), determining the level of demand for facilities and utilities, economic-related needs and corresponding spatial requirements, among others.

Population Density – Bacoor is a coastal component city in the province of Cavite. The city has a land area of 46.17 square kilometers or 17.83 square miles which constitutes 3.03% of Cavite's total area. Its population as determined by the 2020 Census was 664,625. This represented 15.30% of the total population of Cavite province, or 4.10% of the overall population of the CALABARZON region.

2. GROWTH OF BARANGAY POPULATION

Figure 2. Historical Growth of Bacoor's Population

Household Population by Barangay – The earliest census of population in 1903 showed that the City of Bacoor was the fourth most populated municipality among Cavite's then 20 towns. Population decreases were noted in the census years of 1960, 1975, 1990, 2000 and 2015. The most recent decrease was noted in the 2015 census year. Above is a graph of the City of Bacoor's actual percentage to the total provincial population.

From 1903 to 1918, the population of the City of Bacoor grew at an average growth rate of 0.10%. Subsequently decades exhibited accelerating growth rate, with the exception of the 2000 census year, where growth rate decreased to 4.04%. Illustrated in **Figure 3** are the growth rates of the City of Bacoor from 1903 to the most recent 2020 census.

The geometric rate method was used in projecting population from 2024 – 2032. The derived growth rate is 2.48%. Utilizing this growth rate, it is estimated that the City's total population will reach 891,756 by 2032. On the other hand, the number of households is projected to reach 222,526 by 2032.

3. HOUSEHOLD DISTRIBUTION

Based on the 2020 census of the Philippine Statistics Authority, the total number of households in the City of Bacoor grew to 164,263 from 120,092 in 2015. Pre-merging, Barangay Molino IV had the largest number of household (16,246), followed by Barangay Molino III (15,045), and Barangay Molino II (10,004). On the other hand, Barangay Aniban III (206) has the least number of households followed by Salinas IV (364) and Mabolo II (374).

Table 19. Barangay Household Population and Projection

Barangay	Latest PSA Census (2020)	Base Year (2023)	Household Projection								
			2024	2025	2026	2027	2028	2029	2030	2031	2032
City of Bacoor	**663,392**	**713,983**	**731,689**	**749,835**	**768,431**	**787,488**	**807,018**	**827,032**	**847,542**	**868,561**	**890,102**
Aniban 1	16,520	17,299	17,568	17,842	18,123	18,409	18,700	18,998	19,300	19,609	19,924
Aniban 2	5,687	5,758	5,782	5,805	5,830	5,853	5,878	5,902	5,926	5,950	5,975
Bayanan	19,965	21,679	22,283	22,904	23,541	24,197	24,870	25,563	26,275	27,006	27,758
Dulong Bayan	5,273	5,391	5,431	5,471	5,512	5,553	5,594	5,636	5,677	5,720	5,762
Habay 1	12,330	13,172	13,466	13,766	14,072	14,386	14,706	15,034	15,369	15,711	16,061
Habay 2	16,390	20,146	21,581	23,117	24,763	26,527	28,415	30,439	32,606	34,928	37,414
Kaingin-Digman	6,549	6,777	6,855	6,934	7,015	7,096	7,178	7,261	7,345	7,430	7,517
Ligas 1	9,586	10,037	10,195	10,357	10,523	10,694	10,869	11,047	11,232	11,421	11,613
Ligas 2	19,658	22,327	23,295	24,305	25,358	26,458	27,605	28,801	30,050	31,352	32,712
Mabolo	16,988	17,339	17,459	17,580	17,703	17,826	17,950	18,077	18,204	18,333	18,463
Maliksi 1	1,851	2,073	2,153	2,236	2,322	2,411	2,504	2,600	2,700	2,804	2,912
Maliksi 2	11,944	12,303	12,425	12,548	12,673	12,799	12,926	13,055	13,185	13,317	13,450
Mambog 1	18,350	20,091	20,707	21,342	21,996	22,671	23,366	24,083	24,822	25,583	26,368
Mambog 2	12,512	12,741	12,818	12,896	12,974	13,053	13,132	13,211	13,292	13,372	13,453
Mambog 3	3,278	3,482	3,553	3,626	3,700	3,775	3,852	3,930	4,010	4,092	4,175
Mambog 4	837	844	846	848	850	852	855	857	859	861	863
Molino 1	2,714	2,744	2,755	2,765	2,775	2,785	2,796	2,806	2,817	2,827	2,838
Molino 2	1,329	1,350	1,357	1,364	1,371	1,378	1,385	1,392	1,399	1,407	1,414
Molino 3	11,888	12,734	13,029	13,331	13,641	13,957	14,280	14,611	14,950	15,297	15,652
Molino 4	5,031	5,454	5,603	5,756	5,913	6,074	6,239	6,410	6,585	6,764	6,949
Molino 5	8,204	8,587	8,719	8,853	8,989	9,127	9,267	9,409	9,553	9,700	9,849
Molino 6	1,306	1,338	1,348	1,359	1,370	1,381	1,392	1,403	1,415	1,426	1,437
Molino 7	2,335	2,563	2,644	2,727	2,814	2,902	2,994	3,088	3,186	3,287	3,390
Niog 1	16,027	17,601	18,161	18,741	19,341	19,961	20,602	21,265	21,950	22,660	23,393
P.F. Espiritu 1	21,445	24,785	26,010	27,295	28,644	30,060	31,546	33,105	34,741	36,458	38,260
P.F. Espiritu 2	17,700	19,159	19,674	20,206	20,752	21,315	21,895	22,491	23,106	23,738	24,389

Barangay	Latest PSA Census (2020)	Base Year (2023)	Household Projection								
			2024	2025	2026	2027	2028	2029	2030	2031	2032
P.F. Espiritu 3	41,768	48,295	50,690	53,204	55,843	58,612	61,519	64,570	67,772	71,133	74,660
P.F. Espiritu 4	127,183	142,899	148,711	154,838	161,299	168,115	175,305	182,893	190,903	199,361	208,291
P.F. Espiritu 5	6,554	7,493	7,835	8,193	8,567	8,958	9,367	9,795	10,242	10,709	11,198
P.F. Espiritu 6	20,125	21,448	21,907	22,377	22,857	23,347	23,848	24,359	24,881	25,415	25,960
Poblacion	9,634	9,884	9,968	10,055	10,143	10,231	10,321	10,413	10,504	10,599	10,693
Queens Row Central	12,877	13,635	13,898	14,165	14,438	14,716	14,999	15,288	15,582	15,882	16,188
Queens Row East	7,007	7,330	7,440	7,553	7,667	7,783	7,901	8,020	8,141	8,264	8,389
Queens Row West	4,600	4,754	4,806	4,859	4,912	4,966	5,021	5,076	5,132	5,188	5,245
Real	6,988	7,657	7,893	8,137	8,390	8,649	8,917	9,193	9,477	9,770	10,073
Salinas 1	11,694	12,029	12,143	12,258	12,374	12,491	12,609	12,729	12,849	12,971	13,093
Salinas 2	12,089	12,447	12,569	12,693	12,819	12,945	13,073	13,201	13,332	13,463	13,596
San Nicolas 1	7,876	8,604	8,862	9,127	9,400	9,682	9,971	10,270	10,577	10,894	11,220
San Nicolas 2	4,685	4,750	4,771	4,793	4,815	4,837	4,859	4,881	4,904	4,926	4,949
San Nicolas 3	5,777	7,058	7,546	8,067	8,624	9,219	9,856	10,537	11,264	12,042	12,874
Sinbanali	14,175	14,439	14,527	14,617	14,707	14,798	14,890	14,982	15,075	15,168	15,263
Talaba 1	29,250	32,277	33,365	34,493	35,666	36,883	38,148	39,462	40,827	42,245	43,718
Talaba 2	37,445	41,006	42,267	43,567	44,906	46,287	47,710	49,177	50,689	52,248	53,854
Talaba 3	7,074	7,418	7,538	7,662	7,789	7,920	8,055	8,193	8,336	8,483	8,634
Zapote 1	7,446	8,131	8,373	8,622	8,878	9,142	9,415	9,695	9,984	10,281	10,588
Zapote 2	4,331	4,556	4,634	4,712	4,792	4,874	4,957	5,042	5,127	5,215	5,304
Zapote 3	19,117	19,356	19,437	19,517	19,599	19,680	19,762	19,844	19,926	20,009	20,092

Table 19. Barangay Population and Projection

Barangay	Latest PSA Census (2020)	Base Year (2023)	Household Projection								
			2024	2025	2026	2027	2028	2029	2030	2031	2032
City of Bacoor	**520,216**	**715,310**	**733,049**	**751,229**	**769,859**	**788,952**	**808,518**	**828,569**	**849,118**	**870,176**	**891,756**
Aniban 1	14,260	17,370	17,641	17,917	18,199	18,486	18,779	19,078	19,382	19,693	20,009
Aniban 2	5,700	5,758	5,782	5,805	5,830	5,853	5,878	5,902	5,926	5,950	5,975
Bayanan	15,113	21,679	22,283	22,904	23,541	24,197	24,870	25,563	26,275	27,006	27,758
Dulong Bayan	5,679	5,391	5,431	5,471	5,512	5,553	5,594	5,636	5,677	5,720	5,762
Habay 1	9,868	13,172	13,466	13,766	14,072	14,386	14,706	15,034	15,369	15,711	16,061
Habay 2	8,158	20,438	21,893	23,452	25,121	26,910	28,826	30,879	33,077	35,433	37,955
Kaingin-Digman	5,842	6,777	6,855	6,934	7,015	7,096	7,178	7,261	7,345	7,430	7,517
Ligas 1	8,291	10,037	10,195	10,357	10,523	10,694	10,869	11,047	11,232	11,421	11,613
Ligas 2	12,743	22,327	23,295	24,305	25,358	26,458	27,605	28,801	30,050	31,352	32,712
Mabolo	16,333	17,339	17,459	17,580	17,703	17,826	17,950	18,077	18,204	18,333	18,463
Maliksi 1	2,720	2,073	2,153	2,236	2,322	2,411	2,504	2,600	2,700	2,804	2,912
Maliksi 2	10,823	12,303	12,425	12,548	12,673	12,799	12,926	13,055	13,185	13,317	13,450
Mambog 1	13,518	20,113	20,729	21,365	22,020	22,696	23,392	24,109	24,849	25,611	26,396
Mambog 2	12,026	12,741	12,818	12,896	12,974	13,053	13,132	13,211	13,292	13,372	13,453
Mambog 3	2,674	3,482	3,553	3,626	3,700	3,775	3,852	3,930	4,010	4,092	4,175
Mambog 4	859	844	846	848	850	852	855	857	859	861	863
Molino 1	2,615	2,744	2,755	2,765	2,775	2,785	2,796	2,806	2,817	2,827	2,838
Molino 2	1,262	1,350	1,357	1,364	1,371	1,378	1,385	1,392	1,399	1,407	1,414
Molino 3	9,428	12,734	13,029	13,331	13,641	13,957	14,280	14,611	14,950	15,297	15,652
Molino 4	3,830	5,454	5,603	5,756	5,913	6,074	6,239	6,410	6,585	6,764	6,949
Molino 5	7,050	8,603	8,735	8,869	9,005	9,143	9,284	9,426	9,571	9,718	9,867
Molino 6	1,415	1,338	1,348	1,359	1,370	1,381	1,392	1,403	1,415	1,426	1,437
Molino 7	1,703	2,563	2,644	2,727	2,814	2,902	2,994	3,088	3,186	3,287	3,390
Niog 1	11,718	17,601	18,161	18,741	19,341	19,961	20,602	21,265	21,950	22,660	23,393
P.F. Espiritu 1	13,082	24,785	26,010	27,295	28,644	30,060	31,546	33,105	34,741	36,458	38,260
P.F. Espiritu 2	13,607	19,159	19,674	20,206	20,752	21,315	21,895	22,491	23,106	23,738	24,389

Barangay	Latest PSA Cen. [illegible]	Base Year [illegible]	Household Projection								
			2024	2025	2026	2027	2028	2029	2030	2031	2032
P.F. Espiritu 3 (Panapaan 4)	25,819	49,020	51,451	54,003	56,681	59,492	62,442	65,539	68,789	72,200	75,781
P.F. Espiritu 4 (Panapaan [illegible])	39,426	68,179	71,125	74,209	77,433	80,807	84,337	88,030	91,895	95,938	100,170
P.F. Espiritu 5 (Panapaan 7)	4,157	7,502	7,845	8,203	8,577	8,969	9,378	9,806	10,254	10,722	11,212
P.F. Espiritu 6 (Panapaan 8)	16,241	21,448	21,907	22,377	22,857	23,347	23,848	24,359	24,881	25,415	25,960
Poblacion [illegible]	9,430	9,884	9,968	10,055	10,143	10,231	10,321	10,413	10,504	10,599	10,693
QueensRow Central	10,627	13,641	13,904	14,172	14,445	14,723	15,006	15,295	15,589	15,889	16,195
QueensRow East	6,024	7,330	7,440	7,553	7,667	7,783	7,901	8,020	8,141	8,264	8,389
QueensRow West	5,135	4,754	4,806	4,859	4,912	4,966	5,021	5,076	5,132	5,188	5,245
Real (Real 1 & 2)	11,159	12,084	12,246	12,412	12,579	12,749	12,922	13,096	13,273	13,452	13,634
Salinas 1	10,638	12,029	12,143	12,258	12,374	12,491	12,609	12,729	12,849	12,971	13,093
Salinas 2 (Salinas 2, 3 & 4)	12,226	12,447	12,569	12,693	12,819	12,945	13,073	13,201	13,332	13,463	13,596
San Nicolas 1	5,839	8,604	8,862	9,127	9,400	9,682	9,971	10,270	10,577	10,894	11,220
San Nicolas 2	4,489	4,764	4,786	4,807	4,829	4,851	4,874	4,896	4,918	4,941	4,963
San Nicolas 3	2,896	7,058	7,546	8,067	8,624	9,219	9,856	10,537	11,264	12,042	12,874
Sinbanali [illegible]	15,021	14,460	14,549	14,638	14,728	14,820	14,912	15,003	15,097	15,190	15,285
Talaba 1 [illegible]	21,660	32,281	33,368	34,496	35,669	36,886	38,152	39,465	40,830	42,249	43,722
Talaba 2	27,546	41,025	42,286	43,586	44,927	46,308	47,732	49,199	50,712	52,271	53,879
Talaba 3 (Talaba 4, 5 & 6)	6,624	7,418	7,538	7,662	7,789	7,920	8,055	8,193	8,336	8,483	8,634
Zapote 1 [illegible]	7,101	8,131	8,373	8,622	8,878	9,142	9,415	9,695	9,984	10,281	10,588
Zapote 2 (Zapote 3 & 4)	5,135	4,556	4,634	4,712	4,792	4,874	4,957	5,042	5,127	5,215	5,304
Zapote 3 (Zapote 5)	18,339	19,356	19,437	19,517	19,599	19,680	19,762	19,844	19,926	20,009	20,092

Source: PSA 2020 and City Ordinance No. [illegible]

D. SOCIAL

This chapter will describe the services, facilities, utilities and amenities of the social sector that supports the improvement of the well-being of Bacooreños. This includes health and sanitation, education, housing, social welfare, protective services, sports and recreation.

EDUCATION

1 Educational Personnel and Facilities

The City of Bacoor is equipped with educational institutions. This gives the citizens the opportunity to access decent and quality education from daycare to elementary, secondary and tertiary educational levels.

The city has about 29 public elementary schools and 10 public secondary schools which are K-12 capable and 5 offer senior high school [illegible] There are about 173 private institutions with most offering services at the nursery, kindergarten, grade school and high school levels. A number of schools offer tertiary education. Overall, it is observed that the City has achieved a high level of educational services relative to the province.

In addition, to provide quality and affordable education, the City has a proposed plan to establish Cavite State University (CAVSU) to promote intellectual growth, academic excellence and moral integrity.

Table 20. List of Public Elementary Schools

Public Elementary Schools		Private Secondary Schools
1. Bacoor Elem. School 2. Digman Elem. School 3. Dulong Elem. School 4. Habay Elem. School 5. Mabolo Elem. School 6. Maliksi Elem. School 7. Mambog Elem. School 8. Poblacion Elem. School 9. Real Elem. School 10. Salinas Elem. School 11. Sineguelasan Elem. 12. Aniban Elem. School 13. Bayanan Elem. School 14. Gawaran Elem. School 15. Gov. P.F. Espiritu Elem.	16. Ligas I Elem. School 17. Ligas II Elem. School 18. Likha Elem. School 19. Longos Elem.School 20. Malipay Elem.School 21. Molino Elem. School 22. Niog Elem. School 23. Progressive Elem. School 24. Queen's Row Elem. 25. San Nicolas Elem. School 26. Soldiers Hills IV Elem. 27. Talaba Elem. School 28. Zapote Elem. School 29. Pag-asa Elem. School in Bahayang Pag-asa, Molino 5	1. Bacoor National High School – Gawaran Annex 2. Bacoor National High School – Molino Main 3. Bacoor National High School – Villa Maria Annex 4. Bacoor National High School – Tabing Dagat Annex 5. City of Bacoor National High School – Georgetown 6. City of Bacoor National High School – Springville 7. City of Bacoor National High School – San Nicolas 8. City of Bacoor National High School – Salinas 9. Eastern Bacoor National High School 10. Responsible Village Leaders Learning Academy (REVILLA) High School 11. Senior High School-Dulong Bayan 12. SHS in Progressive 13. SHS in San Nicolas III 14. SHS within Bacoor Elementary School 15. SHS within Sineguelasan Elementary School

HEALTH AND SANITATION

The City of Bacoor has 7 Rural Health Units and 3 health centers, 57 barangay health stations, and 10 private hospitals of about 20-100 bed capacity (Table 21 22). Other health facilities are also present such as 1 lying-in clinic, and 1 social hygiene clinic. Figure 13 below shows the location of health facilities in the City.

Table 21. Health Facilities, 2020

Health Facilities	# of Health Facilities
Rural Health Units	7
Health Center	3
Barangay Health Stations	57
Private Hospitals	10
ABTC	1
Lying-In	1
Social Hygiene Clinic	1

Table 22. Health Facilities and Private Hospitals, 2020

Private Hospitals	Locations
Bacoor Doctors Medical Center, Inc.	Bacoor Boulevard, Bayanan
Crisostomo General Hospital	Tirona Highway, Dulong Bayan
Metro South Medical Center	National Rd. Molino 4
Molino Doctors Hospital	National Rd. Molino 2
Prime Global Care General Medical Center Inc.	B3 L6,7,8 Cabezas Cor. Avenida St. Bahayang Pag-asa Subs. Molino 5
South City Hospital & Medical Center	115 Daang Hari Road Molino
South East Asian Medical Center, Inc.	Molino Road, Molino 3
St. Dominic Medical Center, Inc.	Aguinaldo Highway, Talaba 6
St. Michael Medical Hospital	220 Molino II, City of Bacoor
Southern Tagalog Regional Hospital	Habay 2, City of Bacoor

Source: City Health Office

Table 23. Health Centers, 2020

Health Center	Locations
Lingap Kalusugan 1 (Proposed Dialysis Center)	Salinas 2
LIngap Kalusugan 2 (Laboratory)	Queens Row Central
Lingap Kalusugan	Alima

Moreover, the City will establish a Quarantine and Isolation Facility for the COVID-19 patients. In order to regulate the population growth of the City of Bacoor that has already a high population density, the City has family planning services to cater to the needs of its constituency, starting with the caring of productive family members [illegible] The table shows that the most common family planning methods used in the City are BTL/Female Sterilization, pills, DMPA-Injectable, and NFP-LAM.

Table 24: Family Planning Services, 2021

Family Planning	Current User (Begin)	Acceptors New	Acceptors Cont.	Drop Out	Current User (End)
A. BTL / Female Sterilization	1,684	47	39	90	1,680
B. Vasectomy / Male Sterilization	2	0	0	0	2
C. Pills	2,471	490	272	772	2,481
D. IUD	331	27	14	46	325
E. DMPA – Injectable	3,388	572	386	961	3,385
F. NFP – CM	0	0	0	0	0
G. NFP – BBT	0	0	0	0	0
H. NFP – STM	0	0	0	0	0
I. NFP – SDM	0	0	0	0	0
J. NFP – LAM	1,529	593	314	2,968	1,468
K. Condom	295	31	24	95	255
L. Implant	852	39	13	279	6,258

[illegible]

HOUSING

For the relocation of informal settlers, the City follows procedures for pre-relocation relocation and post-relocation phases.

1. Pre-Relocation Phase:

- Social preparation
- Convening the LIAC members
- Community Assembly
- Intake Interview and Validation (Census, Tagging and Profiling)
- Preparation and Sanitation of Master List
- Submission of Documents/Pre-qualification of the Beneficiaries

2. Relocation Phase

- Actual Transfer to the Relocation Site
- Orientation at the Relocation Site
- Distribution of Food Packs to the Relocates

3. Post-Relocation Phase

- Distribution of Financial Assistance
- Clearing of affected areas; and,
- Securing of cleared areas

SOCIAL WELFARE SERVICES

1. **Social Welfare Facilities** – Social welfare covers a broad number of clienteles in the City. This includes the daycare children, youth, differently abled people, senior citizens, women and children and marginalized citizens. This also includes the protection of quality of life of all citizens.

   Gender equality is also included in this subsector that is designed to achieve gender equality and empowerment of women and girls. Poverty reduction and hunger also constitute the sector's mission to end poverty in all its forms and locations by providing suitable policies and programs.

   The City's community centers and government centers, even the evacuation centers that will serve as the temporary shelters during calamities are strategically located in all barangays.

2. **Number of Types of Clientele** – Social welfare covers a broad number of clienteles in the City. This includes the daycare children, youth, differently abled people, senior citizens, women and children and marginalized citizens. This also includes the protection of quality of life of all citizens. Table 25 shows that the City serves large numbers of clienteles, with children/youth and family community accounting for the highest number of clienteles served. This is also reflected in Table 26 which shows that 54 out of a total of 73 barangays have at least one (1) day care center.

   Gender equality is also included in this sub-sector that is designed to achieve gender equality and empowerment of women and girls. Poverty reduction and hunger also constitute the sector's mission to end poverty in all its forms and locations by providing suitable policies and programs.

Table 25: Clientele Served by the City

CLIENTELE TYPE	NUMBER SERVED (SERVICE COUNT)
1. Family/Community	67,485 INDIVIDUALS
	32,514 Families
2. Children/Youth	81,041
3. Women	22,823
4. Elderly and PWD	13,034
5. Individuals/Families In Crisis Situation	6,659 Individuals (Action Center)
	1,250 Families (Fire/Typhoon Victims)

Table 26: Number and Location of Day Care Centers, 2020

Barangay	Number of Day Care Centers	Barangay	Number of Day Care Centers
Aniban1	1	P.F. Espiritu 1	1
Aniban 2	1	P.F. Espiritu 5	1
Banalo	1	P.F. Espiritu 6	1
Bayanan	1	P.F. Espiritu 7	1
Camposanto	1	P.F. Espiritu 8	1
Daanbukid	1	Queensrow Central	1
Dulongbayan	1	Queensrow East	1
Habay 1	1	Queensrow West	1
Habay 1	1	Real 1	1

Barangay	Number of Day Care Centers	Barangay	Number of Day Care Centers
Kaingen	1	Real 2	1
Ligas 2	1	Salinas 1	1
Mabolo 1	1	Salinas 2	1
Maliksi 1	1	Salinas 3	1
Maliksi 2	1	Salinas 4	1
Mambog 1	1	San Nicolas 1	1
Mambog 2	1	San Nicolas 2	1
Mambog 3	1	San Nicolas 3	5
Mambog 4	1	Sineguelasan	1
Mambog 5	1	Talaba 2	1
Molino 1	1	Talaba 4	1
Molino 2	5	Talaba 5	1
Molino 3	5	Talaba 7	1
Molino 4	6	Zapote 1	1
Molino 5	1	Zapote 2	1
Molino 7	1	Zapote 3	1
Molino 7	1	Zapote 4	1
Niog 1	1	Zapote 5	1

PROTECTIVE SERVICES

As one of the sustainable development goals in promoting just, peaceful and inclusive societies, the City of Bacoor has built its foundation on strong institutions, transparency, good governance and dedication to serve the population. It has passed numerous ordinances pertaining to peace, order, and security.

The Bacoor PNP has the following equipment and facilities: 2 buildings, 9 stations, 3 typewriters, 4 computers, 1 base radio, 41 handheld radios, 1 smart phone-COP Hotline, 17 Smart Phones with GPS, 16 patrol vehicles, and 14 patrol motorcycles. There are 184 police personnel in the City and three groups of PNCOs under the Philippine National Police, broken down into 70 under PCP1, 50 under PCP2 and 58 under PCP3 (Table 27).

Table 27. Number of PNCOs, 2020

Stations	Number of PNCO's	Land area (has.)	Population	Number of Barangays
PCP 1	70	1,397.64	234,162	54
PCP 2	50	2,544.36	132,721	12
PCP 3	58	1,658.88	144,353	7

Source: City of Bacoor PNP

As of 2020, the total firemen in the City were 26 and who were assisted by 21 Fire Aides. This number is below the HLURB standard of one firefighter for every 2,000 population. The deficit, therefore, in 2017 is 275 firefighters. The City of Bacoor has five (5) fire trucks at its disposal, with the headquarters located in the compound of the Bacoor Government Center and Talaba 7 (Table 28). There is only one fire hydrant located in Brgy. Banalo.

Table 28. Fire-Fighting Personnel and Facilities, 2020

Type of Service	Location	Area (Sq.m.)	Number of Personnel	Personnel to Population Ratio	Facilities
Bacoor City Fire Station	Bacoor Government	500 sq.m.	17 BFP Personnel	1 Firemen: 2000	1 Fire & Rescue

Type of Service	Location	Area (Sq.m.)	Number of Personnel	Personnel to Population Ratio	Facilities
– Office Personnel	Center, Bacoor Boulevard, Bayanan		And 5 Fire Aides	Population	Vehicle and 2 Motorcycles
City of Bacoor Central Fire Station	City of Bacoor		Firetruck & 9 Fire Aides		2 Firetrucks
Talaba Fire Sub-Station	Talaba 4, City of Bacoor, Cavite	300 sq.m	5 BFP Personnel and 9 Fire Aides	1 Firetruck 28,000 Residents	1 firetruck
San Nicolas Fire Sub-Station	GreenValley, San Nicolas 3, City of Bacoor, Cavite	300 sq.m	4 BFP Personnel and 7 Fire Aides		1 firetruck

SPORTS AND RECREATION

The increase in population has caused significant impacts on the psychological and cultural well-being of the City's citizens. One of the goals to improve the quality of lives of the population, especially those dwelling in urban areas, is to make cities and human settlements inclusive, safe, resilient and sustainable. In this connection, the city has devised ways to provide recreational facilities for the people in order for them to feel healthy, safe and empowered.

Established of Bacoor Sports Center as well as sports activities are promoted by the City Government of Bacoor in order to encourage healthier lifestyles among its residents, especially the youth, the elderly and the differently abled persons.

The City of Bacoor has numerous existing sports facilities. There are 143 basketball courts, 114 covered courts, 57 swimming pools, 12 tennis courts, 57 billiard halls and 4 gymnasiums, 2 cockpits and 1 track oval. Meanwhile, there are also other facilities such as parks, and the six playgrounds distributed in different parts of the City. Basketball courts appear to be the most popular among the sports facilities, with every barangay having at least one court

Table 28 Summary of Sports and Recreational Facilities, 2020

Facilities	Number	Facilities	Number
Basketball Court	143	Billiard Hall	57
Covered Basketball Court	114	Gymnasium	4
Swimming Pool	57	Cockpit	2
Tennis Court	12		

Table 30. Type, Number, and Location of Sports and Recreation Facilities, 2020

Barangay	Basketball Court	Covered Court	Track Oval	Swimming Pool	Tennis Court	Billiard Hall	Gymnasium	Cockpit	Ownership
Alima		1	1						Public
Aniban 1	1	1		2		2			Public/private
Aniban 4		1 (ong oing)				2			Private
Aniban 5	1	1		2		2			Public/private
Banalo	1	1							Public
Bayanan	2	3				2	1		Public/private
Daangbukid	1	1							Public
Dulongbayan	1	1		1		1	1		Public/private
Habay 1	6	5		1		1			Public/private
Habay 2	5	1		1				1	Public/private
Ligas 1	1	1		1					Public/private
Ligas 2		2		2			1		Public/private
Ligas 3	5	1		6		1			Public/private
Mabolo 1	1	2		1					Public/private
Mabolo 2	1	1		1					Public/Private
Mabolo 3	1								Public
Maliksi 1	1	1							Public
Maliksi 2	1	1							Public/private
Mambog 1	1	4							Public
Mambog 2	6	1							Public
Mambog 3	9	1		2	2				Public/private
Mambog 4	2	4		1					Public/private
Mambog 5	3	3							Public
Molino 1	4	3		2		2			Public/private
Molino 2	12	9		5		7			Public/private
Molino 3	3	1					1		
Molino 4	13	13		5					Public/private
Molino 5		4			2		1		Public/private
Molino 6	1	6			1	2			Public/private
Molino 7	7	2		1		2			Public/private
Niog 2	2	3				1			Public/private
Niog 3	1			2		2			Public/private
P.F. Espiritu 1		1			1				Public/private
P.F. Espiritu 2		1			1				Public
P.F. Espiritu 3	3	1							Public
P.F. Espiritu 4		2							Public
P.F. Espiritu 5	1	1		1		1			Public/private
P.F. Espiritu 6	1	1		1					Public/private
P.F. Espiritu 7	2	1		2		1			Public/private
P.F. Espiritu 8	5	2		5	2	2			Public/private

Barangay	Basketball Court	Covered Court	Track Oval	Swimming Pool	Tennis Court	Billiard Hall	Gymnasium	cockpit	Ownership
Queens Row Central		2			1	2			Public/private
Queens Row East	6	3				6			Public/private
Queens Row West		1							Public
Real 1	1	2				1			Public/private
Real 2	1	3				1			Public/private
Salinas 1	8	2		2		2			Public/private
Salinas 2	2	1				2			Public/private
Salinas 3		1			1	2			Public/private
Salinas 4	1								Public
San Nicolas 1				7					Private
San Nicolas 2		4							Public/private
San Nicolas 3		2		3					Public/private
Sineguelasan	1	1							Public
Tabingdagat						1			Private
Ta;aba 1								1	
Talaba 2	3								Public
Talaba 3	1								Public
Talaba 4	1	1				1			Private
Talaba 6	1	1				1			Public/private
Talaba 7	1	1							Public/private
Zapote 1	1	1				1			Public
Zapote 2	2								Public
Zapote 3	1								Public
Zapote 5	7					3			Public/private
Total	**143**	**114**	**1**	**57**	**12**	**57**	**4**	**2**	

Source: City Engineering Office and Sports Dept.

E. ECONOMIC

The blueprint for the City's local economy to better quality of life for all is to promote inclusive and sustainable economic growth, employment and decent work for all and address challenges such as poverty and inequality. This sector will focus on the current local economic situation of the City to achieve the above goals while maintaining interconnectedness of economic activities and target issues within the locality.

AGRICULTURE

1. AGRICULTURAL CROPLANDS

In the City of Bacoor, being a lowland area, rice and vegetables-based farming system is the farming practice. Irrigated rice lands have at least two cropping seasons in an area of about 84.85 hectares planted with rice for year-round farming. In order to increase rice production, cavans of certified seeds and

bags of synthetic fertilizers were distributed among farmers. Vegetables represent one of staple crops that supply food demands in the city.

As part of the City's program on sustainable farming practices, the establishment of Farm Demo on Hybrid and Inbred Rice Production was initiated and has been conducted in different barangays. There are livelihood programs as well as loan services offered through the Bacoor Agricultural MPC for rice and vegetable farmers.

2. LIVESTOCK AND POULTRY

Based on the records of the City Veterinary Office of Bacoor, there are eleven (11) different types of farms located in different barangays of the city.

3. FISHERIES

a) **Fishery Production** – Throughout the years, the City of Bacoor is known for its mussel production. However, due to rapid urbanization and its impacts, the economic activities in the fishing industry have declined. Due to this trend, plenty of agricultural areas were converted to residential subdivisions.

There were three (3) fishing grounds in the City, and these are located in the bay, inland waters and fishponds or cages oversea. In 2020, the bay fishing ground occupied 382.4 hectares that yielded 7,745.8 metric tons of fishery product while the fishpond/cage fishing ground occupied 5,372.6 hectares that yielded a fishery production of 26.1 metric tons. The fishing ground yield only serves the local market. These fishing grounds produce mussels, cocked shells, bangus, sugpo, and tilapia.

In addition to the impacts of urbanization and the demand for land conversion, offshore and coastal fishing were also affected by the construction of the Manila-Cavite Coastal Road and will soon be further reduced by the Bacoor Reclamation Project.

b) **Inland Fisheries** – The inland fisheries in the City refer to the fishing activities conducted within the rivers and creeks and their legal easements. The major inland water bodies in the city include the Don Cella River, Molino River, Zapote River, Imus River, Bacoor or Mestizo River, Ilat Creek and Daang Bukid Creek. The fishery production in these water bodies is not significant as it comes mostly only from hook and line fishing whose catch is just intended for home consumption.

In addition, there were also fishing within the territorial waters of the City of Bacoor using fishing vessels of three (3) gross tons or less or fishing not requiring the use of fishing vessels. This type of fishing is the one practiced in the City's territorial waters. As defined in Republic Act No. 8850 or the Philippine Fisheries Code of 1998, these are waters in the City determined by a line parallel to the straight baseline along the City's coastline and fifteen (15) kilometers therefrom.

c) **Commercial Fisheries** – Commercial Fishing refers to the taking of fishery species by passive or active gear for trade, business and profit beyond subsistence or sports fishing. This also refers to fishing conducted in the open sea beyond the territorial waters and using fishing vessels weighing more than three (3) gross tons. Although desirable as a source of higher incomes for the City's population, this type of fishing is not practiced in the locality.

AGRICULTURAL SUPPORT SERVICES

In terms of fishery support facilities, the City has depuration facilities for green mussel production. Depuration is a process by which shellfish are held in tanks of clean seawater under conditions which maximize the expulsion of intestinal impurities from the bivalves.

INDUSTRY

The City of Bacoor has a huge number of registered industrial establishments. The present industries range from metal fabrication, automotive reconditioning plant, furniture, cosmetics, food manufacturers, etc. None of the industrial establishments in the city are classified as highly pollutive. Most of the establishments are engaged in the production of food, clothing, furniture and other household items.

COMMERCE AND TRADE

For the past ten (10) years, there's a harmonious partnership between the City government and the business community. A very significant portion of the City's revenues came from the fees and taxes paid by different business sectors averaging 11.60% per annum. Business activities are very visible along Gen. E. Aguinaldo Highway and Tirona Highway as well as Bacoor Boulevard. Majority of these businesses are into wholesale and retail trading

TOURISM

Tourism in the City of Bacoor is rich in various heritage, culture and arts attractions. The City as the gateway to Metro Manila via the Manila-Cavite Expressway has so much to offer to tourists and residents in and out of Metropolitan Manila. Enriched by a significant history, Bacoor has so much story to tell that could make tourists' visit enjoyable and memorable.

Through City Ordinance No. 33 Series of 2012 or the Bacoor City Tourism Code of 2012, the City Tourism Officer is tasked to manage the promotion of the tourism program of the City using traditional media and the internet which is intended to improve the local tourism industry in coordination with the Department of Tourism, Philippine Tourism Authority and other tourism-related agencies.

Table below shows the list of cultural properties in Bacoor City as of 2019. They consist of historical bridges, monuments, ancestral houses, culture, arts and traditions attraction, churches, museums, parks and dams.

Table 11. Inventory of Bacoor Cultural Properties

	Name	Location
	Historical Bridges	
1.	Tulay ng Zapote	Zapote 4
2.	Bahay na Tisa	Digman
	Heritage (monuments)	
3.	Tomb of General Edilberto Evangelista	Ligas 1
4.	Fr. Mariano Gomez Monument/Plaza de Mariano A. Gomez	Población
5.	Monument of Love	Habay 1
6.	General Edilberto Evangelista Monument	Zapote 4
7.	Ginintuang Kasaysayan ng Lungsod ng Bacoor	Bayanan
	Heritage (Ancestral Houses)	
8.	Justice Buenaventura A. Ocampo Ancestral House	Digman
9.	Ricardo Fernandez Ancestral House	Poblacion
10.	Mariano Navarette Ancestral House	Sineguelasan
11.	Barcega Family Heritage House	Mabolo
12.	Digman Halo-Halo	Digman
13.	Kademyahan ng Anak Zapote Band	Digman
14.	Kademyahan ng D' Original Band	Kaingen
15.	Kainan sa Balsa	Banalo
16.	Seafood Terminal	Seafood Terminal
17.	Sineguelasan	Sineguelasan
18.	Bakood Festival	Bakood Festival
19.	Bacoor Assembly	City of Bacoor
20.	Senakulo	San Nicolas
21.	Himno ng Bacoor	
22.	Musiko	Musiko
23.	Bara Alta	City of Bacoor
24.	Sta Michael the Archangel Image	Poblacion
	Churches	
25.	St. Michael the Archangel Church	Poblacion
26.	Aglipayan Church	Digman
27.	Bacoor Unida Evangelical Church	Banalo
28.	Our Lady Queen of Peace and Good Voyage Church	Queens Row West
29.	Sto. Nino De Molino Parish Church	Molino 5
	Museums and Educational Establishments	
30.	Senyong's Museum	Bayanan
31.	Bacoor Elementary School	Alima
32.	St. Michael's Institute	Poblacion
	Parks/Eco Parks	
33.	St. Ezekiel Moreno Park	San Nicolas 1
34.	Bacoor Eco-Park	Molino 4
35.	Mangrove Plantation	Sineguelasan
	Dams	
36.	Molino Dam	Molino 3
37.	Prinza Dam	San Nicolas 2

Source: Bacoor Historical Library and Tourism Office, 2023

LOCAL ECONOMIC ANALYSIS

An analysis of the local economy shows that the issues and concerns pertain to the conversion of agricultural lands to residential subdivisions, the increasing proliferation of industries-including pollutive ones and the declining production of fishery products (Table 32). Policy options include importation of cheap products from Southern Luzon towns, discouragement of industries – especially the pollutive ones, and the promotion instead of business enterprises such as SMEs as a way of promoting the vision of the City of transforming itself into a premier business hub south of Metro Manila.

Table 32. Local Economic Analysis

Technical Findings/Observations/ Development Issues and Concerns	Implications (Effects)	Policy Options/Recommended Interventions
Conversion of agricultural lands to residential subdivisions	More imports of food products instead of locally grown produce Deficit in the production of all food items including rice, vegetables and fruits, as well as fish, livestock and poultry for food security for the population	Importation of food products to cope with the demand on local food consumption
High density of industries (pollutive and non-pollutive) especially in Barangay Niog	Impacts on environment and health of nearby residents	Focus on non-pollutive industries and on IT-BPM ventures Comply with environmental measures to reduce the adverse impacts on pollutive industries Strict implementation and monitoring of environmental requirements
Declining fisheries production	Sources will be imported	Development of cottage industries or small and medium enterprises (SMEs) concentrating on its seafood industry, particularly the manufacture of talaba and tahong food products. This is in line with the Department of Trade and Industry's (DTI) One Town, One Product (OTOP) program

F. INFRASTRUCTURE

TRANSPORTATION

1. Roads – As of 2021, there was a total of 146.126 km. of roads in the City of Bacoor broken down into 47.51 km. of national roads, 13.600 km. of provincial roads and 84.956 km. of city roads. **Table 33** shows the length, width, and road surface of these different roads in the City of Bacoor.

Table 33 Inventory of Roads, 2021

No.	Road Name	Width (km)	Length (km)	Surface Type (km)		
				Concrete	Asphalt	Earth fill
	NATIONAL ROADS					
1	Nomo/San Nicolas Bypass Road (NOMO Road to San Nicolas/Las Piñas Boundary)	20.00	1.120	1.120		
2	Molino 3 Bypass Road (Statefields to Camella Sprinville)	8.00	0.600	0.600		
3	Molino 3 Bypass Road (Camella Springville to All Home Daang Hari	8.00	0.440	0.440		
4	Bacoor/Imus Bypass Road (Bacoor Blvd. to Aguinaldo Hway Imus) Roma to ALLHOME Imus	23.60	2.100	2.100		
5	Bacoor Diversion Road (Zapote Fly Over to Bacoor East Elem. School (Tirona Hiway)	30.00	3.500			3.50
6	Bacoor River Drive (Town and Country Bridge to Statefields)	8.00	1.000	1.000		
7	Gen. E. Aguinaldo Highway (Zapote Bridge to Imus Boundary)	20.00	6.200	6.000	0.200	
8	Gen. E. Aguinaldo Blvd. (Zapote Flyover to St. Dominic Intersection)	20.00	1.000	0.800	0.200	
9	Tirona Highway (Binakayan/Mabolo Bridge to SM Bacoor)	20.00	2.760	2.760		
10	Gen. Evangelista St. (Mabolo Plaza to Zapote Kalinisan)	15.00	4.300		4.300	
11	Zapote-Molino Road (Zapote/Aniban to Molino/Dasmariñas Boundary)	15.00	12.000	0.150	11.650	
12	Bacoor Boulevard (St. Dominic to PTT Gas Station)	30.00	7.000	3.000	4.000	
13	Daang Hari Road (SM Molino Intersection to Bacoor/Alabang Boundary)	30.00	4.100	4.100		
14	Marcos Alvarez Road (711 Magdiwang to Las Piñas Boundary)	15.00	1.393			
	Total Length of National Roads		47.51	23.463	20.55	3.50
	PROVINCIAL ROADS					
1	Mambog-Bayanan Road (Mambog/Imus Boundry to Jollibee Mambog)	8.00	5.000	0.370	4.630	
2	Salinas road (Tirona Highway to Real/Imus Boundary)	8.00	5.000	5.000		
3	Niog Road (Aguinaldo Hi-way Jollibee to Bacoor Blvd. Roma)	8.00	2.895	2.895		
4	Old Niog Road (Bacoor Blvd. to Bayanan)	7.00	0.705	0.705		
	Total Length of National Roads		13.600	8.970	4.630	
	CITY ROADS					
1	Sitio Malasakit Easement Road Dulong Bayan (Globe Bldg.)	2.45	0.245	0.245		
2	L. Castro St.	5.00	0.130	0.130		
3	F. Gaudier St.	5.00	0.250	0.250		
4	C. Gawaran St.	6.00	0.045	0.045		
5	E. Gomez St.	6.00	0.640	0.640		
6	G. Hermosa St.	5.00	0.207	0.207		
7	E. Ignacio St.	6.00	0.130	0.130		
8	Isla De Balot (Fisherman Village)	6.00	0.200	0.200		

No.	Road Name	Width (km)	Length (km)	Surface Type (km)		
				Concrete	Asphalt	Earth fill
9	J. Ocampo St.	6.00	0.300	0.300		
10	H. Rubio St.	6.00	0.300	0.300		
11	Sumilang St.	6.00	0.400	0.400		
12	Tincoco St.	6.00	0.150	0.150		
13	Watawat St.	6.00	0.050	0.050		
14	Guevarra St.	5.00	0.194	0.194		
15	Ignacio St.	5.00	0.194	0.194		
16	Malinis St.	5.00	0.194	0.194		
17	Tramo St.	5.00	0.340	0.340		
18	Cuenca St.	5.00	0.200	0.200		
19	Looban St.	5.00	0.360	0.360		
20	Tabinglilog St.	5.00	0.910	0.910		
21	Narra St.	6.00	0.264	0.264		
22	Yakal St.	6.00	0.203	0.203		
23	Molave St.	6.00	0.183	0.183		
24	Duluhan St.	5.00	0.150	0.150		
25	Guinto St. (Batuhan)	5.00	0.120	0.120		
26	Ignacio St.	8.00	0.165	0.165		
27	Looban St.	5.00	0.262	0.262		
28	Daang Bukid (main road)	7.00	0.378	0.378		
29	Andalucia St.	5.00	0.120	0.120		
30	Sgt. Dominador Ignacio St.	5.00	0.142	0.142		
31	Sgt. Ignacio St.	5.00	0.172	0.172		
32	Maligaya St.	5.00	0.200	0.200		
33	Captain M. Sarino St.	7.00	0.700	0.700		
34	Habay Main Road	8.00	0.937	0.937		
35	Sgt. Concepcion St.	6.00	0.040	0.040		
36	Sgt. Gaudier St.	6.00	0.300	0.300		
37	Sgt. E. Gavino St.	6.00	0.127	0.127		
38	Francisco St.	6.00	0.350	0.350		
39	Remedios Guanzon St.	5.00	0.150	0.150		
40	Pinahan St.	5.00	0.120	0.120		
41	Santero St.	7.00	0.090	0.090		
42	Captain M. Sarino St.	7.00	1.550	1.550	0.700	
43	Sgt. Sebastian St.	5.00	0.051	0.051		
44	P. Ulatan St.	5.00	0.120	0.120		
45	Camantique Road	5.00	0.095	0.095		
46	Queens Row Ave.	7.00	0.978	0.587	0.391	
47	Gawaran Ave.	7.00	0.602	0.482	0.120	
48	Floraville Ave.	7.00	0.468	0.374	0.094	
49	Magdiwang Road	7.00	1.255	0.753	0.502	
50	Green Valley Subdivision	6.00	5.900	2.950		2.95
51	Villa Esperanza	5.00	2.390	0.956		1.434
52	Molino 3-Unknown St.	7.00	0.697	0.697		
53	Molino 3-Unnown St.	7.00	6.533	6.533		
54	Molino 3-Unknown St.	6.00	1.848	1.848	1.848	
55	Kaunlaran Village (Molino 2)	7.00	0.804	0.804		
56	Kaunlaran Village (Molino 3)	7.00	0.477			0.477
57	Progressive Village 4, 5 & 6	7.00	2.107	2.107		
58	Progressive Village 14, 16	7.00	1.323	1.323		
43	Sgt. Sebastian St.	5.00	0.051	0.051		
44	P. Ulatan St.	5.00	0.120	0.120		
45	Camantique Road	5.00	0.095	0.095		
46	Queens Row Ave.	7.00	0.978	0.587	0.391	
47	Gawaran Ave.	7.00	0.602	0.482	0.120	
48	Floraville Ave.	7.00	0.468	0.374	0.094	
49	Magdiwang Road	7.00	1.255	0.753	0.502	
50	Green Valley Subdivision	6.00	5.900	2.950		
51	Villa Esperanza	5.00	2.390	0.956		
52	Molino 3-Unknown St.	7.00	0.697	0.697		
53	Molino 3-Unnown St.	7.00	6.533	6.533		
54	Molino 3-Unknown St.	6.00	1.848	1.848	1.848	
55	Kaunlaran Village (Molino 2)	7.00	0.804	0.804		
56	Kaunlaran Village (Molino 3)	7.00	0.477			
57	Progressive Village 4, 5 & 6	7.00	2.107	2.107		
58	Progressive Village 14, 16	7.00	1.323	1.323		
59	Holy Infant Jesus	7.00	0.650			0.65
60	Georgetown Heights	7.00	2.110	2.110		
61	Mary Homes Subdivision (Molino 4)	7.00	8.440	8.440		

No.	Road Name	Width (km)	Length (km)	Surface Type (km)		
				Concrete	Asphalt	Earth Fill
62	Gabriel St.	7.70	0.177	0.17		
63	Monday St.	8.70	0.180	0.180		
64	Tuesday St.	8.70	0.189	0.189		
65	Niog (Evangelista St. Aguinaldo Hiway)	8.00	0.670	0.670		
66	Digman St.	8.00	0.344	0.344		
67	P.F. Espiritu Rd. (Evangelista to Aguinaldo Hiway)	7.00	1.048	1.048		
68	Sulok St. (Main Road)	7.00	0.325	0.325		
69	Ilaya (Aguinaldo to DSM Entrance)	6.00	0.280	0.280		
70	Floraville Avenue	7.00	0.463	0.463		
71	Andrea Avenue	6.00	0.584	0.438	0.146	
72	Wednesday St.	8.70	0.240	0.240		
73	Thursday St.	8.70	0.270	0.270		
74	Friday St.	8.70	0.266	0.266		
75	Saturday St.	8.70	0.341	0.341		
76	Sunday St.	8.70	0.300	0.300		
77	Cirmont St.	17.00	0.123		0.123	
78	Astro Drive	7.00	0.237	0.166	0.071	
79	Everlasting St.	11.00	0.446	0.312	0.134	
80	Area "A" Road	11.00	0.630	0.441	0.189	
81	Queens Row Circle	14.00	0.474	0.332	0.142	
82	Queens Main Ave.	11.00	0.346	0.242	0.104	
83	Rainbow Ave.	11.00	0.320	0.224	0.096	
84	1st Street	3.50	0.163	0.163		
85	2nd Street	4.50	0.305	0.305		
86	3rd Street	6.00	0.514	0.514		
87	3-1/2 Street	3.50	0.082	0.082		
88	4th Street	4.50	0.109	0.109		
89	5th Street	4.50	0.185	0.185		
90	6th Street	4.50	0.190	0.190		
91	Daang Kalabaw	4.20	0.390	0.390		
92	7th Street	2.50	0.075	0.075		
93	8th Street	3.00	0.095	0.095		
94	9th Street	2.50	0.085	0.085		
95	10th Street	4.50	0.046	0.046		
96	Estherville	4.20	0.422	0.422		
97	Bayanihan	6.00	0.166	0.166		
98	Aurora Homes	8.00	0.173	0.352		
99	Evangelista St. to Brgy. Hall	5.00	0.171	0.171		
100	Brgy. Hall to Sineguelasan E/S	4.00	0.565	0.565		
101	Honeymoon Road	8.00	0.700	0.700		
102	Rafael St.	7.70	0.163	0.163		
103	Uriel St.	7.70	0.272	0.272		
104	Jhudiel St.	8.00	0.189	0.189		
105	Street from Aguinaldo Hiway to St. Michael Subd. Entrance Gate	7.70	0.345	0.345		
106	Riverwalk/Bikelane along Zapote River	4.70	0.210	0.210		
107	Camella Springville Subdivision (Solidarity Route)	12.00	2.562	2.562		
108	Town and Country Subdivision (Solidarity Route)	9.50	1.720	1.720		
109	Soldiers Hills Subdivision (Solidarity Route)	6.00	2.230		2.230	
110	Gardenia Subdivision	6.00	3.270	3.270		
111	Addas 2 Subdivision (Solidarity Route)	6.00	1.213		1.213	
112	F&E De Castro Subdivision (Solidarity Route)	6.00	1.055		1.055	
113	Bellazona Subdivision (Solidarity Route)	15.00	2.235	2.235		
114	Vista Verde Subdivision (Solidarity Route)	7.00	3.279	3.279		
115	Meadowood Subdivision (Solidarity Route)	7.75	1.180	1.180		

No	Road Name	Width (m)	Length (km)	Surface Type (km)		
				Concrete	Asphalt	Earthfill
116	San Miguel Subdivision (Solidarity Route)	7.00	1.130	1.130		
117	Queens Row East Subdivision (Solidarity Route)	7.50	1.204	1.204		
Total Length of City Roads			**84.956**	**71.314**	**9.158**	**5.511**
TOTAL			**146.126**	**103.747**	**34.338**	**9.011**

Source: City Engineering Office

The table above displays the total length of each road type in the City of Bacoor as well as their surface finish type. The table also shows that 100 % of provincial and national Roads within Bacoor are paved. On the other hand, 23 percent of the City roads are paved with asphalt while the 6 percent are earthfill.

2. Bridges - The City of Bacoor has a total of 34 bridges spanning 729.20 meters, 18 of which are classified as national, and 16 as city. **Table 34** shows the number and length of bridges by type of administration while Table 16 shows the type of construction and general condition of each bridge in the City of Bacoor.

Table 34 Number and Length of Bridges, By Type of Administration, 2021

Type	Number	Length (Meters)	%
National	18	478.20	65.58
City	16	251.00	34.42
Total	5	729.20	100.0%

Source: DPWH Validation Exercise

POWER

Adequacy and reliability of power supply is an important concern of the local government unit. Power is needed when expanding economic activities and thus improving the social condition of households. LGUs must endeavor to be self-reliant and exercise other powers and discharge other functions and responsibilities that are necessary, appropriate or incidental to the efficient and effective provision of the basic future power requirements of the population and for economic development.

MERALCO manages the distribution of electricity in the whole Bacoor City. The company supplies electricity to all the 120,092 households in all barangays. However, partially available CBMS data indicates that not all barangays are provided with sufficient supply of electricity.

WATER

Most domestic water requirements in the City are being sourced from MWSI Water Service Inc. (MWSI) as the West Zone Concessionaire of Metropolitan Waterworks and Sewerage System (MWSS). The West Zone concessionaire includes Southern Bulacan towns, western LGUs of Metro Manila, and northern towns of Cavite, including Bacoor City. For those areas in the City not being served by MWSI, water is being sourced from various deepwells.

1. Hydrology – Existing artesian wells and deep wells provide water supply both for domestic and irrigation purposes in the City and its nearby municipalities in the Province of Cavite. According to the National Water Resources Board

(NWRB), groundwater extraction serves as one of the major reasons why flood takes longer to subside.

Overextraction also results in a saltwater intrusion in the aquifers particularly to areas facing the Manila Bay such as the City of Bacoor as evidenced by the decreasing piezometric levels in the said areas. The Manila Bay Alluvium Aquifer System consists of the following Local Government Units: Bacoor, Imus, Kawit, Noveleta, and Rosario.

Based on the water balance analysis, the total groundwater replenishment for the City of Bacoor is estimated at an average of 5.130 MLD (Table 35)

Table 35. Recharge and Recoverable Groundwater

Model Area	Area km²	Recharge MLD	Recharge lps	Recoverable MLD	Recoverable lps
1	25.0	7.329	85	5.130	59

Source: Water Resources Assessment and Development Plan [illegible]

INFORMATION AND COMMUNICATION TECHNOLOGY

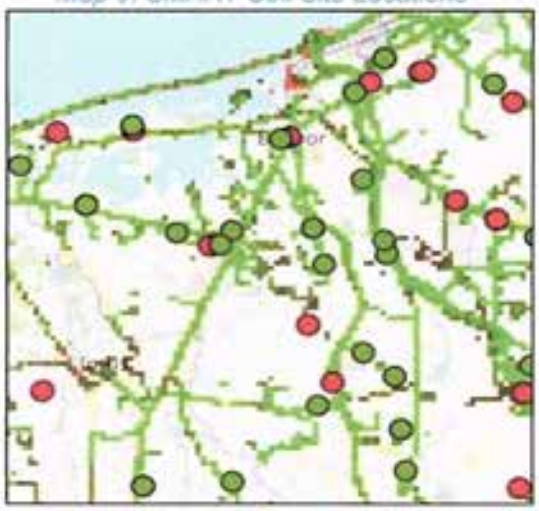
There are several communication service providers operating in Bacoor. Facilities and equipment installed that cater to these service providers include: postal service, cell sites, TV and cable antenna (satellite dish), and radio network. **Table 36** provides a list of the service providers. The list does not include the major television and radio networks which all have full coverage within Bacoor.

Table 36. List of the Service Providers

Communication Service	Service Provider
Cellular Phone Services	Globe Telecom
	Smart Communications, Inc.
	Convergence
	Dito Telecom
	Red
Landline Telephone Services	Globe Telecom
	PLDT
	Converge
	Cablelink
Postal Service	Philippine Postal Corporation
TV and Cable Services (Satellite Dish)	Bacoor Cable TV Corp.
	Cablelink
	Cignal TV
	Sky Cable

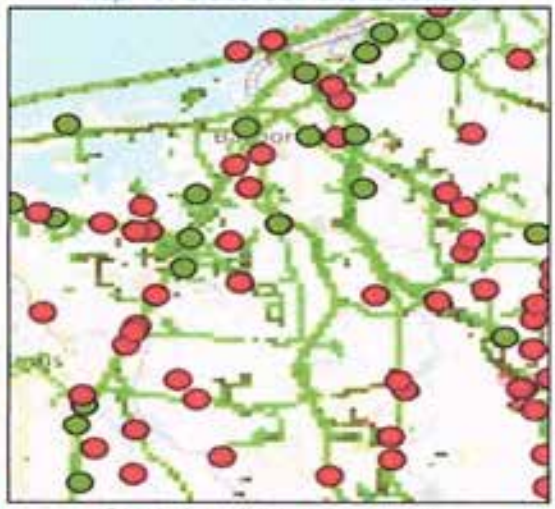
Maps 9-11 show the locations of communications towers within and around Bacoor. On the other hand, **Maps 12-14** show the extent to which 4G+ services are available along major thoroughfares (where the readings were taken). These figures indicate that service is fairly well-distributed, with Globe appearing to have a stronger presence in some areas.

Map 9. SMART Cell Site Locations



Source: https://www.cellmapper.net

Map 10. Globe Cell Site Locations



Source: https://www.cellmapper.net

Map 11. DITO Cell Site Locations

Source: https://www.nperf.com

Map 12. SMART 3G/ 4G/ 5G in Bacoor Coverage Map

Source: https://www.nperf.com

Map 13. GLOBE 3G / 4G / 5G in Bacoor Coverage Map

Source: https://www.nperf.com

Map 14. DITO 3G / 4G / 5G in Bacoor Coverage Map

Source: https://www.nperf.com

CHAPTER 3
SHELTER NEEDS ASSESSMENT

This section will help determine the accumulated housing need at the beginning of the planning period, facilitate understanding of future shelter requirements due to population growth, and identify settlements requiring upgrading of tenure, housing structure, and basic community infrastructure and services.

A. CURRENT HOUSING SITUATION

The City of Bacoor has four (4) identified relocation sites. Among these, two (2) are currently available for immediate occupancy outside the city, accommodating a total of 764 households, namely Hyacinth Residences at Naic and LRTA Subdivision at Brgy. Santiago General Trias. The former is intended for households affected by Mandamus and government projects, which includes but is not limited to the road diversion and revetments, while the latter is specific for LRT Line 1 Cavite Extension affected families.

The remaining two (2) sites are two phases of NHA CBIA project called Ciudad Kaunlaran earmarked for future relocation of Mandamus-affected families and have the capacity to accommodate 1,860 households. Presently, the Phase 1 with 540 units are under construction and is scheduled to be completed by 2024.

On the other hand, there are still 110 pending NHA-allocated units for Bacooreños under Mandamus but the relocation site is yet to be determined.

Table 11. Existing Available Housing Units

Settlement Area	Barangay	Land Ownership	Utilities / Facilities / Amenities	Provided By	No. of Housing Units
In City: Ciudad Kaunlaran, Ph 1	Barangay Molino 2	Government	-	NHA	540
In City: Ciudad Kaunlaran, Ph 2	Barangay Molino 2	Government	-	NHA	1,320
Off-site: Hyacinth Residences	Naic	Government	-	NHA	87
Off-site: LRTA Subdivision	Brgy. Santiago, General Trias	Government	School, Elevated Water Tank and pump house, Covered court, park and playground	LRTA	677*
Off-site: TBD	TBD	Government	-	NHA	110
TOTAL AVAILABLE UNITS FOR RELOCATION					**2,734**

** The number of units allocated is based on LRTA's approved beneficiaries.*

Source: NHA, CBDO

Since at present, there are **874 housing units accessible in areas outside the city,** with an additional **1,860 housing units proposed and under construction within the city**, the anticipated number of new housing units needed for Bacooreños (25,722) is calculated by subtracting these accounted-for units from the total backlog intended for relocation (28,456).

B. Basic Data and Assumptions

The Bacoor City Shelter Plan spans nine years, from 2024 to 2032. To evaluate the housing situation, initial data was sourced from the PSA's 2020 census on population.

The remaining figures were projected by analyzing population trends between the 2010 and 2020 censuses. It's worth noting that since the research was conducted from 2020 to the early part of 2023, the data used is only partial and may be somewhat outdated. Thus, to provide a comprehensive overview of the city's housing situation, certain assumptions were made to facilitate the planning process. These assumptions and their respective bases are as follows:

Table 19. Basic Data and Assumptions

Last Census Year	**2020**	Number of Households	**178,496**
Base Year	**2023**	Housing Stock	**176,036**
Average Household Size (as of last census; not rounded off)	**4.0**	Number of Households That Need Tenure Upgrade	**2,567**
Households/Dwelling Unit	**1.014**	Number of Displaced Units	**25,991**
Household Population in 2020	**663,392**	Doubled-Up Households of Housing Stock	**2,465**
Number of Households in 2020	**164,263**	Homeless	**0**
Housing Stock in 2020	**163,563**	Total Backlog for relocation	**28,456**
Average Annual Population Growth Rate (%) (derived from 2 census years that are at least 10 years apart	**2.48%**	Total Needed Construction of New In-City Housing Units	**25,722**

Source: PSA (2020) and Computed [illegible]

1. The population figures are grounded in the latest PSA census, conducted on 2020;
2. The planning duration covers nine years, from 2024 to 2032, with the reference year set as 2023
3. Bacoor City is home to a population of 663,392 individuals distributed among 164,263 households, as per the PSA's 2020 Census.
4. The population growth rate is 2.48% based on PSA 2010 and 2020 population data and will remain constant in the next nine years.
5. The household size, which stands at 4.0, will remain constant throughout the entire planning period.
6. The CSWDO has verified that there are no homeless households within the city.
7. The initial housing stock, also referred to as the number of occupied dwelling units in the base year, is estimated using the PSA's 2015 data projection, which is equivalent to 144,707.
8. The projected housing stock for the base year (2023) is 176,036.
9. The City Government of Bacoor places its primary focus on the backlog population recorded in the database to align with the zero Informal Settler Family (ISF) target set by DHSUD.
10. 2,465 doubled-up households are determined using the 2023 Housing Stock (176,036) and an average of 1.014 households per dwelling unit.
11. According to the HUDRD database, Bacoor City has a total of 28,456 displaced households. However, only 25,991 of them require relocation and resettlement off-site.

12. The combined total of the population requiring relocation (25,991) and the estimated number of doubled-up households (2,465) equals the overall target for relocation, which is 28,456.
13. According to the HUDRD data, there are 2,567 households in need of tenurial improvement, and they are registered with pending CMP applications.
14. The planned new housing units (25,722) do not match the number of target relocatees (28,456) because there are 2,734 total existing and planned relocation sites allocated for Bacoor residents by the National Government Agencies.
15. Each year, approximately 1,000 household applications for MERALCO temporary service connection are granted. Given that the target population consists of urban poor households, this number will also serve as the basis for upgrading needs on Access to Power Facility.
16. The statistics utilized for the estimated target for upgrading needs for access to potable water and sanitary facility improvement are drawn from the most recent Field Health Service Information System (FHSIS).

    a) The surveyed count of households (HH) with access to a basic safe water supply in the first quarter of 2023 (126,235) was determined by subtracting it from the total occupied dwelling units (176,036), after accounting for the backlog population.
    b) The surveyed number of Households (HH) with flush toilet connected to septic tank for the first quarter of 2023 (125,950) and the number of backlog population subtracted to the Occupied Dwelling Units (176,036). [1]

17. The information used for the future requirements of Garbage Collection and Disposal Services is derived from CENRO's certification that there are currently no inadequacies in solid waste collection services.
18. The City Engineering Office supplied the figures for the yearly goals regarding additional/ upgrading of road/road access (792) and drainage system (2,052).

D. HOUSING UNITS NEEDED DUE TO BACKLOG

As previously mentioned, the base year for Bacoor City's Local Shelter Plan is 2023, which sets the nine-year planning period from 2024 to 2032. This timeframe is further divided into three planning periods: 1st Planning Period covers 2024-2026, 2nd Planning Period spans 2027-2029, and the 3rd Planning Period encompasses 2030-2032. During the 2024-2032 period, Bacoor City's primary focus is addressing the needs of the backlog, particularly doubled-up households and displaced units in alignment with DHSUD's Zero Informal Settler Family (ISF) 2028 Program.

Household population data is extrapolated from the base year's population projections. Details about household (HH) population, the number of households (HH), average household (HH) size, and housing stock can be found in **Table 39**. With an annual growth rate of 2.48%, it's anticipated that the population will reach 890,102, and the number of households will reach 222,526 by 2032.

[1] Note that the backlog population was deducted from the projection to avoid duplication of targeted households for upgrade needs.

Table 23. Household (HH) Population Projection

	LAST CENSUS YEAR	BASE YEAR	1ST PLANNING PERIOD (1PP)			2ND PP	
	2020	2023	2024	2025	2029	2029	2032
HH Pop'n	663,392	713,983	731,689	749,835	768,431	827,032	890,102
Number of HH	164,263	178,496	182,922	187,459	192,108	206,758	222,526
Average HH size	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Housing Stock	163,563	176,036					

Source: Computed from the given data on PSA 2020

The backlog comprises three household categories: (1) doubled-up households, (2) homeless households, and (3) displaced households. Doubled-up households are those where two or more households share a dwelling unit. According to the 2020 PSA data, there are approximately 2,465 doubled-up households to date.

The CSWDO has confirmed that the City of Bacoor does not have any identified homeless households, based on the definition of homeless households, which includes individuals or households living in public spaces like parks and sidewalks, and those without any form of shelter [illegible]

However, the HUDRD database accounts 25,991 displaced households in the city. These displaced households are typically categorized into seven groups, which include families/households in (1) danger/hazard areas, (2) families/households to be affected by infrastructure projects, (3) families/households with a court order for demolition/eviction, (4) families/households with pending threats of demolition, (5) families/households that will be displaced/affected due to climate change and other situations, (6) families/households occupying land whose owners are willing to sell their property to the occupants, and (7) other displaced households that are not classified but are at risk of being displaced.

The City's backlog population that needs relocation comprises of Categories 1, 2, 3, 5, 6, and 7 among the enumerated groups. **Category 1** includes individuals listed in the mandamus court order and those residing in the coastal area. **Category 2** consists of those required to relocate due to various government projects, including the diversion road, revetment, bike lane, LRT Line 1 Cavite Extension Project, ferrocarril, and community amenities, among others. **Category 3** involves households identified with pending civil cases. **Category 5** comprises individuals who were fire victims and have been endorsed by the CSWDO, while **Category 7** encompasses registered members of urban poor associations who do not fit into any of the previously mentioned categories. These five categories constitute the target population for relocation during the nine-year planning period.

Category 6 consists of registered families with pending CMP applications. These are households residing in areas where landowners are willing to sell their properties to the bonafide residents, as summarized in the table below. Instead of providing new housing units to these families, the government is assisting them in securing land tenure because these households already have suitable housing units and have the potential to own the land they occupy through NGA's mortgage financing program/s.

Further information such as the locations, number of households affected, gender of household heads, sand target year of relocation/implementation can be seen in **Worksheet 1-7 in the Annex.**

Table 40. Inventory of Category 6 Households

Location	HH	Land Area	Remarks
Gawaran Heights Homeowners Association, Phase VI, Molino 7	148	6,000 sqm	Providing assistance on the CMP requirements for final evaluation of SHFC Cavite
Gawaran Heights Homeowners Association, Phase VII	208	12,000 sqm	Providing assistance on the CMP requirements for final evaluation of SHFC Cavite
New Gawaran Heights Homeowners Association Phase I to V, Molino 7	862	44,094 sqm	Providing assistance on the CMP requirements for final evaluation of SHFC Cavite
GGMM Clam Neighborhood Homeowners Association Inc. - Green Valley, San Nicolas III, Blk 27 Lot 5	8	400 sqm	Providing assistance on the CMP but household and owners are willing to go for direct selling
Real Ville II HOA, Blk 4 Lot 6 Real Ville Brgy. Real	134	5,981.50 sqm	Providing assistance on the CMP requirements for final evaluation of SHFC Cavite
Queen of Peace Ville Homeowners Association, Salinas I	166	4,999 sqm	Providing assistance for direct selling - the title is with the developer already
Maliksi II Homeowners Association	29	595 sqm	Providing assistance for direct selling – ongoing negotiation
Tibag Achievers Homeowners Association, Panapaan 3	102	5,720 sqm	Providing assistance on the CMP requirements for final evaluation of SHFC Cavite
Julian's Mayville Homeowners Association, Panapaan 5	244	3,331 sqm	Providing assistance on the CMP – takeout
StrikeVille Homeowners Association, Vizcarra Compound, Molino 3	102	15,000 sqm	Providing assistance on the CMP – with pending case for land dispute
Grand StrikeVille 6, 7, and 8, Manggahan , Habay II	564	25,624 sqm	Ongoing organization for Community Mortgage Program (CMP)
TOTAL	**2,567 HH**	**12.37 Hectares** affected by category 6	

Source: Housing Urban Development and Resettlement Department (HUDHD), Bacoor

As mentioned earlier, there are areas in Bacoor where Informal Settler Families (ISFs) that do not necessitate relocation but require assistance in acquiring land tenure through the Community Mortgage Program (CMP) or direct purchase. This is because they live on land whose owner(s) are willing to sell the property to the bonafide residents. These groups are detailed in **Table 40**. The local government will continue to assist these groups in securing land tenure but will refrain from including them in the projection for the target number of new relocation sites to prevent any potential disqualification issues related to double compensation.

On the other hand, presented in **Table 41** is the yearly target for relocation. The table shows that 274 units are required each year to accommodate the doubled-up households, which adds up to a total of 2,465 households over a nine-year period. In the case of the displaced households, a total of 25,991 households need to be relocated and provided with new housing units. They have been earmarked for relocation to units that are ready for occupancy, as detailed in the table, taking into account the timeline for the development and construction of new units.

Table 41. Total Number of Households That Need To Be Relocated and Resettled

Year	Due to Backlog			Annual	%	Total
	Doubled-Up	Displaced	Homeless			
2024	273	484	0	757	7.99%	2,273
2025	274	484	0	758		
2026	274	484	0	758		
2027	274	2,762	0	3,036	32.01%	9,108
2028	274	2,762	0	3,036		
2029	274	2,762	0	3,036		
2030	274	5,417	0	5,691	60.00%	17,075
2031	274	5,418	0	5,692		
2032	274	5,418	0	5,692		
TOTAL	2,465	25,991	0	28,456	100%	**28,456**

Source: Compiled from Program Matrix, PSA 2023

During the initial planning phase (PP 2024-2026), families impacted by Mandamus and government programs, who predominantly comprise the target population's lowest income bracket, will be given priority relocation to existing NGA-supplied sites. This approach allows the local government sufficient time to administer the necessary documentation for 4PH projects while additionally permitting developers to construct the total housing units required for the remaining second and third periods, which are 9,109 and 17,074 units, respectively.

D. HOUSING UNITS NEEDED FOR UPGRADING

The term "upgrading need" is defined as the need for improving the (1) land tenure status and other tenure schemes, (2) access to basic services, and (3) house condition. The City of Bacoor has determined the criteria and benchmarks so as to define what "upgrading" is.

First, the LGU defined those people with secure tenure as those individuals who possess documented evidence to establish their secure tenure status. Regrettably, there are still 28,456 households without this security in their homes, with the highest concentration found in the barangays of San Nicolas (6,471), Molino 2 (4,260), and Zapote 5 (3,135).

For the effective allocation of assistance and resources to these households, Bacoor City further categorized the backlog population into two distinct groups: (1) the 2,567 identified ISFs residing on land where property owners are willing to sell their properties to the occupants, and (2) those in need of relocation from their current dwellings and the provision of new housing units, totaling 28,456 households.

In the context of infrastructure enhancements, they are deemed necessary when a residential unit lacks access to essential services or utilities, or when local Climate and Disaster Risk Assessments (CDRAs) flag an area as prone to disasters.

Table 42 indicates gaps in basic utilities: 9,000 units lack electricity, 21,333 face water supply issues, 21,618 lack sanitation facilities, 2,052 need drainage systems, and 792 require better road access. Considering the number of new units needed also helps determine if providers can meet these household needs. Notably, future water and electricity demands may involve transferees from the relocation program rather than creation of an entirely new account.

CENRO, on the other hand, certified that the current waste collection program is adequate to serve Bacoor's constituents within its 47 barangays on a regular basis, especially because the private and exclusive subdivisions have their own contractual service providers.

Structures with livable spaces that fail to meet national standards, those that are in a state of disrepair or condemned, constructed with substandard materials, or needing extensive repairs, as well as those situated in recognized hazard zones, are candidates for structural improvement. For this category, the projected estimate is derived by subtracting the number of newly constructed or renovated residential buildings from the existing residential lots, spanning a 20-year period from 2003 to 2023. However, because all of the assumed 77,613 dwelling units are privately owned, the City of Bacoor's approach may focus on minimizing the vulnerability of these locations to natural disasters and promoting campaigns to encourage homeowners to rehabilitate their residences.

Table 42. Summary of Upgrading Needs

Upgrading Needs	Target Households				Basis
	Current Needs	Future Needs	Total	Annual Target	
Tenure Need	2,567	-	-	-	Identified ISFs pending for CMP
Access to Power Facility	9,000	25,722	34,722	≈ 3,858	Based on average approved application of urban poor communities
Access to Potable Water	21,307	25,722	47,029	≈ 5,225	Based on FHSIS report 1st Quarter of 2023
Sanitary Facility	21,592	25,722	47,314	≈ 5,257	Based on FHSIS report 1st Quarter of 2023
Garbage Collection & Disposal Services	0	25,722	25,722	≈ 2,858	Based on CENRO's monitoring data
Roads/Road Access	792	25,722	26,514	≈ 2,946	Based on City Engineering Office's available information
Drainage System	2,052	25,722	27,774	≈ 3,086	
Structural Improvement	77,613	-	-	≈ 8,624	Registered residential lots with development and issued certificate of Occupancy (constructed and renovated 2003-2023)

Source: Local Survey, BDHPMO, City Engineering Office, HUDRO, CENRO, City Health Office

CHAPTER 4
AFFORDABILITY ASSESSMENT

A. AFFORDABILITY OF HOUSEHOLDS FOR HOUSING

The majority of homeowners find it challenging to meet their loan and daily living expenses due to the financial burden imposed by the homes they have acquired. This underscores the importance of considering the average income and potential capital outlay for housing within the target population when devising affordable options for socialized housing.

The Local Shelter Plan for the years 2024-2032 is formulated under the premise that the majority of the predicted population expansion will be driven by individuals in higher-income brackets working in Metro Manila and capable of acquiring private housing solutions. As a result, the primary demographic of interest is the urban underprivileged with housing deficits, linked to the Zero Informal Settler Family (ISF) 2028 Program. This initiative is designed to offer cost-effective, enduring, and secure housing options to eligible recipients drawn from ISFs, minimum-wage earners, families, and other individuals with limited income.

The City of Bacoor has established the required number of **new housing units, totaling 25,722**, as detailed in **Chapter 3.A**. When evaluating the extent of affordable housing options, the income or financial capability of the households being targeted is taken into consideration. This demographic is categorized into two income groups, using data from the PSA's 2015 FIES, to determine workable housing solutions within the city for each of these groups.

Table 4.1 Income Groups and Composition of Target Population

	1st Income Group	2nd Income Group
Income Bracket	₱11,947 and below	₱11,948- ₱35,948
Typical monthly income	₱ 10,000.00	₱ 15,000.00
Percentage of New Units	40%	60%
Total number of new units needed: **25,722**	10,289	15,433
Potential % Income for Upgrading/New housing	20%	20%
Potential Annual Capital Cost for Housing	₱ 24,000.00	₱ 36,000
Potential Monthly Capital Cost for Housing	₱ 2,000.00	₱ 3,000
Composition based on jobs	Predominantly made up of tricycle and trisikad drivers, laundry workers, small-scale fishermen, and day laborers.	Consists of a minimum of two members with steady income, capable of supporting families of tricycle operators, casual workers, small-scale entrepreneurs, and vendors.
Affordable housing options	• NHA CBIA Off-site relocation • In-City Relocation for 4-storey socialized housing condominium (4PH)	• In-City Relocation for multi-storey socialized housing condominium (4PH) (refer to Table 3.1)
Payment Terms	6% interest on 30-year amortization	6% interest on 30-year amortization

To enhance the financial resilience of households, planners have taken into account a prudent guideline known as the 30/30/3 home buying rule. According to this rule, homeowners should adhere to three key principles: (1) Their housing mortgage should not exceed 30% of their gross income, (2) They should maintain savings equivalent to 30% of the home's value as a financial safety net, and (3) The property's price should not surpass three times their income. While the 30% rule may overestimate the capacity of the most economically vulnerable segment and is more suitable for developed countries with low poverty rates, it serves as a meaningful reference point for determining the maximum affordability for the target households. Nonetheless, since the primary aim of this housing planning is to offer a sustainable and affordable option to urban poor communities, a 10% reduction is applied to the 30% cap to ensure that households can still manage unforeseen expenses arising from unexpected circumstances that may impact their financial stability. Consequently, both income levels are provided with a presumed 20% potential income allocation for housing upgrades or acquiring a new housing unit.

According to **Table 43**, 40% of the households in need of new units are from the lowest or first income group (10,289), with incomes below the poverty threshold (₱11,947.67). They typically have a monthly salary of ₱10,000, and their prospective capital cost for housing is projected to be at ₱2,000 per month based on the assumed 20% potential housing capital. Given that the first income group is the more vulnerable of the two, it is necessary to facilitate their immediate transfer. Moreover, their limited income implies a constrained budget that would be further strained by expenses related to land, construction, and housing. Therefore, they will be given a relocation priority to sites in nearby municipalities and the CBIA Projects within the city.

On the other hand, the 60% majority (15,433) are from the second income group, with an average monthly income of ₱15,000 and the ability to save ₱3,000 for monthly housing amortization. They are assumed to be able to afford a higher cost of living in comparison to the first, thus the proposed housing option for this group are on economic housing.

B. Affordable Housing Options

Township development is an allusion to our campaign slogan, *"Sa Bacoor, At Home Ka Dito!"* The Township development will be a key strategy for the general well-being and community sustainability of Bacoor City, and its primary objective is to address the housing shortage present and the inadequate access to basic services. It will give Bacooreños a sustainable city-within-a-city residence, complete with adequate employment opportunities, a variety of housing options, a safe environment for pedestrians, and quick access to basic services and government services. It is essential for addressing the issues brought on by urbanization, promoting sustainable growth, and raising the living standards of those who reside in Bacoor. The master plans for these townships are anticipated to significantly enhance the City's economic, social, and environmental well-being and act as models for future and adjacent urban developments. Accordingly, the typical developments should provide access to essential services and community facilities, sewage treatment plants (STP), covered concrete drainage, major and minor concrete roadways, materials recovery facilities

(MRF), water cisterns, and open spaces. Here are the housing projects for the future that are under consideration as part of the township development:

Table 44. Affordability Analysis: Housing Option and Land Need Calculation

OPTION	1	2	3	4	5	6	7
Target Income Group	1st	2nd	2nd	2nd	2nd	2nd	2nd
No. of buildings	Shaw	8	18	4	4	8	8
No. of Storeys	4	15	15	12	12	12	12
Residential Floors	4	14	14	11	11	11	11
Commercial/ Parking Floors	0	1	1	1	1	1	1
Unit Size	25 sqm loftable	27 sqm	27 sqm	27 sqm	27 sqm	27 sqm	27 sqm
Units/ Floor	24	14	14	30	30	30	30
Maximum Selling Price	₱933,320	₱1,620,000	₱1,620,000	₱1,620,000	₱1,620,000	₱1,620,000	₱1,620,000
Total No. of Housing Units	672/has	1,588	3,526	1,320	1,320	2,640	5,280
Land Required for the project	21.44 has	1.47 has	2.47 has	2.21 has	1.97 has	3.7 has*	8.0 has
Total Land Required = 41.26 has							

Recognizing the impact of building height on construction and maintenance expenses, the planners of Bacoor City have determined that, for affordable condominium housing aimed at lower income groups, a practical approach is to limit the building height to a maximum of four (4) stories, rather than opting for high-rise structures. Conversely, Options 2-6 are geared towards the second income group, which possesses a relatively greater potential annual capital budget for housing. Therefore, mid-rise concepts are being considered, along with the possibility of incorporating a commercialized ground floor that falls under local government oversight, in order to provide subsidies for the maintenance costs associated with the corresponding residential levels.

Local and National Governments have jointly endorsed vertical development as a viable solution for addressing land resource scarcity. Consequently, this endorsement aligns with the implementation of the DHSUD's flagship project, the 4PH programs, in which the City of Bacoor has demonstrated its preparedness to engage. As a result, the proposed projects are in accordance with the program. The computations for the maximum unit selling price and the expected land utilization are founded on the directives delineated in DHSUD's Memorandum Circular No. 2030-010, which pertains to the revision of the Operations Manual for the Pambansang Pabahay Para sa Pilipino Housing (4PH) Program. That being said, the total land area required for the city's socialized housing project is estimated to be **approximately 41.26 hectares**. Apparently, due to the government's recent efforts to secure land for in-city housing projects, it can be concluded that there is now an ample supply of government-owned parcels available for this purpose.

CHAPTER 5
RESOURCE ASSESSMENT

Resources analysis is the assessment of the available, required and potential supply and stocks for shelter provision. In order to respond to the housing demand identified in the previous chapters, resources should be first identified and assessed by the LGU. These resources are mainly classified to a) land; b) infrastructure (e.g., power, water, sanitation, etc.); and c) finances or sources of funds.

A. LAND RESOURCES

Land stands as a paramount necessity for the advancement of housing infrastructure. Many Local Government Units commonly face challenges related to the insufficient availability of government-owned land to support housing initiatives. This scarcity can be ascribed to various factors, including policy constraints on land acquisition, affordability issues, the appropriateness of land for creating a secure environment, and other contributing factors. Fortunately, the City of Bacoor possesses the technical capability to meet the minimum land requirements for addressing future housing demands and reducing the backlog.

Table 43. Inventory of Suitable Lands for New Housing Development

Owner/ TCT	Land Area (sqm)	Location	Status/ Description
City of Bacoor/ 057-2017051458	14,685.00 sqm	Zapote 1, Bacoor	• Residential • Triangular lot • With existing covered court and barangay hall • Has an existing MOA with Metro Land Builders Corporation for 4PH development
City of Bacoor/ 057-2021009855	7,769.00 sqm	Alima, Bacoor	• Consolidated lots • Ongoing Transfer of title • Has an existing MOA with Metro Land Builders Corporation for 4PH development
City of Bacoor/ 057-2021004606	5,482.00 sqm	Alima, Bacoor	
City of Bacoor/ O-1284	5,848.00 sqm	Alima, Bacoor	
City of Bacoor/ 057-2022012810	5,466.00 sqm	Alima, Bacoor	
OCT No. 2014-000091	5,523.50 sqm	Salinas, Bacoor	• Adjacent lots for consolidation and retitling • Partially acquired lots with ongoing negotiation for complete lot purchase
OCT No. 2014-000092	5,523.50 sqm	Salinas, Bacoor	
OCT No. 2014-000093	5,523.50 sqm	Salinas, Bacoor	
OCT No. 2014-000094	5,523.50 sqm	Salinas, Bacoor	
T-1352795	19,792.00 sqm	Lot 138, Salinas, Bacoor	• With pending DBP loan for land acquisition
TCT No. 989493	353,792.00 sqm	Sitio Malipay 1, Molino IV, Bacoor City	• With writ of possession intended for township development • 15% of the buildable and saleable area will be dedicated to socialized housing development
TOTAL	**434,928 sqm**		

A combined land area of **43.49 hectares** in the barangays of Alima, Salinas, Molino IV, and Zapote 1 have been classified as suitable locations for future residential developments. These surveyed areas are currently designated for Agriculture, Mixed-

use, or Residential. It's important to note that although there are parcels classified as agricultural, none of these areas fall under the primary agricultural category. This means that if reclassification becomes necessary, certain policy restrictions will not apply. Additionally, they have also been formally zoned for residential and mixed-use purposes in the Comprehensive Land Use Plan (CLUP) and have been certified by the Bacoor City's Local Zoning and Land Development Department.

In terms of hazard exposure, the study and analysis conducted by the BDRRMO have identified that the potential areas for housing development are relatively secure. Nonetheless, recommendations have been provided to reduce vulnerability in case of any potential danger. (See Chapter 3.4). Hazards that were considered are presented in **Tables 4-9** and the population exposure to hazard are identified in **Tables 10-15.**

According to the Affordability Analysis, Housing Option, and Land Need Calculation (see Chapter 4), the City of Bacoor will require approximately 41.26 hectares of land for the construction of 25,722 new housing units. These units are intended to address the housing needs of the population currently awaiting allocation, but they haven't been assigned units yet. Apparently, the City Government of Bacoor currently owns 3.93 hectares of the available suitable lands. This means that once the ongoing acquisition of the remaining 39.57 hectares is successfully completed, the deficiency of 37.33 hectares required for potential housing development areas will be fulfilled. Therefore, it is imperative for the City of Bacoor to persist in the negotiation and acquisition of the said real estate properties.

Table 48. Comparison of Total Land Need VS Total Land Available

Total Land Needed (Hectare)	LGU-Owned Property (Hectare)	Remaining Need for Acquisition (Hectare)	Ongoing Lot Acquisition (Hectare)	Remarks
≈41.26 has	≈3.93 has	≈37.33 has	≈39.57 has	Sufficient once all lands with ongoing acquisition transaction are secured

Source: Geographic Information System (GIS) - Assessor's Office, Engineering Office

The nominated lands were surveyed to make sure they were suitable for the backlog population's housing relocation and resettlement, accessible, and free from disaster risk. There is no need for an additional survey because the total land available already exceeds the requirement for additional units. However, additional research and surveys might still be considered for land banking purposes.

B. INFRASTRUCTURE RESOURCES

RA 7279 (The UDHA Law) under Section 21 mandated the LGU and the NHA, together with private developers and concerned agencies, to provide basic services and infrastructure facilities for socialized housing and resettlement areas such as potable water, power/electricity and an adequate power distribution system, sewerage facilities, adequate solid waste disposal system, and access to primary roads and transportation facilities (e.g. drainage).

The demands for the current and future needs were identified in this plan to assess whether the service providers are capable to satisfy the requirement based on the

summary of upgrading needs [illegible] or if there is a need to pursue an alternative option in order to achieve the target.

Table 47 Summary Assessment of Infrastructure Need vs Capacity of Service Provider

Upgrading Needs	Service Provider	Annual Capacity of Provider to Serve New Units	Annual Target	Remarks
Access to Power Facility	MERALCO	10,000	= 3,981	Sufficient
Access to Potable Water	MWSI	[illegible]	= 5,352	Insufficient. Explore alternative sustainable potable water source option
Garbage Collection & Disposal Services	LGU	47 barangays	= 2,981	Ensure the establishment of MRF & ensure the proper segregation at source
Roads/Road Access	LGU and DPWH	See City Development Plan	= 3,069	Sufficient
Drainage System	LGU and DPWH	See City Development Plan	= 3,209	Sufficient

Source: Meralco, MWSI, City Health Office (FHSIS), CENRO, BSC

The identified locations for shelter facilities fall under the jurisdiction of MWSI, but a conservation ordinance enforced by DENR-WRMO currently exists. Therefore, it is crucial to implement regulations and control measures in these areas.

Additionally, DENR has issued guidelines for the effective implementation of water conservation measures by all government offices. These guidelines are in line with Memorandum Circular (MC) No. 22, which was released by Malacañang on June 7. As of the time of writing, the Department of Environment and Natural Resources' (DENR's) Water Resources Management Office (WRMO) is taking proactive steps to prevent significant water shortages attributed to El Niño. The scope of the water conservation order has been expanded to encompass all residents of the National Capital Region (NCR) and neighboring provinces.

The first bulletin issued by WRMO, following its establishment in April 2023 through President Marcos' Executive Order No. 22, outlines the water conservation guidelines. The primary mission of WRMO is to ensure the availability and sustainable management of the country's water resources. The bulletin recommends practices such as rainwater harvesting, greywater recycling, and shutting off building valves from 7:00 p.m. to 6:00 a.m. It also provides a framework for evaluating monthly water usage based on per capita consumption for frontline agencies, taking into account the number of employees and visitors:

"As a guide, each employee must not consume more than 50 liters of water per day in office buildings (also consider the number of visitors for frontline agencies) and not more than 180 liters per day in households/condominiums and 24/7 offices. Multiply these per capita consumption guides and compare with your total monthly consumption (1,000 liters = 1 cubic meter)"

In Bulletin No. 2, WRMO mentioned that its team would conduct spot inspections of office buildings to check for excessive water usage, leaks, and faulty bathroom fixtures. It also instructed barangay officials and condominium and subdivision managers to

advise residents to conserve water by reducing activities that consume a large amount of water, such as lawn watering and vehicle washing.[2]

Regarding the Local Government Unit's (LGU) ability to construct road and drainage systems, particularly on properties acquired for township development, this will be integrated into the City of Bacoor's development initiatives. It will be a component of the City Engineering Office's Program of Works, showcasing the LGU's capacity in this regard.

C. FINANCIAL RESOURCES

In matching the financial resources, the LGU must ensure that there are funds available to spend with the deliverables set from the shelter needs assessment. This will determine how the project and/or activities will become operational and functional.

1. Estimated Financial Requirement for Housing Provision

From the type of affordable options presented and recommended by income group levels and housing units needed, the total estimated cost was derived. The operationalization of the housing development of City of Bacoor will require a total of ₱27,910,280,000. The estimated cost will cover provision of new housing across all income groups, associated with the needs assessed. It is inclusive of the construction, land development, administrative costs and fees for CCT and the special/unique works such as pile driving, and foundation works.

Table 48. Government's Financial Requirements Needed for Constructing New Housing

Income Group	Option	Number of Units	Unit Cost (in PhP)	Total Cost (in PhP)
1st Income Group	1. 4-storey socialized condominium housing	10,289	₱1,000,000.00	₱10,289,000,000
2nd Income Group	2. 15-storey socialized condominium housing at Zapote 1 with 14 residential floors	1,568	₱1,080,000.00	₱1,693,440,000
	3. 15-storey socialized condominium housing at Alima with 14 residential floors	3,528	₱1,080,000.00	₱3,456,000,000
	4. 12-storey socialized condominium housing at Dulong Bayan with 11 residential floors	1,320	₱1,080,000.00	₱1,425,600,000
	5. 12-storey socialized condominium housing at Salinas with 11 residential floors	1,320	₱1,080,000.00	₱1,425,600,000
	6. 15-storey socialized condominium housing at Molino IV with 14 residential floors	2,640	₱1,080,000.00	₱2,851,200,000
	7. 12-storey socialized condominium housing at Salinas with 11 residential floors	5,280	₱1,080,000.00	₱6,068,400,000
Total		**25,945 units**		**₱27,910,280,000**

[2] https://www.denr.gov.ph/index.php/news-events/press-releases/5517-denr-wmo-releases-water-conservation-guidelines-for-gov-t-offices

2. Potential Sources of Funds for Housing Provision

The City of Bacoor, although being a 1st class component city, will still need outsourcing of funds to carry out this shelter plan due to the substantial amount needed to implement it [illegible] Thus, the identification of potential sources of funds from National Government Agencies (NGAs), Non-Government Organizations (NGOs), and private institutions is critical to provide a variety and range of options to be accessed by the LGU. **Table 49** shows the potential funding sources recognized by the Local Government Unit (LGU) for the low-cost housing township development within the City of Bacoor.

Table 49. Potential Sources of Funds for Shelter Provision and Township Development

Agency/ Organization	Name of Program	Component
NHA	Resettlement Assistance Programs for LGUs	Site development, Upgrading of sites and community facilities
DOTr/ LRTA	LRT Line 1 Cavite Extension	Relocation Site and housing units
SHFC	Community Mortgage Program (CMP)	Lot Purchase and/or vertical developments
DHSUD	Pambansang Pabahay Para sa Pilipino Housing (4PH) Program	Lot Purchase and site development
Pag-IBIG	Development Loan	Construction of units eligible for Pag-IBIG mortgage financing
DPWH	Civil Works and Infrastructure	Financial assistance, roads and community facilities
DSWD/ CSWD		Financial assistance and livelihood programs
Socialized Housing Tax Fund	Housing & Development Program	House construction, purchase of land, land development, relocation and resettlement
20% Development Fund from NTA	Housing & Livelihood Program	Social development, economic development and environmental management
Corporations and Institutions	Balanced Housing	Develop socialized housing equivalent to 5% of their main project's total area
	Corporate social responsibility (CSR)	Land donations, Community Facilities

CHAPTER 6 WORK AND FINANCIAL PLAN

The Implementation Plan provides the details on how the strategies adopted will be carried out which includes the required action, responsible persons, target dates of accomplishment, implementation tools, and materials and resources required to undertake the activity. The City of Bacoor came-up with Table 49 - a Work and Financial Plan to implement the LSP within nine (9) years (2024-2032).

Table 50. Work and Financial Plan

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
GOAL 1: INFRASTRUCTURE							
1.1. To acquire /access 41.26 hectares of land for housing and resettlement beginning 2024 until 2029 (see Table 45)							
1.1.1. Land Inventory	Land research and data gathering of the identified sites for housing development	Conduct necessary tests and study to ensure that the area is hazard-free	Bacoor City Land and Improvement Appraisal Committee	Identify 41.26 has. of hazard-free land for housing and resettlement	None	N/A	2024-2026
	Screening/ Initial site assessment for suitability and feasibility for acquisition and housing development matching with the buildable sites as specified in the CLUP	Site Selection	Bacoor City Land and Improvement Appraisal Committee; HUDRD; DHSUD; CEO; BDRRMO	Identify lots for acquisition; Supplies and materials for conducting the studies	₱1,000,000.00 for administrative and operational expenses	GF	2024-2026
		Site Suitability Analysis					2024-2026
		Site Feasibility Analysis					2024-2026
		Assessment of identified sites and priority setting for land acquisition intended for housing (CMP, CBIA, direct purchase)					2023-2024
1.1.2. Land Acquisition & Development (A&D)	Land negotiation	Coordination with Registry of Deeds to Identify the Lot Owners	HUDRD, OCLS, Assessor and Zoning; Registry of Deeds	TCT/OCT	₱50,000	SHTF	2024-2026
		Dialogue with property owners and developers		Attendance sheet	₱50,000	SHTF	2024-2026
		Direct Purchase	BZLDD; CEO; CPDC; HUDRD, Assessor; RD	Registration Fee, Land Title	[illegible]	GF, Developers	2024-2026
		Land Donation	Corporations and Institutions with CSR Programs; RD	DODA; BIR Tax exemption;	[illegible]	CSR, GF	2024-2026

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
		Expropriation (Eminent Domain)	OCLS; Bacoor City Land and Improvement Appraisal Committee	Writ of Possession	[illegible]	GF	2024-2026
	Clearance for stewardship on protected areas	Land verification through the DENR and other certifications, especially of the parcel of lands cleared due to relocation and resettlement activities	Bacoor City Land and Improvement Appraisal Committee; 4PH Task Force CENRO	Alienable and disposable land certification	₱30,000 per lot	SHTF	2024-2026
1.2. Craft a master-planned community for a residential neighborhood with adequate community amenities and government service facilities							
1.2.1. Township Development	Provide the basis for future decisions on regulations, funding, and the development control of the built environment.	Development of a Comprehensive Master Plan in alignment with CLUP	LHB, CPDC, CEO, HUDRD, CAO, OBO, SP, 3rd Party Master Planner	Comprehensive master plan and planned unit developments; Outsourced Master Planners	₱2,000,000.00	GF	2024-2026
		Formulation of Development Control Standard and Guidelines (DCSG) as implementing rules and regulations of the township master plan		DCSG; Declaration of Covenants, Conditions and Restrictions (DCCR)			2024-2026
	Build a developer community and encourage participation of private sector in the City socialized housing programs and projects in partnership with NGOs (e.g. Rotary, Eagles)	Developer's Forum	LHB, 4PH Task Force, Developers	Relevant codes and restrictions			2024-2032
		Provide incentives for private sector in its participation to the City socialized housing programs and projects	HUDRD, LHB, OCLS, SP, Mayor's Office	Tax incentives; Executive Order; CSR Programs	₱500,000	GF	2024-2032
		Enforcement w/ private developers by invoking Sec.	Private Developers; OCLS; HUDRD; MO	Executive Order mandating Socialized housing equivalent to	N/A	Developers	2024-2032

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
		18 of RA 7279 (balanced housing)		15% of main project's total area or cost of subdivision or 5% of condominium			
1.2.2. Zero (0) backlogs by 2032 and create communities that are socially responsible with livable, decent, affordable, disaster- and climate change-resistant and sustainable settlements and access to urban amenities and opportunity.	Engagement with Pambansang Pabahay Para Sa Pilipino Housing (4PH) Program	Joint venture with land owners/ developers	OCLS, SP, LHB,PH Task Force, Developers	JV Agreement Between Developers and LGU	none	N/A	2024-2026
		Compliance with DHSUD requirements for 4PH	LHB, CPDC, CEO, HUDRD, CAO, OBO, DHSUD, Developer/ Contractor	[illegible]	none	N/A	2024-2026
		Construction and turnover of new housing units (26,605)		Land, construction materials, technical plans and documents, permits	Approximately ₱28B	Pag-IBIG, DHSUD, Developers	2024-2031
	Selection of beneficiaries	Beneficiaries Selection, Awards and Arbitration Committee (BSAAC)	HUDRD, Pag-IBIG, NHA	List of beneficiaries and their validation results	none	SHTF	2024-2031
		NHA Prequalification	NHA	Target beneficiaries' folder of requirements	none	SHTF	2024-2031
	Social preparation activity	Conduct of General Assemblies, orientation	CIO, HUDRD, Barangay and NGAs concerned	Sound system and IEC	₱1,500,000	SHTF	2024-2031
		Completion of documentary requirements		Checklist of requirements needed for prequalification	none	N/A	2024-2031
		Acceptance of relocation		Sinumpaang Salaysay	none	N/A	2024-2031
	Relocation of people residing in danger zones, affected by government projects, affected by climate change and other situations such as fire incident, and of other identified households who were not classified	Provision of housing through CBIA	NHA, LGU	RFO Units	[illegible]	NHA	2024-2032
		Provision of grocery package to relocates	HUDRD	Grocery packs	₱1,500 per family	Socialized Housing Tax Fund (SHTF)	2024-2032
		Provision of trucking assistance to transport the personal belongings of the affected ISFs	HUDRD	Rental winged vans	₱13,500 per winged van trip	SHTF	2024-2032

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
...Zero (0) backlogs by 2032 and socially responsible citizenry with sustainable, livable communities.	but is in danger of being displaced	Provision of transportation assistance	HUDRD	Rental buses	₱10,000 per bus trip	SHTF	2024-2032
		Provision of meal for the relocatees	HUDRD	Breakfast and lunch meals	₱250 per meal per person		2024-2032
		Provision of livelihood financial assistance	HUDRD	Financial assistance	₱10,000 per family	SHTF	2024-2032
	To provide assistance to the households occupying lands whose real property owners are willing to sell their properties to occupants	Acquisition of land through Community Mortgage Program (CMP)	SHFC, HUDRD, OCLS, OBO, CPDC, LHB, Association and barangay	Requirements and fund for CMP without housing components	[illegible]	SHFC, Association	2024-2032
		Slum upgrading or improvement		Requirements and fund for CMP with housing components	[illegible]	SHFC, Associations	2024-2032
	Provide assistance to ISFs with Court Order for Demolition	Pre-demolition conference	IAC, PCUP, DILG Trial court and sheriff	Writ of execution and OCA Circular for sheriff's implementation	none	N/A	2024-2032
		Issuance of Certificate of Availability of Funds for qualified ISFs	HUDRD	Assessment and Validation of civil-case affected families	none	N/A	2024-2032
		Inter-Agency Conference	PNP, CSWD, HUDRD, Sheriff, DILG, DepEd	Office supplies	none	N/A	2024-2032
		Provision of financial assistance equivalent to 60 days × prevailing minimum wage	HUDRD	Financial Assistance, Certificate of Eligibility, Acceptance Letter	₱28,200 per family	SHTF	2024-2032
1.3. Provide sufficient access to target population's dwellings by the end of 2032							
1.3.1. Adequate accessibility of all	Inventory of possible routes	Scouting and mapping	DPWH/ OBO/ CEO/ BZLDD/ CAO	GIS, CAD, Survey tools	₱60,000,000	GF (20% Development Fund)	2024-2032
		Road Widening			₱450,000,000		2024-2032

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
dwellings by the end of 2032	Development of new roads for new sites for housing, upgrading and provision of roads to currently inaccessible areas	Right of Way acquisition through procurement		SP Resolution, TCT and fund for Procurement	none	SHTF	2024-2032
		Right of Way acquisition through expropriation (eminent domain)			none		2024-2032
	Improvement of transit system and pedestrianization	Provision of intermodal transportation hubs and stops	BTMD, CEO, DPWH	Strategically placed Transport hubs and PUV stops	₱40,000,000	GF (20% Developmen t Fund)	2024-2032
		Bike lane provision	CEO & DPWH	Safe lanes for cyclists	₱20,000,000	GF	2024-2032
		Sidewalk upgrading and maintenance	CEO	Safe and unobstructed sidewalks	₱15,000,000		2024-2032
1.4. Ensure that all target households will have the necessary access to basic services by the end of the planning period (2032)							
1.4.1. Improvement of safety and security measures in the city	Study possibility of having township substations for PNP, BDRRMO, BFP	Coordinate regarding manpower capacity	PNP, BDRRMO, BFP, Developers	Availability of manpower	[illegible]		2024-2032
		Identify strategic locations		GIS and Survey			2024-2032
		Proposed construction/ Installation of substation/ outpost/ command center		Area and materials for installation/ construction of substation/ outpost	₱5,000,000	GF	2024-2032
1.4.2. Energization to ensure that all households have sufficient access to power	Coordinate with MERALCO for the development of transmission lines to new sites for housing and connecting HHs without access to power.	Assessment of current capacity, matching with future demand.	MERALCO, LGU	Survey and database	[illegible]	Developers and Associations	2024-2032
		Assess actual number of households whose residing on lots with owners who are willing to sell their property yet still lack access to power		Survey tools and list of target population			
		Connection of power to assessed Households without access	MERALCO	Post layout plan, meters, MERALCO requirements			

OBJECTIVES	STRATEGY	PROJECT, PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
		Design and development of transmission lines to new sites					
	Management of Energy Resources	Proposed Renewable Energy (RE) Programs in line with Renewable Energy Act of 2008	SP, MO, CENRO, CEO, OBO	RE Resources and generators, City Ordinance, alternative options for sustainable renewable energy source	₱5,000,000	GF	2024-2032
1.4.3. Improvement of health measures in the city to ensure sufficient access to potable water supply so all target households will be serviced with safe water supply	Coordinate with MWSI for water connection so target households can have access to basic water services by 2032	Assessment of current capacity, matching with future demand.	CHO, CENRO, CEO, MWSI, OBO	Survey and database		Developers and Associations	2024-2032
		Assess actual number of households whose residing on lots with owners who are willing to sell their property yet still lack access to basic water services		Survey tools and list of target population			
		Design and development of water connection		Water meters and sub meters, Connection plan; MWSI requirements			
	Management of water resources and Proposed Alternative options for potable water source (e.g. desalinators, rainwater harvesting, grey water recycling etc.)	Proposed Renewable Water Resource Programs in line with DENR-Water Resources Management Office (WRMO) directives	CHO, SP, MO, CENRO, CEO, CIO, barangay	Feasibility studies and Resource data	₱5,000,000	GF	2024-2027
		Monitoring of Water Usage and Conservation programs and orders		• Inspectors and ordinances • IEC & Resolution	none		
1.4.4. Ensure sufficient household access to sanitation	Promote health and equitable access to safe water, sanitation and hygiene services	Initiatives to encourage the 21,592 households to have the basic sanitation facility by 2032	CHO, CENRO, barangay, CIO	Toilets, septic tanks, info campaigns; IEC	₱1,500,000	Barangay and LGU GF, NGOs	2024-2031

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
facilities to prevent spread of disease and contamination	Improvement of sewerage system	Regulate discharge of effluent pursuant to Act 9257, otherwise known as "Philippine Clean Water Act of 2004"	Developers, CENRO, OBO, DENR, CEO	• Ordinance • Compliance schedule and Monitoring requirements • Discharge Permit	none	N/A	2024-2032
		Institutionalize and monitor strict compliance for the requirement for all developments to have Sewage Treatment Plant (STP)		Functioning and DENR-compliant STPs, Permits		Developers	2024-2032
1.4.5. Make sure that all households receive regular garbage collection, transportation and the waste will have proper processing, disposal and monitoring	Solid Waste Management Program and Waste Quality Improvements in support to RA 9003 or the "Ecological Solid Waste Management Act of 2000"	Garbage Collection & Disposal Services	CENRO, BLZDD, CPDC, CEO, DPWH, LHB, CHO, Barangay, Service Provider, CIO	• Additional 25,722 households will have access to garbage collection and disposal services by 2032. • HOA Plan • IEC	₱300,000,000 is allocated for annual solid waste collection	GF	2024-2032
		Develop an action plan that will allow the LGU to address the segregation at source and proper collection and disposal both for hazardous and non-hazardous waste					
		Expand and replicate the best practices and the pioneering initiatives of Bacoor Housing Projects for sustaining and maintaining their MRFs		• Proper waste segregation and garbage disposal as per (RA 9003) • IEC	none	N/A	2024-2032
1.4.6. Upgrade existing drainage systems or provide drainage	Repair, rehabilitation and improvement of the drainage system along the vulnerable areas and other flood- control related projects like	Improve the capacity and stability of natural (rivers and their banks) drainage systems especially for flood prone areas	BDRRMO, OBO, CEO, CENRO, DPWH, Barangay,	Dredging and Flood control infrastructure, such as levees, dams, seawalls, and tide gates	₱10,000,000	DPWH, GF	2024-2032
		Improve the capacity and stability of natural		Canal repairs or upgrade	₱10,000,000		2024-2032

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
	clean and green programs.	manmade (concretes canals) drainage systems especially for flood prone areas					
	Development of drainage systems for new sites for housing and for areas without proper drainage at the present	Assess actual number of households whose location that needs new/improved drainage system		Materials for culverts and canal construction and road restoration	None	Developers, GF	2024-2032
		Temporary road closure during construction	BTMD, CEO	Detour signage, EWD, Safety measures	₱2,000,000		2024-2032
		Design and development of drainage system	Developers, CEO, CPDC	Plan and construction materials	₱2,000,000		2024-2032
1.5. Generate adequate employment/ livelihood opportunities to the displaced population and institute good governance, promote culture, trade, and investment in the city through modern technology towards a safe and sound environment							
1.5.1. Improvement of household access to social welfare and Development through Holistic Site Development by Establishment of social services, market centers, alternative livelihood within and near relocation sites	Establishment of community centers with satellite office for social workers and livelihood office for well-rounded communities and increased employment opportunities	Initiate Livelihood and Manpower Development programs	TESDA, Barangay, CSWDO, Livelihood Office, DepEd, NHA, DHSUD, DPWH, Institutions and Corporations with CSR Programs, CPDC, PESO	Office supplies, training kits	Approx ₱2.85M per 1,050 Individuals	GF, DPWH, CSR	2024-2032
		Skills Resource Employment Agency		Database	None	N/A	2024-2032
		Fully equipped community facilities and unobstructed open spaces					
	Adequate community facilities in every township development that can be repurposed as evacuation areas as needed	Maintenance of Parks and Open Spaces	CENRO, ACPOPS, Tourism	Ecopark maintenance	₱100,000 annually	GF (MOOE)	2024-2032
		Provision of Chapels, Schools and Day Care Centers	Institutions and corporations through CSR Programs, DPWH, NHA, DHSUD, DepEd, CSWD, CEO	Community Facilities in proportion to future and existing developments and population of Bacoor City	₱5,000,000	GF, Developers, DPWH, CSR, NHA, DHSUD, Barangay GF	2024-2032
		Provision of Covered Courts and Multi-Purpose Halls			₱10,000,000		
		Provision of Markets			₱5,000,000		

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
		Provision of Health Centers and one-stop shops			₱5,000,000		
1.6. Reduce Bacoor's susceptibility to Risks and Disasters							
1.6.1. Lowering vulnerability of people and property, reducing exposure to dangers, managing land and the environment wisely, and enhancing readiness and early warning for force majeure	Ensure Developers are in full compliance with requirements for soil and structural stability	Compliance with NBC Fire Code, Electrical Code and other relevant building codes	OBO, BDRRMO, CENRO, DHSUD, CIO	Building Permit and Occupancy Permit, soil test, flood test, hazard assessment	[illegible]	Developers	2024-2032
		Promote installation of alarm systems (e.g. Fire and Detection Alarm System (FDAS), seismic monitors, etc.)		Information, Education and Communication (IEC)	₱1,500,000	GF	2024-2032
		Encourage structural rehabilitation of houses that are dilapidated, condemned or in need of major repairs					
	Improvement of areas susceptible to sea level rise	Maintain and restore wetlands like mangrove swamps	City Agriculture	Supplies and materials	₱250,000 annually	GF (MOOE)	2024-2032
		Install flood barriers as necessary to absorb storm surges	DPWH, CEO	Plans and materials for installation of Seawalls, Revetments	₱15,000,000	DPWH, GF	2024-2030
		Monitor climate action plan, DRR Programs and evacuation plan	BDRRMO, CENRO, CPDC, SP	[illegible]			
GOAL 2: INSTITUTIONAL							
2.1. Establish an effective local enforcement, inspection, monitoring and evaluation of the implementation of the Bacoor Local Shelter Plan 2024-2032 and other related programs, projects and activities (PPAs).							
2.1.1. Vigorously pursue a comprehensive, viable, and sustainable urban	Formulation of LSP through the Sangguniang Panlungsod (SP) by enacting through a local ordinance (2023) to	Write up of the LSP in coordination with the concerned NGAs and LGU Offices	LHB, HUDRD, OBO, CAO, OBO, CEO, CENRO, CPDC, Budget Office, CSWD, MO, SP, OCLS, CHR,	Database, survey results, writeshop, and seminar	None	N/A	2023
		Approval and adoption of the housing-related		Ordinance implementing rules	None	N/A	

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
development and housing program, in sync with the city's other development PPAs	improve the living conditions of the community's most vulnerable members, particularly the Informal Settlers Families (ISFs)	programs through the Sangguniang Panglungsod by enacting through a local ordinance (2023)	BDRRMO, stakeholders (private sector, beneficiaries, etc.), other concerned NGAs	and regulations for policies related to the LSP			
		Annual monitoring & Evaluation of the Local Shelter Plan implementation		Survey and Monitoring tools and forms; Administrative and operational expenses	None	N/A	2024-2032
		Amendment of the LSP and other related PPAs as needed		Amended LSP	None	N/A	2026,2029, 2032
	Formulation of **Local Housing Policies** in support of the Local Shelter Plan (LSP)	Approval and adoption of the housing-related programs through the Sangguniang Panlungsod by enacting through a local ordinance (2023)	LHB, HUDRD, MO, SP	City Ordinance	None	N/A	2023
		Integrate all housing policies in the City Development Plan and Annual investment plan and other housing related programs of the City			None	N/A	2024-2032
		Capacity building of the Local Housing Board (LHB), 4PH TWG, BSAAC, RRAP - Trainings and seminars based on training needs assessment	LHB, 4PH Task Force, HUDRD, Mayor's Office, DHSUD, PCUP	Training-Seminar	₱ 200,000.00	SHTF	2023
2.1.2. Creation of new department (Asset Management) to	To consolidate and strengthen the three units, namely, City Inspection and Compliance Unit	Activate the division with the aim to remove illegal occupants, dismantle unauthorized structures, clear public spaces as per	4PH Task Force; OCLS, SP; City Administrator's Office, Development Control (BPSU,	• Sufficient manpower • City Ordinance • Inventory and geotagging of ISFs	Approximately ₱8M	GF	2023-2024

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
control the development and facilitate operations and maintenance of the City's acquired lands specifically for the township developments in order to create employment opportunities, invest in community based projects, act to protect or improve the local environment, and provide services which are important and accessible for those who might not otherwise get them and ensure that the City's vision for the township project will be implemented.	(CICU), City Task Force on Abatement, Clearing and Preservation of Public Spaces (ACPOPS), and Bacoor Public Safety Unit (BPSU) into a single division to ensure efficiency in the delivery of public service and the improvement of the functional capacity in physical and actual enforcement of laws and city ordinances for **Development Control**	CO 47-2019, prevent reoccupation, transfer cleared areas to barangays, and deter illegal entry or reentry of individuals or ISFs.	ACPOPS, CICU) PNP	and all structures, constructions and other encroachments built in violation of RA7279 and other applicable laws. • Certification of turn over for cleared areas			
		Adopt measures in the identification and monitoring of squatting syndicates and professional squatters and action against Squatting syndicate and professional squatters. (LCASSPS)					
	To have a **Compliance Division** responsible of ensuring that all plans are compliant with the governing documents/ rules and regulations/ laws and codes	Identification of positions needed for upgrading, hiring and promotion and creation of Department	LHB, 4PH Task Force, HUDRD, Mayor's Office, HRDMD, PESO, Condo Corp.	City Ordinance		GF	2024-2025
	To have **Utilities Division** responsible for the connection and regulation of utility designs especially if gearing towards underground utilities						
	To have an **Operations Management Division** who will be responsible of the Maintenance and						

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
	repairs of roads, sidewalks, landscape, etc., day-to-day operations and security of the developments of the City of Bacoor.						
	To have a dedicated division for **economic enterprise** to promote the economic growth, job creation, and overall prosperity within townships						
2.2. Act on the devolved functions of Housing & Urban Development related functions to the LGUs pursuant to RA 7160 of the Local Government Code of 1991 and RA 7279 or the Urban Development and Housing Act (UDHA)							
2.2.1. Updating of policies	Updating of **Code of Policy** for the Beneficiary Selection Awards and Arbitration Committee (BSAAC)	Review and modify the Beneficiary, Selection Awards and Arbitration Committee (BSAAC) Code of Policy for the qualification of housing beneficiaries (including the fire victims' families.)	BSAAC and concerned national agencies, E-Governance	Executive Order	None	N/A	2023-2024
		Workshop for the updating of BSAAC Code of Policy with reference to the result of the updating/validation of CBMS 2016-2017		Workshop venue and materials	₱ 300,000.00	SHTF	2023-2024
2.2.2. Monitor trends in the movement of population (Population Growth and	Set up monitoring mechanism through **updated CBMS** database	Procurement of GIS-Based Digital Mapping, House listing and Profiling System	HUDRD	Contract agreement with service provider, hardware, software, training	₱40,000,000	GF	2023-2024
		Updating/ Conduct of occupancy verification,	PSA, Barangay, HUDRD, E-	Survey forms, Tablets, Laptop, GIS-based			2024-2029

OBJECTIVES	STRATEGY	PROJECT/ PROGRAM/ ACTIVITY	RESPONSIBLE AGENCY	RESOURCES NEEDED			SCHEDULE
				WHAT? HOW MANY?	HOW MUCH?	FUND SOURCE	
Resettlement Update)		census, tagging, mapping for CBMS	Governance, Barangay	software, wages, Logistical support			
		Digitalization of registration of socialized housing beneficiaries	HUDRD, E-governance and CIO	Registration forms and database update	None	N/A	2024-2029
		Submission of beneficiaries list to Assessor's Office for updating of records	HUDRD, CAO	List of prequalified beneficiaries	None	N/A	2024-2029
2.2.3. Strengthening and allocation of additional housing personnel	Develop a New Plantilla Structure for Housing Urban Development and Resettlement Department	Review and reorganize the existing plantilla of the Housing Department to be consistent with its present functions, responsibilities and client demands.	HUDRD, Mayor's Office, HRDMD	City Ordinance	None	N/A	2023-2024
2.2.4. Promote the safety, efficiency, and aesthetic quality of socialized housing projects and ensure the orderly and efficient distribution of essential services through legal framework	Legal Review and Approval	Enact an ordinance to regulate and streamline all housing-related concerns raised within the jurisdiction of the barangay to ensure that all housing projects, especially those pertaining to land acquisition and socialized housing, are coordinated effectively with the Housing Department	Barangay, HUDRD, OCLS, SP, 4PH TaskForce, CEO, BZLLD, CAO, CPDC	City Ordinance	None	N/A	2024
		Require a detailed pole design for aerial utility services, including communication, internet, electricity, and water, in all housing developments	Barangay, HUDRD, OCLS, SP, 4PH TaskForce, CEO, BZLLD, CAO, CPDC	City Ordinance	None	N/A	2024

CHAPTER 7
MONITORING AND EVALUATION SCHEME

Monitoring and Evaluation (M&E) will provide the implementers relevant information on the targets indicated in the Work and Financial Plan component of the LSP that would help ensure the effective and efficient delivery of shelter and shelter-related services. Planning and implementing the M&E mechanism will facilitate sharing of learnings and knowledge among stakeholders, which is crucial in ensuring the sustainability of actions. The results of the M&E will be key considerations when revisiting or revising the LSP. The LGU should monitor the implementation of the shelter strategies and programs and evaluate the results every three years. Regular reports evaluating the progress will provide the basis for the review of the shelter plan.

MONITORING FORMS

LGU: ***City of Bacoor, Cavite***
Date: _____

Table 51. Form 1 - Provision of Tenure to Target Population

Program Period	New Sites			Upgrading of Tenure		
	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.
2024-2026	2,273			2,567		
2027-2029	9,108					
2030-2032	17,075					

Monitored by: _____

LGU: ***City of Bacoor, Cavite***
Date: _____

Table 52. Form 2 - Provision of Power

Program Period	New Sites			Upgrading		
	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.
2024-2026	1,399			3,000		
2027-2029	9,108			3,000		
2030-2032	17,075			3,000		

Monitored by: _____

LGU: ***City of Bacoor, Cavite***
Date: _____

Table 53. Form 3 - Provision of Adequate Water Supply

Program Period	New Sites			Upgrading		
	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.
2024-2026	1,399			7,111		
2027-2029	9,108			7,111		
2030-2032	17,075			7,111		

Monitored by: _____

LGU: ***City of Bacoor, Cavite***
Date: _____

Table 54 Form 4 - Provision of Adequate Sanitation

Program Period	New Sites			Upgrading		
	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.
2024-2026	1,399			7,206		
2027-2029	9,108			7,206		
2030-2032	17,075			7,206		

Monitored by: _____

LGU: ***City of Bacoor, Cavite***
Date: _____

Table 55. Form 5 - Provision of Road/ Access

Program Period	New Sites			Upgrading		
	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.
2024-2026	1,399			264		
2027-2029	9,108			264		
2030-2032	17,075			264		

Monitored by: _____

LGU: ***City of Bacoor, Cavite***

Date: _____

Table 56. Form 6 - Provision of Drainage System

Program Period	New Sites			Upgrading		
	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.
2024-2026	1,399			684		
2027-2029	9,108			684		
2030-2032	17,075			684		

Monitored by: _____

LGU: ***City of Bacoor, Cavite***

Date: _____

Table 57. Form 7 - Provision of Regular Garbage Collection

Program Period	New Sites			Upgrading		
	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.	No. of HHs targeted for assistance	Actual No. of HHs assisted	% of Accomp.
2024-2026	1,399			No deficiency as certified by CENRO		
2027-2029	9,108					
2030-2032	17,075					

Monitored by: _____

ANNEX 1: POPULATION AND ANNUAL GROWTH RATES BY PROVINCE, CITY, AND MUNICIPALITY

An excerpt from Philippine Statistics Authority, 2020 Census of Population and Housing, Table 8

Region, Province, And City/Municipality	Total Population				Population Growth Rate (In Percent)			
	01-May-00	01-May-10	01-Aug-15	01-May-20	2000-2010	2010-2015	2015-2020	2010-2020
REGION IV-A (CALABARZON)	9,320,821	12,609,80 3	14,414,77 4	16,195,04 2	3.01	2.68	2.48	2.53
CAVITE	**2,063,161**	**3,090,691**	**3,678,301**	**4,344,829**	**4.12**	**3.37**	**3.57**	**3.46**
Alfonso	39,674	48,567	51,839	59,306	2.04	1.25	2.87	2.02
Amadeo	25,737	33,457	37,649	41,901	2.66	2.27	2.28	2.27
CITY OF BACOOR	305,699	520,216	600,609	664,625	5.46	2.77	2.15	**2.48**
Carmona	47,856	74,986	97,557	106,256	4.59	5.14	1.81	3.54
City Of Cavite	99,367	101,120	102,806	100,674	0.17	0.32	-0.44	-0.04
City Of Dasmariñas	379,520	575,817	659,019	703,141	4.25	2.60	1.37	2.02
General Emilio Aguinaldo	14,323	17,507	22,220	23,973	2.03	4.64	1.61	3.19
City Of General Trias	107,691	243,322	314,303	450,583	8.49	4.99	7.87	6.35
City Of Imus	195,482	301,624	403,785	496,794	4.43	5.71	4.46	5.11
Indang	51,281	62,030	65,599	68,699	1.92	1.07	0.98	1.03
Kawit	62,751	78,209	83,466	107,535	2.23	1.25	5.48	3.23
Magallanes	18,090	21,231	22,727	23,851	1.61	1.30	1.02	1.17
Maragondon	31,227	35,289	37,720	40,687	1.23	1.28	1.61	1.43
Mendez (Mendez-Nuñez)	22,937	28,570	31,529	34,879	2.22	1.89	2.15	2.01
Naic	72,683	88,144	111,454	160,987	1.95	4.57	8.04	6.20
Noveleta	31,959	41,678	45,846	49,452	2.69	1.83	1.61	1.72
Rosario	73,665	92,253	110,706	110,807	2.27	3.53	0.02	1.85
Silang	156,137	213,490	248,085	295,644	3.18	2.90	3.76	3.31
City Of Tagaytay	45,287	62,030	71,181	85,330	3.19	2.65	3.89	3.24
Tanza	110,517	188,755	226,188	312,116	5.50	3.50	7.01	5.15
Ternate	17,179	19,297	23,157	24,653	1.17	3.53	1.33	2.48
City Of Trece Martires (Capital)	41,653	104,559	155,713	210,503	9.64	7.87	6.55	7.24
Gen. Mariano Alvarez	112,446	138,540	155,143	172,433	2.11	2.18	2.25	2.21

ANNEX 2: TOTAL POPULATION, HOUSEHOLD POPULATION, AND NUMBER OF HOUSEHOLDS BY CITY/MUNICIPALITY AS OF MAY 1, 2020

Barangay	Total Population	Household Population	Number of Households
CAVITE	[illegible]	[illegible]	[illegible]
Alfonso	59,306	59,107	14,556
Amadeo	41,901	41,574	10,317
CITY OF BACOOR	664,625	663,392	164,263
Carmona	106,256	105,935	28,154
City of Cavite	100,674	99,840	27,473
City of Dasmariñas	703,141	700,604	171,618
General Emilio Aguinaldo	23,973	23,930	5,323
City of General Trias	450,583	448,894	117,910
City of Imus	496,794	495,685	130,814
Indang	68,699	68,516	17,012
Kawit	107,535	103,491	29,082
Magallanes	23,851	23,841	5,785
Maragondon	40,687	40,605	9,770
Mendez (Mendez-Nuñez)	34,879	34,796	8,606
Naic	160,987	160,311	38,935
Noveleta	49,452	49,408	13,998
Rosario	110,807	110,564	31,510
Silang	295,644	288,349	71,463
City of Tagaytay	85,330	83,779	22,399
Tanza	312,116	310,434	79,243
Ternate	24,653	24,653	6,344
City of Trece Martires (Capital)	210,503	209,146	50,312
Gen. Mariano Alvarez	172,433	171,809	41,233

An excerpt from Philippine Statistics Authority: 2020 Census of Population and Housing, Region IV-A Table 1

ANNEX 3: Total Population including Institutional Population, Household Population, and Number of Households of the City of Bacoor as of May 1, 2020

An excerpt from Philippine Statistics Authority, 2020 Census of Population and Housing, Table 2

DISTRICT 1: BACOOR WEST

Barangay	Total Population	Household Population	Number of Households
Alima	5,639	5,639	1,481
Aniban I	3,341	3,341	952
Aniban II	3,278	3,278	845
Aniban III	837	837	206
Aniban IV	1,902	1,902	499
Aniban V	2,714	2,714	694
Banalo	2,848	2,848	792
Campo Santo	1,329	1,329	376
Daang Bukid	2,839	2,839	727
Digman	2,078	2,078	506
Dulong Bayan	6,744	6,723	1,699
Habay I	19,965	19,965	4,987
Habay II	11,888	11,888	3,065
Kaingin (Pob.)	3,503	3,503	968
Ligas I	4,796	4,796	1,231
Ligas II	5,031	5,031	1,327
Ligas III	8,219	8,204	2,165
Mabolo I	1,430	1,430	391
Mabolo II	1,306	1,306	374
Mabolo III	2,335	2,335	556
Maliksi I	5,273	5,273	1,345
Maliksi II	2,781	2,781	692
Maliksi III	6,117	6,117	1,482
Niog I	5,119	5,119	1,452
Niog II	7,007	7,007	1,839
Niog III	4,600	4,600	1,289
P.F. Espiritu I	4,304	4,304	1,153
P.F. Espiritu II	1,741	1,741	434
P.F. Espiritu III	5,247	5,247	1,222
P.F. Espiritu IV	11,694	11,694	2,815
P.F. Espiritu V	5,640	5,640	1,611
P.F. Espiritu VI	2,767	2,767	714
P.F. Espiritu VII	3,682	3,682	923
P.F. Espiritu VIII	7,876	7,876	2,114
Real I	5,282	5,282	1,274
Real II	4,699	4,685	1,194
Salinas I	19,658	19,658	4,718
Salinas II	5,777	5,777	1,397
Salinas III	1,813	1,813	454
Salinas IV	1,335	1,335	364
San Nicolas I	8,003	8,003	2,011
San Nicolas II	12,038	12,035	2,967
San Nicolas III	37,462	37,445	8,916
Sineguelasan	5,561	5,561	1,435
Tabing Dagat	3,424	3,424	910
Talaba I	1,851	1,851	427

Barangay	Total Population	Household Population	Number of Households
Talaba II	14,623	14,623	3,772
Talaba III	2,202	2,202	525
Talaba IV	3,096	3,096	771
Talaba V	1,776	1,776	476
Talaba VI	2,592	2,592	591
Talaba VII	2,309	2,309	523
Zapote I	5,846	5,846	1,455
Zapote II	5,137	5,137	1,301
Zapote III	2,277	2,277	584
Zapote IV	2,054	2,054	570
Zapote V	19,117	19,117	4,996

DISTRICT 2: BACOOR EAST

Barangay	Total Population	Household Population	Number of Households
Bayanan	11,168	11,101	2,687
Mambog I	12,330	12,330	2,990
Mambog II	7,129	7,129	1,896
Mambog III	21,445	21,445	5,607
Mambog IV	13,868	13,868	3,338
Mambog V	3,832	3,832	869
Molino I	16,627	16,390	3,842
Molino II	42,395	41,768	10,004
Molino III	60,495	60,469	15,045
Molino IV	66,886	66,714	16,246
Molino V *(Bahayang Pag-Asa)*	6,562	6,554	1,629
Molino VI *(Soldiers' Hills IV)*	20,125	20,125	4,496
Molino VII	12,883	12,877	2,882
Queens Row Central	6,098	6,098	1,459
Queens Row East	18,370	18,350	4,213
Queens Row West	10,610	10,610	2,503

ANNEX 4: ASSOCIATIONS BY CLUSTER

DISTRICT 1 – FEDERATION CLUSTER 1	
BARANGAY	**ASSOCIATION**
SINBANALI	Samahang Magkakapitbahay Ng Banalo (PNR)
	Loverador's Association Inc.
	Samahang L. Reyes St.
POBLACION	Kapit-Kamay Bagong Bacoor Tabing-Dagat Assn. Inc.
	Samahang Magkakapitbahay Ng Camposanto (PNR)
	Samahang Magkakapitbahay Ng Daang Bukid (PNR)
KAINGIN-DIGMAN	Samahang Nagkakaisa Ng Tramo Kaingen (SNTKI)(PNR)
MALIKSI I	Kabulusan Ville Neighborhood Association Inc.
	Samahang Magkakapitbahay Tabing Ilog At Tabing Dagat
	Sampalucan Maliksi Livelihood Association Inc.
MALIKSI II	Samahang Magkakapitbisig Ng Maliksi Tres Inc.
TALABA II	Samahang Kapitbahay Ng Mandaragat Inc.
	Samahang Pinag-Isang Layunin Ng Tabing Dagat Talaba II Assn. Inc.
	Diwang Nagkakaisa Talaba II Bacoor City
	Samahang Mangingisda Na Nagsisikap Sa Talaba 2 (SAMANA)
	Organized Neighborhood Association Of Talaba II Inc.
	Samahang Pinag-Isang Layunin Ng Tabing Dagat Talaba II Assn. Inc.
	Samahan Pinagbuklod Ng Tabing Ilog
	Bacoor Alliance of Pinagbuklod Talaba II
	Samahan Ng Daungan Talaba II Livelihood Assn. Inc.
	Active Association Livelihood Coastal Talaba II Inc.
ZAPOTE V	Samahang Magkakapitbahay Ng Aroma Longos Inc. (SMBAZVBC Inc.)
	Samahang Nagkakaisa Ng Coastal Road (SNCRI)
	West Coast Neighborhood Association
	Silangan Compound Neighborhood Assn. (SCNA)
	Mamamayang Nagkakaisa Ng Longos Neighborhood Inc. (MNLNAI)
	Kapit Kamay Ng Magkakapitbahay Longos Bacoor Inc.
	Organization of The Community Of Taylan (OCT)
	Kapit Kamay Thailand Community Assn. Inc.
	San Rafael Samahang Mandaragat Wawa 1
	Purok 1 Barangay Wawa Longos Fishermen Assn.
HABAY 1	Bahayang Nagkakaisang Assn. Inc. (Bars Habay 1)
	Annex Association
HABAY II	Strike Ville 2 HOA Habay 2
	Kapitbahayan Ng Dulong Habay

	Kapit-bisig Habay 2 Neighborhood Assn. Inc.
	Dulong Habay Homeowners Association
DISTRICT 1 – FEDERATION CLUSTER 2	
BARANGAY	**ASSOCIATION**
SALINAS 1	Direct Buyer HOA
	Samasa Homeowners Association
	Ancris Homeowners Assn. Inc,
	Estherville Iii Homeowners Association, Inc.
	Salinas Ville
	Estherville Homeowners Association Phase 1
	5th St. Unity Bukid Association
	Queen Of Peace Ville HOA Inc.
REAL	Real Ville HOA Ph-2
	Real Riverside Homeowners Association Inc.
NIOG	Unity Of Niog-1 Association Inc.
	Madison Woods HOA
P.F ESPIRITU II	Tibag Achievers Homeowners Assn.
P.F ESPIRITU IV	Julians' Mayville HOA Inc
DISTRICT 1 – FEDERATION CLUSTER 3	
BARANGAY	**ASSOCIATION**
TALABA III	Samahang Magkakapitbahay Ng Tramo Talaba 4 (PNR)
	Balikatan Sa Talaba Vi Assn. Inc.
TALABA I	Samahang Magkakapitbahayan Sa Riles
ZAPOTE I	Samahang Magkakapitbahay Ng Brgy. Zapote 1
ZAPOTE II	Samahang Magkakapitbahayan Ng Tramo
LIGAS I	Sitio Mabuhay Ligas 2 Livelihood Association Inc.
SAN NICOLAS II	United Nursery Residence Association Inc. (UNRAI)
SAN NICOLAS III	Bagong Pintong Bato Assn. Inc.
	Golden Side Assn. Inc.
	Neighbor's Association For Progress And Security (Napsi 1)
	Samahang Nagkakaisa Para Sa Ikauunlad Ng Greenvalley
	Sinagtala Neighborhood Association Inc.
	Northville Greenvalley Neighborhood Association Inc.
	United Muslims And Christian Neighborhood Association (UMC)
	Bagoinged Neighborhood Assn.
	Poor's Park Neighborhood Association Inc.
	Bagong Kampi Neighborhood Association
	Ggmm Clam Homeowners Assn

	Green Graces Neighborhood Assn. Phase 2
	Lupang Pangarap Neighborhood Assn.
	Sagip Liwanag Neighborhood Assn. Inc.
	Nagkakaisang Samahan Ng Greenvalley
	Hilltop Neighborhood Association
	Bacoor Alliance Of Pinagbuklod San Nicolas 3
	Jdc Samahang Magkakapitbahay Inc
	Lumang Kalsada Neighborhood Association
	Goldensite Neighborhood Association Inc.
	Manggang Puti Neighborhood Association
	Garden Of Eden Neighborhood Assn
	Samahang Iisang Kapatiran Greenvalley Assn. Inc. (SIKAP)
	Samahang Magkapitbisig Ng Greenvalley
	Latero Neighborhood Association (LANAI)
	New Era Neighborhood Association Inc.
	Platinumville Association Inc.
	Westville Boundary Assn, Cavite Inc.
	Greenvalley Riverside Neighborhood Association Inc.
	Green Valley Bagong Samahang Magkakapitbahay Inc.
	Samahan Ng Bagong Pag-Asa Association
DISTRICT 2 – FEDERATION CLUSTER 4	
BARANGAY	**ASSOCIATION**
MOLINO I	Ciudad De Strike (Phase 1)
	Ciudad De Strike (Phase 2)
MOLINO II	Green Valley Phase 3 Neighborhood Association (GVPH3NAI)
	Green Valley Molino II Neighborhood Assn. Inc.
	Samahang Bagong Pag-Asa Neighborhood Assn. Inc. (SAMBAPA)
	Kabalikat Molino Greenvalley Neighborhood Assn. Inc.
	Jetti Greenvalley Neighborhood Association
	The Ramblers Neighborhood Association
	Mag Vil-Es Neighborhood Association
	Balangay Molino 2 Neighborhood Assn.
	Strike Kalinga 2 HOA Inc.
	Strike Kalinga 1 HOA Inc.
	Strike Kalinga 3 HOA Inc.
	Strike Kalinga 4 HOA Inc.
	Dahlia United Molino Ii Neighborhood Assn. Inc (DUMNA)
	Development Order Villa Esperanza-Cavite Inc.
	Samahang Nagkakaisa Ng Villa Esperanza Molino Ii Inc (SNVE)

	Bagong Pag-Asa Ng Villa Esperanza Livelihood Association Inc.
	Maligaya Villa Esperanza Inc.
	Hopeland Neighborhood Association Inc. (MZHNAI)
	Green Stone Neighborhood Association
	Our Place Neighborhood Associaton Inc.
	Parales-Manalaysay Association
	Bagong Samahan Pagkakaisa Villa Esperanza Molino II
	Bacoor Cavite United Villa Esperanza Resident Association Inc.
	Green Era Homeowners Inc.
MOLINO III	Nazareth Neighborhood Association
	Nazareth Occupance
	Strike Heights Neighborhood Association
	Strikeville Neighborhood Association
	Molino 3 Proper Livelihood Association Inc.
	Samakama Pangkat Nazareth
	Holy Infant Association
	Samahang Nagkakaisa Tungo Sa Kaayusan Inc
	Samahan Ng Nagkakaisang Mamamayan Ng Molino III Neighborhood Inc.
	Manggahan Urban Poor Association
	Ibayo United Families Inc.
MOLINO IV	Samahang Magsasaka Sa Malipay Molino Iv
	Tabing Ilog Molino 4 Neighborhood Association
	Coalation Pang Kaunlaran Sa Malipay Inc
	Malipay Urban Poor Settlers Association Inc. (MAUPSAI)
MOLINO VI	Hicban Association Of Bacoor Cavite
	Hicban Compound Neighborhood Assn. (HCNAI)
	Grand Strike Ville Ii Homeowners Association Inc.
	Samahan Ng Bagong Usbong Ng Cavite
	Creekside Homeowners Association
	Barracks Neighborhood Association
	Maralit Compound Homeowners' Association
MOLINO VII	New Gawaran Heights Homeowners Association Phase 1-5
	Gawaran Heights Homeowners Association Inc. Phase VI
	Gawaran Heights Homeowners Association Inc. Phase VII
DISTRICT 2 - FEDERATION CLUSTER 5	
BARANGAY	**ASSOCIATION**
QUEENSROW WEST	United Magdiwang & Village
	Bi Concern Citizen Association Inc.

QUEENSROW EAST	Bagong Samahan Ng Magkakapitbahay HOA Inc. 2001(BSMBI)
	Block -1 Interior Compound Neighborhood Assn. Inc.
	Samahang Nagkakaisa Ng Bagong Silang 1
	Bagong Silang Blk-3 A-li Residence Assn. Inc.(BASBRAI)
	United Homeowners Association Of Block 1-A Bagong Silang Inc.
QUEENSROW CENTRAL	Samahang Masigasig Queens Row West Inc.
BAYANAN	Urban Association Bayanan Chapter Inc.
MAMBOG I	Mambog Ville Home Owners Association Inc.
	Manananim Ng Gulay Livelihood Association Ng Mambog 1
MAMBOG III	Pinagpala Compound Mambog 3 Association

Source: Urban Poor Community Affairs Work Group (UPCAWG) Database

ANNEX 5:
FORMULA AND SAMPLE COMPUTATION

Formula No. 1 Computation for Homeless Households

Homeless Households = $\frac{\text{Total Homeless persons – Homeless individuals}}{\text{Average HH size}}$

Sample Given:
Homeless persons = 98 homeless persons
Homeless Individuals = 8 (not part of household)
Average Household Size = 4.5

Solution: $98 - 8 = \frac{90}{4.5}$ = 20 homeless households

Therefore:
Homeless HH =
20 homeless households
\+ 8 homeless individuals
28 Total Homeless Households

Formula No. 2 Computation for Household per Dwelling Unit

Household per Dwelling Unit = $\frac{\text{No. of HH for the base year – Homeless HH}}{\text{No. of Occupied Dwelling Unit for the BY}}$

Sample Given:
No. of Household for the Base Year = 28
Homeless Households = 27,522
No. of Occupied Dwelling Unit for the Base Year = 27,138

Solution:
Household per Dwelling Unit = $\frac{27,522 - 28}{27,138}$ = 1.0131 or 1.31%

Formula No. 3 Computation for Housing Stock (Occupied Dwelling Units)

Housing Stock = $\frac{\text{No. of HH for the base year – Homeless}}{\text{Household per Dwelling Unit}}$

Sample Given:
Households = 27,522
Homeless = 28
Households per Dwelling Unit = 1.0131

Solution:
Household per Dwelling Unit = $\frac{27,522 - 28}{1.0131}$ = 27,138

Formula No. 4 Computation for Doubled-up Household

Doubled-up Households = Housing Stock × % of HH per Dwelling Unit

Sample Given:
Housing Stock in Base Year = 27,138
Average Household Size = 1.0131 or 1.31% of Housing Stock

Solution:
Doubled-up Households = 27,138 × 1.0131 = 356

ANNEX 6: BACOOR CITY SEISMIC HAZARDS ASSESSMENT

Republic of the Philippines
Department of Science and Technology
PHILIPPINE INSTITUTE OF VOLCANOLOGY AND SEISMOLOGY

DATE	2 June 2023, 11:14 am
LOCATION	Bacoor City, Cavite
COORDINATES	120.97386, 14.41263

Note: [illegible]

SEISMIC HAZARDS ASSESSMENT

HAZARD	ASSESSMENT	EXPLANATION AND RECOMMENDATION
Ground Rupture	**Safe; Approximately 7.5 km west of the Valley Fault System: West Valley Fault**	Active faults are faults that have moved within the last 10,000 years. An active fault may show evidence or may have documented history of recent movements. Ground rupture is a displacement along an active fault trace that reaches the surface. Ground rupture hazard assessment is the distance to the nearest known active fault. The recommended buffer zone, or *Zone of Avoidance*, against ground rupture hazard is at least 5 meters on both sides of the active fault or from its zone of deformation.
Ground Shaking	**Prone; Intensity VIII**	All sites may be affected by ground shaking in the event of an earthquake and can be mitigated by following the provisions of the National Building code and the Structural code of the Philippines.
Liquefaction	**Safe**	Liquefaction is a phenomenon wherein the ground, especially near the river, lake and coasts, behaves like liquid similar to quicksand due to very strong shaking.
Earthquake-Induced Landslide	**Safe**	Earthquake-induced landslides are the downward slope movement of rocks, solid and other debris commonly triggered by strong shaking.
Tsunami	**Safe**	A tsunami is a series of sea waves commonly generated by under-the-sea earthquakes.

Note:

- All hazard assessments are based on the available susceptibility maps and the coordinates of the user's selected location.
- Depending on the basemaps used and methods employed during mapping, discrepancies may be observed between location of hazards or exposure information and actual ground observations.
- In some areas, hazard assessment may be updated as new data become available for interpretation or as a result of major topographic changes due to onset of natural events.
- For site-specific evaluation or construction of critical facilities, detailed engineering assessment and onsite geotechnical engineering survey may be required.

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[illegible]

ANNEX 7: BACOOR CITY VOLCANIC HAZARD ASSESSMENT

Republic of the Philippines
Department of Science and Technology
PHILIPPINE INSTITUTE OF VOLCANOLOGY AND SEISMOLOGY

DATE	2 June 2023, 11:14 am
LOCATION	Bacoor City, Cavite
COORDINATES	120.97356, 14.41253

[illegible]

View document online

VOLCANIC HAZARDS ASSESSMENT

HAZARD	ASSESSMENT	EXPLANATION AND RECOMMENDATION
Nearest Active Volcano	**Approximately 44.6 km north of Taal**	Active volcanoes are those that erupted within historical times (within the last 600 years). Accounts of these eruptions were documented by man within the last 10,000 years based on the analyses of material from young volcanic deposits.
Permanent Danger Zone	**Outside**	
Ballistic Projectiles	**Safe**	Ballistic projectiles are large particle tephra ejected straight out of the volcanic vents.
Base Surge	**Safe**	Base surge is a special class of pyroclastic density current that are mobile and water-vapor-rich pyroclastic surges. They are generated by explosive phreatomagmatic eruptions.
Volcanic Tsunami	**Safe**	Volcanic tsunami occur in caldera lakes when water is displaced by deformation of the lake floor caused by rising magma or the entry of pyroclastic density currents (PDCs) or landslides into the lake, or in seas when water is displaced by PDCs or debris avalanches from volcanoes. Such tsunamis are unlike those generated by large magnitude offshore earthquakes, which are long-period waves generated by fault displacement or deformation of the seafloor.
Ashfall	**Prone**	In case of future eruptions, the site may be affected by ash fallout, depending on the scale of eruption and prevailing wind direction at the time of eruption. Generally, ashfall is heavier near the active vent and thins out indefinitely away from the eruption center.

Note:

- All hazard assessments are based on the available susceptibility maps and the coordinates of the user's selected location.
- Depending on the basemaps used and methods employed during mapping, discrepancies may be observed between location of hazards or exposure information and actual ground observations.
- In some areas, hazard assessment may be updated as new data become available for interpretation or as a result of major topographic changes due to onset of natural events.
- For site-specific evaluation or construction of critical facilities, detailed engineering assessment and onsite geotechnical engineering survey may be required.

[illegible]

ANNEX 8: BACOOR CITY RAIN-INDUCED LANDSLIDE HAZARD ASSESSMENT

Republic of the Philippines
Department of Environment and Natural Resources
MINES AND GEOSCIENCES BUREAU

DATE	2 June 2023, 11:14 am
LOCATION	Bacoor City, Cavite
COORDINATES	120.97355, 14.41253

Note: [illegible]

HYDRO-METEOROLOGICAL HAZARDS ASSESSMENT

HAZARD	ASSESSMENT	EXPLANATION AND RECOMMENDATION
Rain-Induced Landslide	**Low Susceptibility; No identified landslides**	Areas with low susceptibility to rain-induced landslides are gently sloping areas with no identified landslides. Implementation of appropriate mitigation measures as deemed necessary by project engineers and LGU building officials is recommended for landslide-susceptible areas. This includes performing site-specific studies to address potential foundation/slope stability problems. Monitoring of signs/evidences of ground movement such as tension cracks, tilted trees and fences, and bulging road sections in areas that are moderately to critically susceptible to landslides should be done regularly and reported to local authorities and/or the MGB.

Note:

- All hazard assessments are based on the available susceptibility maps and the coordinates of the user's selected location.
- Depending on the basemaps used and methods employed during mapping, discrepancies may be observed between location of hazards or exposure information and actual ground observations.
- In some areas, hazard assessment may be updated as new data become available for interpretation or as a result of major topographic changes due to onset of natural events.
- The possibility of both rain-induced landslide and flooding occurring is not disregarded. Because of the composite nature of MGB's 1:10,000-scale Rain-induced Landslide and Flood Susceptibility Maps, it spatially prioritizes the more frequently occurring and most damaging hazards in an area. Continuous updating is being done.
- For site-specific evaluation or construction of critical facilities, detailed engineering assessment and onsite geotechnical engineering survey may be required.

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ANNEX 9: BACOOR CITY SEVERE WIND HAZARD ASSESSMENT

Republic of the Philippines
Department of Science and Technology
PHILIPPINE ATMOSPHERIC, GEOPHYSICAL AND ASTRONOMICAL SERVICES ADMINISTRATION

DATE	2 June 2023, 11:14 am
LOCATION	Bacoor City, Cavite
COORDINATES	120.97355, 14.41253

Note: [illegible]

HYDRO-METEOROLOGICAL HAZARDS ASSESSMENT

HAZARD	ASSESSMENT	EXPLANATION AND RECOMMENDATION
Severe Wind	**117.1 - 220 kph (20-year return period); 117.1 - 220 kph (500-year return period)**	The Regional Severe Wind Hazard Map represents the 3-second peak gust wind speed measured at 10-meter height (above ground) over open and flat terrain. This does not take into account the local factors such as topography, terrain roughness and shielding from neighbouring structures. The Regional Severe Wind Hazard is expressed in terms of Return Periods(RPs) of Tropical Cyclone winds. Return period means the repeat interval, or the estimate of likelihood and severity of severe wind event. Return periods are then translated into Annual Exceedance Probabilities (AEPs) which are the chance that a given severe wind hazard level will be equalled or exceeded in any year. At higher return periods, the wind speeds are stronger but are less frequent. At lower return periods, the wind speeds are less intense but are more frequent. The Regional severe wind hazard maps are used to update the wind zoning map of the Philippines and as reference in designing building structures. For those areas identified as high risk to wind damage, building codes/regulations must be strictly implemented to mitigate severe wind risks. For already developed areas, retrofitting is encouraged – the methods applied in this study can be used to set out a cost-benefit study for retrofitting older, more vulnerable building types to increase their resilience to severe winds.

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ANNEX 10: BACOOR CITY STORM SURGE HAZARD ASSESSMENT

Republic of the Philippines
Department of Science and Technology
PHILIPPINE ATMOSPHERIC, GEOPHYSICAL AND ASTRONOMICAL SERVICES ADMINISTRATION

DATE	2 June 2023, 11:14 am
LOCATION	Bacoor City, Cavite
COORDINATES	120.97356, 14.41253

[illegible]

HYDRO-METEOROLOGICAL HAZARDS ASSESSMENT

HAZARD	ASSESSMENT	EXPLANATION AND RECOMMENDATION
Storm Surge	**Safe**	A storm surge ("daluyong ng bagyo") is the abnormal rise in sea level that occurs during tropical cyclones or "bagyo". It happens when a very strong tropical cyclone blows-off excessive amounts of seawater toward low-lying coastal communities. It is catastrophic and life-threatening because a storm surge can cause massive inland flooding, sometimes in unimaginable heights. It is even more danger[illegible] when the storm surge coincides with a high tide. For storm surge-prone communities, the most important considerations are 1) the strength of the tropical cyclone, 2) the height of the surge, and 3) if the community is located in a low-lying areas.

Note:

- All hazard assessments are based on the available susceptibility maps and the coordinates of the user's selected location.
- Depending on the basemaps used and methods employed during mapping, discrepancies may be observed between location of hazards or exposure information and actual ground observations.
- In some areas, hazard assessment may be updated as new data become available for interpretation or as a result of major topographic changes due to onset of natural events.
- For site-specific evaluation or construction of critical facilities, detailed engineering assessment and onsite geotechnical engineering survey may be required.

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ANNEX 11: BACOOR CITY NEAREST CRITICAL FACILITIES

DATE 2 June 2023, 11:14 am
LOCATION Bacoor City, Cavite
COORDINATES 120.97355, 14.41253

NEAREST CRITICAL FACILITIES

CRITICAL FACILITY NAME	TYPE	DISTANCE FROM SPECIFIED LOCATION
Bayanan Es	Public Elementary School	1.4 km
Bacoor Nhs - Molino Annex	Public Secondary School	1.1 km
Molino Ii Barangay Health Station	Government Health Facility	387 m
Molino Doctors Hospital	Private Health Facility	354 m
Manila-Cavite (NCR Bdry-Jct Cavite City Sect); Cavite (second District)	Primary Road Network	4.2 km
Cavite-Batangas Rd; Cavite (third District)	Secondary Road Network	3.5 km

Note:

- All hazard assessments are based on the available susceptibility maps and the coordinates of the user's selected location.
- Depending on the basemaps used and methods employed during mapping, discrepancies may be observed between location of hazards or exposure information and actual ground observations.
- In some areas, hazard assessment may be updated as new data become available for interpretation or as a result of major topographic changes due to onset of natural events.
- All computations are based on the available exposure data and the coordinates of the user's selected location.
- Schools data obtained from Department of Education (2015)
- Health facilities data obtained from Department of Health (2016)

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ANNEX 12: WORKSHEETS

Table 58. Worksheet 1-7: Displaced Population

Potential Cause Of Displacement	Location	Land Owner Of Occupied Lot	No. of HH	Sex Of Household Head		Target Year
				M	F	
Category 1: FLOOD/ SEA LEVEL RISE	Alima	Coastal Area	97	54	43	2023-2026
	Sineguelasan	Coastal Area	647	458	189	2023-2026
	Tabing Dagat	Coastal Area	63	47	16	2023-2026
	Kaingen	Coastal Area	0	0	0	2023-2026
	Maliksi I	Coastal Area	3	3	0	2023-2026
	Maliksi III	Coastal Area	27	15	12	2023-2026
	Digman	Coastal Area	29	14	15	2023-2026
	Talaba II	Coastal Area	178	98	80	2023-2026
	Zapote V	Coastal Area	658	411	247	2023-2026
	Maliksi I	Diamond Export Corporation	178	85	93	2023-2026
	Maliksi III	Diamond Export Corporation	354	202	152	2023-2026
Category 1: MANDAMUS	Alima	Body Of Water (Manila Bay, River)	121			2024-2026
	Banalo	Body Of Water (Manila Bay, River)	7			2024-2026
	Digman	Body Of Water (Manila Bay, River)	16			2024-2026
	Kaingen	Body Of Water (Manila Bay, River)	8			2024-2026
	Maliksi I	Body Of Water (Manila Bay, River)	27			2024-2026
	Maliksi III	Body Of Water (Manila Bay, River)	128			2024-2026
	San Nicolas	Body Of Water (Manila Bay, River)	0			2024-2026
	Sineguelasan	Body Of Water (Manila Bay, River)	57			2023
	Tabing Dagat	Body Of Water (Manila Bay, River)	108			2024-2026
	Talaba II	Body Of Water (Manila Bay, River)	1240			2024-2026

Potential Cause Of Displacement	Location	Land Owner Of Occupied Lot	No. of HH	Sex Of Household Head		Target Year
				M	F	
	Talaba VI	Body Of Water (Manila Bay, River)	1			2024-2026
	Zapote V	Body Of Water (Manila Bay, River)	81			2024-2026
Category 1: DENR	Tabing Dagat	Government	345	128	217	2024-2026
	Digman	Government	53	31	22	2024-2026
Category 2: DIVERSION ROAD	Digman	Government	15	10	5	2024-2026
	Kaingen	Government	6	5	1	2024-2026
	Maliksi I	Government	10	5	5	2024-2026
	Maliksi III	Government	55			2024-2026
	Tabing Dagat	Government	6	3	3	2024-2026
	Talaba II	Government	84	53	31	2024-2026
	Zapote V	Government	84	50	34	2024-2026
	Tabing Dagat	Government	57	35	22	2024-2026
Category 2: DPWH REVETMENT	Daang Bukid	Government	12	2	10	2024-2026
	Maliksi I	Government	1	1	0	2024-2026
	Talaba II	Government	5	4	1	2024-2026
	Zapote V	Government	4	3	1	2024-2026
Category 2: BIKE LANE	Aniban II	Government	4	2	2	2024-2026
	Zapote V	Government	2	1	1	2024-2026
						2024-2026
Category 3: WITH PENDING THREATS OF DEMOLITION/ EVICTION (CIVIL CASES AS OF 2023)	Molino Iv	Amely Agmata	1			2023-2026
	Queensrow West	Rodolfo And Margarit Catutal	3			2023-2026
	Bayanan	Pag-Ibig Fund	1			2023-2026
	Molino II	Michael Bermas	1			2023-2026
	San Nicolas II	Pag-Ibig Fund	2			2023-2026
	Sulok, Panapaan III	Hermilinda Valle	1			2023-2026
	Habay 2	Bienvenido Buhain	7			2023-2026

Potential Cause Of Displacement	Location	Land Owner Of Occupied Lot	No. of HH	Sex Of Household Head		Target Year
				M	F	
	San Nicolas III	Lourdes Sosuan	4			2023-2026
	Malipay, Molino IV	Althorp Land Holdings	6			2023-2026
Category 5: FIRE VICTIMS	Maliksi II	Coastal Area	16	8	8	2023
	Maliksi III	Coastal Area	8	3	5	2023
	Niog I	Residential	27	19	8	2023
	Panapaan IV	Residential	15	9	6	2023
	Talaba VII	Coastal Area	67	48	19	2023
	Zapote V	Coastal Area	186	105	81	2023
Category 7: REGISTERED URBAN POOR ASSOCIATION MEMBERS NOT FALLLING UNDER OTHER CATEGORIES	Bayanan		247			2026-2030
	Habay I		546			2026-2030
	Habay II		297			2026-2030
	Kaingin-Digman		194			2026-2030
	Maliksi I		112			2026-2030
	Maliksi II		36			2026-2030
	Mambog III		29			2026-2030
	Molino II		4,260			2026-2030
	Molino III		1537			2026-2030
	Molino IV		652			2026-2030
	Molino VI		928			2026-2030
	Molino VII		1182			2026-2030
	Niog		375			2026-2030
	P.F Espiritu II		150			2026-2030
	P.F Espiritu IV		244			2026-2030
	Queensrow Central		89			2026-2030
	Queensrow East		554			2026-2030
	Queensrow West		602			2026-2030
	Real		224			2026-2030
	Salinas I		615			2026-2030
	San Nicolas III		6,471			2026-2030
	Sinbanali		110			2026-2030

Potential Cause Of Displacement	Location	Land Owner Of Occupied Lot	No. of HH	Sex Of Household Head		Target Year
				M	F	
	Talaba II		785			2026-2030
	Talaba III		100			2026-2030
	Zapote I		575			2026-2030
	Zapote V		2,126			2026-2030

Source: Housing Urban Development and Resettlement Department (HUDRD) Database and Urban Poor Community Affairs Work Group (UPCAWG) Database

Table 59. Current Number of Households Needing Adequate Sanitation Upgrading

# HH with Basic Sanitation Facilities	# HH for Upgrading of Units	Percentage of Housing Stock	Annual Target	Program Period
125,950	21,618	12%	2,402	2024-2032

Source: PSA and FHSIS

Table 60. Current Number of Households Needing Adequate Access to Safe Water Supply

# HH with Basic Sanitation Facilities	# HH for Upgrading of Units	Percentage of Housing Stock	Annual Target	Program Period
126,235	21,333	12%	2,370	2024-2032

Source: PSA and FHSIS

Table 61. Assumed Households Needing Structural Improvement Upgrading

Residential Buildings	Upgraded (2003-2023)	Units that need upgrading	Remarks
98,596	20,983	77,613	Formulate incentives to promote upgrading of dilapidated structures

Source: Assessor's Office and Office of the Building Official

ANNEX 13: OFFICE OF THE BUILDING OFFICIAL'S RECORD OF ISSUED CERTIFICATE OF OCCUPANCIES

Republic of the Philippines
Province of Cavite
CITY OF BACOOR

OFFICE OF THE BUILDING OFFICIAL

CERTIFICATES OF OCCUPANCY ISSUED (RESIDENTIAL)

YEAR	COO ISSUED
2003	488
2004	638
2005	960
2006	922
2007	809
2008	819
2009	1,025
2010	752
2011	806
2012	1,026
2013	1,149
2014	1,803
2015	1,249
2016	1,633
2017	1,248
2018	1,145
2019	921
2020	691
2021	1,435
2022	1,145
2023 as of August 16, 2023	319

Prepared by

ABBY P. ROSALES
Administrative Aide III

GEM F. ROA
Administrative Aide II

Noted by

ENGR. FELICITO R. MEJIA
City Gov't Dept. Head I

ANNEX 14: ASSESSOR'S OFFICE'S RECORD OF RESIDENTIAL REAL PROPERTY IN BACOOR AS OF AUGUST 11, 2023

Republic of the Philippines
PROVINCE OF CAVITE
CITY OF BACOOR
City Assessor's Office

ENDORSEMENT NO. 0815-03, SERIES of 2023

TO : **ATTY. AIMEE TORREFRANCA-NERI**
City Administrator/OIC, HUDRD

RE : **Real Property Units (Residential)**

DATE : **15 August 2023**

Greetings!

Respectfully endorsed to your good office the No. of Residential Real Property Unit for Land and Building as per system generated report as of 11 August 2023.

Residential RPU

LAND – 142,259
BUILDING – 98,596

For your information.

Thank you.

Very truly yours,

ENGR. ALLAN C. QUINATADCAN, REA 5440, REB, CE, RMP, EnP
OIC-City Assessor

ANNEX 15: WRMO BULLETIN No. 001

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
KAGAWARAN NG KAPALIGIRAN AT LIKAS YAMAN

WATER RESOURCES MANAGEMENT OFFICE

Bulletin No. 001

WATER MANAGEMENT FOR GOVERNMENT BUILDING ADMINISTRATORS

1. Memorandum Circular 22 (2023) mandates all government agencies to implement water conservation measures. The DENR Water Resources Management Office (WRMO) shall monitor the progress of all agencies towards conserving water through the analysis of their monthly water bills.

   MC22:
   (https://www.officialgazette.gov.ph/downloads/2023/06jun/20230607-MC-22-FRM.pdf)

2. Inform all personnel of MC22 and the water conservation program for government agencies. Remind everyone of the impending El Niño and potential drought conditions this year

3. The following guidelines are hereby provided to all building administrators:
   a. All government offices must have separate water meters. Check regularly if water meters are functioning properly. Contact your water service provider if a sub-meter needs to be installed.
   b. Detect leaks and faulty water fixtures by checking the water meter during after office hours. The water meter dial should not be rotating at this time.
   c. Check for leaks by observing floors and walls that are constantly wet and/or covered with molds due to moisture.
   d. Shutdown the main building valve after the last person has left the building or from 7:00 pm to 6:00 am the following day.
   e. Survey the number of people in each office. As a guide, each employee must not consume more than 50 liters of water per day in office buildings *(also consider the number of visitors for frontline agencies)* and not more than 180 liters per day in households/condominiums and 24/7 offices. Multiply these per capita consumption guides and compare with your total monthly consumption (1,000 liters = 1 cubic meter).
   f. Regularly check for faulty toilets and faucets. Note that running water in old urinals and toilets with valves that do not completely seal will each waste 130 cubic meters of water per month (~PHP 12,000/month).
   g. If possible, avoid using potable water for street cleaning and watering plants. Consider harvested rainwater for this purpose.

4. For any detected leaks within your compound that may need major repairs, please contact DENR-WRMO (wrmo@denr.gov.ph). For leaks along streets and before your meter, please report them to your water service provider (Manila Water or Maynilad in NCR).

ANNEX 16: WRMO BULLETIN No. 002

Bulletin No. 002

EL NIÑO AND THE STATUS OF METRO MANILA'S WATER SUPPLY

DOST-PAGASA has recently announced that a **weak El Niño condition** is now prevailing over the Pacific Ocean and may likely intensify into a moderate or even strong El Niño condition in the last quarter of this year. While DOST-PAGASA is forecasting more than average rains in the next few months due to Habagat or the Southwest Monsoon, it is wise to be proactive in our actions and prepare for the worst possible dry conditions.

As of July 6, 2023, the Angat Dam water level is at **180.89m**, just slightly above the minimum operating level of 180.0m. Without any significant rains, we will reach this minimum operating level around July 9, 2023. When below operating levels, our allocation for irrigation will be reduced and supply for NCR, Rizal, Cavite and Bulacan Province will be at the minimum volume. Expect lower water pressures mainly during the night and possible interruptions in certain parts of the MWSS service areas.

As we prepare for even drier conditions due to El Niño, it is, more than ever, important to conserve water in order to prevent massive water interruptions later this year. Below are WRMO next steps and directives to the public.

1. The WRMO team shall conduct **spot inspections of office buildings** for unwarranted use of water, leaks and faulty bathroom fixtures. The team will ensure that WRMO bulletins 001 and 002 are posted in offices accordingly.
2. The WRMO, together with the MWSS, shall **review the monthly water bills of all government facilities in accordance with Malacañang directive MC 22 (Water conservation during El Niño).** Notices on excessive use of water shall be issued.
3. All **Barangay officials, condominium and subdivision** managers are directed to **advise its residents to conserve water** through:
   a. Reduction of activities that consume a large amount of water such as watering the lawn and washing vehicles.
   b. Promote rainwater collection among residents for non-potable use of water.
   c. Recycle water from laundry and dishwashing discharge for watering plants.
4. All NCR LGUs are directed to **fast track the approval of water pipe repairs of Manilawater and Maynilad.**
5. For any detected leaks within your compound that may need major repairs, please contact DENR-WRMO (**wrmo@denr.gov.ph**). For leaks along streets and before your meter, please report them to MWSS (8929569), 89222969, 09673197144 or at cch@mwss.gov.ph) and your water service provider: Manila Water (1627) or Maynilad (1626).

ANNEX 17: CENRO's Certification: Zero Waste Collection Service Deficiency

REPUBLIC OF THE PHILIPPINES
PROVINCE OF CAVITE

CENRO
CITY ENVIRONMENT & NATURAL RESOURCES OFFICE

CERTIFICATION

This is to certify that based on the records of the City Environment and Natural Resources Office (CENRO), there is no deficiency in the collection of garbage within the City of Bacoor. The collection of garbage within the city is conducted regularly, based on the schedule given to each and every barangay.

This certification is being issued upon the request of the Housing Urban Development and Resettlement Department (HUDRD) for the updating of Local Shelter Plan.

Issued this October 5, 2023 at the Office of the City Environment and Natural Resources Officer.

ROLANDO R. VOCALAN
CENR Officer
City of Bacoor

2/F Bacoor City Hall, Bacoor City Government Center (BCGC) Compd.
Bacoor Blvd. Brgy. Bayanan, City of Bacoor, Province of Cavite 4102
(046) 481-4128

ANNEX 18: CSWD's Certification: Zero Homeless in the City of Bacoor

Republic of the Philippines
CITY SOCIAL WELFARE AND DEVELOPMENT OFFICE
Bacoor, Cavite

October 16, 2023

CERTIFICATION

This is to certify that there is no homeless citizen / families in the City of Bacoor, Cavite based on the record and also during the regular conduct of reach out operation for the children, individuals and families in street situation and Special Badjao Operations.

This certification is issued for whatever legal purpose it may serve.

Certified by:

BERMELY C. BALASE, RSW
Social Welfare Officer III

Noted by:

EMILIANA DR. UGALDE, RSW
CSWD Officer

ANNEX 19: Basis for Bacoor City Computation: Consolidation of BPSU, CICU and ACPOPS

Number of Position	Position Title	Salary Grade	Monthly Salary	Annual Salary	Clothing Allowance	Mid Year Bonus	Year end Bonus	Cash Gift	PEI	PERA	GSIS	Pag - Ibig	Philhealth (5%)	ECC	Total
1	Attorney III	21	63,997.00	767,964.00	6,000.00	63,997.00	63,997.00	5,000.00	5,000.00	12,000.00	92,155.68	1,200.00	19,199.10	1,200.00	**1,037,712.78**
1	Administrative Officer V	18	46,725.00	560,700.00	6,000.00	46,725.00	46,725.00	5,000.00	5,000.00	12,000.00	67,284.00	1,200.00	14,017.50	1,200.00	**765,851.50**
1	Administrative Officer III	14	33,843.00	406,116.00	6,000.00	33,843.00	33,843.00	5,000.00	5,000.00	12,000.00	48,733.92	1,200.00	10,152.90	1,200.00	**563,088.82**
1	Administrative Officer II	11	27,000.00	324,000.00	6,000.00	27,000.00	27,000.00	5,000.00	5,000.00	12,000.00	38,880.00	1,200.00	8,100.00	1,200.00	**455,380.00**

Number of Position	Position Title	Salary Grade													
1	License Inspector II	8	19,744.00	236,928.00	6,000.00	19,744.00	19,744.00	5,000.00	5,000.00	12,000.00	28,431.36	1,200.00	5,923.20	1,200.00	**341,170.56**
1	License Inspector I	6	17,553.00	210,636.00	6,000.00	17,553.00	17,553.00	5,000.00	5,000.00	12,000.00	25,276.32	1,200.00	5,265.90	1,200.00	**306,684.22**
1	License Inspector I	6	17,553.00	210,636.00	6,000.00	17,553.00	17,553.00	5,000.00	5,000.00	12,000.00	25,276.32	1,200.00	5,265.90	1,200.00	**306,684.22**

Number of Position	Position Title	Salary Grade													
1	License Inspector II	8	19,744.00	236,928.00	6,000.00	19,744.00	19,744.00	5,000.00	5,000.00	12,000.00	28,431.36	1,200.00	5,923.20	1,200.00	**341,170.56**
1	License Inspector I	6	17,553.00	210,636.00	6,000.00	17,553.00	17,553.00	5,000.00	5,000.00	12,000.00	25,276.32	1,200.00	5,265.90	1,200.00	**306,684.22**
1	License Inspector I	6	17,553.00	210,636.00	6,000.00	17,553.00	17,553.00	5,000.00	5,000.00	12,000.00	25,276.32	1,200.00	5,265.90	1,200.00	**306,684.22**

Number of Position	Position Title	Salary Grade													
1	Security Officer 1	11	27,000.00	324,000.00	6,000.00	27,000.00	27,000.00	5,000.00	5,000.00	12,000.00	38,880.00	1,200.00	8,100.00	1,200.00	**455,380.00**
1	Security Officer 1	11	27,000.00	324,000.00	6,000.00	27,000.00	27,000.00	5,000.00	5,000.00	12,000.00	38,880.00	1,200.00	8,100.00	1,200.00	**455,380.00**
1	Security Officer 1	11	27,000.00	324,000.00	6,000.00	27,000.00	27,000.00	5,000.00	5,000.00	12,000.00	38,880.00	1,200.00	8,100.00	1,200.00	**455,380.00**
1	Security Officer 1	11	27,000.00	324,000.00	6,000.00	27,000.00	27,000.00	5,000.00	5,000.00	12,000.00	38,880.00	1,200.00	8,100.00	1,200.00	**455,380.00**
1	Security Officer 1	11	27,000.00	324,000.00	6,000.00	27,000.00	27,000.00	5,000.00	5,000.00	12,000.00	38,880.00	1,200.00	8,100.00	1,200.00	**455,380.00**

Number of Position	Position Title	Salary Grade													
1	Security Officer 1	11	27,000.00	324,000.00	6,000.00	27,000.00	27,000.00	5,000.00	5,000.00	12,000.00	38,880.00	1,200.00	8,100.00	1,200.00	**455,380.00**
1	Security Officer 1	11	27,000.00	324,000.00	6,000.00	27,000.00	27,000.00	5,000.00	5,000.00	12,000.00	38,880.00	1,200.00	8,100.00	1,200.00	**455,380.00**

7,918,771.10

ANNEX 20: Basis for Bacoor City Computation: City Livelihood Programs

LIVELIHOOD OFFICE

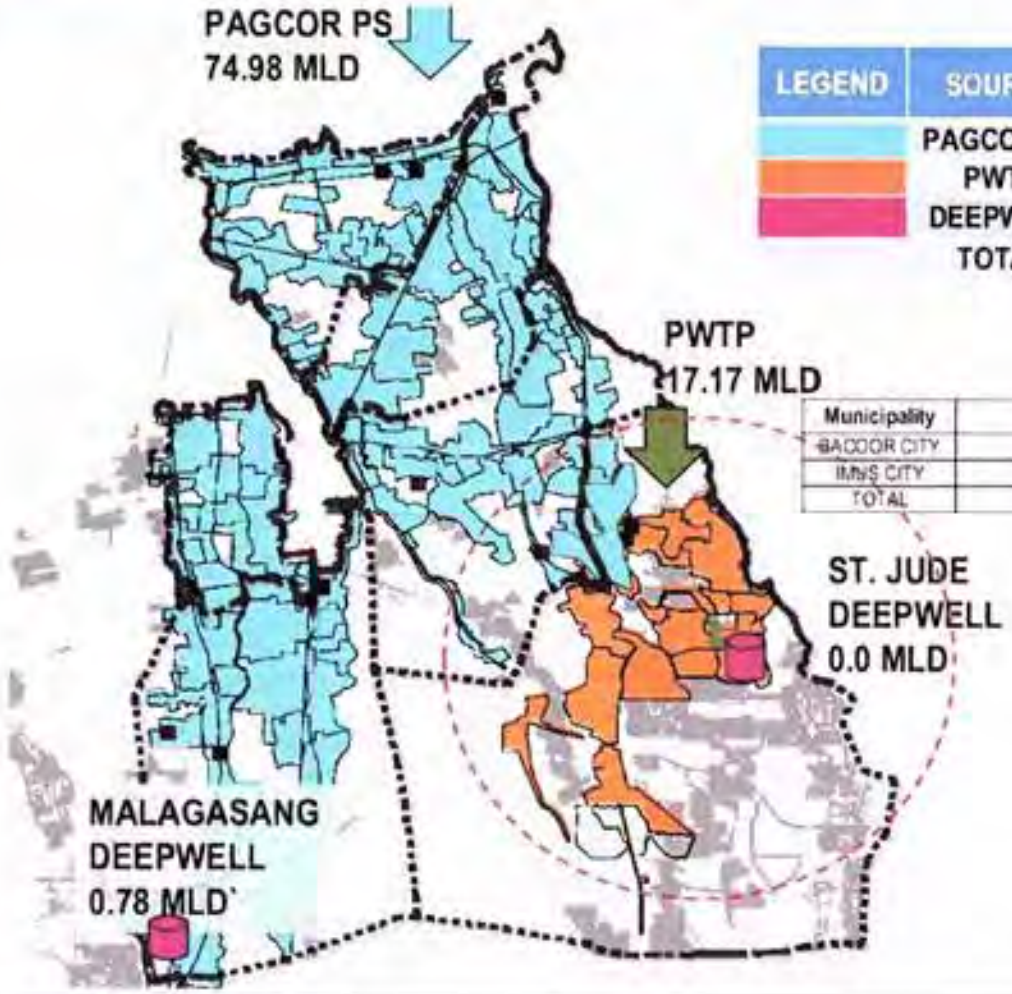
RESOURCES NEEDED

	WHAT?HOW MANY?	HOW MUCH		TARGET NO. OF BENEFICIARIES	TOTAL COST OF TOOL KIT/STARTER KIT	FUND SOURCE	SCHEDULE
		TRAINING MATERIALS	TOOL KIT/STARTER KIT				
I	1. Provision for Livelihood Training and 2. Provision for Toolkit/Starter Kit 3. Provision for Entreprenuership Mind						
1	Candle Making	2,500.00	2,500.00	100	250,000.00		TBA
2	Perfume Making	2,500.00	2,500.00	100	250,000.00		TBA
3	Cookery/Food Processing	2,500.00	2,500.00	100	250,000.00		TBA
4	Bread Making/Cake making	1,500.00	6,000.00	75	450,000.00		TBA
5	Manicure / Pedicure (Mani-Ped)/Foot -Spa	3,000.00	6,000.00	100	600,000.00	GENERAL FUND	TBA
6	Balloon Arranging/Floral Arrangment	3,500.00	1,500.00	75	112,500.00		TBA
	Soap Making						TBA
7	Dishwashing Liquid	1,600.00	1,600.00	100	160,000.00		TBA
8	Fabric Conditioner	2,800.00	2,800.00	100	280,000.00		TBA
9	Beadwork	1,500.00	1,500.00	100	150,000.00		TBA
10	Hair Cutting/Hair Coloring	2,000.00	2,000.00	100	200,000.00		TBA
11	Massage Therapy	1,500.00	1,500.00	100	150,000.00		TBA
	TOTAL	24,900.00		1050	2,852,500.00		

Prepared by

EUGENE D. ECALTO JR.
Livelihood Staff

ANNEX 21: BACOOR AND CITY WATER SERVICE CONNECTION AND NON-REVENUE WATER (NRW)



LEGEND	SOURCE	WSC	SUPPLY (MLD)	BV (MLD)	%
	PAGCOR PS	90,035	74.98	60.19	81.57%
	PWTP	19,019	17.17	14.41	17.23%
	DEEPWELL	1,323	0.78	0.75	1.20%
	TOTAL	110,377	92.93	75.35	100%

Municipality	WSC	Supply	BV	CMD	NRW %	MLD
BACOOR CITY	68615	65.41	51.74	0.75	20.90%	13.67
IMUS CITY	41762	27.19	23.61	0.57	13.16%	3.58
TOTAL	110377	92.60	75.35	0.68	18.63%	17.25

as of July 2023

ANNEX 22: LOCAL SHELTER PLAN UPDATING PROCESS

TASK	OUTPUTS	2023 (BASE YEAR)									2024-2032		
		APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	PP1	PP2	PP3
DATA GATHERING													
Conduct of coordination meeting with Bacoor City LGU for LSP formulation and provision of the checklist of data requirements	Issuance of Executive Order 56 s. 2023 creating Technical Working Group (TWG) for the updating of Bacoor City's Local Shelter Plan for the period of 2024-2032												
	Scoping of available data												
	Validated and complete submission of data requirements												
	Finalized work plan for LSP Formulation												
SITUATIONAL ANALYSIS													
Needs Assessment *(BASED ON LATEST CENSUS RESULT – PSA 2020)*	Projected Needs (PSA)												
	Population Projection (Worksheet 2, 3-1, 3-2)												
	Updated data on Backlogs (PSA, Local Survey)												
	Displaced Population (Worksheets 1-1 to 1-7, 3-1)												
	Homeless (Worksheet 2, 3-1)												
	Doubled-up Households (Worksheet 2, 3-1)												
Affordability Analysis	Upgrading needs												
	Affordable Housing Options												
	Land Need Calculation												
Resource Analysis	Inventory of Available Suitable Lands for Housing (Worksheets 6-1, 6-2)												

TASK	OUTPUTS	2023 (BASE YEAR)									2024-2032		
		APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	PP1	PP2	PP3
	Comparison of Land Need and Available Suitable Land for Housing												
Assessment of Services needed vs Capacity of Service Provider	Assessment of Power Need vs Capacity of Power Provider (Worksheet 6-3)												
	Assessment of Water Need vs Capacity of Water Provider (Worksheet 6-4)												
	Assessment of Domestic Waste Management Need vs Capacity of Service Provider (Worksheet 6-8)												
	Assessment of Sanitary Facilities Need vs. Capacity of Service Provider (Worksheet 6-5)												
	Assessment of Roads Need vs Capacity of Service Provider (Worksheet 6-7)												
	Assessment of Drainage Need vs Capacity of Service Provider (Worksheet 6-6)												
UPDATING OF LOCAL SHELTER PLAN (LSP) FOR THE PERIOD OF 2024-2032													
Workshop Seminar and Writeshop	Workshop Seminar – Learning session orienting the LSP TWG regarding the LSP mechanics												
	Writeshop with Key Shelter Agencies (KSAs)												
Drafting of Local Shelter Plan	Chapter 1 (Introduction)												
	Chapter 2 (Bacoor City Overview)												
	Chapter 3 (Shelter Needs Assessment)												

TASK	OUTPUTS	2023 (BASE YEAR)									2024-2032		
		APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	PP1	PP2	PP3
	Chapter 4 (Affordability Assessment)												
	Chapter 5 (Resource Assessment)												
	Chapter 6 (Work and Financial Plan)												
	Chapter 7 (Monitoring and Evaluation)												
REVIEW AND APPROVAL OF LOCAL SHELTER PLAN													
Initial review and critique of LSP TWG and DHSUD	Initial LSP draft revised in response to comments and criticism												
LSP TWG's Final reading of the amended LSP draft	Proofread and finalized LSP update for 2024-2032												
Submission of finalized LSP to DHSUD for review and approval	Draft of LSP approved for SP endorsement												
Submission of LSP to Sangguniang Panlungsod (SP) for review and approval	Resolution adopting the updated Local Shelter Plan												
Monitoring	Evaluation every year and amendment as needed every three (3) years												

ANNEX 23:
Local Shelter Plan Photo Documentation


BACOOR LOCAL
SHELTER PLAN
2024-2032