



Food and Agriculture Organization  
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# FAO recent and ongoing activities in water resources in Lebanon

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# 1. Support to MoEW for the Feasibility study of the Information component of the *Centre d'Information et de Formation aux Metiers des Eaux (CIFME)*

## Study outputs

### 1-Governance structure

- Law article
- MoU
- Concerted development with stakeholders

### 2-Priority data harmonisation

- Hydrometeo, water quality, water infrastructures, water uses
- Indicators and maps

### 3-ICT infrastructure

- Monitoring networks
- Data centre with water Geoportal
- Data bases and e-government applications

### 4-Resources

- Dedicated staff for Technical Secretariat (as part of the ITCW)
  - Capacity building
  - 6 M€ budget over 5 years
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## 2. Monitoring water productivity by Remote Sensing as a tool to assess possibilities to reduce water productivity gaps (WAPOR)

### Overview

**Budget:**  
**10 million USD**

**Timeline:**  
**2016-2019**

**Countries :**  
Global, with focus on Lebanon, Ethiopia and Mali

#### Funded by:



Ministry of Foreign Affairs of the  
Netherlands

#### Implemented by:



Food and Agriculture  
Organization of the  
United Nations

#### Partners:



**UNESCO-IHE**  
Institute for Water Education





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# Objectives

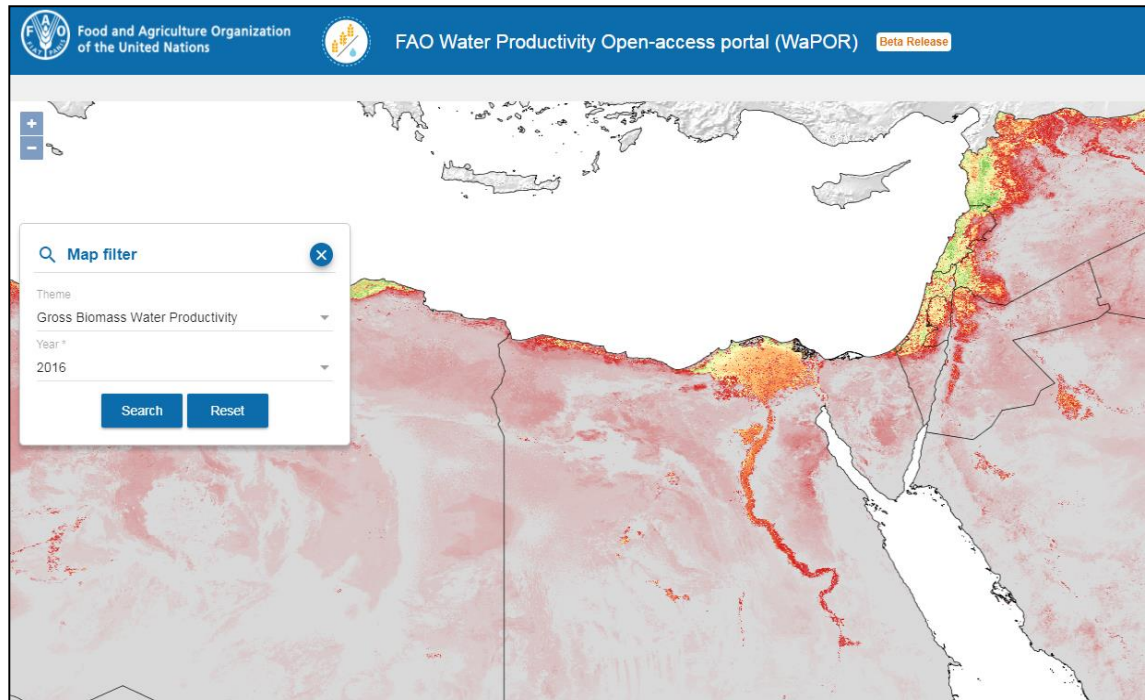
- Promote **evidence-based** decision making
  - **Engage** stakeholders for wider adoption and use of water accounting & productivity concepts and data
  - Enhanced **capacities** to manage sustainably water resources and increase land and water productivity
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## Using Remote Sensing in support of solutions to reduce agricultural water productivity gaps

### WaPOR

Near real time monitoring of water productivity at 30m-250m resolution with data updates every 10 days over 10 years



For further information:

<http://www.fao.org/in-action/remote-sensing-for-water-productivity/en/>



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### 3. Implementing the 2030 Agenda for water efficiency/ productivity and water sustainability in NENA countries

## Overview

**Budget:**  
**10,153,938**  
**USD**

**Timeline:**  
**2016-2020**

**Countries :**  
Algeria, Egypt, Iran, Jordan, Lebanon, Morocco,  
Palestine and Tunisia

Funded by:



Implemented by:



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## Objectives

1. establishing a robust **water accounting system** providing the evidence base for the full water budgeting (supply, demand, uses and re-cycling, present and projected)
  2. implementing a series of **interventions to increase water efficiency and productivity** in selected farming systems of the countries to advance in achieving the SDG 6.4; (introduction/enhancement of good practices and affordable technologies; improvement of decentralized water governance; development of under-exploited value chain rural agro-industry)
  3. ensuring that **higher efficiency/productivity achievements for the 2030** time horizon are attained within 'safe operational boundaries of water use' defining the conditions for 'water sustainability' and, therefore, for a sustainable, socially equitable and human-rights based development.
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## 4. Support to the Regional Collaboration Platform of the Water Scarcity Initiative to increase water productivity

### Overview

- 3 years
- 8 countries : Algeria, Egypt, Iran, Jordan, Lebanon, Morocco, Palestine and Tunisia
- 500,000 USD (FAO TCP/RAB/3602)

### The project Objectives

1. to strengthen countries' capacities,
  2. to enhance information and experience exchange among them
  3. to adopt effective pathways for increasing water productivity in selected farming systems of the beneficiary countries, and to be able to monitor water productivity via RS.
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## 5. Improved Water Resources Monitoring System/Integrated Water Resources Management at regional level in Lebanon

### Overview

**Budget:**  
2,432,130 USD

**Timeline:**  
2017-2020

**Country/Location :**  
Lebanon/ Al Bared Watershed

#### Funded by:



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Embassy of Switzerland in Lebanon

#### Implemented by:



Food and Agriculture  
Organization of the  
United Nations

#### Partners:



مؤسسة  
مياه لبنان الشمالي





## Project's outputs

1. Established real time monitoring at key locations
  2. Established water quality monitoring at key locations within a pilot watershed
  3. Water Establishment/Watershed Prototype Monitoring System is developed, management authorities empowered, and their capacity is enhanced to operate the system - including preparation of a business plan to operate the monitoring system
  4. Water accounting tool implemented
  5. Informed decisions transferred to end-users to improve capacity for enhanced crop water productivity
  6. Scaled-up approach through stakeholder platforms and data-sharing
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## 6. Coping with water scarcity – the role of agriculture. phase III : strengthening national capacities

### Overview

**Budget:**  
**2,373,000 USD**

**Timeline:**  
**2011-2017**

**Countries :**  
Lebanon, Egypt and Jordan

**Funded by:**



**Implemented by:**



Food and Agriculture  
Organization of the  
United Nations

**Partners:**





## OUTPUT 1: Increased capacity for water demand management in irrigation systems

1. Capacity building workshops in the use of RAP (Rapid Appraisal Performance of irrigation networks) and MASSCOTE/MASSPRES (Mapping System and Services for Canal Operation Techniques/Pressurized irrigations systems).
2. Application of RAP and MASSCOTE/MASSPRES techniques.
3. Develop modernization plans for large scale irrigation schemes.



## OUTPUT 2: Improved re-use of treated wastewater for irrigation from Iaat (near Baalbek) Wastewater Treatment Plant

1. Implement a fully developed and operational pilot area, equipped with modern irrigation equipment adapted for the use of treated waste water
  2. Develop an awareness building campaign for all stakeholders concerned with the re-use of treated effluent and sludge
  3. Contribute to a strategy for the efficient use of treated waste water for agricultural production taking into account optimal irrigation techniques and choice of suitable crops.
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# Thank you

Contact us

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