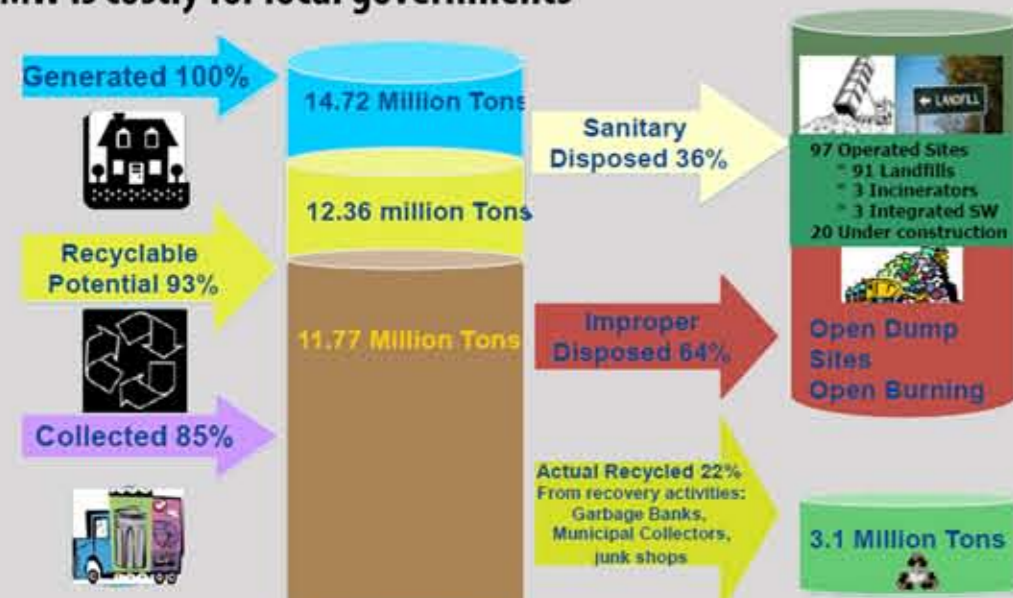


INTRODUCTION

Current solid waste management practices are inadequate
SMW is costly for local governments



Opportunities to promote waste management at source

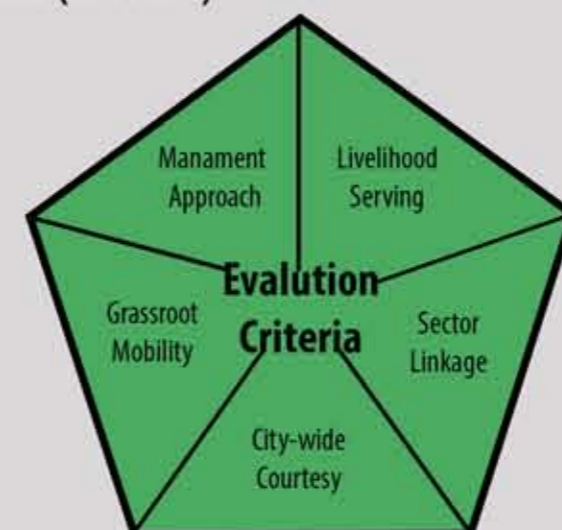


OBJECTIVE

This study aimed to assess the performance of local-based practices on waste management at source that was influenced by the Sound Material Cycle Society concept

METHODOLOGY

The research applied a combination of exploratory and descriptive types of research, which utilizes a case study approach to frame the research design and data analysis. A platform of evaluation framework was developed by documentary research cum expert judgement in order to assess performance of waste management practices for recycling program and their replication influence. This study shows the results of three local initiatives so called Community-based Recycling Management (CRB), Scavenger Group for Recycling (SGR), and Integrated Municipal Waste Management (IMWM).



A more visible displeasing solid waste was commonly known as one of the most environmental problems. Yet, despite advances in solid waste recovery and disposal technologies, increased awareness among consumers, and new attention given to the emergence of new threats to human welfare and the environment, the problem of solid waste remains as one of the most relevant urban environmental issues. Sustainable solutions for solid waste management were also found at regional level. Yet, there have been attempts done by local-based actions on waste management from sources in order to protect the environment towards the aim of zero waste.

Community-based Recycling Management (CRB)

The Community-based Recycling Management (CRB) was basically applied into pilot communities before replicating the successful model to interested areas. It served development activities through three principle mechanisms – engaging households in source separation, setting up a stakeholder platform to monitor progress, recycling waste into resources. Phitsanulok aspires to be a green, clean and healthy city providing a high quality of life for all residents by 2020. Its specific goals are:

- Be a Zero Landfill city by 2020 through waste avoidance, waste reduction and waste utilization; and
- Reduce the size of waste subsidy so that the waste management budget can be used for improvements in other areas.



Key Influencing Factors

- Regular monitoring:** This is in order to visit and have an informal talk with the villagers. Any problems or questions will be addressed and improved. On the other hand, the villagers will be feeling that they are one part of their own community.
- Knowledge and skills transfer:** Through trainings and study visits, it will provide initiatives and updated information on waste management and environmental conservation. People can keep them up to date and improve their own area in a proper way.
- Technology transfer:** Any development project coming to the village needs to be evaluated if it fits the area or not. Implementing pilot project prior to conduct full operation is strongly suggested.
- Social capital utilization:** Exploration and understanding of community context is important. The results showed the community's capacity and readiness to carry out the program.

Integrated Municipal Waste Management (IMWM)

The IMWM aims to provide necessary infrastructure to improve municipal waste management system by adopting a sustainable process of transforming waste into resources. IMWM also initiated the advocacy programs to encourage local people to adjust behavior and remind awareness on 3Rs and sustainable solid waste management.

The IMWM was run by the government-led action, the Public Health and Environment Division. The director and municipal staffs took responsibility of promotion of waste separation at source by transferring knowledge on waste value, price, separation technique, and waste utilization. In management aspect, they were responsible for organizing community group meeting for trading recyclables and relevant issue on waste management, collecting recyclables households or meeting points, separating on site and selling to the junkshop.



Key Influencing Factors

- Social capital:** An asset of any development program, including SWM. The project should consider starting from what already existed in the local area.
- Community participation:** Involvement of community members is an important asset for successfully adopting any municipal projects, including SWM.
- Local administration operation:** Time and duty management should be balanced.
- Simple and easy technology:** Technology transfer should be simple and not expensive so they can be adapted and sustained easily.
- Develop working network:** Due to a limited number of municipal staff, building network with local organizations can help in the promotion and dissemination work significantly.

Scavenger Group for Recycling (SGR)

The local waste pickers functioned as a Waste Pickers Cooperative, which the recyclable materials were accepted for exchange instead of cash and could even turn into social welfare benefits such as life insurance, fund for child education, savings. It affected not only a significant change in waste stream in the area but also changed the perception of the rest of community. Pravet, a district within BMA located on Southeastern Bangkok, was represented as a case for this model. Located on the fringes of the capital city, the population in the area was 160,816 persons (BMA, 2012). Its residents were mainly public and private sector servants, university students, industrial wage labor, merchants, street vendors, etc.



Key Influencing Factors

- Attitude:** Waste picking and separation were considered the major occupation of the waste picker organization, and packaging and recycling of wastes remain as their main source of income.
- Social capital:** Local development projects should also consider the local context of the beneficiaries and their community, and start to develop and improve from their existing capacities and interests.
- Partnership:** Partnerships could promote resource mobilization, whether knowledge, technical or financial, of external and local partners. Seamless collaboration among interested parties made work easier and quicker.
- Budgeting:** Allocation and maintenance of budget from the municipality or the district to help run the project is a key mechanism in sustaining the waste picker organization and their activities in the long run.
- Monitoring and evaluation:** Regular monitoring and evaluation of project partners. It helps improve the overall project implementation.

Conclusion

The study revealed that the influence of sound material cycle society have been reached to multilevel of the Thai administrative system during the last ten years. This can be categorized into levels of national government policies and plans; local administration's regulations and practices; and project initiatives. There have been three major categories of influencing evidences on SMS in Thailand - financial, knowledge, and technology.

Good management practices of waste separation programs as well as the knowledge transfer in waste management were functioned effectively on a multilevel of stakeholder platform. It is recommended that the following strategies should be developed in mainstreaming primary source separation and management in Thailand;

- (1) encouragement of cooperation among various stakeholders
- (2) promotion of related science and technology
- (3) capacity building for local communities
- (4) initiation of the recycling-oriented society.



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