

# World Water Day webinar

MENA in context....

Questions....



## Water Scarcity

- MENA is home to about ...% of world's population but only has access to ..% of the world's renewable fresh water.
- MENA is home of .... of the world's most water scarce countries.
- By 2050, ..... of MENA countries could have less than 200 m<sup>3</sup> of renewable water resources per person per year in terms of absolute water scarcity height.

## Climate change

- *Temperature increase* between +0.8 Celsius and +... Celsius in the last ... years- higher than world average
- *Acceleration of warming has especially taken place in the last ... years.*

# MENA in context....

## Answers....

### Water Scarcity

- MENA is home to about **4%** of world's population but only has access to **2%** of the world's renewable fresh water.
- MENA is home of **12** of the world's most water scarce countries.
- By 2050, **two-thirds** of MENA countries could have less than 200 m<sup>3</sup> of renewable water resources per person per year in terms of absolute water scarcity height.

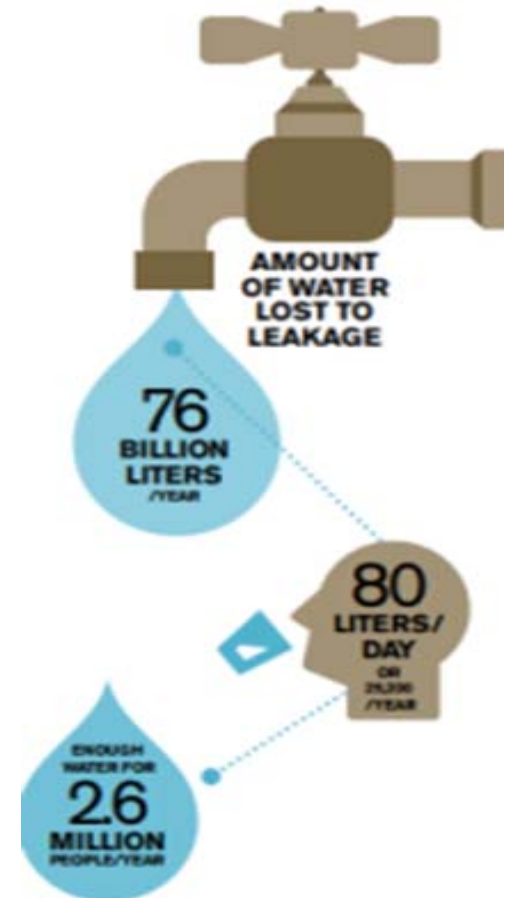
### Climate change

- *Temperature increase* between +0.8 Celsius and **+2.5** Celsius in the last **100** years- higher than world average
- *Acceleration of warming has taken place* in the last **30** years.



# Some of the key issues...

- Large scale and prolonged displacement + ↗ population growing rate  
→ Water demand ↗
- Water table drop & surface water dry;
- Over pumping impact Water quality;
- domestic needs ↗ Vs agricultural needs
- Lack of investment by government
- More private sellers → Price ↗ → > 30% of income for Water



# Case study: Bekka, Lebanon





# Provision of WASH Services for Vulnerable Syrian and Lebanese Children in the Bekaa

*Project funded by UNICEF*



- **Coverage across 247 ITSs**
- **Initial case load of 29,670 Syrian refugees for 2017**
- **Scale up to 41,546 Syrian refugees by August 2017, due to several emergency responses**



# Provision of WASH Services for Vulnerable Syrian and Lebanese Children in the Bekaa

*Project funded by UNICEF*



## Water

- Provision of 10,253 water tanks
- Provision of water trucking services
- Ensuring water quality

## Sanitation

- Construction and rehabilitation of 2,625 latrines
- Provision of sewage desludging services





# Provision of WASH Services for Vulnerable Syrian and Lebanese Children in the Bekaa

*Project funded by UNICEF*



## Hygiene

- **Provision of hygiene promotion sessions, including water conservation**
- **140 sessions were conducted, reaching a total of 1,946 individuals in 2017**



# Provision of WASH Services for Vulnerable Syrian and Lebanese Children in the Bekaa

*Project funded by UNICEF*



## Key messages include:

- Reuse of grey water – whenever possible
- Immediate closure of taps when not in use
- Direct reparation of broken taps and leaking water tanks
- Cleaning of water tanks – only when empty
- Water treatment rather than disposal – whenever possible
- Proper storage of water in closed containers





# Support for Water and Sanitation in the Bekaa

*Project funded by the European Union*



- **Installation of more than 40 km of water distribution lines in the villages of Ablah and Taalabaya in Central Bekaa**
- **Rehabilitation of WASH facilities in 15 schools**
- **Comprehensive awareness media campaign on water conservation and hygiene promotion**



# Support for Water and Sanitation in the Bekaa

Project funded by the European Union



## •Water conservation posters



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## •Water conservation posters





# Afghanistan

- Groundwater recharge work



- The function is to slow the spring flood water velocity and allow the water to percolate/infiltrate and charge groundwater. Spring runoff can therefore be stored in aquifers, from which the water can be withdrawn during the dry season for irrigation, livestock watering, and drinking water supply.



# Iraq

- Dohuk WASH World Water day: funded by GIZ and we are partnering with UNICEF and local DoW and Dohuk response local government to present some activities (theatre acting, radio ads, speeches, children songs) at the University of Dohuk





# WATER SCARCITY SCHEMES

## DESCRIPTION

Strategic investments in water security can break the cycle contributing to stability and resilience in the face of socio-economic change (p. 112)  
 There is a rich menu of technology, financial and institutional options but the right mix of actions will be different for any particular country, river basin or city. This is because of the diversity of environmental, economic, and sociopolitical characteristics in the Middle East and North Africa. (p. 134)  
 The growth of megacities may contribute to localized centers of extremely high water demand where water scarcity will concentrate, leading to competition with water currently used in agriculture – reference from Tropp and Jagerskog, 2006! (p. 68)  
 The most important lesson from global and regional experience is that technology, policy and institutional management must evolve together to achieve water security. (page. 135)

### • WORLD VISION OUTCOMES

- Information guide on looking at WASH in non-household settings- presented at UNC Water and Health conference in October, 2016. and 2017- focus on water scarcity as well.
- WV Water Scarcity forum with specific webex on the role of water scarcity in the countries we work in, namely: Lebanon, Jordan, Syria, Iraq.
- By the end of 2018, we aim to have a substantial library of learning on this issue hosted on our website [www.wvi.org/cleanwater](http://www.wvi.org/cleanwater) for everyone associated with delivering WASH to use.
- Two page overviews on the role of Water scarcity schemes working in each of the countries.

### Water conservation related schemes

**Jordan:** In both Za'atari and Azraq refugee camp especially focusing on water conservation schemes among young children (WASH UP! Scheme).

**Lebanon:** The Bekaa and North Lebanon area has hygiene promotion and behaviour change linked to data collection.

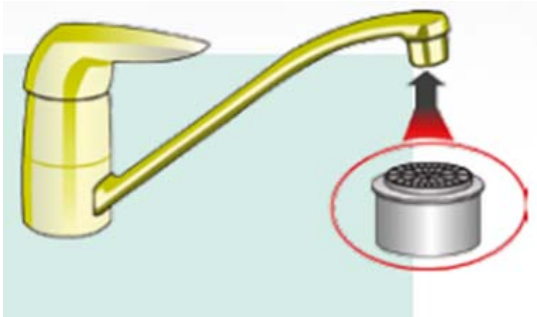
**Iraq:** Large scale sustainable water supply systems (water treatment, storage supply and boreholes) in combination with water conservation schemes.

**Syria:** Focus on water conservation promotion activities/ camps, markets, Host communities, schools and distribution of IEC materials.

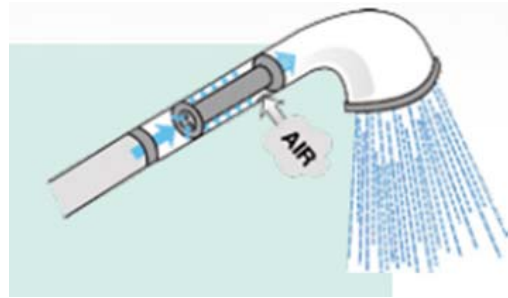
All country specific water conservation focus water conservation strategies such as: rain water harvesting, water conservation in groundwater resources, methods of utilizing groundwater resources and/or communication and education outreach. Strong emphasis on a number of water-saving techniques at household and communities.



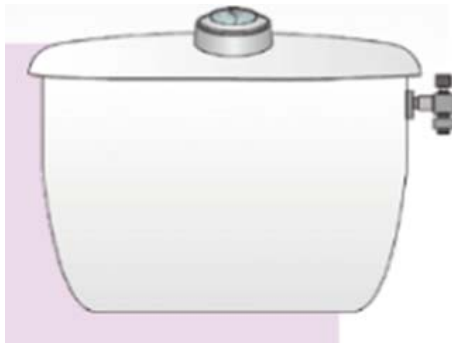
# Small quiz...



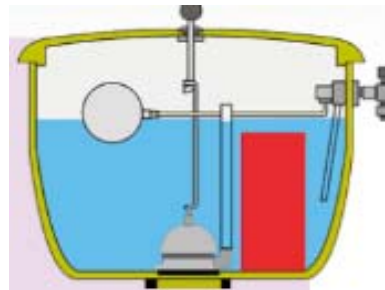
Reduce flow ...% by 30-60%



Reduce flow by 50%



between 10 to 50 % ↓ on water use



30 % of water saved

# What should we do to focus on water scarcity?

1. Do no harm approach verses ground water
2. Water recycling
3. Reduce water wasting
4. Educating communities through water conservation behavior change activities:
  - Rainwater harvesting
  - Water conservation in groundwater
  - Effective utilizing ground water
  - Communication and education outreach