



# **URBAN REGENERATION & CLIMATE CHANGE PROGRAM**

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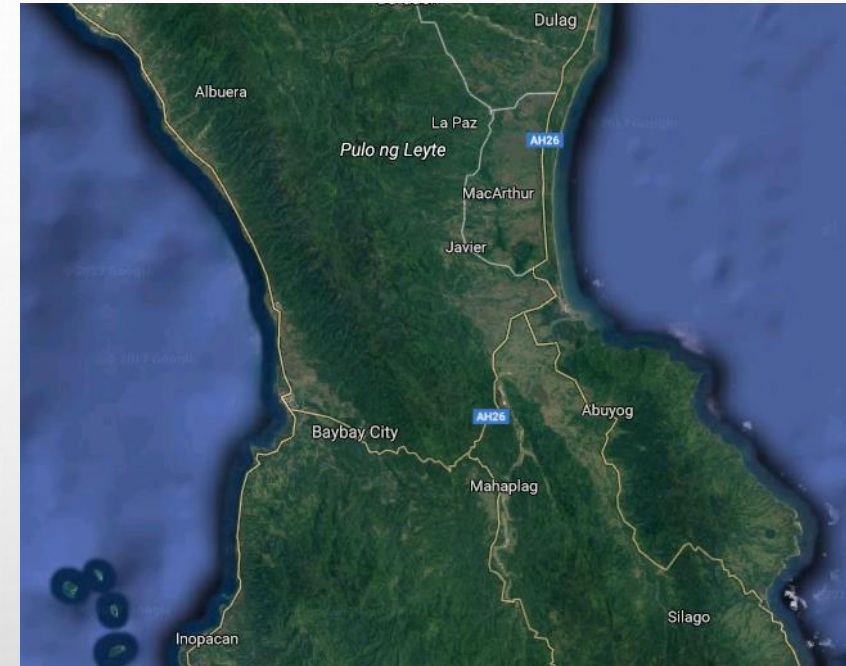
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LOCAL GOVERNMENT UNIT OF BAYBAY CITY, LEYTE, PHILIPPINES

# INTRODUCTION: BAYBAY CITY

<b>Country</b>	Philippines
<b>Province/Region</b>	Leyte/Region 8
<b>Congressional District</b>	5 <sup>th</sup> District of Leyte
<b>Land Area</b>	460.50 sq. km. (46,050 hectares)
<b>No. of Barangays</b>	92 (23 urban; 3 sub-urban; 66 well-managed rural barangays)
<b>No. of Households</b>	26,937
<b>Economy</b>	Largely agro-based economy & commerce

Barangay	Population		Area (ha)	Density (persons per ha)	
	2013	2015		2013	2015
City of Baybay	118,402	120,685	46,050.05	2.6	2.6
Rural	100,267	101,875	45,818.16	2.2	2.2
Urban	18,135	18,810	231.89	78.2	81.1
Built-up Area			<b>613.26</b>		

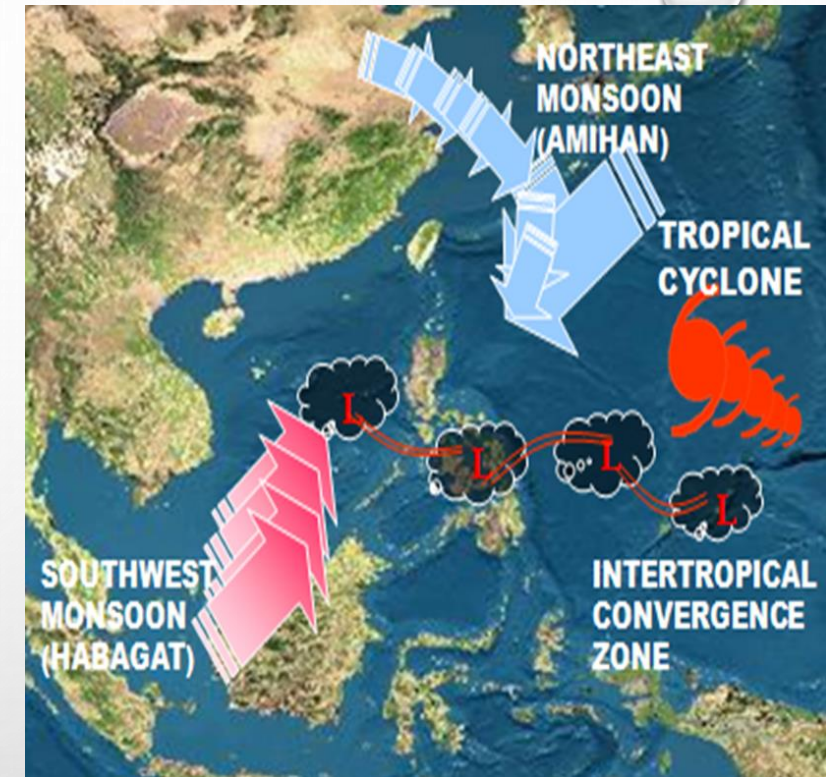


# BAYBAY CITY

- highly susceptible to typhoons and other meteorological variability
- visited by an average of 5 - 7 typhoons every year which could potentially cause associated natural hazards
- Baybay is a coastal, generally mountainous and river-dissected city with predominantly wet climate, that can impact on the lives of its communities, properties, growing economy and crop production levels

## VISION

"Baybay, an agri-industrialized City, with law-abiding and empowered citizenry enjoying the benefits of a competitive economy and **sustainable natural environment, with resilient infrastructures**, governed by competent, transparent and development-oriented leaders".





# PROBLEM: SOLID WASTE

We Know that...



**Un-managed wastes can contribute to excessive global warming**

## “Throw-Collect-Dump” system of garbage

- an **INEFFECTIVE** waste management
- never been resolved by the Local Government Unit satisfactorily

**Present Collection Rate : 28 %**

- 26 out of 92 Barangays are covered by garbage collection

**Waste generation rate: 0.52 kg/person/day**

**Total waste generation: 55 tons/day**



**Baybay City Open Dumpsite, Barangay Imelda**

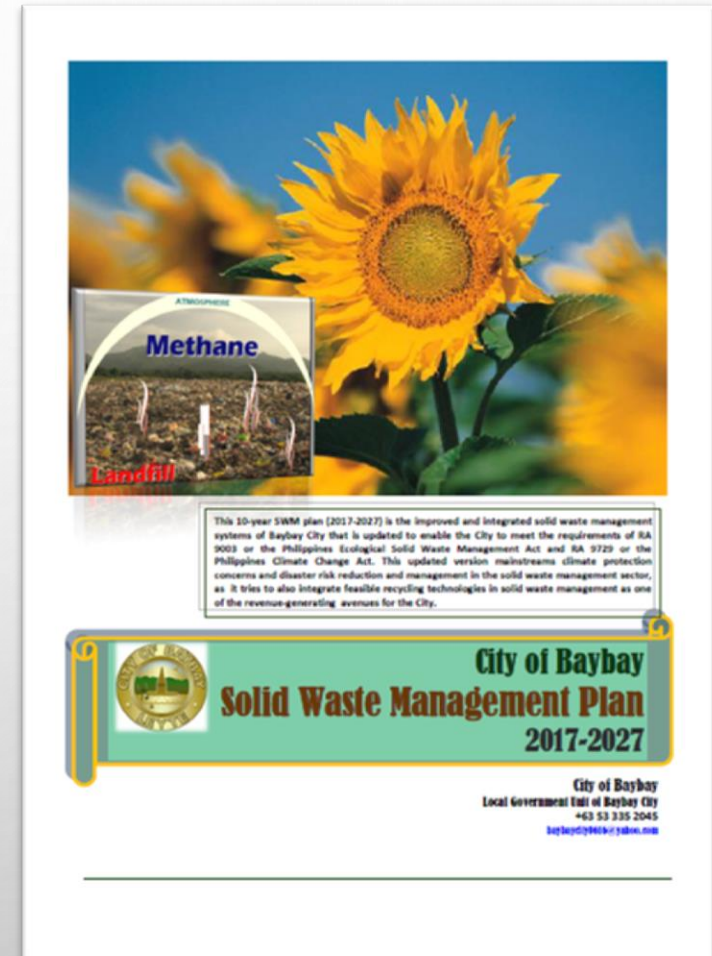
# BAYBAY CITY SOLID WASTE MANAGEMENT PROGRAM

The implementation of solid waste management in the City is anchored on national legislations, its principles & requirements:

- RA 9003 or the Philippines Ecological Solid Waste Management Act
- RA 9729 or the Philippines Climate Change Act

## City SWM Program

- ❖ 10-year plan (2017-2027)
- ❖ mainstreams climate protection concerns and disaster risk reduction and management
- ❖ integrates feasible recycling technologies in solid waste management as one of the revenue-generating avenues for the City
- ❖ motivating constituents towards managing properly their generated solid waste, understand and appreciate the value of resources
- ❖ optimize resource recovery, divert waste from the disposal facility and increase the lifespan of the proposed landfill
- ❖ inclusion of SWM annual budget in the 20% City Development Fund

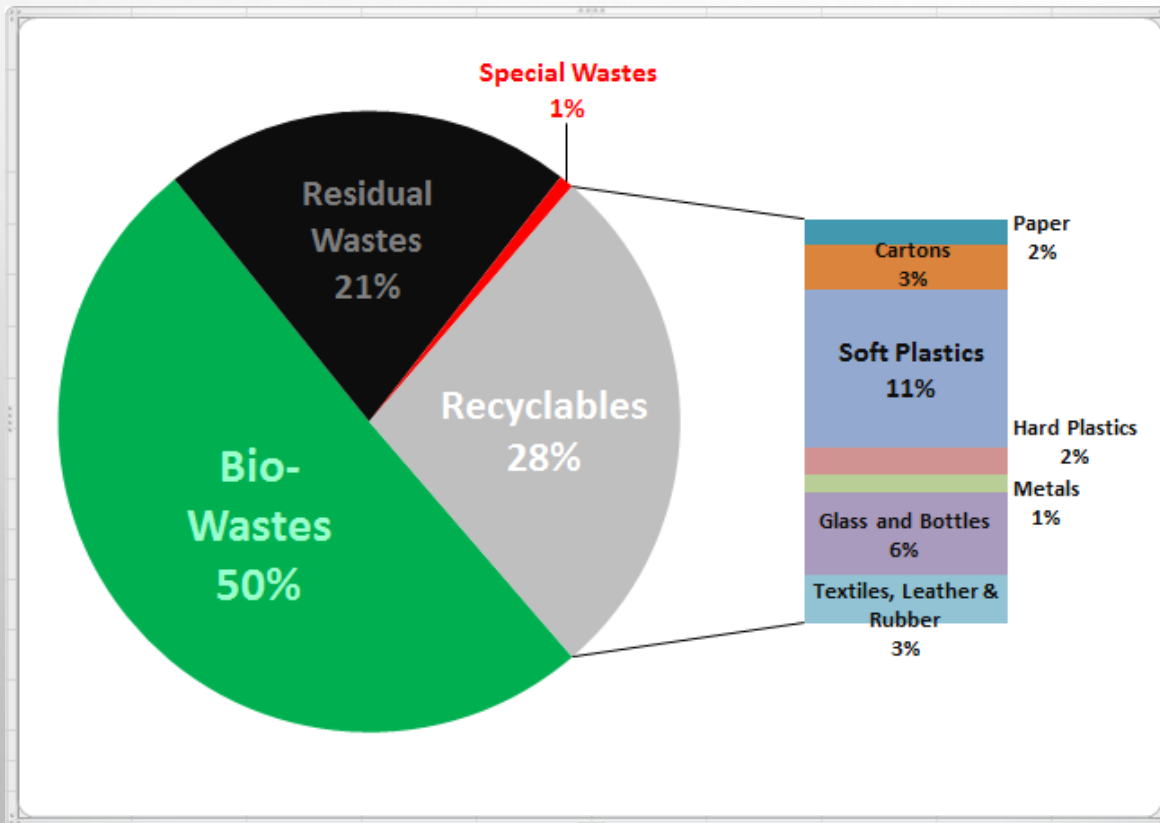




# SWM PROGRAM: ISSUES & CHALLENGES

❖ **Segregation of waste at the source is not fully observed at the barangay level**

❖ **Not all barangays (only 26) are covered by the LGU garbage collection**



**Fractions of Household Waste**

*Baybay Waste Analysis & Characterization Study 2013*

# **SWM PROGRAM: ISSUES & CHALLENGES**

- ❖ **BUDGET** FOR THE DEVELOPMENT OF SANITARY LANDFILL PROPOSED FOR 2017
- ❖ **COST-RECOVERY MECHANISM**

THE NEED TO:

- ❖ **CLOSE AND REHABILITATE** THE OPEN DUMP IN BRGY. IMELDA
- ❖ **CONSTRUCT THE MATERIALS RECOVERY FACILITY** IN BRGY. IMELDA, INCLUDING COMPOSTING
- ❖ **CONSTRUCT A HAZARDOUS/INFECTIOUS WASTE** FACILITY AT THE DISPOSAL SITE

# SWM PROGRAM: STRATEGIES

## ❖ Information Drive And Education Campaign

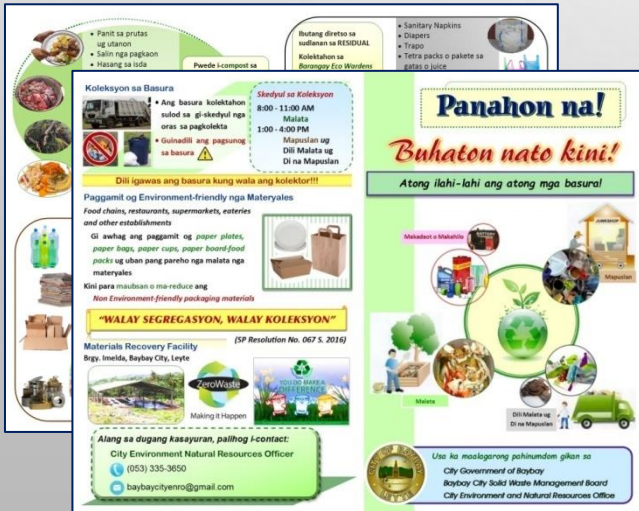


## ❖ Construct of Materials Recovery Facility (MRF) in Barangays



MRF, Barangay Candadam

MRF receive mixed waste for final sorting, segregation, composting, and recycling





# SWM PROGRAM: STRATEGIES

## ❖ Establishment of MBT and Central MRF in Brgy. Imelda

### MECHANICAL BIOLOGICAL TREATMENT

#### WINDROW COMPOSTING



#### VERMI COMPOSTING



### Central Materials Recovery Facility



For final sorting of wastes

Organic fertilizer production



# SWM Program: STRATEGIES

## ❖ Sanitary Landfill (SLF) Development



SLF site, 3 hectares, Barangay Buenavista

➤ Serves as the final disposal for residual wastes

## ❖ Hazardous/Infectious Waste management area



Healthcare and Special Waste Containment Facility

Currently under construction



# LESSONS & IMPLICATIONS

- HARMONIZE PLANS, PROGRAMS & EFFORTS OF ALL SECTORS
- MAINSTREAMING CLIMATE CHANGE ADAPTATION & MITIGATION
  - IN POLICY & DECISION MAKING
  - IN ALL PROGRAMS, PLANS & PROJECTS
- CONDUCT INTENSIVE INFORMATION EDUCATION COMMUNICATION (IEC) CAMPAIGN
- STRENGTHEN LAW ENFORCEMENT
- IDENTIFY AND EVALUATE DOABLE MANAGEMENT SCHEMES
- TO ADOPT AND PROMOTE INNOVATIVE SOLID WASTE MANAGEMENT PROCESSING TECHNOLOGIES
- ACHIEVE A FEASIBLE WASTE DIVERSION RATE FROM 25% TO 50% THROUGH SEGREGATION AT SOURCE, RECYCLING INITIATIVES AND COMPOSTING



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