Chapter - VI

Conclusion
Conclusion:

From the physico-chemical and bacteriological analysis of drinking water, it has been observed that all the water sources were unfit for drinking purpose. Dug Wells and hand pumps have maximum T.D.S., Salinity and Hardness recorded. Dug wells are open at the top and are direct contact with atmosphere and surrounding area. Bacteriological examination of water from Amravati and Akola district shows 52% and 69% non-potability respectively. Water from this area is unfit for drinking purpose and various water born diseases profoundly occur in the community. The main cause of water contamination is the improper sanitary condition surrounding the water sources. Most of the villages water used for drinking purpose from bore wells and water supply agencies which is already contaminated. Drinking water problem is in summer season due to scarcity of water and inadequate water supply.

On the basis of study conducted from saline belt villages, physico-chemical parameters of drinking waters was maximally above the permissible limit. Such as Salinity, T.D.S., Chloride and hardness are the parameters mainly very high than the considerable limit and water becomes non-potable. Due to the lack of other water sources people have to use such water for drinking purpose. Many of the villages totally depend upon tube well and open well. Because of Salinity water becomes too salty and having bitter taste. Most of the villages still today depends upon river water for drinking purpose specially in summer season and where water found not fit for human consumption.

The list of villages of having very high T.D.S., Chloride, Salinity and hardness were specially noted and there is urgent need to make alternative supply of pure and safe water to villages by government and non-government organization. In such villages desalination of
water is also needed. In rainy season there is need to harvest the rain water in lakes which is today’s necessity.

On basis of study the following general recommendations would be employed to improve the quality of drinking water from salinity-affected villages.

**General Recommendations:**

- Maintain the proper hygienic conditions while using drinking water.
- Construct a wall around the well with proper drainage facility.
- Use only one bucket to draw water from the well and keep this bucket clean.
- Do not bath and wash clothes just beside the water sources so that waste water cannot drain back into the well or others sources.
- Keep surrounding clean and animals away from the well.
- Hand pumps and Tube wells needs to be properly operated and maintained to supply of safe water for drinking purpose.
- Frequently bleaching of drinking water should be done by Grampanchayat or by Government agencies to avoid water born diseases.
- There should be a regular washing of storage tank or containers.
- There should be no sewage disposal near hand pumps and wells.
- Hand pumps and wells should be located at higher elevation and safe distance from installations such as pit, Latrines and agricultural fields
- Microbiological study of water should be carried out regular intervals and need to design a Health Educational Program with respect to Environmental sanitation and safe drinking water supply.
- If there is no latrine available, it is important to dispose carefully faces by burying or by covering to prevent contact from flies and animals, which may lead to water contamination.
- If possible, keep the well covered when it is not being used.
- Excessive or indiscriminate use of chemical fertilizers should be avoided for agriculture, which increases salinity of soil and water. Traditional water harvesting in lakes in rainy season is must which can provide water having minimum physiochemical properties.