

COMPOST IN GROWING VEGETABLES AN EFFORT IN REDUCING ORGANIC WASTE DISPOSAL INTO THE RIVER



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- Citarum is the longest river in West Java Province, Indonesia, heavily polluted by waste from nearby activities, such as household waste.
- The community dumps organic and inorganic waste into the Citarum River every day. Based on the data from the local government in Karawang Regency, West Java Province, the total waste disposed of was about 900 tons per day with the estimation of 60% of organic waste from nearby activities. This condition is one of the causes of the overflowing of the Citarum River during the rainy season and causing a flood.

The aerobic composting was conducted using microbes. After composting organic waste from the settlement area, the compost was put into a polybag with a diameter of 30 cm. The vegetable seed was planted inside the polybag (compost media) and placed in the participant's yard.



Figure 2. Composting process activities



Citarum River

Site

Tarumajaya

Region -> Bandung Province -> Jawa Barat Country -> Indonesia

Results

The result showed that Ipomea reptans Poir (kangkong), Brassica juncea subsp. integrifolia var. crispifolia (green mustard) and Brassica rapa subsp. Chinensis (bok choi) crop was harvested in only a month after first planting and repeated monthly.

900 tons/day

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Purpose

- train people to reduce the organic waste dumping to the river
- 2 Transform the waste into a valuable product such as compost
- 3 Test the productivity of the compost as a growing media for vegetables.









Figure 3. Planting experiment results

In the early 2 two months, total productivity was 34 kg of kangkong, 16.5 kg of green mustard, and 18.2 kg of bok choi. In general, the products were used for daily consumption and local direct selling.





Training

- Distribution of organic waste processing machines
- Seed distribution and composer
- Technical guidance on organic waste processing equipment.



Figure 1. Training and monitoring activities

Ipomea reptans Poir

Brassica rapa subsp. Chinensis

Brassica juncea subsp integrifolia var. crispifolia



This project requires a community organisation in charge of management on a large scale. The organisation also needs capacity building to empower the sustainability of the project.