

## 3R GOOD PRACTICES IMPLEMENTED BY NGOs/



### 3R Good Practices in Thailand

<b>NGO /CBO</b>	<b>Pobsook Community</b>
<b>Activity</b>	Community Composting Facility
<b>OUTLINE OF 3R GOOD PRACTICES</b>	
<b>Keywords</b>	Organic Waste, Solid Waste, Recycling, Thailand
<b>Country</b>	Thailand
<b>Area Implemented</b>	Pobsook Community, Pakkret Municipality, Nonthaburi Province
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<b>Waste Sector</b>	Organic Wastes
<b>3R Practice</b>	Composting Facility
<b>Website / Data Source</b>	<a href="http://www.pakkretcity.go.th/">http://www.pakkretcity.go.th/</a>

## OVERVIEW OF PRACTICES

### Introduction

Pobsook composting facility is a joint effort of Pakkret municipality, JICA, and Popsook community of 240 households. It has been set up in an area of 275 m<sup>2</sup> at general public area with financial support from JICA and Pakkret municipality. The amount of Pakkret MSW generated has been steadily increasing from 120 tons/day in 1996 to 220 tons/day in 2003. A decentralized composting facility (CF) was set up in the outskirts of Bangkok for managing this waste.

### 3Rs Good Practice

The establishment of composting program (i) encouraged to separate solid waste at sources; (ii) promoted public participation in solving solid waste problem; and (iii) generated compost that can be used as soil conditioner or fertilizer. The management system of Pobsook CF is divided into two sections. Firstly, committee of CF comprises of 12 members that are representative of Pobsook village of 6 persons, Bang-ta-lad Pattana community of 2 persons, and Pakkret municipality of 4 persons. Their responsibility is to set up cooperation procedure, guidelines and timetable for collecting waste and composting. Secondly, staff of CF are Pakkret municipality officers and employee with a total number of 5 persons. Their responsibilities are to collect waste from household on Pobsook village and to make compost.

The composting center consists of an office building, a composting plant, a recyclable separation area. Designated staffs collect household wastes in a small van and make compost from the separated food and garden wastes, and coordinate between the Municipality and the villagers. Bio-fertilizers are produced using a rotary drum composting unit (JICA Technology) with a capacity of 1 ton/day. However, 500 kg/day of compostable wastes were collected and taken into CF. After collection, the waste is shredded into small pieces using a hand machine and a mixture of ingredients (65% bio-waste, 25% bio-fertilizer and 10% sawdust to reduce moisture content) is fed into the drum. Compost is made by operating the rotary drum 3 times/day at a frequency of 3 rounds/count to mix and aerate the waste for quick fermentation. The mixture is moved through the inner chamber of the drum taking 2-4 weeks for the fermentation. Secondary fermentation takes another 2-3 weeks in the aeration shed.

### Outcome of Activities

The quantity of recyclable materials was collected between January and December 2007 in households and brought to CF of 1 ton/day. The participation rate is 50% and diversion rate were found to be 34.72%. The compost product is mainly used to public and green areas of Pakkret municipality.

A number of factors have contributed towards successful implementation of Pobsook CF are the cooperation among external donor (JICA), LGAs, community leaders, and local people is an important driving force for the success. In addition, source separation at home could be encouraged by providing free waste bin and door-to-door service.



Pobsok Composting Facility



Organic waste garbage bin and door-to-door services provided



Compost