



10th WEDC Conference

**Water and sanitation in Asia and the Pacific: Singapore: 1984**

**Water, sanitation and rural women**

**Mrs A Mitra**

#### A) INTRODUCTION

This presentation attempts to highlight the problems of women living in rural communities in West Bengal, related directly or indirectly to water and sanitation, which affects the quality of their lives, their health, personal hygiene and their environment. It is a presentation of experiences of social workers in implementing rural welfare schemes which may be taken into consideration when planning rural projects.

#### B) RURAL WEST BENGAL, INDIA

This state is one of the few states in India where a variety of geological and climatic conditions exist which may broadly be taken as representing conditions prevailing in the eastern region of India. West Bengal is divided into 16 districts. There are 38,074 villages with a population of 3,344,978.

**WATER AND SANITATION. HOW IT AFFECTS THE RURAL WOMEN IN WEST BENGAL - SOME CUSTOMS AND HABITS.**

#### Water

In the hill areas of North Bengal villages usually consist of a cluster of houses located near springs and storage tanks. The community as a whole is not very organised. Women have to carry water in pitchers or buckets up steep tortuous paths.

Drinking water from surface and ground water sources are springs, streams ring-wells, tubewells and storage tanks. About 40% of the villages have tubewells. Some springs are now being arrested and the water stored, disinfected and conveyed to the rural areas.

Water shortage in summer causes great hardship. Women and children suffer from dysentery, diarrhoea and gastro-enteritis due to the pollution of springs, streams and storage tanks. It has been noted that villages with tubewells are not prone to these ailments. It is difficult for women to bathe and wash clothes due to water shortage in summer and the extreme cold in winter.

The water has high iron content. It is deficient in iodine content in some areas, leading to goitre. Iodised salts are often supplied to the markets by the Government departments.

In the drought-prone dry hard rock areas in

the plains, consisting of parts of 5 districts, women often have to walk very long distances to reach a drinking water source. Deep wells, ponds, lakes and rivers are the main source of water. Rig-bored tubewells are being sunk in large numbers by drilling through the hard underground rock formation.

Carrying water is the duty of the women who are quite aware of the need for safe drinking water from tubewells or deep wells. In some areas they spend upto 4 hours in a day for fetching drinking water. They use the water from the ponds, lakes, drying river beds and stagnant pools for lack of any other alternative.

It is the custom for rural women to have daily baths. Contaminated water causes skin diseases and eye infections. Gastro-intestinal diseases are common.

Another problem area is the saline zone in Southern West Bengal, consisting of parts of two districts, because both the surface and sub-surface water is brackish. Tubewells often have to be sunk upto a depth of 250 to 350 metres. Pond water is used for washing bathing and other domestic purposes. Deep wells and tubewells are the main source of drinking water. Two desalinization plants are now supplying water to about 140,000 people and more schemes are underway.

In the vast gangetic plains there are a large number of ponds and many wells but tubewells which supply safe drinking water are not within the reach of a large number of women.

The rural women in Bengal collect water in earthen, brass or copper pitchers. Buckets are also used. The commonly used container for drinking water is the earthen pitcher which also helps to keep the water cool. Drinking water is collected daily as water stored overnight is considered to be stale. The well is not merely a place for collecting water, it is also a place for pleasant discussions and enjoying some free time, away from domestic chores.

#### Personal hygiene and sanitation

Daily bathing is a ritual with rural women. They often go in groups to bathe in ponds where they also bathe their children, wash clothes, utensils and collect water for household use. Teeth are cleaned with soft branches of certain types of trees. Only

the right hand is used for eating and is always washed before and after meals. It is also a custom to wash the mouth after each meal.

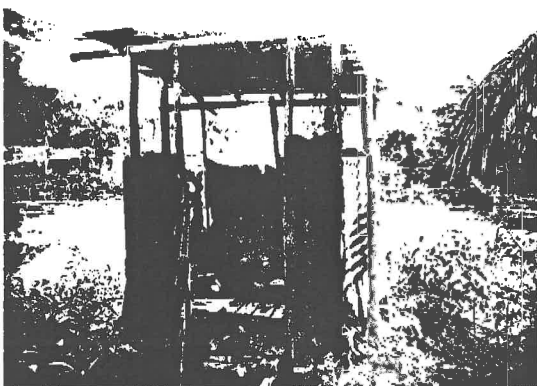
Houses and floors are kept very clean by the women and girls. Utensils are usually cleaned with ash. Household garbage is generally disposed of in the fields which also absorb the waste water. In some villages women's voluntary organisations working on the Gandhian principle of 'safai' or cleanliness, have successfully taught simple garbage disposal methods and channelling of waste water into kitchen gardens.

Women in the rural areas are handicapped by the lack of proper latrines. They often go in groups when it is dark for privacy. Some locations available for the use of the rural women are (a) Sheltered bamboo groves or any other area of dense vegetation near the house.



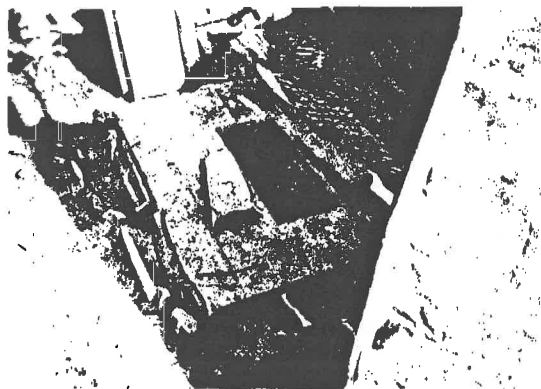
*Appropriate technology for latrine superstructure in a bamboo grove.*

(b) enclosed platform projecting over a ditch



*Latrine superstructure over a ditch.*

(c) trench latrines (d) various types of platforms over pits.

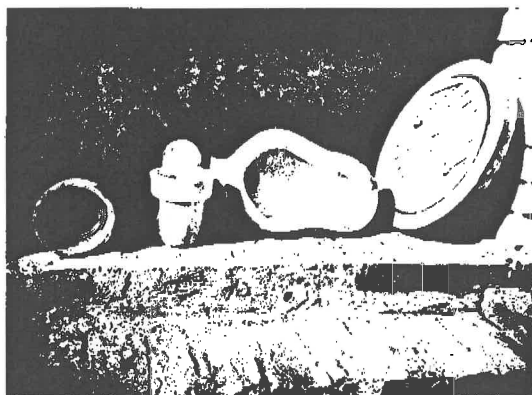


*Cement platform over a pit (discarded after filling pit with earth)*



*Sanitary latrine under construction.*

(e) Sanitary latrine with septic tank or (f) dug-well latrine with earthen rings lining the pit.



*Parts of a sanitary and dug-well latrine in rural areas.*

#### Health

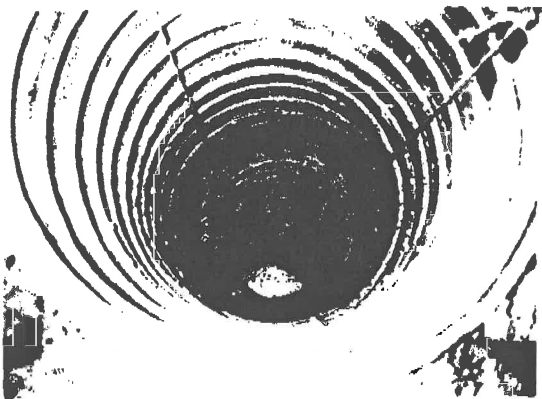
Given below is an analysis of the cases treated at a medical-care centre of the Women's Co-ordinating Council (WCC) which

is a voluntary organisation constituted of representatives of 78 major women's organisations in West Bengal. The medical centre covers children, nursing and expectant mothers of 5 villages and reports show that the most common problems are diarrhoea and worm infestation. 922 patients were treated during July to September 1983. 478 were cases of diarrhoea and 122 cases of worm infestation.

Others were treated for respiratory tract infections, conjunctivitis, skin infection and a few for infective hepatitis.

The women in these villages use safe tubewell water for drinking but as the number of tubewells are inadequate, water from ponds is used extensively. Various other factors contribute to the high incidence of diarrhoea such as, pollution of drinking water, contamination through hands, vectors, lack of sanitation, etc.

To illustrate briefly the water and sanitation situation in two of these villages - village A has 251 households, 6 tubewells, about 170 ponds, 31 sanitary latrines, population about 2,500. Village B has 151 households, 3 tubewells, 22 ponds and 10 sanitary latrines. There are about 40 latrines of indigenous types.



*Dug-well latrine pit lined with earthen rings.*

The pits for dug-well type latrines are usually upto 6 feet deep. In the above picture an over-enthusiastic villager has reached the water table !

#### PROGRESS IN RURAL WATER SUPPLY AND SANITATION. THE GOVERNMENT AND NON-GOVERNMENT ORGANISATIONS (NGOs) - A FEW FACTS

In West Bengal, under the Minimum Needs Programme about 70 piped water schemes were taken up to benefit nearly 500,000 people. A large number of tubewell and wells have been sunk. Under the Accelerated Rural Water Supply Scheme in 1977-78 a large number of schemes to supply water to problem villages have been taken up to benefit nearly 1,200,000

rural population. Over 60 drilling rigs are being used for sinking thousands of ribored tubewells in drought-prone hard rock areas. In spite of the progress made in drinking water supply, a large percentage of villages still do not have safe drinking water within reach due to many reasons which are outside the scope of this paper.

NGOs - There are about 300 voluntary organisations in West Bengal and many of them are working in the rural areas. A few NGOs have equipments, such as drilling rigs, and the technicians to implement a large number of water and sanitation schemes all over the state. Many women's voluntary organisations are based in rural areas to implement rural community welfare projects such as education, crafts-training for women, income-generating schemes, education in health, nutrition, hygiene and sanitation, medical care, family planning, water supply i.e. sinking tubewells, cleaning ponds and so on.

#### THE RURAL WOMAN IN THE DECADE PROGRAMMES.

If any significant result is to emerge from the International Water and Sanitation Decade emphasis must be laid on the role of the women in the community to ensure the success of the programme being undertaken.

During the International Drinking Water Supply and Sanitation Decade 1981-90, the target set by the Govt. of India for rural water supply is 100% and for rural sanitation is 25%.

Designing of low cost sanitation, the pour-flush latrine with two pit system, has been completed and pilot projects for installing sanitation in villages have been started in West Bengal. The smokeless chulla (stove) has been designed to reduce environmental pollution and training is being given to social workers to install them in rural households.

#### Community Participation

I have found community participation to be quite positive from my own experience in 3 districts while doing relief work through the WCC during the devastating floods in 1978. Just a few of us voluntary social workers with one resident staff representative of WCC successfully constructed several school buildings, a rural library, sunk tubewells, ran medical care schemes and vocational training centres for women. We have conducted surveys, family welfare, health, hygiene, water, sanitation and education schemes.

A few steps to ensure village involvement is to (a) involve local bodies and the district administration for good co-ordination (b) hold several discussions and meetings with the local bodies and invite all interested villagers to participate and formulate

development programmes based on the immediate needs of the community (c) involve active village workers, including women, to supervise and be responsible for projects (d) ensure participation of the women by making medical care, vocational training and other income generating schemes a part of all water and sanitation programmes.

Providing safe drinking water within a reasonable distance should be the first on the list of priorities. Women's priority is always adequate water supply. Other developmental programmes come later.

Village level community participation for water supply is very good. Villagers legally donate their land for sinking tubewells and wells. They are also prepared to give their labour. But a simple maintenance system must be clearly laid down which is relevant to the situation in each area.

Women are careful with the hand pump so that it does not go out of order. Many villages have people who can repair the pumps women can also be given training in basic repairs.

House-to-house survey and education programmes are very effective. House visits and discussions with the women help in planning a realistic programme based on the needs of the village community. It also encourages women's participation.

Women are receptive to the idea of a well planned sanitation system after they have been educated by social workers through house-to-house education, but men are often not receptive. The reason is usually economic. The basic needs of food, shelter, repairs, farming or perhaps constructing a cowshed takes priority over the construction of a latrine.

Financial constraints are also the main obstacle for voluntary organisations trying to implement water, sanitation and other rural development projects.

Waste water disposal systems, hygienic storage of drinking water anti-pollution schemes such as smokeless stoves etc. are used by the women. The women must feel the need for these facilities and believe that they will improve the quality of her life. Only then will she see to it that the latrine is kept clean, the drain that carries the waste water is kept free from clogging, the smokeless stove is kept well repaired.

A common cultural problem is the excessive reserve attached to all private functions which prevents open discussion on the problem of waste disposal. This attitude can be overcome by women social workers

or voluntary organisations who are located in the area and have developed rapport with the women.

Water supply schemes should include intensive education of the women in storage and purification of water. Simple storage methods should be used such as fitting taps to the earthen pots to avoid pollution.

Education programmes must include home sanitation i.e. correct storage of food and water, disinfection, prevention from contamination, prevention of air pollution and the use of chemical and other water purification aids.

Education programmes should include visuals for maximum impact. However, the reaction of women to the picture and posters should be tested first through social workers. A poster showing a golden coloured healthy child to the rural women may only represent a child with jaundice !

Mass media such as the radio and local folk entertainment media such as puppet shows, drama etc. can be very effective.

In order to reach the rural women, schemes sponsored by the Government for training village-level workers are being run by voluntary organisations at 16 centres for groups of 50 trainees from different blocks. Their training includes water, sanitation education as well as basic health and hygiene, nutrition, education and child care.

Water and sanitation schemes should not be planned in isolation, but as a part of a project for the welfare of the community as a whole.

Both preventive and curative measures must be included for improving the general health of the village community.

The curative measures such as medical care ensures the immediate response and involvement of the community.

Every household must accept sanitation programmes for it to be successful. There must be freedom and flexibility to modify programmes to suit different areas and conditions.

In conclusion, rapid strides have been made in recent years in water supply and sanitation technology, but, if the decade programmes are to actually benefit the rural women success of the programmes should be measured in terms of improvement of her health, the health of her children and family the environment and the quality of her life.