

EXECUTIVE SUMMARY

For more than 17 years, Swasthya Bhabna Welfare Society (SBWS), led by Dr. Pradip Kumar Das, have carried out dermatological community medical training and consultation in different parts of West Bengal in India..

Title of the Project:- Project proposal for water treatment to mitigate arsenic pollution in different arsenic affected villages under seven districts (North 24PGS, South 24PGS, Malda, Murshidabad, Nadia, Burdwan and Hoogly) of West Bengal

Dr. Pradip DAS

Swasthya Bhabna Welfare Organization



Project team members mentioned in the application

Dr. Suhas Bhattacharya, Dr. Sourav Dhara, Dr. Kathakali Chatterjee, Dr. S. K. Laha

The problem of arsenic is reported to have alarming levels in the ground water in nine districts of West Bengal. As per reports 560 villages are affected, more than a million people are at risk. Thousands are suffering from arsenic induced skin lesions that might develop into cancer. Arsenic in ground water has been found above the Bureau of Indian Standards (BIS) and WHO's maximum permissible limit of 0.01PPM. Average concentration of arsenic in most of the Tube well water of affected villages is about 0.20PPM, rising upto as high as 3.7 PPM, in some villages. This catastrophic situation could potentially effect an area of 37,000 sq.km and a approximately a population of 34 million. As no systematic investigation has been done till date, may be a larger population is actually

at risk. The source of arsenic is geological with high levels of arsenic in basement rocks. The problem is aggravated by over-pumping of ground water and inadequate treatment facilities. People in West Bengal dug wells to draw water from aquifers anywhere upto 150 metres below ground level. To produce three to four crops a year, thousands of tube wells were installed and this have aggravated the problem to a large extent.

Objectives of this project: are to establish community groups to take action on arsenicosis as a sustainable community institution, to improve drinking water quality in arsenic affected areas through ground and surface water treatment and rain water harvesting, to increase prevention of arsenicosis and its dermatological complications through improved community awareness, diagnosis and treatment and to arrange for self income generation / self dependence amongst the arsenicosis affected patients.

Project beneficiaries- Target groups here represent the population which is already or at risk of arsenic contamination. The benefits of the project are to reach out to the entire community irrespective of caste, creed, gender and economic status. Although water is there in plenty in West Bengal, there is a definite paucity of safe and portable water. This project is therefore expected to focus on this basic needs of the people in arsenic affected villages under seven districts of **Paschimbanga (North 24Prgs., South 24Prgs., Malda, Murshidabad, Nadia, Burdwan & Hooghly)**. With the improvement of the drinking sources in the villages, everyone will have a decent living condition and will contribute to economic growth. The condition of women and specially girl child will improve and this will help in improving gender equity.

Challenge:- Rapid/realistic assessment of magnitude of the problem, Diagnosis and treatment of arsenic affected population/population at risk, Supply of safe water to affected population/population at risk, Creation of mass awareness

Project Overview :- The condition of women and specially girl child will improve and this will help in improving gender equity. The role of the women in this project will be self-sustaining 'community group leaders' These community groups become actively involved in preventing and reducing Arsenicosis. Overall sustained environmental development and better quality of women's life assured in the arsenic affected areas by socio-economic upliftment of the women (savings from expenses on health diverted to productive activities). Self income generation schemes will be taken for the young girls and house wives through different types of SHG

training for upliftment of their present strata of financial structure through this project works. The money collected through user's fees for the sustainability of the project will be deposited either in the Post Office or in the Nationalised Bank or Co-operative Bank will be operated by the President, Secretary and Treasurer selected from the Women members of the village.

Project Length : 12 months

Success Criteria and Evaluation :- Training community mobilisation and awareness and local medical personalities, Basic Water testing, Alternative water supply, Rain water harvesting, Health Extension, Prevention of Arsenic related Dermatological complications and other health hazards, Suggestive Arsenic Mitigation measures to be adapted on community & house hold



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