

City overview

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155,000 (2015)

Total waste generated per day

Waste generated per capita per day

75 tonnes 0.5 kg

Waste-to-resource facility established 2012

Capacity of waste-to-resource facility 5 tonnes

Operator Urban Environment Company (URENCO)

Local partners

Municipal People's Committee, Provincial People's Committee, Environment and Development in Action Vietnam

Source: ESCAP and ENDA Vietnam.

Introduction

Kon Tum is a riverside town and the capital of Kon Tum Province in the highlands of Viet Nam. Surrounded by rich and diverse flora and fauna, it is popular with tourists, and tourism remains central to the local economy. Economic growth in Kon Tum Province is closely linked to the agricultural and forestry sector, relying on such products as coffee, rubber, pepper, cashew, pulp and wood. Kon Tum is the central trading town and distribution hub in the province. The provincial government set an economic growth rate target for the town of 11–16 per cent over the next five years, driven largely by industrial development.

In 2015, the town had an average population growth rate of around 3 per cent. Approximately 75 tonnes of solid waste was generated in the city each day, having risen from 55 tonnes per day in 2011. Around 62 per cent of the municipal solid waste is organic. Most waste is disposed through landfilling, but the municipal landfill facility is almost full and alternative waste treatment methods are needed. Waste collection is undertaken by Urban Environment Company (URENCO), a state-owned company linked to the Municipal People's Committee. Collection in 2010 covered some 60–75 per cent of the town. URENCO receives a fee for collecting solid waste, at approximately \$1 per household per month, from around 50 per cent of the households in the town. Almost 90 per cent of URENCO's operating expenses, however, are subsidized by the local government.

The town has not developed a solid waste management plan. The national government is urging the town and provincial governments to develop and implement strategies and policies based on the 3R principles and aligned with the national strategy for integrated solid waste management. In 2014, the provincial government stipulated that by 2020, 90 per cent of Kon Tum's municipal solid waste had to be collected and that 85 per cent of the collected waste had to be reused or recycled.

There are around 60 waste pickers in Kon Tum and 30 more operating at the dumpsite. Sixteen of the waste pickers trade recycled materials, and seven of them work in junk shops. Junk shops sell collected materials to local industrial parks for processing. Plastic bottles, carton boxes and metal are all priority materials for recycling. Waste pickers generate an average monthly income of \$50–\$100.

Promoting the IRRC model in Kon Tum

The first waste-to-resource facility, an IRRC, was established in 2012. ESCAP provided funding for its construction, while Waste Concern provided the designs for the plant and technical assistance and the municipal government provided the land and liaised with URENCO for waste collection and delivery and operation of the facility. Environment and Development in Action (ENDA) Vietnam, an NGO, provided capacity-building and technical support, especially to the municipal bodies, and for outreach activities with local communities.

Community outreach depended on engagement from the local government, especially at the commune level. Yet, government commitment in Kon Tum was limited, and some leaders resisted piloting a waste separation initiative in their commune. Ultimately, three wards agreed to pilot the initiative, and Quang Trung ward in particular achieved good results, mainly due to good capacity within its ward and commune leadership and sustained outreach to residents.

Outreach in all wards was built around the establishment of a network of communicators, drawn from the local community. ENDA supported this network of communicators through training and capacity building on waste separation at source. In addition, study tours for the communicators were arranged with local government to strengthen the awareness-raising efforts and increase their understanding of what was to be achieved and why. Brochures and banners with information on waste separation at source were also developed and distributed around participating communes.

However, the city must also compete with alternative uses of organic material. For example, pig farmers began towards the end of 2014 to collect separated organic waste from households in Quang Trung ward. The farmers used the waste as feed for their pigs. Despite pressure from URENCO and the municipal government to desist, the farmers continued to appropriate waste separated for the waste-to-resource initiative, and the initiative was forced to withdraw. In addition, around 20 per cent of participating households began to use separated waste for in-house composting.

Results and impact

In early 2015, the waste-to-resource facility processed an average of 650–680 kg of organic waste per day, producing approximately 1.3 tonnes of compost per month. Almost all compost produced in the facility is sold directly to URENCO for application in the town's parks, groves and other green spaces. Rubber and coffee plantation owners are also clients. Compost sells at around VND1.2 million (\$53) per tonne.

The waste-to-resource initiative has had limited impact in Kon Tum. For the reasons cited, the operations of the facility are still working towards financial sustainability. Kon Tum's collection fees remain among the lowest in the country (the collection fee in Kon Tum is half that charged in Quy Nhon, for example). As a result, URENCO cannot cover the costs of operations or the cost of collecting separated waste. Increasing waste collection fees is within the purview of the provincial government, although officials have been adamant against raising fees.

