IIT-M'S BRAINCHILD PURIFIES WATER FOR A LAKH PEOPLE

by Amritha K R

Chennai: It has been just a year from its launch and it has already got over one lakh users. This is the story of IIT Madras's arsenic water purifier that caught the eyes of governments in several States of the country.

The nanotechnology-based low cost purifier was first introduced in villages in Murshidabad district, West Bengal, last year after the Arsenic Task Force of the government of West Bengal certified and approved the purifier. Over the course of the year, the community-level unit of the water purifier has been installed in 100 villages in the State, each providing arsenic free water to 100 families.

The research team at IIT Madras has developed two more variants of the water purifier — a larger unit that can provide 18,000 litres per hour and cater to 50,000 people, and a smaller household level variety. Both have found takers. The larger one has been installed at the Nadiya District in West Bengal and the household level purifiers has been installed in 200 households. While the community level purifier provides purified water at the cost of ₹2 paise per litre, the smaller version costs about ₹5 paise per litre.

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"The government departments and agencies in Bihar, Assam, Uttar Pradesh and Karnataka have expressed interest in the project. Some of these have already kick-started while the others are in the discussion stage," said T Pradeep, faculty at the IIT Madras who heads the project.

Meanwhile, there are orders for 1,000 more community level units from West Bengal government. Around 400 of these will be installed in the next three months. The government has asked for two more of the larger 18,000 litre per hour purifiers. The household level purifiers, meanwhile, are being distributed in Bihar through NGOs.

The water purifier works on a black granular looking nano-structured material. The black sand like purifier, which is the key purifier, can filter out water without pumps or solvents. The research wing which has incubated a company, Innonano Pvt Ltd, at the IIT Madras for the purifier, is now working on filters for Fluoride, Lead and Mercury.