

Turning One Person's Trash into Another's Treasure

Nong Klang Dong Subdistrict Administration Organization.

Uthai Thani Province.

Executive Summary

In Thailand, the solid waste problem is considered as an important environmental problem, caused by excessive consumption behaviors of humans. As they lack the knowledge of waste management such as waste sorting and reuse, the volume of waste is gradually increasing and accumulating more than 10 million tons annually. In fact, Thais produce an average of 1.14 kg of waste per person per day (Pollution Control Department, 2018). Although Thailand has a long-term waste management solution, it still cannot solve the problem at Taluk Moo Village where each household produces an average of 144.6 kg of waste /month/household. The types of the waste usually include plastic bags, foams, used agricultural chemical containers, batteries, technology equipment.

The problem was raised and analyzed in the village meeting, and it was found that garbage and waste were inappropriately dumped in public area of the community causing disorders and unpleasure odors. The main cause is due to a lacking of waste sorting awareness and inability to reuse and process the waste that is still valuable; for example, plastic waste, organic waste, especially food waste from households.

Objective of the initiative;

The purpose of the project is to turn the area into a zero-waste community with a capability to manage waste and reuse it properly, including establishing waste fund with the cooperation of the public sector, private sector and civil society which people in the area can earn money from the waste. It would provide people the opportunity to contemplate, make decisions, take actions, and evaluate the implementation. This further aims to do source separation, reuse the waste, develop the waste fund, and reduce the negative impact on the environment. This results would make the project a sustainable solution of the solid waste management in the community.

Implementation;

The project has two phases:

Phase 1 (2016-2017): The community was experiencing the overflow of the waste and garbage as can be seen from the great amount of waste discarded from each household (144.6 kg./month/household). The village leaders were aware of the problem and

encouraged people to separate the waste by themselves. Therefore, the separation project to reduce global warming, allowing people to sort waste to a certain extent, was introduced. The use of cloth bags in the market to reduce the use of plastic bags was promoted. This helps the community reduce the waste of the village. The strengths that make the Project of Baan Taluk Moo Village in its initial stages successful were the community leaders and village leaders. The project had all community members participate in the implementations with the support from Nong Klang Dong Subdistrict Administration Organization and associated organizations that took part in the implementation, such as health promoting hospital, community development, village health volunteers and the private sections who are the customers buying the waste.. Although the implementation in the first phase could reduce the waste in the village, the burden of remaining waste management still belonged to Nong Klang Dong Subdistrict Administration Organization as they needed to procure bins and waste collection.

Phase 2 (2018-2019) is developed from Phase 1 to (improve) by adjusting the implementation model by focusing on 2 important aspects: (1) the participation of all sectors in the implementation that focuses on problem-solving at the root cause focusing on creating a good environment for the community, and sustainability in implementation which brought the idea of an outcome mapping to act; and (2) Emphasis on the creation of learning and reflection in the development plan with the participation of local people who set goals together, do a work plan, create community rules and regulations and reflection on results for continuous evaluation and development. The activities were conducted as follows:

Activity 1: Appointing a working group as a waste management village council.

Activity 2: The working group organized the village community meeting.

Activity 3: Developing knowledge in waste separation and raising awareness of the community to protect the environment.

Activity 4: Executing waste separation practice in household/community. The locals were taught how to turn the waste into creative appliances and accessories for commercial purpose. The plastic bags were cleaned, compacted, and sold to the waste shop to increase their income. Additionally, the organic waste can be used to feed the earthworms, and the earthworm manure would turn to fertilizer used to grow vegetables in their households, reducing the burden of expenses on food purchases while having safe vegetables to consume.

Activity 5: Establishing the Waste Fund.

Activity 6: Creating a waste management village model

Activity 7: Knowledge exchanging platform with a summary of the outcome from the implementation.

The main findings;

1. In 2016, before the initiation of the project, Talukmoo Village generated approximately 144.6 kilograms of waste/month/household on average. After the initiation of the project in 2019, now these households merely generated 17.2 kilograms of waste/month/household.

2. The community's members earned the additional income from the waste management and utilization at, on the average, 300-500 Baht/household/month.

3. The people were highly satisfied with the project's operation, at 98 percent.

4. The project created the collaboration between 7 networks, namely, the networks of the housewives, the elderly people club, the village health volunteers (VHVs), the communal professional group, monks, the Community Development Department's officials, and the youth.

5. 100 percent of the community's members actively participated in the project.

In addition, there were also 1 waste fund and 15 model houses for waste management. The model village for organic waste management is food waste which used to feeding earthworms in 5 household. And use the earthworm as organic fertilizer for growing vegetables in order to promote the consumption of chemical-free vegetables in the community and to reduce household expenses for food purchases.

Extension of the outcomes;

This project provides a learning source of waste management and becomes a model community for Uthai Thani Province and other provinces of Thailand, as the project was successfully implemented in over 18 communities.

The lesson learned;

The important lesson learned was "the collaborative waste management at the source", which is a solution that focuses on the source of the problem that produces good outcomes. Also, the collaborative determination of the community's goal, using the outcome mapping, allows the project to be conducted with transparency and to acquire the clear – measurable results. The formation of the policy, based on the community's input, allows the policy to be implemented concretely, as well as reduces the problem of

segregation of works, promotes the monitoring and governing system, as this project was the initiation and collaboration of every related party in the local community. Such a project also allows the people to participate in the designing and the determination of the policy, as they see the examples from the previous success. Further expansion of this project should cover the larger area, to the size of the subdistrict, the district, and the entire Uthai Thani Province. The methods and formats of the project can also be used for solving other problems of the community, for example, the promotion of chemical-free vegetable consumption, the solution of the road accident, etc.
