

## **SUMMARY OF THE FINDINGS**

### ***STUDIES ON QUALITY OF WATER IN SELECTED AREAS OF BELTHANGADY TALUK -- A SPECIAL REFERENCE TO HEALTH***

Each person has a fundamental and inalienable right to healthy environment. Environmentalism is a fairly new movement in the world. It is getting top priority in national policies among the developed and developing countries. We know that three basic amenities for living organisms are air, soil and water.

Water is the most essential material for survival and propagation of life on earth. Survival of plants is not possible without water. Water in abundance is required for domestic use, agricultural activities and industries. Human activities have polluted much of this limited quantity of water. Rain water on its way down to earth also brings number of air pollutants which mix with water on the ground and pollute it. In addition to this, various pathogenic micro-organisms may enter the water along with sewage or other wastes. These micro-organisms, mainly bacteria and viruses can cause various diseases.

Thousands of families residing in the taluk make use of water for domestic purpose and agricultural activities from open wells, ponds, lakes and small rivers. Most of the people residing in this rural area are uneducated and not aware of the importance of the quality of water. At the same time they wash their clothes, domestic animals, the equipments used for agricultural

purposes etc., near the water resources. And they dump some domestic wastes near water bodies. The result of all these is water pollution. We know that about 80% of the diseases are caused due to making use of polluted water. With this in view, it is planned to take up an investigation in this direction.

Physico-chemical analysis was done twice in a month, to know the quality of water from different sampling stations. Suitable standard methods of APHA were used for physico-chemical analysis. The study period was divided into three periods pre-monsoon (February to May); monsoon ( June to September ) and post monsoon ( October to January ). Water samples were collected from various stations from October 2008 to September 2009, periodically twice in a month. The standard prescribed methods followed for the analysis of water sample (APHA, 1995). Physico-chemical parameters of the study site have been comprehensively analyzed. The physico-chemical parameters determined and analyzed are water temperature, turbidity, PH, alkalinity, free carbon dioxide, total hardness, dissolved oxygen, nitrates, sulfates and total dissolved solids. The data determined are compared with drinking water quality standards (BIS and WHO). It is observed that the physico-chemical parameters determined from the different sampling stations are much below the maximum permissible limits. Hence, water is suitable for drinking purpose as per the norms of BIS.

No environment issue can be addressed unless society to understand it and demand that its decision makers deal meaningfully with it. The people residing in this area are educated about importance of water and its quality.

They are also advised not to wash clothes, animals, automobiles etc., near natural water resources. Villagers are informed about the impact of environmental degradation and sustainable conservation of water resources. The farmers are educated for judicious utilization of chemical fertilizers to prevent the environment of water through nitrogenous and phosphate derivatives. The use of pesticides should be avoided to the maximum extent possible. However, if necessary the required minimum effective dose of least hazardous pesticides should be used against the target organism. Awareness Programmes are organized to villagers to create awareness about proper sanitation for prevention and control of pollution in water sources. In this manner awareness is created in rural uneducated people on the impact of water pollution and on the potential hazardous of using polluted water for drinking.

**Dr. Vishwanath P.**  
Principal Investigator

Ujire - 574 240  
**Ms Nanda Kumari K P**  
Co-investigator

**Dr. B. Yashovarma**  
Principal  
SDM College(Autonomous)