



Water Scarcity issues:

Creating the further evidence base for WASH work in the Middle East



Regional Middle East picture



- The Middle East has experienced many environmental concerns lately. Water resources are becoming increasingly scarce.
- Some of these countries, including Jordan, Iraq and Lebanon which are facing unique 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. In other words, the water shortage has become an increasingly difficult problem to manage. More than 4% of the world's population live in Middle East region where the demand for water exceeds its supply.
- 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.

Regional picture....



- 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 makes living harsh. The Middle East requires water resources for its people as well as to maintain the suitable land for agriculture.
- Water conservation through WASH (Water, sanitation and hygiene) 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.

WV Middle East WASH Country overview

- Afghanistan
- Jordan
- KRI
- Lebanon
- Syria



Now a brief overview of three country regarding WV work on water issues

Water schemes in Jordan



- In the context of Jordan, which currently ranks as the most water-scarce country in the world, water per capita is 88% below the line considered as water poverty. The increased number of Syrian refugees living in Jordan has stretched Jordan's water system even further, even creating a potential source of conflict.
- The challenge in Jordan is to balance the increasing water needs with the available water resources and to find funding to work towards a sustainable water sector.
- World Vision Jordan has been responding to the Syrian refugee crisis since 2012, focusing on WASH, Education, Child Protection and Basic Needs. World Vision Jordan's target areas will remain the host communities (particularly in the North) and both Za'atari and Azraq refugee camp. In the last two years alone, World Vision Jordan managed over US\$30 million in programming. World Vision's Jordan office maintains significant technical capacity in-country including international WASH technical specialists, WASH engineers, hygiene promoters and field monitors.

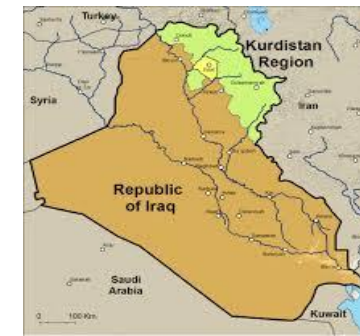


Water schemes in Lebanon



- Within the context of Lebanon, water has become an issue, with scarcity hitting particularly hard the agricultural sector, which accounts for 60 percent of the water consumed despite the sector's limited impact on the Lebanese economy (agriculture contributed to 5.9% of the country's gross domestic product in 2011).
- Increasing pressure on the existing water supply due to the presence of more than 1.3 million Syrian refugees fleeing the war, exacerbating a situation which may lead to food insecurity and public health problems. In addition, the country's inability to store water efficiently, water pollution and its misuse both in agriculture and for domestic purposes, have put great pressure on the water resource.
- World Vision Lebanon has an experienced WASH team working out of the National Office as well as Bekaa and North Lebanon Offices. The Bekaa office has units specialised in hygiene promotion and behaviour change, an engineering unit with experience in design and construction and staff dedicated to WASH data management and stakeholder liaison.

Water schemes in KRI



- KRI has the second world oil reserve after Saudi Arabia and an abundant other natural resources. But with the three previous decades facing a growing water shortage it threatens not only its economic development, but also supplies a rapid increase of demand. The reasons for that water supply shortage are various including lack of appropriate laws for regulating water issues; political instability and long period of war damaged water-irrigation, drainage and recycling systems to name but a few. KRI is currently characterized by poor water and service quality.
- Three decades of war, combined with limited environmental awareness, have destroyed Iraq's water resources management system. Thus, Iraq faces difficulties to realize the target of 91% of households using safe drinking water supply by 2015. Currently, 16% of households report daily problems with supply and 20% use an unsafe drinking water source. Furthermore, leaking sewage pipes and septic tanks pollute the drinking water network.
- World Vision has established its operations in the Kurdistan Region of Iraq (KRI) on September 2014. KRI is an autonomous region in Northern Iraq with borders at the Kurdish regions of Iran to the East Turkey to the North, and Syria to the West, along with the rest of Iraq to the South.
- World Vision KRI has been responding to the needs of Internal Displacement Populations (IDPs) and refugees by creating access to primary health care, safe water, appropriate sanitation and improved hygiene, food and nutrition and child protection services.
- World Vision focuses on specialised large scale sustainable water supply systems (water treatment, storage supply and boreholes). The aspect of water conservation is of absolute critical in order to focus further strengthen the WV WASH programme in KRI.

Our focus on water scarcity issues through evidence on WV non-household settings:



Focus: To play a key role in gathering and sharing evidence of impact of WASH in non-domestic settings including schools, health care facilities and refugee camps. This evidence will form a critical bedrock for advocacy, sharing of knowledge, and consensus building. The aspect of water conservation schemes will be included.

Selected interventions....

- WV WASH away from home schemes aim to help adults and children in the settings of schools, health care facilities and refugee camps to contribute positively around WASH related issues in their community.
- Aspects of water conservation will be reflected on in Afghanistan, Jordan, KRI, Lebanon.



Interventions

Specifically in WASH schemes at schools, health care facilities and refugee camps:

- In schools, student have improved physical health status and improved school performance
 - In health care facilities, there is an improved neonatal care.
 - In refugee camps, there is an improved physical health status of children who have been affected by Syrian Crisis
- ALL WITH A FOCUS ON WATER CONSERVATION

Results achieved through interventions

These results can be achieved through two key interventions, namely:

- Improved WASH facilities
- Hygiene promotion sessions with a strong focus on water conservation

WV focus on water scarcity in further programme

Objective of the programme

This will be a multi-country programme focusing on the following aspects:

- Working on creating holistic WASH schemes that especially reflect on issues around water scarcity;
- Working with local government in setting up specific WASH strategies and schemes that focus on water conservation;
- Developing an evidence base programme that reflects on the development of the implemented water scarcity schemes and show the impact that these have made at households and communities level; and
- Focusing on the development of critical guidelines based on best practices around developed water scarcity schemes

Methodology of setting up the programme

- The programme will be set up with each of the WV WASH leads who have a number of key WASH staff under their wings. The focus of each of the programmes will be based on focus on the development of a number of country specific water conservation schemes relating to:
 - Focusing on a number of key conservation strategies which may include water conservation strategies such as: rain water harvesting, water conservation in groundwater resources, methods of utilizing groundwater resources and/or communication and education outreach.
 - Focusing on a number of water-saving techniques at household and communities.

Background on some water-saving technology to potentially be implemented

- [Low-flow shower heads](#) sometimes called energy-efficient shower heads as they also use less energy
- [Low-flush toilets](#) and [composting toilets](#). These have a dramatic impact in the developed world, as conventional Western toilets use large volumes of water
- [Faucet aerators](#), which break water flow into fine droplets to maintain "wetting effectiveness" while using less water. An additional benefit is that they reduce splashing while washing hands and dishes
- [Raw water flushing](#) where toilets use non-purified water
- [Waste water reuse](#) or recycling systems, allowing:
 - Reuse of [grey water](#) for flushing toilets where used, or watering gardens
 - Recycling of wastewater through [purification](#) at a water treatment plant.
 - [Rainwater harvesting](#)
- [Low flow taps in wash basins](#)



Focusing on existing programmes



Meet Eliza
The official ambassador of WASH UP!, this smart, energetic little six-year-old is always neat and clean, if a little forgetful. While she may misplace her toys and socks, she always remembers to wear her sandals to the latrine and knows how to avoid spreading germs.

- This will be done in the regional water scarcity programme but also through existing programmes such as WASH UP! Through our Muppets, we have the unique ability to talk to children, model behaviours for them, and give them the language to talk about taboo topics like water conservation .
- Also through a focus on the WASH away from home schemes in schools, health care facilities and refugee camps



More information...

For more descriptive overview of country work, water scarcity programmes in the countries, WASH away from home webexs and upcoming learning event refer to:

www.wvi.org/MEERO

