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Unsold Food and Wastes of Convenient Stores in Phuket Province Thailand and Scope of Using them to Reduce the Cost of Fish Feed

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Studying the possibility of reducing the cost of aquatic animal feed by using unsold food from convenient stores in Phuket Province, Thailand. Reducing the cost of aquatic animal feed is a challenging Phuket is an island province and an attractive tourist destination with travelers come from all over the world. More than five million tourists arrive each year. Convenient stores were established to facilitate tourists spread throughout the island. There are unsold excess foods and lots of food wastes are produced each day, especially in restaurant hotel and convenient store. Therefore, this research aimed to: 1) study the problem of excess food and food wastes from convenient stores, 2) manage excess food and food wastes from convenient stores, and 3) study on the possibility of reducing the cost of aquatic animal feed by using unsold food from convenient stores. This research was qualitative research. The sample group was related to the people from Phuket Municipality and 42 convenient store operators. The instrument was an interview form. The first part was a general question and the second part was an in-depth, open-ended questions with no fixed structure. The findings of the research are as follows:

- 1) Convenient stores of all brands; namely 7-Eleven, Family Mart, Big C, Tops Daily, Super Chip Mini Mart, and others have unsold excess foods and food wastes daily. Amounts depend up on the size of the store, store location and inventory, the value of which ranged from 300 to 1,000 Baht per day. The top 5 excess products are breads and other bakery products followed by pre-cut fruits and vegetables, beverages, dairy products, cooked and ready-to-eat foods.
- 2) When unsold food and food wastes from convenient stores in the excess food sections, it should be planned by carefully managing inventory orders. When receiving the products, placement of the products on shelves product position, store decoration, cleanliness, service, promotions etc. affect their sales and also directly associated with the amount and value of excess food. For surplus food that are about to expire within 2-3 months, it is better to use discounts to enhance sales. They should also be placed near the checkout location to stimulate sales. In Phuket, there is only "Scholars Foundation of Sustainability" which mediates distributing foods to the underprivileged society and take care of the legislation controlling in donation of excess food to various organizations or foundations.
- 3) Excess food and wastes from the convenient stores can be directly used for aquatic animals such as products, bread and bakery vegetables, fruits and prepared foods or undergo processing and bringing in excess food and food wastes can be used to cultivation of black soldier fly larvae as a source of 40 - 50 percentage of protein, lauric acid that reduces pathogens and contains omega-3, 6 and 9 can reduce food wastes, reduce greenhouse gas, and reduce the cost of aquatic animal feed.

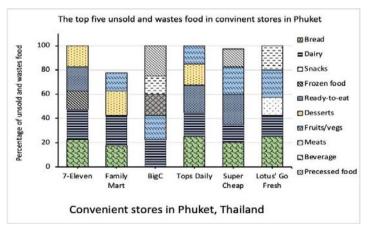


Figure 1 Composition of top five unsold food waste in different convenient stores