

## WATER

#### Key messages

- Water is life, be economical with it.
- The amount of water in the world is limited.
- Lack of access to safe water and sanitation has many serious repercussions (refer to water borne diseases).
- Without safe water, sustainable development is impossible.
- The disease burden due to unsafe water and waste water disposal is very high in developing countries.
- There are several main effects of water scarcity:- climate change and increased utilization.

#### What you need to know about the community

- What are the different water sources/ technologies within the community?
- The availability of the water sources in the community.
- How adequate and constant are the water sources?
- What is the water quality at the sources?
- Who owns the water resources?
- Are the water sources protected from contamination?
- What is the operational status of the water sources?
- What are the conditions of the water sources and the cleanliness of the surrounding?

### What you need to do in the community

- Talk to the elders, leaders and community at large about their need for safe water.
- Together with the community, identify the existing sources that need to be improved and also explore the alternatives for new sources.
- For the existing sources, help the communities to identify areas of improvement.
- For the new sources, help the community to identify the most suitable water technology that they would want in their community.
- Assist and encourage the community to weigh their choice of technology versus costs.
- Help the community to come up with a criterion in which they will participate



in, to come up with the new water sources.

- Help the community to identify the local resources that are available to improve and/or to build new sources.
- Identify the types of contribution that the community is willing to contribute.
- Help the community to identify different types and sources of water pollution and how they can be stopped.

#### What you should know and do on water quality

- Water quality is mainly defined by its chemical, biological and physical characteristics.
- Water quality control is important because it protects public health.
- Assist the community to come up with ways on how to improve water quality.
- Work with the community to tackle difficult water quality problems such as storm water pollution and urban water run off.
- Help the communities to come up with simple treatment measures that can be undertaken to improve water quality at household level.

#### Water borne diseases

- Assist the community to describe water borne/related diseases. (Refer to table on page 15).
- Help them to identify water borne/related diseases within their community and how they are caused/transmitted.
- Identify together with the community different effects of water borne diseases.
- Help the community to come up with different ways in which these diseases can be prevented.

#### Water technology

- Help the community to identify characteristics of different low cost technology options that they can afford.
- Assist the community to come up with criteria/ factors that they will consider to come up with a suitable technology for the community. (Use water ladder)
- Help the community to identify the advantages and disadvantages of each technology identified.
- Encourage the community to choose technologies that are manageable and technically sustainable (e.g. locally sourced materials, easily available spare parts).

#### What to consider when constructing a water point

- A water point should be strategically placed at a central place.
- Ensure the location is not liable to flooding or pollution from upstream sources.
- The land on which the water point is located should be owned by the community. If the land is privately owned, access rights for all should be secured in a written agreement.
- The water point should be located on a secure site. The safety of women and girls while collecting water is not compromised.

# What to consider while siting water points in relation to latrines, septic tanks and sewer lines, grave yards, animal karals /houses

- Harmful bacteria take 50 days to die when travelling in the soil. They therefore pose a contamination threat if they reach the water table in less than 50 days after travelling from the source of pollution. For example, if bacteria takes 10 days to travel through underground soil to reach the water in a shallow well, then this possess a contamination threat.
- To prevent bacterial contamination, there should be a minimum distance of 30 metres between water points and sources of pollution e.g. latrine, septic tank and sewer lines.