Case Study 2: Food Waste Has Its Way

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Everyday, there is over 3 500 tonnes food waste produced in Hong Kong while a large portion comes from households. The disposal of food waste imposes heavy burden to the limited landfill spaces and becomes one of the key factors contributing to its rapid depletion.

A key driver to food waste avoidance and minimisation is public education and engagement. Since 2005, we have been partnering with green groups in the Green Delight in Estates (GDE) programme, which aims to raise environmental awareness among public rental housing (PRH) residents and to instil a culture of protecting and improving the environment. For 2012/13, the theme of the GDE programme was Reduction of Municipal Solid Waste to echo with the government's prevailing policy. Estate-wide campaigns with in-depth educational programmes have been organised in order to encourage the community to actively take part in food waste reduction.

# **Reducing Food Waste at Source**

To promote the message on cherishing food, we conducted an estate-wide programme, "Cherish Food with Rewards" Campaign, in all PRH estates from 15 October 2012 to 4 November 2012. Tips on reducing food wastage were promoted through posters and website. Residents were encouraged to make pledges on cherishing food.

In addition, a "Food Waste has Value" Green Recipe Competition was held from 18 February to 17 March 2013 to solicit smart cooking recipes from residents on reducing food wastage. Around 100 participants including the competition winners and their families, representatives from HA and green groups participated in the final judging and award ceremony held in May 2013. The Secretary for Transport and Housing and the Secretary for the Environment also shared their food saving tips with the participants, and demonstrated how to cook spring rolls from left-over cooked ingredients of Chinese soup.



The Secretary for Transport and Housing and the Secretary for the Environment demonstrated how to cook spring rolls from left-over cooked ingredients



"Food Waste has Value" Green Recipe Competition Awards Presentation Ceremony



# Food Waste Recycling in Six Estates

Under the GDE programme, food waste recycling has been carried out in six selected estates. On-site food waste recycling for compost using micro-organism has been conducted in Lam Tin Estate since December 2012. Off-site food waste recycling was commenced in November 2012 for Lai Kok Estate, Tin Wah Estate and Tin Tsz Estate, and in December 2012 for Nam Shan Estate and Ching Ho Estate. Food waste was transported to a centralised food waste recycler in Yuen Long for conversion mainly into fish feed. As at the end of March 2013, 875 households have registered to participate in the scheme.

Regarding the food waste collection process, either a self-help mode or "Bucket Exchange" mode was adopted in the six estates. Tin Wah Estate, Tin Tsz Estate and Nam Shan Estate adopted the self-help mode whereby the residents put their food waste directly into large bins for collection by the food waste recycler. For Lai Kok Estate, Ching Ho Estate and Lam Tin Estate, "Bucket Exchange" mode was adopted whereby the residents brought their buckets of food waste to the ground floor of each block to exchange for clean buckets from the security guards.

### Off-site Food Waste Recycling – Self-help Collection in Tin Wah Estate, Tin Tsz Estate and Nam Shan Estate



Residents emptied the buckets of food waste into large bins located next to their residential blocks



Food waste recycler collected the food waste for off-site conversion into fish feed

# Off-site Food Waste Recycling – "Bucket Exchange" Collection in Lai Kok Estate and Ching Ho Estate



Residents brought their buckets of food waste to the ground floor of each block to exchange for clean buckets



Cleansing workers transported the buckets of food waste to refuse collection point and emptied it into large bins



Food waste recycler collected food waste for off-site conversion into fish feed

### **On-site Food Waste Recycling Using Micro-organism in Lam Tin Estate**



Cleansing workers added micro-organisms in food waste to facilitate fermentation for around 2-3 weeks





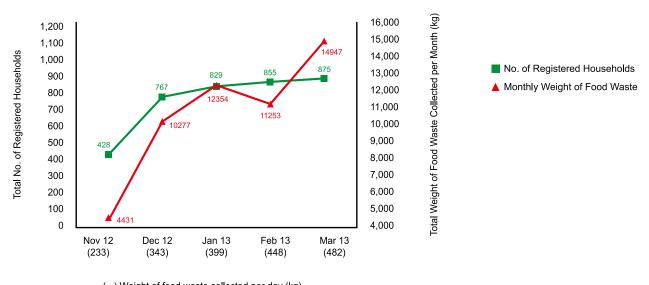
Cleansing workers dug out the compost from soil and stored it for usage at the community farm in the estate

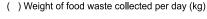
Cleansing workers put the fermented food waste in an open area and buried it in soil for composting for around 1.5-2 months

With the active participation of residents in the food waste recycling scheme, we have collected increasing food waste per month for recycling, reaching around 15 000 kg in March 2013. The results of the scheme as at the end of March 2013 are summarised below.

Weight of food waste collected per participating household per day in March 2013	0.56 kg
Weight of food waste collected per day in March 2013	482 kg
Weight of food waste collected in March 2013	14 947 kg

#### Total Number of Registered Households and Weight of Food Waste





# **Our Way Forward**

It is notable that Hong Kong's municipal solid waste consists of a significant portion of food waste, much of which needs not be disposed of in landfills. We believe that by partnering with community groups, substantial progress can be made to gain public's support for food waste reduction. Further estate-wide campaigns will be held to encourage residents to save food. Besides enhancing food waste recycling in Lai Kok Estate, Tin Wah Estate, Tin Tsz Estate, Nam Shan Estate, Ching Ho Estate and Lam Tin Estate, we will extend off-site recycling to six more estates under the GDE programme. Riding on the successful results in 2012/13, we will continue our efforts in promoting food waste reduction and recycling to encourage active participation of PRH residents.