

Report on

WORLD WATER MONITORING DAY 2011; Village Nikargachi, District Nadia, West Bengal

Project Title : Toward Provision of Safe Drinking Water, Sanitation and Health in Nikargachi, an Impoverished Village in Chakdaha Block, Nadia District, West Bengal.

I. Introduction and Objective

In order to observe the important occasion of World Water Monitoring Day (WWMD), 2011, we have conducted a project on Safe Drinking Water, Sanitation and Health in Nikargachi, an impoverished Village in Chakdaha Block, Nadia District, West Bengal. Our activities were spread over the months of November-December, 2011.

The specific objectives of our project were : conducting a benchmark survey of the socio-economic-environmental characteristics of the selected village; preparation of a water profile of the village including both availability and quality; testing the quality of water from different sources in the village;; sensitising villagers regarding water , sanitation, health and education; suggesting methods of alleviating the problem of water availability and quality; providing training on low cost technologies (household level) for water purification; and mobilization of the community for changing their behaviour to become more sensitive , conscious and informed of the need for saving and using safe water and improved sanitation.

In the following paragraphs we present a profile of our activities related to village water status, results of water quality tests we have conducted, village sanitation scenario and women's health. We have conducted a special programme to generate among young children the awareness about the critical need for using pure and clean water in everyday life and for maintaining proper sanitation and healthy habits: Sit and draw programme where the topic was USES OF WATER. This programme created great

enthusiasm among the children who participated in large numbers (137). Children were also involved in water testing.

II. The village scenario

Nikargachi village is located in Chakdaha block in Nadia district, West Bengal. The village is extremely poor with virtually very little basic amenities of life. Following are the basic scenario of the village:

- Total population of the village is approximately 2500, all belonging to Scheduled Castes (*Bagdi* community).
- There is only one deep tube well functioning properly for drinking water for the entire village. Since it is quite inadequate for the entire village population, large proportion of the population here use water for drinking, cooking and other domestic purposes from shallow tube wells (only about 50ft deep). Water from this source is most likely to be polluted. There are numerous small ponds in the village in very unhygienic condition. Water from even these ponds is used for domestic purposes creating health hazard.
- Most of the village people do not have access to sanitary toilets and people practice open defecation which leads to frequent diarrhoea in the village.
- There is no primary health centre or qualified doctor in the village to meet the health needs of the people.
- Literacy level in the village is low, and limited mostly to primary level. There is only one primary school in the village and no high school. There are very few high school graduates, and not a single college graduate.
- Agriculture is mostly mono-crop, and without irrigation farming here is vitually an activity with low productivity, subjecting the population to poverty.
- Lack of livelihood opportunities causes out-migration of large numbers of working age population seeking employment as wage labour, mostly for part of the year.

III. Water Quality in Nikargachi : Results of Tests conducted :

The only sources of water in Nikargachi village are ponds and tube wells. Most of the ponds are of medium depth, about 8 feet, and the tube wells are of shallow to medium depth, except for two government constructed deep tube well out of which only one is functional. We have tested water from a sample of 11 ponds and 31 tube wells. Following are the results of tests of basic parameters regarding water quality.

- **Water Temperature** : We found that during the current season water temperature in the village ponds varies around 22 degrees C to 24 degrees C providing moderate conditions for aquatic animals and the temperature of all the tube wells was 26 degrees C.
- **Dissolved Oxygen**: Levels of dissolved oxygen are around 49 in all the tube wells. Pond water also varies from 46 to 48, (except in one pond where it is 92, whose water is highly alkaline (high PH level of 9). [*A surprising result has been for ten tube wells where the DO level is zero, which could not be explained here.*]
- **Turbidity**: Tube wells in Nikargachi have water with zero turbidity, and all ponds (except one with 40) have turbidity level at 100. It suggests that while apparently tube well water in the village might be fit for domestic consumption, pond water here is totally unfit not only for drinking, but even for bathing or other domestic uses.
- It should be stressed that our test is not comprehensive and foolproof (for instance the test does not check if there are arsenic or similar other pollutants in the water sample). We have advised villagers about the possibility of this danger and persuaded them to approach the local government for necessary support. Our aim is to help them in their endeavour in all possible ways.

IV. Outcome

The villagers are now aware of the water scenario of the village and the hazards associated with it. They have already approached the local government for comprehensive test of water available in the village for drinking and other household purposes.

Following are the names of some village participants in the project:

'Toward Provision of Safe Drinking Water, Sanitation and Health in Nikargachi, an Impoverished Village in Chakdaha Block, Nadia District, West Bengal.'

SI No	Name	Sex
1	Upen Sarkar	Male
2	Radu Mondal	Female
3	Debasis Mondal	Male
4	Kakoli Sarkar	Female
5	Susanta Sarkar	Male
6	Ful Sarkar	Female
7	Sahadeb Barik	Male
8	Kanika Majhi	Female
9	Sakhi Santra	Female
10	Siddartha Sarkar	Male
11	Banshi Sarkar	Male
12	Surajit Sarkar	Male
13	Swapan Barik	Male
14	Prasenjit Sarkar	Male
15	Amit Sarkar	Male
16	Becharam Sarkar	Male
17	Sourav Sarkar	Male
18	Monika Santra	Female
19	Rakhi Bagh	Female
20	Rituparna Santra	Female
21	Dipali Sarkar	Female
22	Nabin Roy	Male
23	Chiranjit Santra	Male
24	Dali Biswas	Female
25	Joy Sarkar	Male
26	Champa Sarkar	Female
27	Nayan Santra	Female
28	Joysna Santra	Female

29	Himlata Mondal	Female
30	Rupa Santra	Female
31	Monjuri Sarkar	Female
32	Mhambhu Santra	Male
33	Kartick Sarkara	Male
34	Bablu Santra	Male
35	Biswajit Sarkar	Male
36	Samir Sarkar	Male
37	Sikha Mondal	Female
38	Asis Sarkar	Male
39	Kamola Biswas	Female
40	asis Mondal	Male
41	Soumen Mondal	Male
42	Moumita Bagh	Female
43	Toton Barik	Male
44	Subrata Barik	Male
45	Bikash Roy	Male
46	Sujoy Sarkar	Male
47	Debnath Sarkar	Male
48	Bapan Sarkar	Male
49	Sudip Santra	Male
50	Arati Sarkar	Female
51	Bikash Sarkar	Male
52	bapi Roy	Male
53	Duranta Sarkar	Male
54	Adharani Roy	Female
55	Sefali Sarkar	Female
56	Bhanu Sarkar	Female
57	Dipali Sarkar	Female
58	Suparna Sarkar	Female
59	Joyanti Santra	Female
60	Sarama Roy	Female
61	Gopal Santra	Male
62	Sunil Mallik	Male
63	Swapan Bagh	Male
64	Naba Kumar Bagh	Male
65	Parimal Majhi	Male
66	Nanigopal Santra	Male
67	Anadi Majhi	Male
68	Ranjit Santra	Male
69	Biswajit Santra	Male
70	Giren Bagh	Male
71	Pintu Mpndal	Male

72	Subrata Bagh	Male
73	Pratap Bagh	Male
74	Anuradha Santra	Male
75	Laxmi Bagh	Female
76	Sumitra Santra	Female
77	Anjali Bagh	Female
78	tumpa Mallik	Female
79	Arabinda Bagh	Male
80	Netai Bagh	Male
81	Paresh Santra	Male
82	Mritunjoy Barik	Male
83	Dipak Barik	Male
84	Balan Bagh	Male
85	Aparna Barik	Female
86	Rekha Barik	Female
87	Dipak Mallik	Male
88	Kailash Mallik	Male
89	Asit Barik	Male
90	Aparna Majhi	Female
91	Putul Barik	Female
92	Parbati Barik	Female
93	ranjana Bagh	Female
94	Samila Santra	Female
95	Manaj Barik	Male
96	Sufal Mallik	Male
97	Gopinath Mallik	Male
98	Satyajit Mallik	Male
99	Ujjal Barik	Male
100	Prasanjit Barik	Male
101	Harani Barik	Female
102	Prasenjit Mallik	Male
103	Naresh Barik	Male
104	Kamala Majhi	Female
105	Sampa Mallik	Female
106	Ranjan Mallik	Male
107	Suvankar Majhi	Male
108	Arjun Mallik	Male
109	Tapan Majhi	Male
110	Ashima Barik	Female
111	Ruma Bagh	Female
112	Anup kumar Barik	Male
113	Bishnu Pada barik	Male
114	Suparna Mallik	Female

Contact No. of some of the villagers are as follows:

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