200 Karnataka villages enter pact to pump fuel out of plastic

SUMMARY

The villages have decided to pool in all their plastic waste and feed it to an indigenously developed plant that will convert it into synthetic fuel, an equivalent of diesel.



The plastic reclamation unit can generate a synthetic fuel for use in pump sets, generators and boilers. Source: Express Photo

More than 200 villages in the coastal district of Dakshina Kannada in Karnataka are silently working together on a project, which has the potential to change the way one looks at plastic waste. The villages have decided to pool in all their plastic waste and feed it to an indigenously developed plant that will convert it into synthetic fuel, an equivalent of diesel.

In what is being touted as a first of its kind initiative in the country, the Bellare gram panchayat in Puttur Taluk will shortly set up a Plastic Reclamation Unit (PRU), which has a capacity of absorbing 500 kg of plastic and generating more than 250 litres of synthetic fuel out of it in two hours

Dakshina Kannada Zilla Panchayat president Asha Thimmappa Gowda said 203 ecology-conscious gram panchayats in the area, who have entered a mutual agreement, will send their plastic waste to the unit.

"It is a simple process of reverse engineering using a 'patent-applied-for' technology. We take the plastic material back to its original form," said Sathish Narayanaswamy, co-director of Altanol Technology, the company involved in the manufacture and improvisation of the PRU over the past nine years.

The company applied for its patent for the technology in May, he said.

Classified as a diesel equivalent by the Ministry of Petroleum and Natural Gas, the synthetic fuel has a wide variety of use, like in running pump-sets, generators, industrial boilers, and costs less than Rs 25 per litre.

The fuel has zero-emission in its usage, according to Narayanswamy.

The gram panchayats in Dakshina Kannada located in the eco-sensitive Western Ghats region have actively pursued green technology for disposing waste and garbage.

Before agreeing to send plastic waste to the PRU at Bellare, the gram panchayats had an informal agreement with a plastic recycler in Mysore. But over a period of time the plastic recycler stopped visiting the villages, creating a plastic disposal problem.

"It is a major concern since many of the families are involved in agriculture and farm animals tend to consume plastic and fall sick," said Prakash Shetty, secretary of the Laila Gram Panchayat.

It was a study tour by a delegation of gram panchayat members from Dakshina Kannada to the Altanol Technology workshop in Nanjangud in Mysore district that convinced them to go in for setting up of the PRU in the district.

The next challenge was the cost of setting up the unit — Rs 42 lakh — which was considered too steep. "Our delegation met several entrepreneurs in the district and finally a businessman agreed to finance the project," a gram panchayat official said.

Once the financial part was taken care of, the Puttur gram panchayat set aside 1.60 acre land at Bellare for the unit. While half an acre land would be required to set up the PRU, the rest would be used to store the plastic input and the synthetic fuel.

"Now we are in the advanced stage of setting up components such as heat exchangers, furnace and cooling tower, all of which will be complete before the middle of July," said Narayanaswamy of Altanaol. Once operational, the entire unit can be run by just four persons, he said.

The move by the gram panchayats comes even as the tech city of Bangalore is struggling with the problem of an ineffective garbage disposal system and continued dependence on landfills.

The Bangalore city corporation is setting up three waste processing units at a cost of Rs 150 crore in Doddaballapur, Kannahalli and Satharam and is hoping to reduce dependence on landfills.

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