Arab Republic of Egypt
Ministry of Water Resources and Irrigation

Water Strategy in Egypt

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Water Challenges

- Population growth
- Limited water resources (water scarcity)
- 97% of renewable water resources originates outside the borders
- Impact of uncoordinated projects in Upper Nile countries
- Increase in water demand
- Increase in food gap
- Aging of canal networks and infrastructures
- Water quality issues
- Impact of climate change
water strategies, plans

Water Strategy 2050

NWRP (2017-2030-2037)

Implementation plan

2017-2020

2020-2030-2037
NWRP 2017-2037

Develop Water Resources

Enhance Water Quality

Rationalize Water Use

Create Enabling Environment

Water Security for All
National Program: Enhancing Water Quality and Reuse of water

- 500 intermediate drainage reuse pump stations constructed
- 4 mega project
  - completed
    - Treatment of Mahsama drain (10 Billion LE)
  - Treatment of Bahr El Baqar drain (20 Billion LE)
  - On-going:
    - Enhancing water Quality in Ketchner Drain in Middle Delta (447 million EU)
    - construction of west Delta treatment plant (60 Billion)
The National Program: Rehabilitation of Canal system and Water Structures

- **Started in** 2020
- **Target:** rehabilitation of 20000 km of branch canals
- **Cost:** 80 billion Egyptian Pound
- **Completed:** 5000 km

**Impact:**
- Improve water allocation and conveyance efficiency
- Increase the agricultural production
- Positive environmental impact
- Create jobs for villagers during the project construction period...”Decent Life Initiative”
The National program: **on-farm Irrigation improvement and Modernization**

- A joint plan was set-up between the two ministries; MWRI and MALR
- **Target:** 3.7 million feddans in old lands mostly sugar-cane areas, Horticultural areas
- **Funding:**
  - farmers get a loan without interest
  - recovered over 10 years
  - One year grace period
- MWRI helped farmers with advice, extension fields, awareness program, competitions,..
- **Impact:**
  - face water scarcity
  - increase in productivity by about 30%
  - rationalize farming inputs such as fertilizers.
  - Job creation
  - Contribute to “Decent Life Intiative”
National Campaign on Modern Irrigation

Farmer-to-Farmer dialogue

Capacity building
Modern Irrigation

- **Completed:**
  - Nile Delta and valley: 1.35 million feddan
  - Groundwater areas: 1.8 million feddan

- **Planned and ongoing:**
  - 3.7 million feddan
The National Program: Desalination

• an ambitious program for desalination (through Coordination with Ministry of housing)

• Joint policies to cope with water scarcity included:
  – All new cities and communities along the sea coast will depend on sea water desalination to meet municipal requirements

• Progress
  – Completed: 81 plants ......>> 0.913 MCM/day
  – On-going: 11 plants ..........>> 0.465 MCM/day
  – 2050 plan: to produce......>> 6.4 MCM/day
flood protection dams are being constructed to protect communities and to store water for bedwins communities (1500 structures)

• Ground Tanks constructed to store rainwater for municipalities of desert communities

• Artificial and mountain lakes
Climate Change

(2) National Program: protection of the Coastal Delta (GCF grant) to face Sea Level Rise

- Completed: 118 km
- on-going: GCF grant + local Budget
  - Use of nature-based solutions
  - Target: protection of 69 km
  - 80% completed
- Plan: Development of ICZM plan
Use of Solar Energy in Water Management

- All Diesel groundwater wells (428 wells) are being changed to be operated by solar energy
  - Completed: 196 wells
  - On-going: 96 wells
  - Plan: 136 wells

- Pilot areas were conducted to introduce solar pumps for Farmers Mesqas (ditches) in Nile Delta and valley 4 plants
Enabling Environment

Institutional/Regulatory framework

- New Law issued in October 2021

Awareness raising

- CWW
- TV/seminars

Capacity development

- Training centers

Introduce technologies

- Telemetry system for water monitoring
- Smart irrigation
- Forecast Center
Big Challenge!!!

Uncoordinated interventions and projects in upstream countries affects dramatically the SDGs achievement.

Egypt is the gift of the Nile