

Annual Report of Project Well of 2012

Summary:

In 2012 the following activities were undertaken:

- 1) Construction of forty dugwells;
- 2) Maintenance, including distributing the disinfectant to communities using functional dugwells and renovating some of the older dugwells;
- 3) Annual measurement of arsenic concentrations in all functional dugwells;
- 4) Conducting of several village meetings during site selection, and continuous education of the user communities through health meetings.
- 5) Meetings and conferences attended by the members.

January to December 2012

CONSTRUCTION:

In 2012 during the months of January to May site selection for 40 bore-dugwell that are also called as bi-tech wells were done by the field workers in addition to their monthly survey, maintenance work and awareness meetings that included village meetings during site selection and after construction of wells and community health meetings and projector programs that are also held in schools and communities. Thirty sites were selected in the district of North 24 Parganas and ten in Nadia. In North 24 Parganas 20 bi-tech wells were funded by MSSCT through Blue Planet Network (BPN) out of which 10 were constructed in Gobindopur panchayet of Swarupnagar block and 10 in the Baduria block. Arghyam donated funds for 10 bi-tech wells that were constructed in Chakdah block of Nadia district and 8 bi-tech wells were funded by Global Giving through BPN, one by Amrita Seattle and one by Project Well. All these 10 bi-tech wells were constructed in Gaighata block of North 24 Parganas.

The reports of all the 40 bi-tech wells are uploaded on Peer Water Exchange website here:

1. http://peerwater.org/en/apps/362-Arsenic-Safe-Drinking-Water-North-24-Parganas-1-/show_projects (MSSCT (10) - PW218 to PW227 -- \$10,730);
2. http://peerwater.org/en/apps/363-Arsenic-Safe-Drinking-Water-North-24-Parganas-1-/show_projects (MSSCT (10) - PW228 to PW237 -- \$10,730);
3. http://peerwater.org/en/apps/365-Arsenic-Safe-Drinking-Water-Nadia-1-/show_projects (Arghyam (10) - PW238 to PW247 -- \$12,460)
4. http://peerwater.org/en/apps/366-Arsenic-Safe-Drinking-Water-North-24-Parganas-1-/show_projects (Global Giving: 8; Amrita Seattle: 1, and Project Well: 1, - PW248 to PW257 -- \$12,460)

Due to more than normal rainfall at the end of the monsoon season in 2011 construction of some bore-dugwells could not be completed that were finally finished in March 2012.

A glance of detail activities during June 2012:

At Chakdah on June 30 sites were selected to do pilot tests to locate the depth of the sand layer. Out of these 30 sites ten sites were finalized. Pilot tests at sites donated by Rakhit Sadder, Mayno Mondol and Ratan Ghosh were done on 15,16 and 17th June. The team of four that does pilot tests and boring stayed at house of one of the field workers for three days. Meantime village meetings at the 3 selected sites were done by the field workers to give the prospective users the information about the importance of drinking arsenic safe water from the bore-dugwells/bi-tech wells and how to maintain them including application of theoline and be self reliant within a year. The team that is involved in boring to insert the 10 feet long bore came back on 26th June to start boring at the 3 selected sites and simultaneously did pilot tests. By 29th boring at all the 10 sites was complete. Before the 15th two pilot tests were done under the supervision of another field worker. One site was approved that is at Ganesh Sarkar's land while the other was cancelled.

To manage with construction and ongoing training a new field worker with motorbike was hired in August here in Chakdah for the district of Nadia replacing one who resigned from the organization for a local government job.

Awareness Programs

The Awareness team carried out field activities like doing survey of the communities and recording the number of users and administer theoline dose besides organizing health meetings and motivating the villagers to drink arsenic-safe water and practice proper personal hygiene to avoid falling sick from water- and food-borne bacterial diseases. With efficient planning, there were 123 awareness meetings held in Gaighata, Baduria, Swarupnagar and Chakdah. There were 51 village meetings before and after construction of 40 wells and 18 projector programs and 54 health meetings held in schools and communities. Health meetings are done in the communities where the number of beneficiary families is less than seven and Projector Programs are done where the response is extremely poor including water not being used at all. Almost at every meeting pictures are being taken for documentation.



The AWS awareness team organized a Projector Program at Sabaipur Adarsha School on September 28th 2012.

Apart from meetings in the villages awareness among the learned, business people were held as for example the project was presented at two Rotary Clubs in San Francisco Bay Area, California, and participation at the Spring Festival of International House at University of

California, Berkeley in mid year of 2012. And on August 31st Aqua Welfare Society presented the program at the Energy and Environment Conclave 2012 organized by the



The AWS awareness team organized a Projector Program at a school on September 21st 2012. They are with four school teachers in the picture.



The AWS awareness team organized health meeting on March 29 2012 near bi-tech well numbers PW158 and PW159 at a home to use the electricity for the projector where the neighbors attended.

Bengal Chamber of Commerce (picture 5). The topic was entitled ‘Arsenic Mitigation – ground realities and opportunities’ where they discussed the functions and activities of the bi-tech well water program and the prospect of commercialization of the bi-tech wells and improvement of indigenous industries like pottery and ring makers, diggers for digging and dredging and masons for building the house around the wells and also the industry of pipes and hand pumps that are used in the construction. The commendable part of this project is that the laborers, transport and raw materials are all indigenous, provided by the people living in the arsenic affected villages.

In 2013 and 2014 efforts will be made to obtain funds from the donor organizations in India like Arghyam that has already funded for wells in 2012.

The Project Well program is also being known internationally through the peerwater.org website where reports of all the wells are uploaded and updated through the mobile text/sms method that is operated directly from the field by the field workers. The importance of the text/sms system is to empower the community to send messages about the functionality of the well because they have access to cell phone and phone number to send the message with the project identity number that is inscribed on the sponsor plate. Such activities are shared at meetings and functions so that other organizations can learn and follow.



Aqua Welfare Society at the Bengal Chamber of Commerce on August 31st 2012



The water project of Project Well being shared at a fund raising function on December 5th 2012

Monitoring and Maintenance

In March 2012 only 23 historical water sources were selected randomly for annual arsenic tests in the laboratory. And since November 2012 water analysis for initial arsenic levels of the newly constructed bi-tech wells of 2012 and annual arsenic levels of all the remaining historical wells has been commenced in the field office using the field kit called VisuPass (Visual Portable Arsenic System) obtained from United Kingdom through online order from Palintest (<http://www.palintestusa.com>). Some of the samples were collected in duplicate. And a new personnel has been hired to do the water analysis for arsenic levels.

The bi-tech wells number PW163 and PW166 of the 23 sources tested in the laboratory in March (dry season) showed high arsenic levels as 53 ppb and 111 ppb. Samples from these wells were retested in August 2012 and the report of PW166 showed high arsenic by the field kit and also at a laboratory. Due to these reports PW166 has been permanently closed. And the arsenic level of the well number PW163 when retested showed to be less than 10 ppb.



Field workers at work : recording the monthly survey report on November 21st 2012



Field office meeting on October 2nd 2012

In November and December 2012 total of 143 water samples were collected from North 24 Parganas and Nadia. There were 45 water samples from dugwell and bi-tech wells combined. Apart from the annual test for arsenic of these implemented wells, as a protocol for site selection, samples from two nearby tubewells of the proposed sites were also tested with the same kit. Hence there were 74 samples from shallow tubewell for site selection and 23 samples from deep tubewells for both site selection and being in close proximity to dugwell or bi-tech well and one sample was from bottled water used by a community. The water analysis using the field kit is continued in the following year for site selection since many sites were cancelled due to absence or low levels of arsenic in the samples.

Out of 45 samples of dugwell and bi-tech wells traces of arsenic was found in only two wells. These two wells will be considered to be monitored for one year along with 23 more that will be selected randomly. All the tests will be done with the field kit.

Since Theoline is being used to control the growth of bacterial water analysis for e.Coli is not carried out anymore from this year. As also last year laboratory tests showed e.Coli as undetected in all 21 samples.

Due to good quantity of rainfall in the preceding year dredging was not required in any of the wells. Hence in September the following sources were attended for minor maintenance included mostly repair of check valves. The wells were PW81, 82, 156, 172, 179, 184, 229, 230, 240, 243, 244, 246 and 247. Due to heavy rainfall construction of PW194, PW250, PW254 and PW256 were scheduled to be completed during the construction period of 2013.

In 2012 decision to give the ownership to the communities where more than seven families are using water source are given a handover package and a letter stating that it would be responsibility of the community to do maintenance of their source that includes application of theoline and all types of minor wear and tear. Some of the communities are conscious and they look after their source well. These communities are visited quarterly while the new wells and those that are not being used efficiently are subjected to more awareness programs and monthly visits. Such responsibilities/handover packages have been given to 53 communities: Chakdah-10, Gaighata-30, Deganga-13. These communities are being watched closely for any kind of adverse consequences due to lack of maintenance.

Administration

Project Well directors met with the board members of Aqua Welfare Society several times during the year including on the day of the annual general meeting on May 14th when the progress of the field activities and plans for future projects were discussed. And the Annual General Meeting of Project Well was held over phone in November after the financial statement was perused over email on 13th November.

In January 2012 as in previous years the technical advisor who is also the current President of Project Well visited some of the wells to give his advice on proper construction of bi-tech wells. The chief Director of Project Well visited the field on 5th, 10th, 14th, 17th and 21st May and again on 19, 23rd, 26th, 27th, 28th November 2012 mainly to see the wells with problems like technical issue, quality of water and cooperation of the communities because they were not being used. All the visits were facilitated by respective field workers. The board members of Aqua Welfare Society, the geologists visit the field at least twice a year and the treasurer visit every month to discuss matters with the field workers.

Re-appointment of the field workers were done by giving them contract letters. Mrs. Farida Bibi coordinates the activities in the field, Mr. Biswajit Karmakar and Mr. Laltu Mirza are in the Construction and Maintenance Team; Ms. Aparna Mondal and Mrs. Shilpi Poddar in the Awareness Team, Mrs. Shikha Majumdar, and newly appointed Mr. Ranajit Bala are field workers in the district of Nadia who manage 52 sources by themselves. Ms. Champa Mondol and newly appointed Mr. Safikul Molla are responsible for the office activities including testing arsenic concentrations using field kit and keeps account of office registers and

records. Prasun Hira (data entry personnel) and Jayanta Dey (accountant) were also re-appointed along with Mr. Animesh Chandra Sarkar who has been given responsibility of overseeing 30 wells of Sarupnagar. The community based groups of the 40 newly constructed wells will be given training on maintenance for one year or more if needed.



A newly constructed bore-dugwell # PW221 at Gobindobpur., Swarupnagar



A newly constructed bore-dugwell # PW242 at Deuli, Chakdah
