

1. INTRODUCTION

Arsenic is omnipresent inside the earth. Arsenic that comes to the surface through exploitation of nature, such as agricultural irrigation withdrawing underground water, geothermal power plants or mining, has seriously contaminated the environment in Asia. Groundwater is the main source of drinking water in India and Bangladesh. In the early 'eighties, arsenic contamination of groundwater was detected in six eastern districts of West Bengal, India. The arsenic concentration in groundwater in these districts ranged from 0.06 mg/l to 1.86 mg/l, far in excess of WHO's drinking water provisional guideline value of 0.01 mg/l. It is estimated that over 150 000 people are affected by arsenic and are suffering from 'arsenical dermatosis' (black spots, eruptions and even cracking of skin). Similar problems have also become apparent recently in Bangladesh in the areas bordering India, but their geographical extent is yet to be defined.

In India both the state governments and the central government initiated several actions in the past to mitigate the effects of arsenic in drinking water. These included the establishment of working groups and an expert committee, and the launching of a major water supply project. The governments also identified the sources and causes of arsenic contamination as well as its impact on public health, developed water treatment methods for arsenic removal and recommended measures needed to supply arsenic-free drinking water to populations at risk. Services of several experts from India's specialized agencies and research institutions were used in these endeavours.

Recognizing the gravity of the situation resulting from arsenic contamination of drinking water in Bangladesh, the Government in October 1996 convened a special high-level interministerial meeting and constituted a National Steering Committee with the Minister of Health as the Chairman. Various international and donor agencies offered assistance. WHO also supported the visit of a special mission to assist the Central Government and the State of West Bengal, in India, in August 1996 and technical support was provided to Bangladesh through WHO consultants in the last week of April 1997.

As it was felt that the two countries facing arsenic contamination of groundwater would benefit from each other's experiences, a regional consultation on "Arsenic in Drinking Water and Resulting Arsenic Toxicity in India and Bangladesh" was convened at New Delhi, India, from 29 April – 1 May 1997. The consultation brought together key scientific and technical persons from Bangladesh and India as well as international experts for extensive discussions on arsenic problems. A 20-Step Action Plan for achieving the objectives of providing immediate relief to the victims and developing long-term measures for effectively addressing this major public health issue was the outcome of the consultation.