

Ending Nightmare of Arsenic Panic

Arsenic contamination in groundwater in Bangladesh is a rising concern to ensure safe drinking water for the people. Arsenic contamination in water has caused adverse health effect as well as social & economic problems. The tubewells in rural areas of Bangladesh have been identified with high arsenic concentration which is alarmingly higher than the standard set by the World Health Organization (WHO) and many more areas are feared to have been contaminated with the same. Areas of different districts are intensively affected with arsenic problem & many areas are yet to be identified to contain arsenic or not.

Chuadanga is one of the districts under southwest part of Bangladesh which is contaminated with severe arsenic in groundwater. In 2003, a study was conducted by Government initiative where 20.33% tubewells of the district was identified to contain arsenic. 33 villages of the district have been identified to have arsenic ranging within 80-100% which is alarming. Baradutpatiliya is one of this category villages of Chuadanga district located at Howli union of Damurhuda Upazila. The total numbers of families of the village are 620 and the population is around three thousand. Tubewells, the only source of drinking water in the village, are affected with acute arsenic contamination. According to a study conducted in 1993 around eighty percent Tubewells of this village are highly contaminated with arsenic. But the villagers could not identify the disease from the symptoms. The disease was used to be appeared as curse from God by the villagers due to poverty, ignorance, lack of education & information, superstition & other social facts. As a result, adverse health effects, different social, behavioral & economic problems condensed centering the arsenic problem. The arsenic contamination has been silent killer of the people of this village. 25 people died from arsenic contamination related diseases in Baradutpatiliya village since 1993.



Arsenic contamination of in Tubewell water resulted in threatening the health of Baradutpatiliya villagers. (16 January 2015, Baradutpatiliya, Chuadanga)

In this village, first arsenicosis symptom was detected in a man named Abdul Manan in 1994. The Department of Public Health Engineering conducted tests on his body and declared him as the first Arsenicosis patient in Chuadanga. Despite the diagnosis Abdul Manan could not escape death.

This is one of the single examples of misery of Baradutpatiliya villagers generated from arsenic problem. Women with arsenic poisoning suffer enormous difficulties in the village. Their suffering is not confined within deterioration of physical conditions only but also has severe social consequences. Renu Begum was divorced after Arsenicosis symptom was found in her body. Parents are even keen to carry out early marriages of their daughters from fear of getting Arsenicosis. Muslima has been a victim of such situation; she was forced to marry when studying at class six. The arsenic affected people also receive negative behavior from rest of the society.



Arsenic-suffering women of Baradutpatiliya village facing social problems. (16 January 2015, Baradutpatiliya, Chuadanga)

Considering these circumstances, Government bodies and some non-government organizations intervened some initiatives to remove arsenic problem. In this association, screening the tubewells to identify arsenic, promoting treatment facilities to jeopardized arsenic patients, instalment of CIDCO plant & conduction of research work were initiated under various types of projects. But lack of effective meeting, advocacy & lobbying and lack of required maintenance of the water technologies resulted in the failure of these projects. The number of arsenic affected patients did not stop increasing. The villagers knew no solution how to get rid of problems, nobody showed them path to come out from the misery situation.

Upholding the pledge to ensure improved Public Health and environmental soundness by promoting WaSH governance, NGO Forum has been working to establish safe water and sanitation rights for the last three decades. The organization has been working to ensure the WatSan rights for the country's poor and disadvantaged people, especially the hard-to-reach. One of its intervened projects **[Enhancing Governance and Capacity of Service Providers and Civil Society in Water Supply and Sanitation Sector](#)** supported by the European Union is being implemented in 59 unions throughout the country commenced in January 2013 and will be ended in December 2016. The overall goal of the Project is to ensure the good governance in promotion of pro-poor safe and sustainable water supply and sanitation services among the target communities from the six different hard-to-reach areas of Bangladesh.

One of the major concerns of the programme is to ensure safe water for the people of those areas which are affected with severe groundwater arsenic contamination. Under the programme, for the treatment and betterment of Arsenicosis patients some activities such as health camps, counseling with Arsenicosis patients, development of guideline for Arsenicosis patient treatment, consultation

meetings with the Upazila Health Complex on Arsenicosis issues, procurement of medicine, monitoring on health status & support to ultra poor Arsenicosis patients have been provisioned. RESWO (Rural Economic and Social Welfare Organization) is the local NGO of Chuadanga district to implement the project successfully in partnership with NGO Forum.

In the primary stage the response of the people of Howli union was not that satisfactory due to their bitter experiences in the past. But the different consciousness raising tasks contributed to attract the Baradutpatiliya villagers getting involved with the programme. The villagers then started realizing that this is going to be a different programme which would show them the light of hope through getting remedy from arsenic. They started realizing that they will have both opportunities to participate and give opinion in project related interventions. Various types of problem identification tasks were finished at the first step. The most important tasks identified were through Village Development Committee (VDC) meetings with the Howli Union Parishad (UP), the lowest tier of Local Government and its water and sanitation related committees-Ward WatSan Committee and Union WatSan Committee. Emergency tests of arsenic contamination in the area's tubewell water were also carried out. These meetings also enabled activation of the UP's WatSan committees that contributed in improving governance in relation to pro-poor service delivery of the UPs. Collaboration meetings were also conducted with the Upazila Administration regarding arsenic scenario of the upazila.

Vulnerability assessment of the union area through mapping, arsenic testing of tubewells, identification of arsenic patients & providing them with free treatment, installing Arsenic & Iron Removal Plant (AIRP) on the basis of application from the villagers, offering free IGA loan to the Arsenicosis patients for being self-sufficient through various types of income generating activities, creating awareness among the people regarding water & sanitation have been carried out under the programme.

According to Md. Mominur Rahman (42), Field Engineer of NGO Forum of Jessore Region (contact number +8801712547024) a total of 3,896 tubewells have been brought under tests and 2,775 tubewells were tested to identify the Coliform/bacterial infection. These tubewells have also been marked with red & green color after arsenic tests. 30 Deep Tubewells & 5 Arsenic Iron Removal Plant (AIRP) have been installed under the hardware support under the Project. Besides, 49 Deep Tubewells have been reformed to make the water arsenic-free. These technologies have ensured safe and arsenic-free water for 1,073 people (663 male and 410 female). Social interaction among the villagers increased from the very beginning of the programme. These water technologies have been installed in this area on the basis of cost sharing. In this regard the villagers become unified to raise funds to participate in cost sharing process. They are participating in different types of meetings and other awareness raising works related to arsenic initiated under the programme.





Context-specific water technologies promoted to this area. (26 January 2015, Howli, Chuadanga)

To ensure the betterment of Arsenicosis patients, NGO Forum organized 3 Health Camps in the village where 171 Arsenicosis patients have been identified through proper health check-up. Under the health services the Arsenicosis patients are now getting proper treatment in Health Camps from expert doctor & availing free medicine facilities.”The Upazila Administration has always been sincere to build the liaison between NGO Forum & Upazila Health Complex to ensure the health services for Arsenicosis patients on public-private partnership” informed by Dr. Abdul Latif (65)(contact number +8801712567863)a retired Health & Family Planning Officer, Damurhuda Upazila Health Complex.

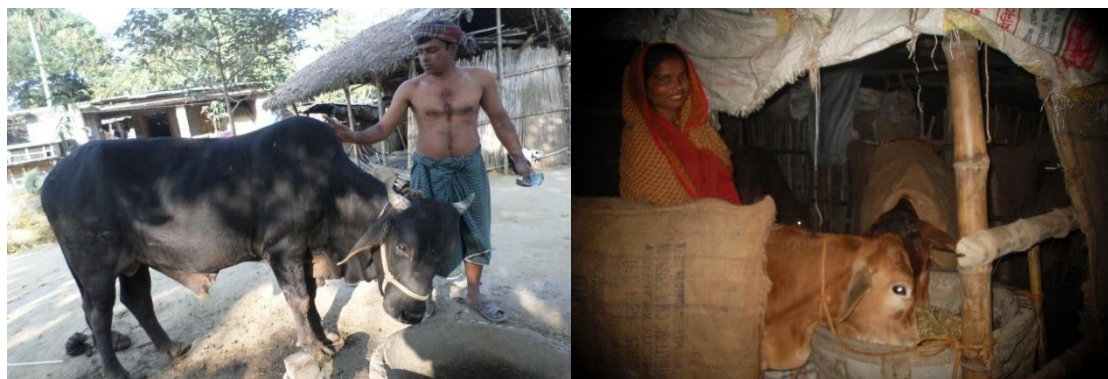
Financial support to 77 arsenic-affected persons has also been extended. Interest-free IGA loan has been provided to these patients to carry out income generating activities to contribute to their livelihood. 34 arsenic-affected people have received an amount of Tk. 20,000 each under the Project which is helping them to be self-sufficient. Minarul (37) (contact number +8801918223796), son of Gazi Rahman of Majherpara is now living with happiness. He established a Tea Stall taking loan from the Project. Now he earns Tk.250 daily from the Tea Stall. He has also started agricultural works and sand business from the support of the loan. Assan Ali (42) (contact number +8801941757423), son of Lal Mohammad also from Majherpara lend 20 decimal lands from the support of loan. He bought a cow by 17 thousand taka from benefit of land cultivation. He hopes the cow will be sold at taka 40,000 to 50,000 in upcoming days.



Financial supports are extended to the arsenic patients. (21 December 2014, Howli, Chuadanga)

Mohammad Ali Shah Mintu (52) Chairman of Howli Union Parishad (contact number +8801929363984) is one of the witnesses of the loan scheme says “This is not only Minarul & Assan

Ali, but many have also become self-reliant by utilizing the money”. He also informed that the Union Parishad has become engaged in the loan scheme and the loan receivers are getting direct result from the loan scheme. Ziarul Haque (38) (contact number +8801916411708), son of deceased Ibrahim Joarder works at a brick field as daily laborer. After receiving the loan, he bought a cow. Now the market price of the cow is 50,000 BDT. Ziarul is very much optimistic to sell the cow at 80,000 BDT during the next Eid. Another example of Nazira Khatun (33) (contact number +8801957653586), wife of Billal Hossian of Gorosthan para lends a land by 20,000 BDT. She has been able to aggregate a good amount of money for cultivating paddy in the land. Now she does not need to buy rice round the year as the cultivation fulfills her demand.



Ziarul Haque and Nazira Khatun are utilizing the loan to improve livelihood. (16 January 2015, Howli, Chuadanga)

The interest-free loan receivers are improving their livelihood through income generating activities as well as taking nutritious foods for fulfilling the deficiency of their body caused by arsenic contamination. The progress of the programme did not end here. Now the work of pipeline water supply scheme is advancing very quickly. If the pipeline is installed then around three thousand people of six hundred families will get safe drinking water from the technology. The whole village will be covered under supply of water by overhead tank.



Pipeline water scheme will ensure arsenic-free water 3,000 people of 600 families. (21 December 2014, Howli, Chuadanga)

The villagers are very much optimistic with this scheme which is showing them new dream for living a healthy life. Hence the chapter of living with arsenic panic of Baradutpatiliya villagers is closed. The nightmare of arsenic is a past.

- **Geographical Location:** Baradutpatiliya village of Damurhuda Upazila of Chuadanga district under drought-prone zone of Bangladesh.
- **Project Title:** Enhancing Governance and Capacity of Service Providers and Civil Society in Water Supply and Sanitation Sector. (Grant Contact No. DCI-NSAPVD/2012/306-698).
- **Starting and finishing date:** The Project started in January 2013; the ending period is December 2016.
- **Sources and amount of Project funding:** The total budget of the Project is EUR 43, 20,315 (BDT 45, 36, 33,075). European Union contributes 89.11% of total budget and the contribution of NGO Forum & Community is 10.89%.
- **Partner organization and government bodies:** RESWO (Rural Economic and Social Welfare Organization), e-mail (reswodn@yahoo.com) is the local NGO in this area to implement the Project successfully in partnership with NGO Forum. Howli Union Parishad, Department of Public Health Engineering & Upazila Health Complex are the Government bodies of the Project.

