# Diplomacy for Sustainability

Berlin, 29th May to 6th June 2019

European Sustainable Development Week





## **Achieving Water Security - Cyprus Case**

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#### **Sustainable Development Goal 6**



SDG6:"Ensure availability and sustainable management of water and sanitation for all" is of particular importance to countries in the Eastern Mediterranean region, suffering from long and repetitive droughts

#### In response:

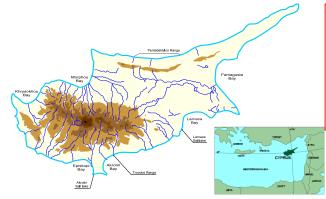
- European Commission adopted its communication "Next steps for sustainable European future: European action for sustainability (Nov 2016)
- Formulated a multi stakeholder platform on the SDGs and a set of indicators for monitoring progress
- Cyprus, a member of the EU, supports and is committed to the new global partnership
- Through the trilateral mechanism, Cyprus and Greece have developed synergies for collaboration with Israel and other countries of the Eastern Mediterranean area on various sectors, including water

#### Water Availability Challenge in Cyprus

- According to IPCC, Cyprus is highly vulnerable to the impact of climate change and classified as one of the global "hotspots"
- Limited water resources
  - Depend mainly on rainfall
  - Scarce & expensive to exploit
  - Water Stress Index ~73%
- All houses are connected to public water supply with improved sanitation facilities
- Excellent quality of drinking water

#### **Objective at national level:**

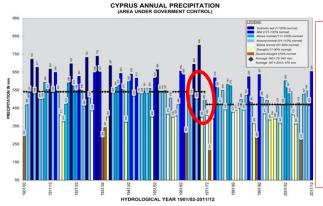
- Ensure availability of water for all uses to the maximum extent possible
- ☐ Enabling legal framework:
- Integrated Water Management Law
- Water Protection and Management Law



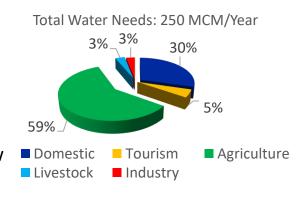
#### **Cyprus**

Location: Eastern Mediterranean Area: 9,250 Km<sup>2</sup>

Population: 850,000

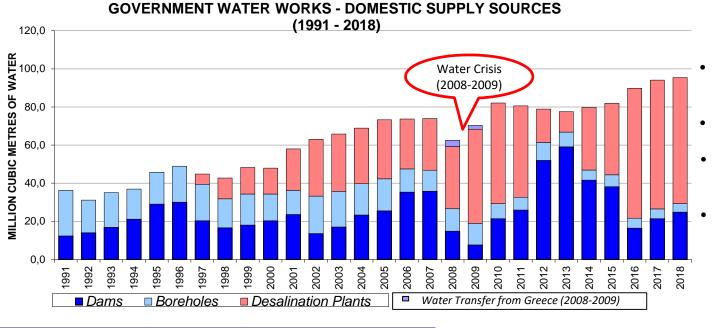


Statistical analysis reveals a stepped drop of 15% in precipitation since the early 70's, resulted in a drop of 40% in river runoff

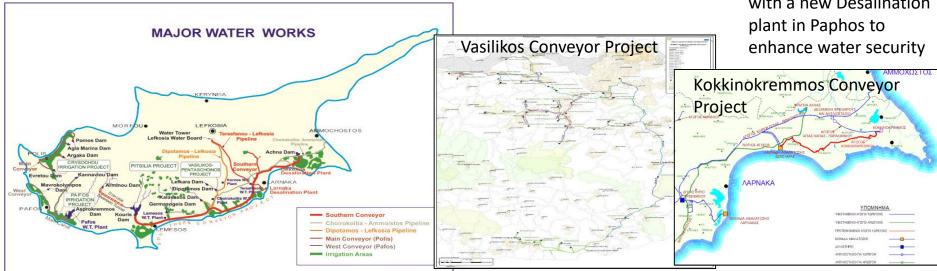


- Increasing demand for domestic sector (population, tourism, lifestyle)
- Sharp decrease in fresh water allocation to agriculture (could reach up to 70%)

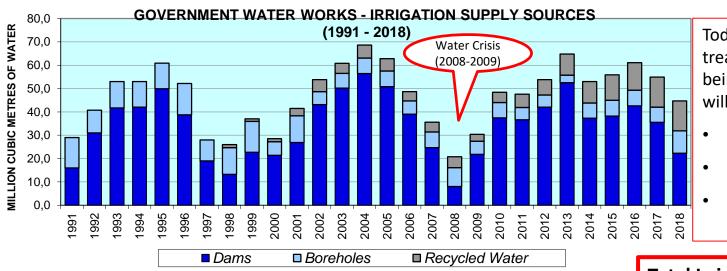
## Address the challenge for domestic water



- Production of desalinated water = 70 MCM
- by 2022 will be 110MCM
- Major water works are in place
- Two new water supply projects are currently under construction Vasilikos Conveyor and Kokkinokremmos, along with a new Desalination plant in Paphos to enhance water security



## **Address the Challenge for Irrigation Water**



Today, 20 MCM of tertiary treated recycled water are being produced (by 2026 will be 65MCM)

- 77% direct irrigation
- 20% aquifer recharge
- 3% discharge to dam or sea



#### **Total Irrigation Demand:**

- 150 MCM/Year(%) of irrigation demand satisfied by water reuse:
- > Today 11%
- > By 2026: 40%

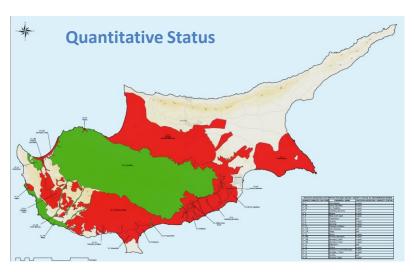


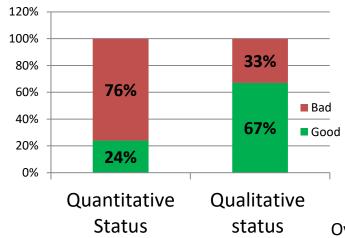
#### **Demand Management Measures**

Effective water demand management is also one of Cyprus' priorities as it is a fundamental condition for the exercise and application of a sustainable water policy

- Legislation
- Integrated Water Management Law
- ☐ Incentive water pricing
- Metering is applied to all users
- Volumetric pricing and rising block tariffs
- Leakage reduction in distribution networks
- **☐** Improve irrigation efficiency
- On farm advanced irrigation systems and techniques (95% of irrigated area)
- Addressing illegal abstraction
- Introduction of a more stringent procedure regarding borehole drilling and abstraction permits through the *Integrated Water Management* Law
- ☐ Cultivation of a water consciousness culture

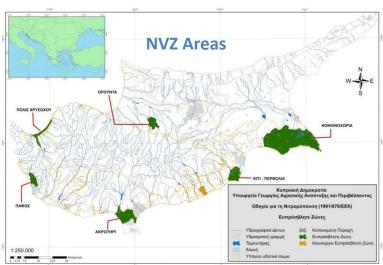
## Address the challenge - GWBs





Overall 21 GWBs (one out of the control of the Republic of CY)

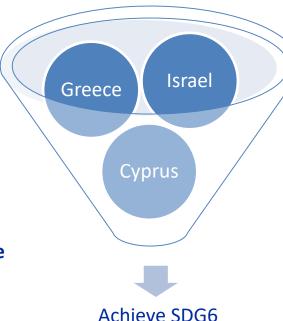




## **Collaboration Policy at Regional Level**

Exchange of experiences and knowhow between neighbouring countries is of prime importance

- ☐ Trilateral cooperation between Cyprus, Greece and Israel in the field of Environment, Water Resources and Climate Change
- ✓ MOU in the field of Water Resources
- ✓ Sub-regional Marine Oil Pollution Contingency Plan
- ✓ Joint workshops on sustainable management of water
- ☐ Bilateral cooperation of Cyprus with Egypt on the protection of the marine environment



Other like-minded parties are most welcomed to join our efforts to create and advance synergies and collaboration, to the benefit of our countries, as well as to our region, which today is facing multiple challenges

## **Taking on the Challenge**

**Sustainable Integrated Water Resources Management** is essential to achieve water security to meet present and future needs at regional and global level

To accomplish SDG6 with success and within the set framework we have to shift our perspective and embrace the new sustainable policy:

- Recognize the limitations of water availability
- Reflect the real value of water and the need for financial sustainability
- Ensure fair access to limited water resources
- **■** Enhance demand management and alternative water sources
- Consider risks and impacts of climate change
- Ensure the quality of water resources and the environment
- **■** Fostering research & innovation
- Enhance cooperation and knowledge exchange with water professionals, institutions, experts at regional and global level

.....so as no one is left behind

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Thank you for your attention

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