



# HA TINH



## BACKGROUND

Ha Tinh is located on Viet Nam's north-central coast and is the capital of Ha Tinh Province. It is one of the poorest provinces in the country, a circumstance partially attributed to harsh natural conditions (cold winters, extremely hot summers and heavy rains). The primary industries are agriculture, forestry, fishery, construction and retail trade.

## SOLID WASTE MANAGEMENT IN HA TINH

Waste management in Ha Tinh has become a major problem and a significant priority for the leadership of the city. In 2010 the city experienced an acute crisis when the landfill had to be closed due to protests from the neighbouring communities. Since the protests and the closure of the landfill, the local government has tried to locate a new site for a landfill and has made solid waste management a priority. The landfill crisis has further strengthened the local government's commitment to decrease the amount of waste that needs to be disposed in the landfill.

Due to the closing of the city's landfill, the collected waste is now transported to a landfill about 20 km away, in Cam Xuyen district. However, the Cam Xuyen landfill does not have the capacity to receive all of the city's waste and needs to be expanded. The expense of transporting the waste such a long distance and the bad road conditions are inhibiting the necessary frequency of access to the landfill.

According to Citenco (the state-owned environmental and sanitation company), 95 per cent of waste in inner Ha Tinh and 30 per cent of waste in the communes are collected. About 94 tons of waste is generated every day, and 52–60 tons are collected. To limit the amount of waste that needs to be deposited in the landfill, the city has encouraged households to treat their own waste, which has resulted in waste burning, burying or dumping into local rivers and thus causing pollution and environmental degradation. Citenco collects waste that is dumped in communal areas on occasion, but this solution is neither sufficient nor permanent. The city is committed to finding sustainable solutions

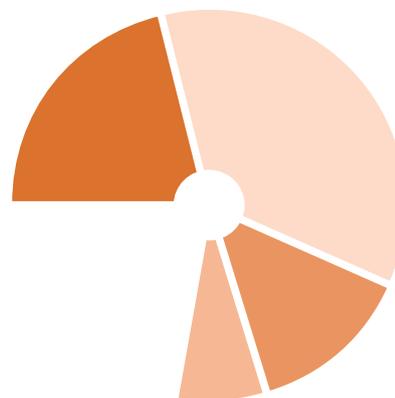
### CITY FACTS

POPULATION	91,288
URBAN POPULATION	65,720
% URBAN POPULATION	72%
PER CAPITA INCOME	11 million VND
TOTAL WASTE GENERATED	94 tons/day
ORGANIC WASTE	57%
NON-ORGANIC WASTE	23%
TOTAL WASTE COLLECTED	52-60 tons/day

that would limit the amount of waste that needs to be dumped in the landfill while also improving the local environment.

Given that about 60 per cent of the waste in the city is organic, composting would be a way of reducing much of the waste that needs to go to the landfill. The city has encouraged home composting, and some rural households and farmers produce compost but only on a small scale for their family cultivation needs. In both the urban and rural areas, residents recognize that organic fertilizer is beneficial to the land and the crops and agree that composting and source separation are important ways of dealing with waste.

In an attempt to reduce waste at the landfill, the city purchased equipment for a composting plant with a capacity of 120 tons per day through an ODA loan from Belgium. But the technology has proven difficult to put in use. Land has not yet been allocated for the plant, and there are no final plans or funds for when and how to operate the plant. One possibility that the city is exploring is to place the composting plant next to the landfill in Cam Xuyen district.



COMPOSITION OF MUNICIPAL WASTE



### PLANS FOR THE IRRC

Based on the need for a suitable solution for the communes, an integrated resource recovery centre is planned in Thach Ha commune, close to the city centre. Initially, the IRRC will address the problem of waste collection in the commune as well as ensure that the organic waste from the town's central market is turned into a resource. Although the IRRC will initially only treat waste from the market and the Thach Ha commune, the plan is to expand its activities later to treat waste from adjacent communes.

Since the closure of the city's landfill in 2011, there has been no waste collection in Thach Ha commune. Encouraged to treat their own waste, many of the households have taken to dumping their waste in communal areas. Before the closure of the landfill, between 2007 and 2010, waste in the commune was collected by 24 female workers. The women were farmers who needed additional income and received a small collection fee from each household for collecting waste twice a week. With a small team of collectors in each subcommune, there were many workers who shared the limited income from the collection fees, and thus the income for each collector was very small. Once the women collected the waste, they took it to points where Citenco then collected it before transporting it to the landfill.

The IRRC will build on the previous system and employ some of the women waste collectors. It will formalize the collection and management of the IRRC through the creation of an environmental cooperative. The collection and transport of waste from the commune will be handled by the cooperative workers, while Citenco will transport the organic waste from the central market to the IRRC. Citenco will also be responsible for regularly collecting rejected material from the IRRC and taking it to the landfill.

To ensure that only separated waste is transported to the IRRC, the People's Committee of Ha Tinh will work with the central market's management board and the vendors as well as households in Thach Ha commune. The People's Committees at the city and commune levels are committed to the project and to ensuring its success. Other important parties, such as the Women's Union, have been included in the project planning process and will have a critical role in promoting source separation in the commune.



IRRIC HA TINH	
MANAGEMENT	Environment Cooperative
CAPACITY	5 tons/day
FOCUS	Commune, Market

### COMMUNITY NEEDS AND PRIORITIES

According to a survey conducted through the ESCAP-funded IRRIC project, the majority of households in urban areas think that the current collection system is acceptable and that the waste collection fee is fair. However, in the communes, the majority of households is not satisfied with the current waste collection system and would prioritize solid waste management over other infrastructure improvements if given the choice.

For more information please contact  
 ESCAP's Sustainable Urban Development Section  
 Email: [escap-edd-suds@un.org](mailto:escap-edd-suds@un.org)