

WORTHY WASTE

Handle Waste, Earn Money, Sustain Earth

tcs sustainathon

OUR IDEA

Encouraging people to segregate the waste into dry and wet waste, incentives would be provided to people according to the weight of the waste produced separately.

Meet Our Team

Green code

Anisha Bhujbal Sania Edlabadkar Priti Gopale Tanaya Chaudhari

We are Third year students at Pune Institute of Technology. Our vision is to help make the world a green paradise as an Engineer and to be a part of that change.

Problem Statement

Waste to Wealth

- 1. Ideas for significant wealth generation from wet waste
 - 2. Convert waste generated by Online Delivery

 Mechanism into wealth
 - 3. De-centralised recycling and Processing

Many ideas have been sown for handling dry waste, but we are yet to develop mechanisms to handle wet wastes efficiently.

Wet wastes not only affects humans but also disrupts the ecosystem of the water bodies.

Wet waste that decomposes and releases a bad odour leads to unhygienic conditions leading to rise in health conditions.

The plague in Surat is a good example of a city suffering due to callous attitude of the local body in maintaining cleanliness in the city.

Idea

Let us consider an example of a city, first the city would be divided into different sectors depending on the no. of waste handling companies. Each sector's waste would be handled by a particular company. The company would be providing two bins to each of its household, one for dry waste another for wet waste. At the begin of each day, the company would send it's trucks to collect the waste. Depending on the weight of the waste produced during the previous day, Incentives would be provided to the households.

Truck Structure:

- 1. Weighing Machine: The truck would have an inbuilt weighing machine to weigh the waste.

 Dry and wet waste will be measured separately.
- 2. Colander: To strain wet waste of it's excess water.
- 3. QR-scanner: A QR-scanner would be used for scanning the QR-code and automatically storing the weight of the waste in a centralised database system of the company for that particular day.

Other Components:

1. QR-code: A QR-code will be provided to each of the houses

At the end of every month, the company would pay sector depending on the total weight of the waste collected as per the rate.

Wealth from waste! Let's get to work! The wet waste and the dry waste collected are weighed separately.

Segregate

the waste.

The houses are paid monthly according to the weight collected to the houses.



The waste is brought to the company for further processing

Waste managers scan the QR codes of the houses and the weights are loaded into the Database

Points

- 1. Providing an incentive for the waste produce should not make people make more waste. To tackle this problem, an upper-bound would be provided to the max weight above which no incentive will not be provided.
- 2. Giving incentives for wet waste should also not motivate people to add water to the wet waste, therefore a colandar is included in the design of the truck.
- 3. Moreover, To prevent water strained from the waste from running onto the roads and sewers, tanks are also included in the design.

Technology

- 1. The QR code will be provided to every household for the waste managers to access the database of the respective household to update the weights.
- 2. The QR scanner would be used to scan the code
- 3. Weighing machine to weigh the waste
- 4. A databases software to store the weights
- 5. A software that calculates total amount for each household at the end of each month and pay the incentive to the house owners through online transaction.

Impact and Values

- 1. There are companies for handling dry waste efficiently.
- 2. Wet waste is dumped into a landfill, thus, disrupting the soil ecosystem, spreading diseases, thus, efficient ways to handle wet waste must be developed.
 - So, Our idea is an attempt to help our waste managers to manage the wet waste efficiently using technology available.

Result Expected

Following the method suggested would provide an additional income to the household. The incentives provided would motivate people to segregate waste properly and handle it efficiently. The Dry waste can be recycled, while the wet waste can be made into a compost and sold.

THANK YOU