

Water, Sanitation And Health: Role Of NGOs

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THE Alma-Ata Declaration in 1978 which identified Primary Health Care (PHC) as the key to attainment of Health For All (HFA) by the year 2000 AD, including the provision of safe drinking water and adequate sanitation as one of its eight essential components.

The availability of safe and adequate drinking water and sanitary measures has a direct bearing on people's health. Therefore, the provision of safe drinking water and proper disposal of wastes is a pre-environmental control measure against the transmission of most water-borne diseases. This relationship is in evidence in many research studies which show that over 75 per cent of all diseases in Bangladesh are related to unsafe water supply and inadequate sanitation. Moreover, water-borne and water-related diseases are responsible for high infant/child mortality and poor quality of life. The causal relationship between unsafe inadequate water and diseases is illustrated in the prevalence of the following diseases.

★ Gastroenteritis and diarrhoeal diseases are largely preventable if safe water and adequate sanitation are made available.

★ Typhoid and paratyphoid fever, which are quite common in our country, likewise, can be traced to contaminated public water supply and unsafe food.

★ Sometimes even cholera (El tor), also results from contaminated water and poor sanitation.

★ Infectious hepatitis can be traced also by contamination of drinking water and food.

★ Amocblasis, which is rampant throughout Bangladesh, can also be eliminated by ensuring clean water supply and proper excreta disposal.

★ Intestinal parasites come through faecal pollution of the soil.

★ Malaria, Filariasis and some other vector borne diseases share a common condition—water as the medium in which their vectors breed.

Unlike any curative medical interventions such as antibiotic treatment, surgery and emergency care, which do not depend on long term behavioural change to bring back or to improve health, water related interventions; however, require for sustained behavioural change over time on the part of all members of the community in order to have a positive impact on health.

Opportunities for contamination

of water arise at many points: at the water sources, during transport and storage, and in use. While technologically improvement/interventions in water supply and quality can be made, these perhaps will not be effective by themselves. Some of the behavioural obstacles to clean, and safe water as well as programme issues that affect the success of efforts to overcome these obstacles are discussed below.

Water And The Source: Communities obtain water from below the ground (wells/pumps) on the surface (rivers, ponds, springs) and above the ground (rain). The source of water determines the opportunities for its contamination. For example, water from ponds, stream, and rivers may contain parasites or may become contaminated with bacteria when water in the immediate area or upstream from the community is used for washing the cloths, watering livestock or disposing of human waste although water from below the ground is the safest, it can be contaminated if a latrine placed less than 30 metres away from that source. Disposal of human waste is a key issue in protecting water at its source. Human waste disposal behaviours often depend on deep-rooted cultural values as well as cost, convenience and comfort.

Even when the source is protected, water still may be contaminated when dirty containers or dipping utensils are used during transport, and storage. In addition, water stored in an uncovered receptacle may be contaminated easily by insects, dirt of other debris. Utensils used to remove water may stir of sediments from the bottom. Use of a container with a spigot placed above the sediment levels will help prevent

this problem.

Water use determines the necessary standard of cleanliness. Water used for bathing and washing requires the least degree of cleanliness, water used for drinking and food preparation must be free of parasites and viruses and largely free of harmful bacteria. Water for external use need not be completely free from disease causing organisms. Water for internal use should be as clean as is economical and feasible over time. The simple behavioural interventions that make water safe for bathing and washing may not be adequate for drinking or food preparation. Water that has been allowed to stand for an extended period of time has reduced levels of bacteria and may be safe (to some extent) to drink. It may, however, still contain harmful organisms, making further interventions such as filtering, boiling or chemical treatment necessary.

Categories of water and sanitation related diseases—behavioural issues:

i) **Water-borne diseases:** Spread by contaminated water or dirty hands. (Example: typhoid, cholera, dysentery, hepatitis A gastroenteritis).

Behavioural issues—Unsanitary food preparation.

Unsanitary methods of washing and drying dishes and utensils.

ii) **Water-washed diseases:** Aggravated by insufficient water for washing. (Examples: scabies, lice, trachoma, conjunctivitis).

Behavioural issues: Unhygienic practices in bathing and washing cloth.

iii) **Water-based insect/vector transmitted diseases:** Carried or transmitted by insects or animals living or breeding near water. (Examples: malaria, filariasis, dengue, guineaworm, yellow fever.

Behavioural issues: Time spent at in or near unprotected traditional water sources, presence of insects in homes and compounds. Methods, of collecting, storing, and using water.

iv) **Sanitation-related diseases:** Spread via unsafe human or animals waste disposal (Examples: hookworm, tetanus).

Behavioural issues: Unsanitary disposal of human waste. Presence of animals and their waste in living areas.

Unprotected feet.

Role of NGOs: The NGOs can play a very vital role in relation to the problems of water and sanitation in Bangladesh. The role of NGOs in these endeavours should not only be to merely provide water and sanitary facilities to the community, but also must make the people aware about the greater implications of such problems and motivate them to use and maintain these facilities. The specific role of the NGOs in this regard should therefore be the following:

• Pass on the concept of safe water and sanitation to motivators and the community;

• Advocate use of safe water and sanitation as a way of life and means to improve health, economy and better quality of life;

• Make water and sanitation an integrated part of any development activity;

• Train local people to maintain/repair these facilities;

• Organize training/orientation course at various levels directly relevant to the programmes of water and sanitation.

• Produce health education materials in local/regional languages for promoting awareness among people about water and sanitation.

—Public Health Dialogue/VHSS.