



BITUNG

Introduction

The city of Bitung is located in the province of North Sulawesi in Indonesia surrounded by the regency of North Minahasa (N), Maluku Sea (S), regency of Minahasa (W) and Maluku (NE). The region is characterized by natural protection areas like protected forests, nature reserves, national tourism parks and forest (around 43 %). Therefore, nature tourism is one of the economic pillars in this region. The topography unfolds from mountainous areas in the west and northwest to a flat coastal area in the east where the urban agglomeration is situated. Bitung has a rapid economic and demographic growth related to its port and solid industry. Many northern Indonesian trade routes and touristic cruise lines are routing together in the city. This growth also leads to unavoidable environmental pollution from industrial waste as well as domestic waste and wastewater accumulation.

Since 2016, various activities to address sanitation problems have been carried out in combination with public awareness and education programs (e.g. "5 Clean"). Furthermore, Bitung is participating in national and international events regarding environmental sanitation.

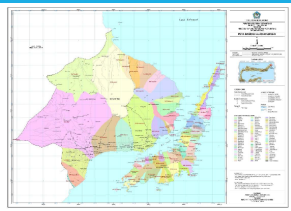
Challenges related to Water and Sanitation

The government initiated several countermeasures to target sanitation problems but still faces obstacles for their success. A waste recovery facility has been built in several locations but there are still many people who don't understand and don't want to know about the waste recovery and its benefits so that many of these locations are abandoned or not operating. There are many DEWATS systems that have been successfully built but operation and management isn't optimized by the community yet due to a lack of capacity building about the ways and benefits of operating DEWATS.

Training assistance is needed for communities, operators and management teams for STP, DEWATS, waste recovery facilities. Additionally, specialized training for industrial DEWATS management in factories, markets, schools and hospitals.

Quick Facts

Country: Indonesia
Population: 222.908 Inh.
Adm. Area: 304.0 km²



Executive Member (since 2018)

Contact

n. Maximilian Lombar
a. Jl. DR Sam Ratulangi
No.45 Kota Bitung
Sulawesi Utara, Indonesia
t. +62 438 21002
@ bitungkota.go.id



Insufficient community toilets and septic tanks



Periodical flooding events



Informal dumpsite

System Solution

Integrated Sanitation Management - Coastal and Touristic Areas



Applied Modules:

- Decentralized Wastewater Management
- Septic Tank Assessment
- Fecal Sludge Management
- Solid Waste Management
- Regulations and Policy
- Operation and Maintenance
- Capacity Building
- In-House-Management

Key Project Interventions

- Implementation of Material Recovery Facility (MRF, TPS 3R)
- Construction of DEWATS, public toilets plus community sanitation center in subdistricts
- Development of Fecal Sludge Treatment Plant (STP) in urban area
- Dissemination of Septic Tank Amnesty (free desludging service)
- Assessment and procurement of septic tanks and desludging trucks
- Development and dissemination of environmental policies

Financing Mechanism

Land and community facilitation are funded by Local Government budget also with cost sharing for operation and maintenance. Additionally, there is a Business to Business (B to B) model in infrastructure development for short term cooperations and Public-Private-Partnership (PPP) for larger budget and long term projects.

Project Images



Community-based DEWATS plant



Material Recovery Facility



Sludge Treatment Plant