Enriched Compost Demonstration on Different Crops Production in Eco-village in Tangail.

Study conducted by Waste Concern Consultants for TIDP of LGED, Tangail.

Waste Concern Consultants
House No. 21 B, Road 7,Block- G,
Banani model Town, Dhaka- 1213.
Tel: 88-02-9884774,9873002.
Fax:88-02-9884774.
E-mail: wastecon@dhaka.agni.com.
office@wasteconcern.org.

EXECUTIVE SUMMERY

1. The broad objective of this study is to determine the impact of Nutrient Enriched Blended Compost on crop production. Specific objectives of the study are:

- To survey on chemical and organic fertilizer use by the farmers of five ecological village for the selected crops.
- To determine the soil fertility status of ecological village.
- To set up demonstration plots on Nutrient Enriched Blended Compost in various crop productions.
- To recommend balanced fertilizers for the selected crops on the basis of soil test value.

2. To achieve the objectives WCC and TIDP have selected 21 farmers in five Eco-villages for demonstration on different crop production.

3. Survey on fertilizer use by farmers of Eco-villages has been done before setting up the demonstration plots.

4. Soil samples from the selected farmers' fields have been collected before crop cultivation in order to determine soil fertility status of their lands.

5. Field demonstrations on the impact of Nutrient Enriched Blended compost for different crops production were set up in five eco-villages of Tangail.

6. Before setting up the field demonstration professional expert of WCC and TIDP's Environmental Specialist have visited all the villages and explained to farmers how to set up demonstration plot on specific crop production. Soil scientist of WCC and TIDP's Environmental Specialist have visited the experimental plots at different time of demonstration and gave necessary advices to the farmers on intercultural practices for particular crop cultivation.

7. Soil samples have been collected from the demonstration field after the harvesting of crops in order to determine the impact of NEBC on soil characteristics.

8. From the field survey it has been found that in five eco-villages farmers are using chemical fertilizers indiscriminately and in imbalanced way. Most of the farmers are using over dose of Urea and TSP for production of various crops.

9. The farmers are not using any amount of organic manure and other nutrient like sulfur, zinc and boron in cultivation of rice, wheat, mustard and vegetables.

10. Most of the soils of the eco-villages are depleted in organic matter content. The soils of eco-villages are low in nitrogen, available phosphorus and exchangeable potassium content.

11. The soils of Modhupur and Gorai are acidic which should be neutralized by liming for vegetables production.

12. The use of Nutrient Enriched Blended Compost has increased 26.67% yield of cauliflower, 20-30% wheat, 68.22% lady's finger and 12.92-59.83% yield of rice compared to farmers' practice.

13. The use of Nutrient Enriched Blended Compost has increased organic matter content as well as plant nutrient content in soils compared to farmers' practice.

14. Fertilizer recommendation on the basis of soil test value has been made for different crops which can be used by the farmers of eco-villages in future for sustainable crop production keeping their soils in healthy state.

15. Observation of the study shows that the farmers of all eco-villages are not conscious of soil fertility and balanced fertilization of their land for different crop cultivation.

16. The use of organic manure along with proper dose of chemical fertilizer should be promoted by different agencies among farmers for soil fertility management.

LIST OF CONTENTS Page

LIST OF TABLES

LIST OF FIGURES

LIST OF PLATES