# Essay on Arsenic Problem in Bangladesh

Hints: Introduction, What is Arsenic? Arsenic in Bangladesh, Effects of Arsenic, Causes of Arsenic Contamination, Steps to Solve the Problem, Conclusion.

#### Introduction

Arsenic which is called the silent killer is a new but the most dangerous problem of our country. It has come out just at that time when most people of our country have developed the habit of drinking tube-well water to save themselves from water-borne diseases. 80% of people of our country live in rural are areas depending on ground water. But, arsenic has been found at an unacceptable rate in tube-well water in many parts of Bangladesh. So, it has become a matter of great concern for our country. According to the opinion of The New York Times, arsenic contamination of Bangladesh is the greatest mass-poisoning of world history.

#### What is Arsenic?

Arsenic is a poisonous mineral substance. It has no color, smell, and taste. Arsenic is a compound of more than 240 minerals. It could be found in all-natural reservoirs but is commonly found in groundwater. Arsenic is not harmful up to an acceptable limit which is. microgram per liter. If it exceeds this limit, it becomes a poison for its users. WHO has recommended this limit.

# Arsenic in Bangladesh

The problem of arsenic contamination was identified in 1993 by DPHE at first in Champai Nawabganj. But, it was not disclosed at that period. Later, in 1996, Pabna Community Clinic organized a "Health

Camp" where Dr. Saiful Kabir of Dhaka Community Centre identified some patients who were suffering from arsenic contamination. Since then, it has taken a severe turn in many parts of Bangladesh.

At present, arsenic has been found in 59 districts out of 64. In some districts, it is several times more than the limit given by WHO. In Narayanganj, it is found that level of arsenic is mg/liter which is 20 times more than the WHO limit. Another survey reveals that 44 districts of Bangladesh have been affected by arsenic and 220000 people are supposed to be at risk. Dhaka Community Hospital and the Jadobpur University of West Bengal organized a joint survey in 1997. They examined 9089 tube wells in 60 districts and found arsenic in 85% tube-well water. So, it is clear that arsenic has spread all over the country more or less.

#### Effects of Arsenic

Arsenic is a poisonous substance. It takes 7/8 years to show symptoms of arsenic-created diseases. Then there remains nothing to do. Besides, no proper treatment of arsenic-based diseases has been invented. But, a very small portion of arsenic may be dangerous if it exceeds the minimum acceptable limit. Hyperpigmentation, depigmentation, keratosis are commonly reported symptoms of chronic arsenic exposure. Arsenic creates various types of skin diseases including cancer. Besides, it may create disease in the liver, kidney, and lungs. It may create gangrene in the hands and legs also. Arsenic-based diseases are not contagious ones. Only taking more arsenic is liable for these diseases. But, villagers of Bangladesh do not want to understand it. They do not want to participate in any function with an arsenic-affected person. So, arsenic contamination is a social problem also.

## Causes of Arsenic Contamination

It is normal to find arsenic with water, soil, etc. up to a reasonable limit. But, in Bangladesh and some parts of West Bengal, arsenic is being found exceed-ing the reasonable limit. Once, it was assumed that Farakka Barrage" is liable for this pestilence-like hazard. Because arsenic was found in some districts of West Bengal and Rajshahi division at first. Now it is observed that almost 3/4ths of areas of Bangladesh are suffering from arsenic contamination. So, it has been proved that only "Farakka Barrage" is not liable for arsenic contamination. Some specialists believe that excessive use of groundwater may be the cause of arsenic contamination. Actually, it is still unknown what the reasons behind this are.

# Steps to Solve the Problem

Realizing the urgency of mitigation of the arsenic problem, the Bangladesh government has taken some positive steps. The government has formed a" National Arsenic Committee" headed by the Health Minister and a" Steering Committee" headed by the Health Secretary. UNICEF and some NGOs are helping the government to solve the problem. A project of 60 million dollars has been taken with a loan of \$ 42 million from the World Bank while technical assistance will be given by various donor agencies. With the material supports of donor agencies and NGOs namely BRAC, GRAMEEN BANK, DHAKA COMMUNITY HOSPITAL a program has been taken to find out a permanent solution by identifying some steps.

#### These are as follows:

A patient and groundwater study will be organized to find out the extent of the problem and its causes.

Detailed geological and hydro-geological investigation will be carried out.

Tube-wells which are not yet contaminated will be identified.

Steps should be taken to use alternative sources of water i.e. surface water, rainwater, etc.

Public media will put on special programs to increase mass awareness regarding the arsenic problem.

To arrange treatment of those people who have already been affected by arsenic contamination.

Research works have to be done to trace out the real causes and proper solutions to the arsenic contamination problem.

### Conclusion

The arsenic contamination problem is a natural calamity. We, the Bangladeshi, have faced many other natural calamities boldly. So, there is nothing to be frightened about. UNICEF and NGOs are trying their best to solve this problem. Besides, it is not a problem for Bangladesh only. West Bengal, Japan, -Brazil are also suffering from this problem. So, if we can move jointly, it would be easy to find out a solution.