

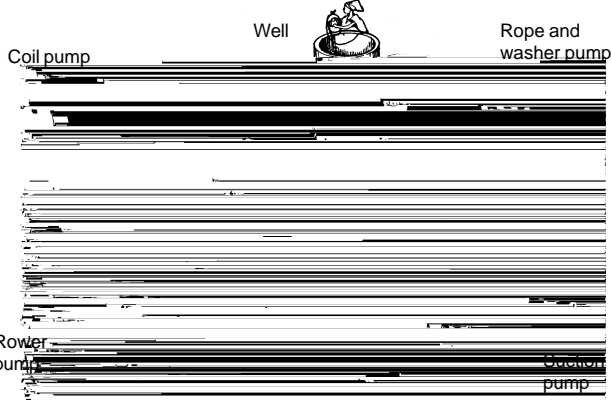
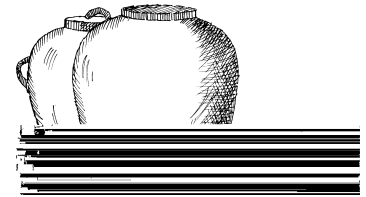
Water

Water is essential for life, but for many people, the quantity of water available may be minimal, and the water may be of poor quality. This Technical Brief outlines some of the issues which need to be considered when planning improvements to supplies, to ensure that the most appropriate sources of water are selected.

The most common sources of water are: ■ rainwater ■ surface water ■ groundwater

Rainwater

Collecting rainwater from the roof of a building is a simple and effective way of obtaining water. It is important to ensure that the water is collected from a clean surface and that the collection system is well maintained. Rainwater can be used for a variety of purposes, including drinking, cooking, and irrigation.



Surface water

Surface water is water that is found on the surface of the earth, such as rivers, streams, and lakes. It is a common source of water for many communities. However, surface water can be contaminated by pollutants and may not be suitable for drinking without treatment. Surface water can also be affected by changes in land use and climate.

Groundwater

Groundwater is water that is found underground in the soil and rocks. It is a common source of water for many communities. Groundwater can be contaminated by pollutants and may not be suitable for drinking without treatment. Groundwater can also be affected by changes in land use and climate.

Water from mountain springs

Water from mountain springs is water that flows naturally from the ground in mountainous areas. It is often of high quality and is a common source of water for many communities.

Shallow wells

Shallow wells are wells that are dug into the ground to a depth of less than 100 meters. They are often used to obtain water from the water table. Shallow wells can be contaminated by pollutants and may not be suitable for drinking without treatment.

Shallow or deep boreholes

Shallow or deep boreholes are wells that are drilled into the ground to a depth of more than 100 meters. They are often used to obtain water from deep aquifers. Boreholes can be contaminated by pollutants and may not be suitable for drinking without treatment.

Letting rainwater from the roof of a building is a simple and effective way of obtaining water. It is important to ensure that the water is collected from a clean surface and that the collection system is well maintained. Rainwater can be used for a variety of purposes, including drinking, cooking, and irrigation.



Selecting a water source from the existing sources

Socio-political and economic considerations

Socio-political and economic considerations are important in the selection of a water source. These considerations include the social and economic impact of the water source, the cost of the water, and the availability of the water. The selection of a water source should be based on a comprehensive analysis of these factors.

Women and water

Women and water are closely linked. Women are often responsible for the collection and distribution of water in many communities. The selection of a water source should take into account the needs and preferences of women.

The selection of a water source should be based on a comprehensive analysis of the socio-political and economic factors, as well as the needs and preferences of women. This analysis should include a detailed assessment of the water source, the cost of the water, and the availability of the water. The selection of a water source should be based on a comprehensive analysis of these factors.

Water quality

Water quality is a critical factor in the selection of a water source. The water source should provide water that is safe for drinking and use. The selection of a water source should be based on a comprehensive analysis of the water quality, including the presence of contaminants and the level of pollution.

Operation and maintenance

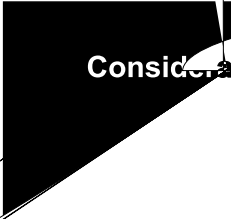
Operation and maintenance are important factors in the selection of a water source. The water source should be easy to operate and maintain, and the cost of operation and maintenance should be low.

The selection of a water source should be based on a comprehensive analysis of the operation and maintenance factors, as well as the socio-political and economic factors, and the needs and preferences of women. This analysis should include a detailed assessment of the water source, the cost of the water, and the availability of the water.

Yield versus demand

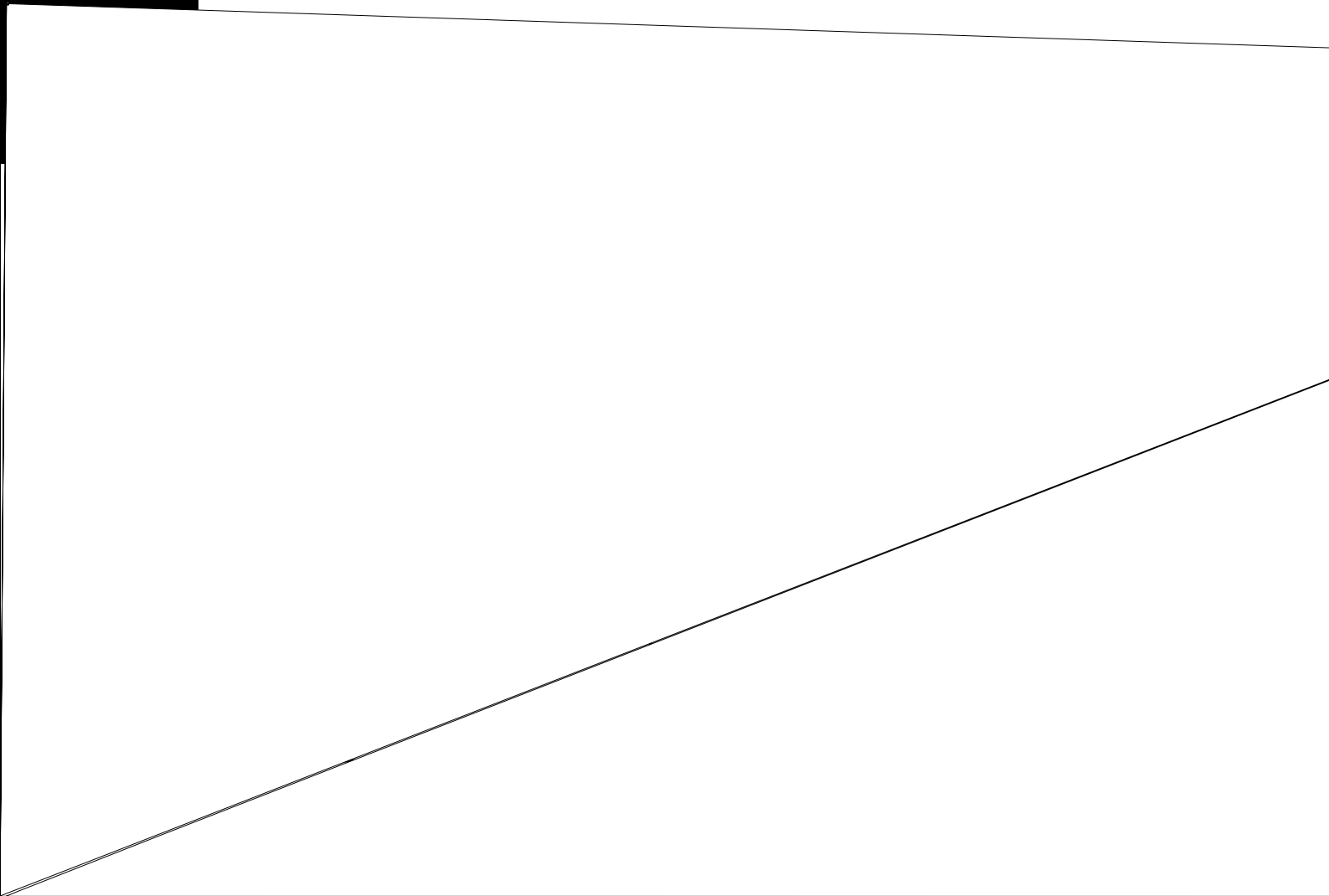
The yield versus demand is a critical factor in the selection of a water source. The water source should provide water that meets the demand of the community. The selection of a water source should be based on a comprehensive analysis of the yield versus demand, including the level of demand and the availability of the water.

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love



Consider

on of a range of factors. The illustration below highlights some of these. It may be that
ment. In other cases, a new source or sources may have to be developed.



Further reading

Anderson, A., O'Connell, C., Tait, J. et al.: *Controlling the risk of infection in the workplace*, *Work*, V. 13, No. 2, ITP, 1994.

Brake, F., Bracken, M., Vass, T., Smith, J., *Liability: The Control of Occupational Medicine*, *Work*, V. 13, No. 2, ITP, 1994.

Wright, S., *Work and Health: Occupational Health and Safety*, ITP, 1994.