

Kerala Man Makes Portable Plant that provides 2hrs of Biogas & 4Kg of Manure daily

Aiming to eliminate wet wastage in Indian households, the 68-year old former Navy man claims it is the first portable biogas plant manufactured in the country.

By Rinchen Norbu Wangchuk November 7, 2018, 4:49pm

For Rajagopalan Nair, retirement from the Indian Navy wasn't the end of the road.

The ex-Navy officer from Kerala went onto become a civil engineer, establishing his own firm, Hi Tech Bio Solutions, in Vasai, a suburban town in the Palghar district of Maharashtra, and developed India's first portable biogas plant that consumers can use for both commercial and domestic purposes.

According to the **Hindustan Times**, the biogas plant generates approximately two hours of cooking gas and four kilograms of liquid manure, which one can use for farming purposes.

"This is the first portable biogas plant manufactured in India," said the 68-year-old Nair, in a conversation with the publication.

"My aim was to introduce a system that can eliminate wet wastage produced in scores of households like vegetable and fruit peels, discarded meat, chicken and fish waste, and other forms of wet garbage. With my plant the wastage produced in the household kitchen can be converted into

different types of by-products like cooking gas and liquid manure,” added the man from Kerala.



Rajagopalan Nair with his portable biogas plant. (Source: India Mart)

First tested in 2008 in Thrissur (his native place) the portable plant obtained the ISO certification earlier this year on May 22. Following certification, he began to manufacture the device in Vasai. Speaking to the publication, Nair says that conventional biogas plants sold in India emit a terrible odour, attract pests and other insects, besides other disadvantages.

How does Nair’s 350 kg fibre glass-made portable biogas plant work in comparison?

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Once organic matter is deposited into the tank, the bacteria inside converts convert organic matter into methane gas through a chemical process called anaerobic digestion. A by-product of this process is called slurry, and it can be used as organic manure to grow plants.

For residents of Vasai, the local civic body is already offering a 5% subsidy in house tax to those who install a biogas plant in their homes. They also receive an additional subsidy from the local civic body for installing a rainwater harvesting system.

(Edited by Gayatri Mishra)