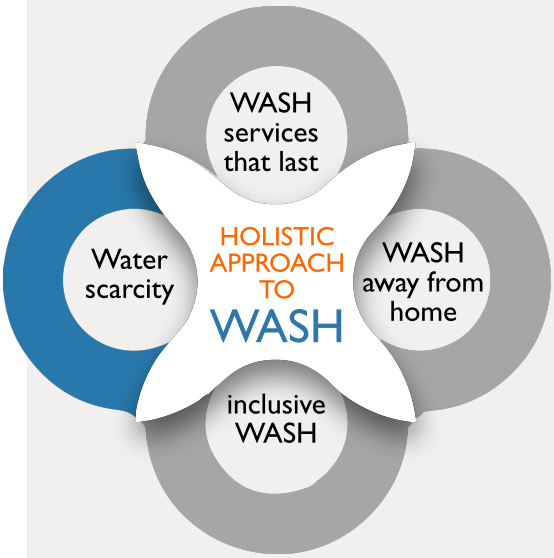
World Vision Middle East and Eastern Europe Region (MEER)

WATER SCARCITY

OUR APPROACH



The Middle East has experienced many environmental concerns lately. Water resources are becoming increasingly scarce, especially for the millions there who already lack access to sanitary water. Some of these countries, including Jordan, Iraq and Lebanon are facing severe problems that require global and immediate attention. Beside their neighbouring location, one shared factor of all these countries is their lack of water resources and poor water management.

Water shortage has become an increasingly difficult problem to manage. Given the many political, institutional and socio-cultural conflicts and tensions this region is facing, water scarcity simply adds an additional volatile dimension to an already fragile part of the world. Although the population is not that larger in terms of numbers, the global implications are very significant. The imbalance between supply and demand, along with persisting issues such as climate change and exponential population growth, has made reflecting on water reuse a necessary method for conserving water.

Ironically, the Middle East has some of the largest oil reserves in the world, which produces most of the area's wealth. Even so, the region's climate and environment make living harsh. The Middle East requires water resources for its people as well as to maintain the suitable land for agriculture. Water conservation through water, sanitation and hygiene (WASH) schemes is a critical element which includes policies, strategies and activities that are made to sustainably manage the natural resource fresh water, to protect the water environment, and to meet the current and future human demand. Population, household size, and growth and affluence all affect how much water is used. Factors such as climate change have increased pressures on natural water resources especially in manufacturing and agricultural irrigation.

OUR GOALS AND ACTIVITIES FOR WATER SCARCITY

WATER CONSERVATION

Ensuring availability of water for future generations where the withdrawal of freshwater from an ecosystem does not exceed its natural replacement rate.

ENERGY CONSERVATION

Energy conservation as water pumping, delivery and wastewater treatment facilities consume a significant amount of energy.

HABITAT CONSERVATION

Habitat conservation where minimising human water use helps to preserve freshwater habitats for local wildlife and migrating waterflow, but also water quality.

The key activities that benefit water conservation are as follows:

1. Any beneficial reduction in water loss, use and waste of resources.
2. Avoiding any damage to water quality.
3. Improving water management practices that reduce the use or enhance the beneficial use of water.

POTENTIAL STRATEGIES TO BE IMPLEMENTED

Rain water harvesting

One of the key strategy in water conservation is rain water harvesting. Digging ponds, lakes, canals, expanding the water reservoir, and installing rain water catching ducts and filtration systems on homes are different methods of harvesting rain water. Harvested and filtered rain water could be used for toilets, home gardening, lawn irrigation, and small scale agriculture. There is some focus on this in some of the countries at a very small scale but with the help of local government officials more specific aspects within their World Vision (WV) programmes around rainwater harvesting will be further reflected on especially around the scaling up with quality of these schemes in schools, health care facilities and refugee camps.

Water conservation in groundwater resources

Another strategy is protecting groundwater resources. When precipitation occurs, some infiltrates the soil and goes underground. Contamination of groundwater causes the groundwater water supply to not be able to be used as resource of fresh drinking water and the natural regeneration of contaminated groundwater can take years to replenish. Some examples of potential sources of groundwater contamination include storage tanks, septic systems, uncontrolled hazardous waste, landfills, atmospheric contaminants, chemicals, and road salts. Contamination of groundwater decreases the replenishment of available freshwater so taking preventative measures by protecting groundwater resources from contamination is an important aspect of water conservation. Each of the countries will be reflecting with local government officials on specific aspects within their WV programmes that can help to enhance more effective groundwater resources in their programmes.

Utilising groundwater resources

An additional strategy to water conservation is the practicing of sustainable methods of utilising groundwater resources. Groundwater flows due to gravity and eventually discharges into streams. Excess pumping of groundwater leads to a decrease in groundwater levels and if continued it can exhaust the resource. Ground and surface waters are connected and overuse of groundwater can reduce and, in extreme examples, diminish the water supply of lakes, rivers, and streams. This aspect will be more critically looked at within the WV borehole schemes and how to better utilise and work with existing groundwater resources.

Communication and education outreach

A fundamental component to water conservation strategy is communication and education outreach of different water programmes. Developing communication that educate people especially at household and community level as well as the general public is another important strategy utilised in water conservation. Communication of how water systems work is an important aspect when creating a management plan to conserve that system and is often used for ensuring the right management plan to be put into action. This will be done through an on-going partnership between World Vision and Sesame Street.

WATER SCARCITY PROJECTS CURRENTLY IN: