

Ecofarm at Velhe Road, where the city's household waste feeds vegetable patches

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There are three large barrels on the farm that Parikshit Dhulugade and his wife Prachi run near Nasrapur, Velhe Road, about 35 km from Pune. This 30 gunta farm (40 guntas is one acre) is primarily used to grow vegetables – the tomato crop is being harvested, there is also lettuce, brinjal, beans, beetroots and cabbage still to harvest on neat beds in the farm, as I visit on January 29, 2021.

What is unique about this farm is the manner in which this farmer couple works with a friend, Abhijeet Wagh, to turn household waste gathered from three different housing societies in Pune into a resource on the farm. While Wagh is in charge of collecting and transporting the material to the farm, Parikshit and Prachi take care of activities on the farm.

It is now four years since Wagh began his project of collecting food and garden waste from housing societies to turn it into compost that can be used to enrich the soil on the farm. Abhijeet collects the waste from houses spread across housing societies in Kothrud, Karve Nagar and Warje in Pune and brings the material to the farm, where the bigger chunks are shredded and then fed into the turning barrels.

This device is something that Wagh designed – a mechanical engineer, Wagh has even sold smaller versions of these machines to houses in the city. At the composting unit, the household waste is retained in the drums for about eight days and stirred for proper aeration. This initial phase is when rodents are bound to attack, and having the drum reduces the risk of rodent attacks. Once the material is removed from the drums, it is laid out in a shed covered with a tin roof to “cook” – this process is when the aerobic activity occurs, with the multiplication of the microorganisms.

Parikshit uses a spade to dig a little into one heap of compost, and I can see steam rise.

“The heat is an indicator that the process is going well. The whole thing gets cooked, and it needs just the right quantity of air and moisture. This requires space and proper aeration, which is hard to find within city limits. Also, many housing societies do not feel enthusiastic about trying this because of the smell involved, but any cooking process emits smells,”

Abhijeet charges the households he works with about Rs80 per month, and since at present they have only about five people working on the project, including the driver and the couple that lives on the farm, they are able to manage expenses.

Once a week, Abhijeet gathers up garden waste from households – the dry leaves are spread on the beds too, and here the process of decomposition is different from the compost made from other waste.



There are challenges that these friends face, though. According to information available on the website of the Pune Municipal Corporation, in 2016, about 1600 tonnes of waste was generated in the city each day (one tonne is 1000 kg); Abhijeet's barrels can handle up to one tonne of waste matter each day – at present, he processes about 600 kg a day.

(This is an excerpt from the chapter "Ecofarm at Velhe Road, where the city's household waste feeds vegetable Patches" in the report "State of Urban Agriculture in Indian Cities: Pune". Read the full report [here](#))