

JalKalp Filter: A step toward securing affordable and clean drinking water By Upasana Upadhyaya

Safe drinking water is a right for every individual, but millions of people around the world still do not have access to clean and safe drinking water. India is home to the highest number of rural people in the world without access to clean drinking water (63 million people, according to Water Aid reports). Some factors that can be attributed to this grave problem include climate change, population numbers, industrialization, and urbanization. However, in rural areas, the problem is particularly severe. In some regions, even if water is available, it is not safe for consumption. Water levels are dropping rapidly due to over-exploitation and lack of groundwater recharging. In addition, water contamination is a serious problem, giving rise to health and hygiene concerns, including skin diseases. Lack of safe drinking water affects household economy negatively as money is spent on medical care of the family and/or to procure safe water.

Under a village development project in Bihar, *Gram Utthan* (village rise), aimed at providing sustainable and inclusive development, Sehgal Foundation is assisting poor people with affordable and safe drinking water solutions. Jalkalp is a low-cost ultra-portable stainless steel biosand filter that does not rely on electric power and delivers clean drinkable water with 100 percent removal of coliform matter. Coliform is a kind of bacteria that causes illness if found in water bodies. The project, initiated in February 2018, is providing clean drinking water to rural families. The filters are provided to those who are willing to contribute financially to the cost after they understand the utility of the filter and how it operates.

"JalKalp filter has been a boon to me and my family. Previously we used to drink

water straight from the hand pump without getting it filtered, or else we purchased bottled water, which is expensive. The water here can only be suitable for drinking if it is dug from 200-250 meters deep, which sometimes becomes difficult, and that cannot be considered as fully safe for consumption. However, when I attended a community meeting organized Sehgal Foundation, I came to know about the JalKalp filter, which was easy to afford, unlike other filters. The team demonstrated the usage of the filter, and I was impressed with its working. Therefore, I decided to install the filter at my



home. Because of the filter, the water from 20–25 meters down can also be collected for filtration. Jalkalp has reduced the incidences of health problems in our family." —Shambhu Prasad, Kharika village, Bihar

Shambhu Prasad is one of the thirty people who have benefited from this initiative so far. Iron, arsenic, and biological contamination in drinking water is a major issue that people in rural areas are struggling with. The poor people are the most affected as they cannot afford expensive water purifying systems. JalKalp filter





comes with a built-in mechanism to deal with iron and arsenic contamination as well as biological contamination.

Jalkalp also helps reduce drudgery for women. Since women in most rural areas would otherwise typically have to travel over long distances to collect safe drinking water, and these women have to look after members of the household who became sick from waterborne diseases and contaminated water, the JalKalp filter serves to lighten their workload as well as solving these problems.

This household water treatment and storage technology helps raise awareness in the rural communities about the importance of safe drinking water. This is an important step in upholding the right to clean drinking water for every individual.

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