

R T C



Designed & Implemented by Waste Concern
Supported by MoEF & UNDP under SEMP

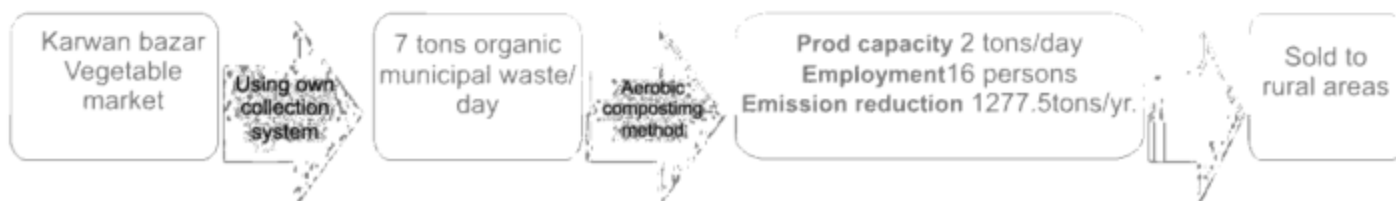


main goals

- To promote the concept of 3R principals.
- To demonstrate 'Efficient Technology' and provide 'Hands-on training' on;
 - Organic waste recycling
 - Rain water harvesting
 - Waste water recycling
 - Solar power generation &
 - Eco-sanitaion.

work process

- To introduce a small scale CDM model for urban waste recycling projects.



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Waste transported in covered truck



Aerobic composting



Temperature monitoring



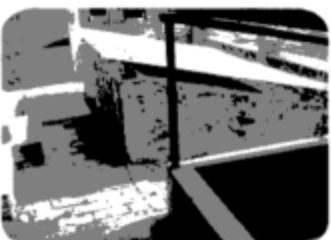
Methane monitoring



Forced aeration system



Rain water harvesting system



Leachate treatment tank

Tangible Social & Environmental Return in Economic Terms from RTC Project

Items	Details	Summary
Total Investment	Tk. 45,70,256 (US \$ 65,665)	Tk. 45,70,256 (US \$ 65,665)
Total Beneficiaries	20,000 person	20,000 person
Investment Per Beneficiary	US\$ 65,665/20,000 person= US \$ 3.28	US \$ 3.28
Compost Produced from the Collected Waste	766.5 tons/year	766.5 tons/year
Compost Produced by Each Beneficiary	766500 kg/20,000 = 38.33 kg/year	38.33 kg/year
Value of compost produced per beneficiary	38.33kg @ Tk. 4.5/kg=Tk172.5 = US \$ 2.48	US \$ 2.48
By composting 2555 tons of organic waste per year, green house gas reduced (carbon dioxide equivalent)	1277.5 tons or 1277500 kg per year	1277.5 tons
Green House Gas Reduced by Each Beneficiary	1277500 /20,000 = 63.88 kg/year	63.88 kg/year
Value of Green House Gas Reduction	As per Current Carbon Price @ US \$ 15/ton = US \$ 0.96/ year/beneficiary	US \$ 0.96/ year/ beneficiary
Amount of waste managed by this project	DCC Expenditure to manage per ton of waste is Tk. 1949. This project is managing 2555 tons of waste per year.	2555 tons/per year
Saving of DCC Expenditure by the project	Per year expenditure saved by this project is Tk. 1949/tons X 2555 Tons = Tk. 49,79,695	Tk.49,79,695
Saving of DCC Expenditure Per Beneficiary	Tk. 4979695/20000 = Tk. 249/year or US \$ 3.58 / Beneficiary/Year	Tk. 249 or US \$ 3.58 / Beneficiary/ Year

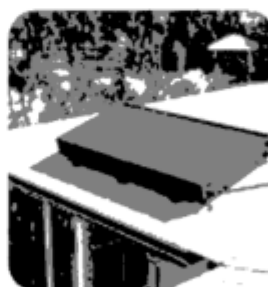
Total tangible benefits

Considering the life of this pilot project of 15 years,

By investing US \$ 1 per beneficiary, we are getting environmental & social benefit worth US \$ 32.1 (US \$ 105.3/US\$ 3.28). Note US \$ 1 = Tk. 69.60



Oxygen level monitoring



Roof top solar panel



Training session

Total benefits
per
beneficiary
per yr,
US \$ 7.02



Value of
Compost,
US\$ 2.48



Value of
GHG
reduced,
US\$ 0.96



Saving of
DCC
expenditure,
US\$ 3.58

key features

- Treating 2555 tons of solid waste per year.
- Producing 766.5 tons of compost per year.
- Reducing 1277.5tons of CO₂ / yr.
- Serving 20,000 people.
- Saving DCC expenditure of Tk. 4,979,184 per year.
- Saving 2810 cubic meter of scarce land area by avoiding dumping of waste..
- Harvesting 1.6 m³ of rainwater per day.
- Recycling 1.2 m³ leachate water per day.
- Eco-toilet recycling 15 kg human excreta per day.
- Providing employment for 16 persons.