## Safe Drinking Water, Sanitation and Health in Nikargachi: An Impoverished Village in Nadia District, West Bengal\*

#### **ACKNOWLEDGEMENTS**

This brief report is the outcome of a forty five days action-research project implemented by "Kalyani Institute for Study, Planning, and Action for Rural Change (KINSPARC)", a Science-Technology-based NGO in West Bengal. The project has been funded by India Water Partnership (IWP), a constituent of Global Water Partnership (GWP), Stockholm, KINSPARC is the Eastern Zonal coordinator of IWP. The project relates to the problem of availability and quality of safe drinking water in the village of Nikkargachi in District Nadia, West Bengal. Large proportion of Nikargachi population lives below the poverty line and belong to socially, economically and educationally backward community. The village is characterised by scarcity of clean water, poor health and lack of basic livelihood facilities. A careful study of these problems along with appropriate policy recommendations for development of the village is highly needed. The financial assistance provided by the IWP served to meet this purpose. We are grateful for this support to IWP, particularly to the distinguished leadership of Professor S.R.Hashim, President, and Dr. Veena Khanduri, Executive Secretary of IWP. The villagers, women and men came out in large numbers to help implementation of the study. Even the children of the village joined the KINSPARC team in making the study successful. We appreciate this enthusiasm and participation of the village people.

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# A broad scenario of village Nikargachhi with focus on water, sanitation and health:

Nikargachhi village is located in Chakdaha block in Nadia district, West Bengal. The village is extremely poor with little basic amenities of life for a total population of about 2500, all belonging to Scheduled Castes (*Bagdi* community). Apart from poverty and lack of basic livelihood facilities, the most critical needs of the village people include scarcity of safe drinking water; lack of awareness regarding sanitation, hygiene and health.

The objective of our study is to make an overall survey of the Water-Sanitation-Health status of the village with a view to providing a focused advisory communication, especially for safe drinking water.

Following is a summary view of Nikargachhi village scenario based upon Rapid Rural Appraisal:

- There is virtually no employment opportunity in the village except agriculture. without any irrigation facility. The village is paddy-based mono-crop lowland which remains waterlogged during monsoons. Vast majority of villagers are landless labourers with jobs available as farm labour only for about six to nine months in the year. Widespread poverty and lack of livelihood opportunities lead to out-migration of local population.
- As source of safe drinking water there are only two deep tube wells for a population of more than two thousand in the village out of which one deep tube well has been out of order for a long time causing acute scarcity of safe water. This situation, compounded with lack of health awareness, compels many villagers to use water from shallow tube wells (only about 50ft deep), for most domestic purposes including drinking. There are numerous small ponds in the village in very unhygienic condition. Water from even these ponds is often used for domestic purposes causing severe health hazards.
- Majority of the village people do not have access to sanitary toilets and people practice open defecation which leads to frequent gastrointestinal disorders.

- There is no primary health centre, nor any qualified doctor in the village.
- Somewhat paradoxically, although the level of awareness of health and sanitation in the village is poor among the elderly people in the village, a redeeming feature of the village is that, according to our study literacy and school attendance of the young generation of boys and girls up to primary level is good. But due to absence of any secondary school and higher education facility in the village or its neighbourhood, there are very few high school or college graduates in the village. In general, at present very few villagers have education above primary level.
- There is no electricity available to villagers although the power supply line goes over the village.

### **Specific Activities in the Study:**

- Preparation of water profile of the village: we have conducted a survey and testing of the availability and quality of water sources in the village. Although the tests have not covered all aspects, broad analysis of the results shows that water in the ponds is generally turbid, alkaline and not fit for drinking or bathing. Nonetheless, people are mostly indifferent to this potential problem and persist in polluting the water. Water in the tube wells are generally better.
- **Health awareness programmes:** Doctors interacted with village women and made them aware of how health is dependent on water and sanitation related behavior of people. Medical advice was given to patients suffering from anemia and anti-helminthic tablets were distributed to those who complained of worm infestation.
- Through a number of visits and intensive interactions with villagers, both male and female, villagers have been made aware of the crucial need for clean and sanitary personal habits, e.g., frequent hand washing, avoiding unclean water (e.g., shallow and pond water) for washing and bathing, especially for women who dip in the water for bathing, preventing cattle bathing in ponds, etc.
- Training villagers in simple ways of preventing pollution of drinking water at household level. Meetings were held in clusters and people were advised to store water in clean vessels with covers and not to dip hand and nails into the water while serving. Women were taught to use the method of sedimentation and decantation for storing water for drinking.

• A sit and draw programme on various aspects of water was organized for children below age 12 with a view to providing training and awareness. About Hundred and fifty children participated with great enthusiasm. Paper, pencil, rubber, sharpener and crayons were given to all the children (participants).

The brief and intensive programme helped initiation of a process of behavior change in this indigent community in Nikargachi. Continuation of the process should strengthen it. The programme was highly appreciated and people are eagerly looking forward to the development.

### Water, sanitation &health in Nikargachhi village





## Sit & Draw Programme for Children of Nikargachhi in different clusters

**Topic:** Uses of Water







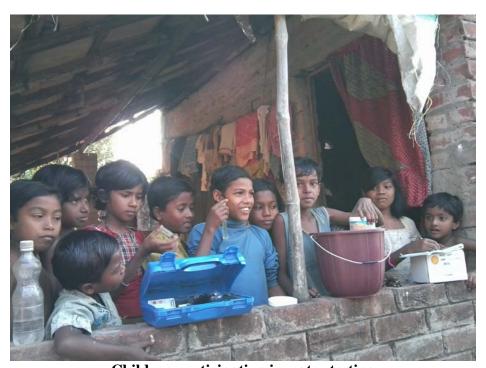
Villagers of Nikargachi



**Interaction with villagers** 



Dr. interacting with village ladies



Children participating in water testing