'Desi' water filters a hit in villages

Pune-based maker uses CSIR technology to provide virus-free water

Anand Parthasarathy

BANGALORE: A small-scale industry unit near Pune is turning out a range of water filters based on indigenously developed technology that has won national and international patents for the elimination of both bacteria and viruses — without needing any power source.

Developed at the Council of Scientific and Industrial Research (CSIR) Pune-based National Chemical Laboratory (NCL), the' filter system which uses multiple ultra fine porous membranes, has been tested at the National Institute of Virology and found to remove the Hepatitis A and E virus, while a test house in Mumbai has found it proof against water-borne bacteria and E-coli.

The NCL design — the first membrane-based filter technology developed entirely in the country —has won both Indian and U.S. patents.

- Design wins both Indian and U.S. patents
- Rural model priced around Rs. 8,000

The fact that it requires no electricity or other power sources to run it has made this an ideal solution not just for urban domestic use, but for purifying well water in villages.

The NCL design has been acquired by the Pune-based Membrane Filters (India) Pvt Ltd that has set up a plant at nearby Shivpuri to produce 2000-plus units a month under the brand name 'Purioin.' The units are made in five sizes for homes, offices, hospitals — as well as special models for fitment adjacent to rural wells, ponds and other water sources, where they can be integrated with hand pumps.

The rural model is priced around Rs.8,000.

The models made with light-weight plastic bodies, use five stages of nitration with ultra thin ceramic and carbon filters. The ability to deliver 2-5 litres of pure drinking water per minute, even from brackish or badly polluted sources, has made the Purioin filter a quiet champion in hundreds of villages since its first launch six months ago.

Almost the entire production is being shipped to villages by a number of members of parliament under their Local Area Development Funds initiative.

Union Finance Minister P. Chidambaram was one of the first to deploy the units in his constituency, while the Science and Technology Ministry has acquired 2000 units to be deployed in any national disaster situation.

Because the units are being

snapped up by Government departments, as soon as they are manufactured, Membrane Filters has not been able to feed the consumer market in an aggressive way — so far. However word of mouth reputation around Pune, of the filter's world class performance and cost effectiveness, has seen individual customers queuing to buy units and the company is currently setting up a dealer base in Maharashtra and the Southern states.

Subhash Devi, Chairman, Membrane Filters, who quit his job with a multi national company to acquire and productionise the CSIR technology told The *Hindu* on telephone on Sunday, that the Pune University has decided to supply each of its affiliated colleges — numbering over 400 — with 2 units each of Purioin under a campus improvement programme.

The email address of the maker is membranefilters@vsnl.net