



FACT SHEET

Bac Ninh



Quick Facts

Country:	Viet Nam
Population:	206,035 Inh.
Adm. Area:	82.6 km ²



Executive Member of City Alliance
since 2017

Contact

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Project Start/End Year
2014-2028

Introduction

Bac Ninh city is located 30 kilometers northeast from Hanoi and is a fast growing city, which almost doubled its proportion of trade, services, industries and construction in recent years. In the beginning of 2018, the administration of Bac Ninh was upgraded to City Class 1, which equals the status of a province. Bac Ninh is known as the “land of a hundred handcraft villages” and famous for its longstanding culture, academic tradition and the homeland of the “Quan Ho” folk songs which are recognized by the UNESCO as intangible cultural heritage of humanity. Beside that, Bac Ninh is recognized for its noodles production from private households in the Khac Niem district. There are 500 to 600 kilograms of noodles produced every day in 207 households.

But the food production also generates around 3,450m³ untreated wastewater a day (including domestic, industry and husbandry) discharging directly to the environment. In 2017, Bac Ninh signed a Memorandum of Understanding (MoU) with BORDA Vietnam and its partner - Vietnam Academy for Water Resources (VAWR) - to implement integrated sanitation approach to entirely solve the environmental pollution of wastewater especially from the noodle production in this area. Implementation of the concept of Integrated Sanitation that is applied in this city contributes to achievement of a cluster of Sustainable Development Goals and Targets of the 2030 Agenda for Sustainable Development, such as SDG 1- No Poverty; SDG 6 - Clean Water and Sanitation; SDG 7 - Affordable and Clean Energy; SDG 9 - Industry, Innovation and Infrastructure; SDG 11 - Sustainable Cities and Communities; and SDG 17 - Partnerships for the Goals.

Challenges Related to Water and Sanitation

Despite the challenges occurring from the noodle production, the city of Bac Ninh is also facing a rapid industrialization and development of craft villages, which increase the weight of environment pollution. Most of the existing infrastructure is outdated or insufficient in these areas and there are many more rural areas far from the urban center that do not have any treatment systems in place so that wastewater and waste directly discharge into rivers, channels or other open water bodies. But even with the centralized wastewater treatment system in the city only 35 per cent of all households are connected.



System Solution

Integrated Sanitation Management



Food production of noodles in Bac Ninh applied the following seven modules:

- Decentralized Wastewater Management (DEWATS)¹
- Fecal Sludge Management
- Regulations
- Operation & Maintenance
- Capacity Building
- Monitoring & Evaluation
- Re-Use

Key Project Interventions

- Develop capacity of city and local authority for implementation and operation and maintenance of decentralized wastewater management
- Raising awareness to decision makers from city to ward and people on environment protection, wastewater treatment, hygiene and sanitation to reduce pollution
- Provide assistance to city and ward authorities to develop policies on fee collection of decentralized wastewater treatment
- Propose and demonstrate the technological solution on fecal sludge management

Financing Mechanism (see Case Study: Financing Integrated Sanitation, 2019)

The project implementation is funded by the provincial state budget. Optional, private infrastructure investments are possible (BT models of Public-Private-Partnership).

Project Images



Untreated waste and wastewater disposal I



Untreated waste and wastewater disposal II



Household noodle production

Contacts

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Mallory Bellairs, UN ESCAP (Layout)

Jakrapong Tawala, UNITAR (Administrative map)

¹ UN ESCAP, UN-Habitat and Asian Institute of Technology, 2015. Policy Guidance Manual on Wastewater Management with a Special Emphasis on Decentralized Wastewater Treatment Systems.