

Well Placed

The poor villagers of Dunguripada of Nuapada district constructed a well, themselves, to escape tubewells discharging fluoride containing water and mitigate their fluorosis woes.



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" All resident of this poor tribal habitation are affected with fluorosis but were ignorant of the reason. When they learnt that water of the tubewell is the reason for their misery, they waited for help from government. But when that too was not forthcoming they took up challenge themselves and constructed a well within two months with their own contribution."

It was very hot May afternoon. Malati Majhi, aged about 36 years and mother of two, along with four other women, were making a one and half kilometer trek from the stream to their village with one big boulder on her head. "We fell short of boulders and hence collecting from the streambed," said Malati. She was referring to under construction an open well that she and other villagers dug up and were collectively contributing to sanitize. Four months later Falguni Majhi, looking far more aged than her actual age 53, was both elated and sad. She was elated because she felt that her children and fellow villagers have insured themselves from the brutally painful disease that she herself ignorantly acquired. She was sad because had she known the reasons earlier, she and many others could have avoided the permanent agonies that will haunt them for rest of their lives. Falguni, a housewife of Dunguripada habitation in Saipala Panchayat of Nuapada district in Odisha, now knows that water of the tubewell at the front of her house has physically crippled her and many other fellow villagers. "Our habitation, with 13 households, had this lone tubewell to source water from and we were under impression that tubewell water is safe', says Falguni and adds 'that was a mistake that we ignorantly committed'. The tubewell that Falguni refers to discharges water that contains 5mg of fluoride per litre. And the disease that she acquired from consuming water of that tubewell is 'fluorosis'.





This small habitation of Nuapada district in Odisha has a population of about 60 people. But, as many as 21 people have already been affected with skeletal fluorosis, some at very advanced stage of affect. Almost all other residents of the habitation clearly show other symptoms of fluorosis. Ironically, although Nuapada district has already been identified as one of the most fluoride affected district of the Odisha state, till late 2013 nobody of the habitation were aware about the reason that caused their physical abnormalities. "It was only in December 2013 that I learnt that excess fluoride in water can cause disease like our fellow villagers have," says Kamala Majhi, 36 years, a mother of two kids. "I had one awareness programme organised at Nuapada by RCDC, an NGO which is running a project on drinking water quality with support from UK based WaterAid, where I was exposed to many new terms like 'fluoride' and 'fluorosis' through graphic presentations," she adds.

Since, that day when Kamala learnt about fluoride and fluorosis, her habitation had a changed view towards the water they drink and use for cooking. The first thing that Kamala and villagers asked RCDC was to facilitate a test of her village tubewell water. RCDC provided villagers a field test kit. The water was tested by the villagers themselves using the kit. The result startled them all as it showed 5mg of fluoride concentration. "It was way high then 1.5 mg per liter which is considered as safe," says now fluoride literate Kamala.

A series of village meetings afterwards had one primary agenda on ways to get rid of the menace. "We discussed many things: stop use of water from the only tubewell of the habitation, demand safe water from government, procure water from Pipalchhendi - the main village about two kilometers away, rely on surface sources, or find some alternative source," recalls Falguni. They tried all. The first collective decision the villagers took was to stop using the tubewell water. They used water from the nearby stream - Bhalubindha. But the stream is not perennial and dries up soon after monsoon season. When the water of the stream dried up they collected water from sources in the main village two kilometers away. They filed memorandum for safe water supply with the government department and Panchayat.





Finally, the villagers decided that instead of waiting for the government to provide them relief, it is better to search and develop alternative source of water. Because only they will be suffering if nothing is done. "From RCDC and other experts who visited our habitations and from the discussions in various trainings and meetings we learnt that open well can be a safe source," says Raising Majhi, aged only 22 years but no more able to stand straight. "In one meeting in March 2014, we decided to dig up a well, ourselves," Raisingh adds. It was a consensus decision in the habitation to dig the well through own contribution.

They decision they took was not at all easy to implement. They had many obstacles - where to dig the well, how to meet cost of materials, how to find time for the work by skipping daily wage etc. Ironically, the government records do not tell the truth of economic condition of the village. Records say that only four of the 13 households of the habitation live in Below Poverty Line condition. "The fact is that all households barely meet their subsistence requirement," says Brundabati Majhi, Sarapanch of Saipala Panchayat. Yet, the villagers' resolve overrode their economic limitations. They decided to break and collect boulders themselves, provide labour contribution and contribute financially to manage expenditures for collecting materials. Once that decision was taken, the other decision to find location of the well was a relatively easier one. "In one meeting Mandara Majhi who is about 70 years old told that earlier they were using water from a shallow well from our field and the water was sweet," informs Fulei Majhi. Once Fulei heard that she immediately rose to tell that she will donate that piece of land to the village for the well. The whole gathering clapped at the instant announcement of the lady. "I myself and my family members are affected with fluorosis, it was a pleasure for me to offer the land as that can spare us from the agony," Fulei adds further.

It was a loaded few weeks of summer for the villagers thereafter. Each of the households contributed manpower to dig up the well, up to 18 feet deep; break boulder; and then provide labour to construct the wall. They also contributed 11,150 rupees in cash to meet cost for sand, cement, transportation and mason. Even fluorosis crippled people contributed in



whatsoever manner that they could. When their material stocks fell short and they had no cash to spare for transportation cost, women like Malati volunteered to carry big boulders on their heads to complete the work. Their hard labour had to bear the fruit. "After sanitizing the well we started using water from the middle of May," says an elated Falguni. The day villagers used water from the well for the first time was like a festive occasion. They were all happy. "I am astonished to see the work of these poor people. Had the government constructed this kind of a structure it would not have a budget of less than 50,000 rupees," says the Sarapanch. "RCDC which consistently worked in the background to make people aware about the quality of water and motivated them also deserves a big pat," she adds.

Now that their immediate goal to make provision for safe water has been met through their own hard work, the villagers are preparing to make the government accountable to provide them water from safe sources through pipe water supply system. "Till now we were requesting the RWSS officials, we will now start demanding," says Kailash Majhi, another fluorosis affected person in his mid forties. "We now know that getting safe drinking water is our right," says Kailash. Other villagers nod in appreciation. The government has taken note of this. "We have planned for a mega pipe water supply scheme, we hope to roll that out soon," informs the Mr Binod Sethy, Executive Engineer of RWSS. Now, Malati is happy that he is sure of the future. She is also sad. "Had RCDC come to our village earlier, I and others would still have been physically fit," she rues.

The small tribal habitation of Dangarpada has shown a big heart. On one hand they showed how the community members can themselves contribute to mitigate their woes, on the other they have stirred a debate on seriousness of fluoride affect. These poor people of Dangarpada say that they have just begun. "We are planning to totally cover the well which we could not do this time due to fund shortage. We have also set our eyes on higher standards of water and sanitation access," informs Fulei with a wide smile.



Poor people poured their resources

Considering the gross poverty in which they live, contribution that people of Dunguripada habitation made was enormous. Their net contribution for the well was as follows:

1. Cash contribution: Rs 11,150.00
 - 1) For 10 bags cement @ Rs 340 = Rs 3,400.00
 - 2) For 2 tractor loads of sand @ Rs 400 = Rs 800.00
 - 3) For 4 tractor trips to collect stone @ Rs 1200 = Rs 4,800.00
 - 4) For payment to mason @ Rs 250 for five days = Rs 1,250.00
 - 5) To purchase a pulley to draw water = Rs 900.00
2. Human-power contribution
 - 1) 5 days for each of the 13 families

A positive aberration

When Rasanda Putel, staff of RCDC, saw physical abnormalities in Duguripada residents, he was convinced that it was fluorosis. But when he told this to the villagers, in one of his preliminary interactions, not many people seemed interested. However,

Kamala Majhi, a lady in her thirties, though did not actively participate in the discussions was listening to what Rasananda was briefing very carefully. Being a woman, she was reluctant to say in the open meeting. But that inhibition was not there after the meeting, and especially because half of her family are affected with serious fluorosis deformities. She requested Rasananda to tell more about fluoride and fluorosis. Rasananda was looking for an inroad and seized the opportunity. Few months later Kamala participated in a large awareness programme organised by RCDC at the District headquarter where many experts made presentations on fluoride in water, fluorosis disease and ways to mitigate. Subsequent village meetings became more regular, participatory and focused. Woman participation increased. Villagers became fully aware about the tubewell water quality and decided to stop using that. That was the first step. They then requested the government for alternatively water supply. However, support from Government was found less than adequate. In the mean time, RCDC social engineers were working consistently to instill a sense of confidence among the villagers to take up alternative initiatives themselves. In one meeting RCDC's Rabinarayan Parida showed them few visuals of how community members, instead of waiting endlessly for the government to deliver, themselves took up various activities related to water access and sanitation. Fulei was the first in the village to positively respond to such an idea. "This habitation is a homogenous and receptive unit, that helped," says Rabinarayan. The modest villagers, on the other hand thank, RCDC staffs for this. "Rabinarayan and Rasanand not only told us to contribute, but also worked with us in breaking boulders and toiled with us. That was so encouraging for us," says Fulei. The villagers not only contributed to construct the well but these barely literate people have maintained a neat record of all expenditures.





Published by:



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