



Case Study from Sahibganj District, Jharkhand

Good intentions brings change in Dihari village

Introduction

Dihari village in Hazipur panchayat of Sahebganj district wears a new look. District Water and Sanitation Department has embarked on a programme to identify safe and unsafe drinking water sources that led to improvement in the overall health conditions of people in this village.

The water sources in Sahebganj have high arsenic content and its impact is visible on health of people. Most people in the villages have deformed bones, skin pigmentation, affected finger and toe nails. Concern to improve poor health conditions of women and children triggered this partnership between DWSD and UNICEF, Jharkhand.

Impact of arsenic:

Arsenic is listed as a hazardous material and is a suspect carcinogen that is responsible for lung and skin cancer. It is a cumulative substance, which slowly, passes out of the body through urine, hair, finger and toe nails and skin. Large population of the village shows symptoms of structural and functional disabilities. Villagers have skin pigmentation, lesions on fingers and toes.



Dihari village has about 200 handpumps to provide drinking water to 3,000 residents of the village. However, about 80% of the hand pumps have high arsenic content and need treatment, before they could be declared as safe source for drinking. With this reality how do we expect people of this village to lead a healthy and happy life? The DWS Department and UNICEF are jointly working in Sahebganj to mitigate the high arsenic water content.

Small initiatives to mitigate arsenic content:

PHED has identified ways to prevent further exposure of villagers to high arsenic content water. Color coding of hand pump spout was undertaken to categorise safe and unsafe sources of drinking water. Not many people are aware that arsenic rich water is not suitable for drinking and cooking, but can be used safely for laundry and bathing and other purposes. To enable villagers to differentiate between the potable and non potable water sources, the spout of hand pump is painted red or blue. Water from hand pump with red spout is used for other purposes than drinking and cooking, while water from blue painted spout handpumps used for drinking and cooking.

Arsenic removal attachment installed in 34 handpumps gush out safe drinking water. People from the village have switched to safer sources as they feel the treated water is much tastier than the high arsenic content water.

With low levels of literacy how do we inform people about the actions they need to take? UNICEF has taken a daunting task of educating villagers on impact of arsenic contaminated water and use of safe drinking water sources to contain further spread of the disease.

Community awareness with community participation:



To communicate with people about the risk to their health from arsenic is the task that UNICEF has taken on itself. UNICEF has developed systematic communication interventions to reach out to families and communities with specific messages on switching to safe sources of drinking water.

Well trained theatre groups move in the villages and perform *nukkad natak* on promotion of safe use of drinking water. This intervention has developed greater understanding of people on importance of using safe drinking water. People have switched to safe drinking water sources, women take special care to use only safe water for drinking. Women ensure that their children drink safe water only.



This has helped in containing further exposure of villagers to high content of arsenic water.

Future plan

A piped water supply scheme linked with safe water source will provide safe drinking water to all the villagers of Dihari. The well intentioned move by the DWS department has literally added colors to the lives of people! What more could the villagers ask for?