

# Annual Report of Project Well of 2011

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## *Summary:*

In 2011 the following activities were undertaken:

- 1) Construction of fifty 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, and bacterial analysis of the newly constructed dugwells;
- 4) Conducting of several village meetings during site selection, and continuous education of the user communities through health meetings.
- 5) Organization of and attendance at two workshops.

## *January to December 2011*

This year, Nadia and N 24 Parganas districts were selected as sites at which to construct 50 more bore-dugwells: 21 bore-dugwells in Chakdah block of Nadia and 29 in Swarupnagar and Baduria blocks of North-24 Parganas.

To implement 50 new projects in new areas, we needed additional field workers to help with construction and awareness programs. They were hired on a contract basis and new contract letters were given to the existing staff, informing them of incremental salary raises. The new and existing staff positions were :

Re-appointment of Paramita Guha as Project Manager; Dennis Baroi, Technical Manager; Biswajit Karmakar, Maintenance Manager; Asit Mondol, Field Worker; Prasun Hira (data entry personnel); and Jayanta Dey (accountant). Appointment of Laltu Mirza, Ms. Champa Mondol, Aparna Mondal, Shikha Majumdar, Krishnopawdo Biswas, Shampa Goldar from time to time throughout the year.

The following field staff resigned this past year: Paresh Biswas, Saurya Sassi Pal and Mr. Surojit Bhadra.

## **Construction:**

By July 2011, construction of 21 bore-dugwells had been completed in Chakdah. Village meetings were held at each site during this period. Unfortunately, due to geological reasons as well as the government's plan to distribute pipeline water in the area (of which we were previously unaware), 39 sites were cancelled: 15 sites in Chakdah, 12 at Baduria and 12 in Swarupnagar.

By November 2011, 25 bore-dugwells had been bored, but due to unusual amount of rainfall at the end of monsoon season, the water table was high and digging could not be done. The delay lasted three months. Four bore-dugwells were completed in February 2012. Ultimately,

all 29 bore-dugwells were completed by March 2012. The reports are uploaded on Peer Water Exchange website here:

1. [http://peerwater.org/en/apps/285-Arsenic-Safe-Drinking-Water-N-24-Parganas-Swarupnagar-Set5-A-1-/show\\_projects](http://peerwater.org/en/apps/285-Arsenic-Safe-Drinking-Water-N-24-Parganas-Swarupnagar-Set5-A-1-/show_projects) (10 wells)
2. [http://peerwater.org/en/apps/290--Arsenic-Safe-Drinking-Water-N-24-Parganas-Nadia-Set5-B-5-/show\\_projects](http://peerwater.org/en/apps/290--Arsenic-Safe-Drinking-Water-N-24-Parganas-Nadia-Set5-B-5-/show_projects) (5 wells)
3. [http://peerwater.org/en/apps/291--Arsenic-Safe-Drinking-Water-N-24-Parganas-Swarupnagar-Set5-C-5-/show\\_projects](http://peerwater.org/en/apps/291--Arsenic-Safe-Drinking-Water-N-24-Parganas-Swarupnagar-Set5-C-5-/show_projects) (5 wells)
4. [http://peerwater.org/en/apps/292--Arsenic-Safe-Drinking-Water-Nadia-Baduria-Set5-D-1-/show\\_projects](http://peerwater.org/en/apps/292--Arsenic-Safe-Drinking-Water-Nadia-Baduria-Set5-D-1-/show_projects) (10 wells)
5. [http://peerwater.org/en/apps/293--Arsenic-Safe-Drinking-Water-Nadia-Chakdah-Set5-E-1-/show\\_projects](http://peerwater.org/en/apps/293--Arsenic-Safe-Drinking-Water-Nadia-Chakdah-Set5-E-1-/show_projects) (10 wells)
6. [http://peerwater.org/en/apps/294-Arsenic-Safe-Drinking-Water-Nadia-Chakdah-Set5-F-1-/show\\_projects](http://peerwater.org/en/apps/294-Arsenic-Safe-Drinking-Water-Nadia-Chakdah-Set5-F-1-/show_projects) (10 wells)

## Awareness Programs

With the help of the new Project Manager, there are now two distinct teams to carry out field activities – one team is engaged in well construction and maintenance, and the other educates and motivates 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, the Project Manager and field team conducted 53 health meetings in 2011. From January to November 39 village meetings were held and in December 10 village meetings were held in Baduria and 10 in Swarupnagar to prepare for the 2012 construction program. In total, there were 112 meetings last year. Village meetings are conducted during site selection, right before construction. These meetings are held to educate user groups on the effects of drinking contaminated water and benefits of drinking the arsenic-safe dugwell water. Apart from the general village meetings, there are other short meetings that are held during site selection by the Project Manager and the Technical Manager. They also meet with government officials like the head of the gram panchayet; with the help of panchayet members, they visit villages and talk to communities who show interest in community-based arsenic-safe water projects.

One field staff training program was held in April, conducted by the Project Manager. (Refer to the additional public education report of 2011 attached.)



In January 2011 the technical advisor visited the wells to give his advise on the digging procedure of the bore-dugwell in the area with clay and sand layers at different depth that varies from place to place. In June 2011, the Director of Project Well visited the field at Swarupnagar on 10<sup>th</sup> June to see the construction of the new type of bore-dugwell, followed by another visit on 14<sup>th</sup> June to see seven new bore-dugwells in Chakdah, Nadia and a visit on 24<sup>th</sup> to seven old dugwells that had been reported to have problems and were not being used. All the visits were facilitated by respective field workers. We also collected water samples from fifteen wells to measure arsenic. In November 2011, both the Director and the President of Project Well visited the village to observe construction of more dugwells. Three overseas donors accompanied them to the field.



A newly constructed bore-dugwell # PW182.



A newly constructed bore-dugwell # PW206.

## Monitoring and Maintenance

As per Project Well guidelines, after completing construction of the 21 new wells in Nadia, water samples were collected in duplicate for arsenic measurements. Arsenic levels were below the permissible limit recommended by WHO in all samples except for one (that one was below the standard set by Bureau of Indian Standards). Bacteriological tests were also done and E.coli, a bacterium that causes diarrhea, was undetected in all 21 samples. Water was also collected from 36 existing wells for annual arsenic measurements, and water samples were collected from 15 sources every other month, in February, April and June, for regular arsenic monitoring. This bimonthly regimen was discontinued after it was discovered that the laboratory used committed errors with matching codes in the last set of samples. These results from the laboratory could not be used, thus the bimonthly regimen resumed in March 2012. This time, Project Well tested 25 sources, including 2 modern dugwells, 7 borewells, 15 bore-dugwells and one well converted from borewell to bore-dugwell.



Bacteria tests of all 50 dugwells and arsenic tests of 29 newly constructed wells are pending.

Dugwells those get almost dry in the summer need to be dredged, so in 2011, 38 such dugwells were dredged so that the user communities could get water during that dry season.

Project Well directors met with the board members of Aqua Welfare Society several times to discuss the program progress and plans for the future.



**Project Well and Aqua Welfare Society meeting in June in the village office of AWS**



**2011 Annual General Meeting of Aqua Welfare Society**

Project Well and Aqua Welfare Society also participated in a workshop at Murshidabad organized by Ramkrishna Mission, Sargachi and Amrita Seattle of Seattle, Washington, in June 2011 and Project Well participated in a 3-day workshop in November 2011 in Bodh Gaya, Bihar, in India organized by Fogarty International and All India Congress of Cytology and Genetics to discuss the dugwell program as a feasible mitigation option for arsenic-safe water in Bihar.



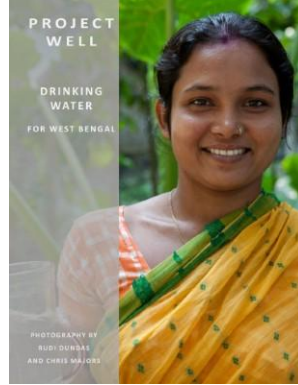
**Project Well and Aqua Welfare Society at the workshop organized by Amrita Seattle**



**Dugwell proponents at the Fogarty International workshop**

Project Well participated in the Spring Festival of International House at University of California, Berkeley. In November 2010, two professional photographers visited India and stayed in the villages for ten days to document the work of Project Well and Aqua Welfare Society. One of the photographers, Rudi Dundas, with the help of Project Well and Aqua Welfare Society, developed and published a booklet about our work that is now used for

awareness and fundraising purposes. Fundraising presentations were also organized by Meera Smith at her home in November 2011 and again in December with the help of Rudi Dundas at the Rotary Club of Sausalito, California.



The major donors of the 50 bore-dugwells of last year are MSSCT (20), Blue Planet Network (15), Row for Water (10) and other private donors (5).

For 2012, funds for 30 bore-dugwells have been received after submitting proposals through Peer Water Exchange, and the major donors are MSSCT (20) and Arghyam (10). We are very thankful to the donors—because of their donations, today more than 5000 people are drinking (and cooking with) arsenic-safe water, including students at six schools and visitors to a health center.



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