

Water, Energy, Food Security Nexus in the MENA Region

within the GIZ Programme
“Adaptation to Climate Change in the Water
Sector in the MENA Region” (ACCWaM)

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Outline of the presentation

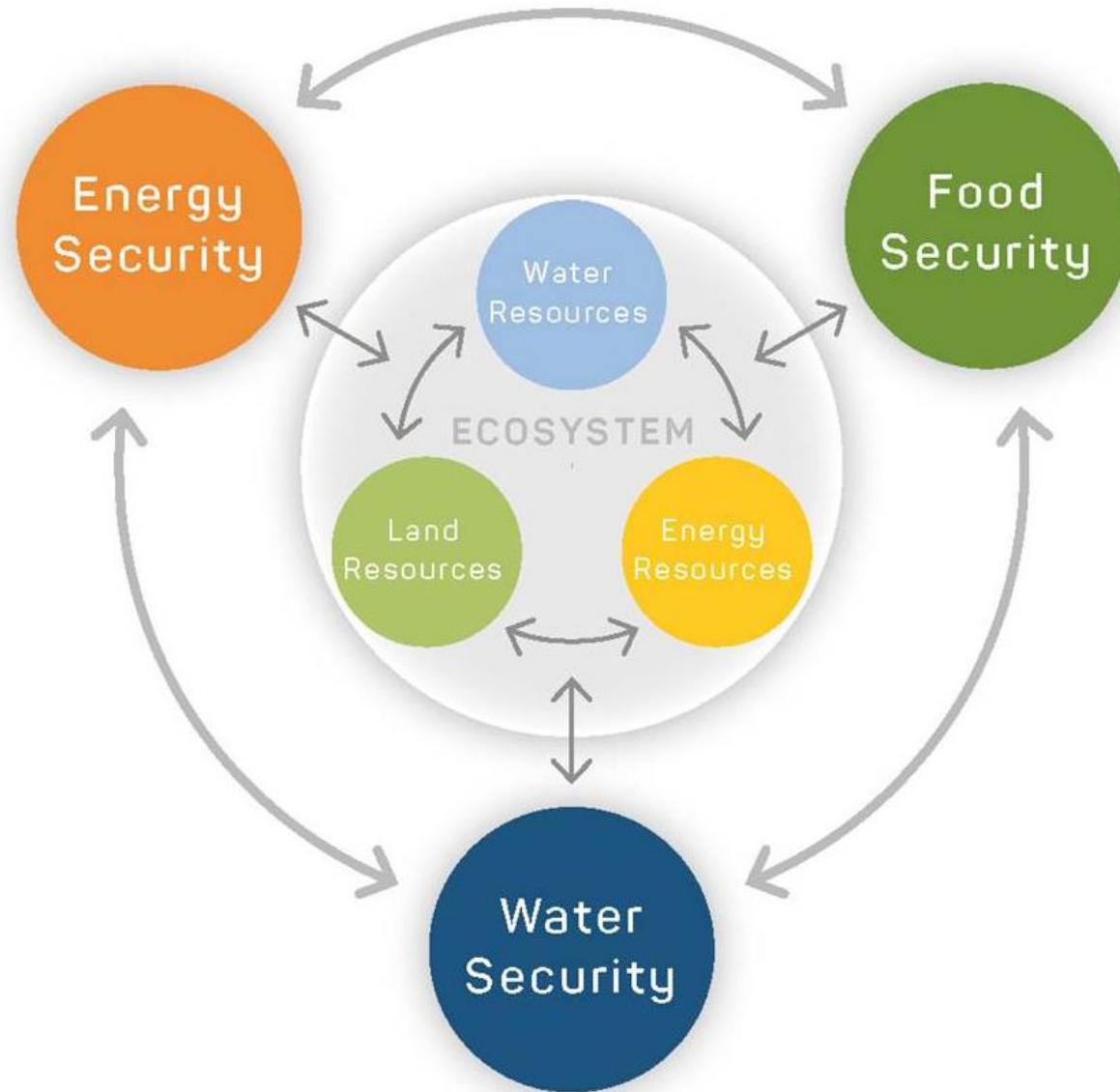
- 1. Objective of the study**
- 2. Methodology adopted for the pilot countries**
- 3. Presenting the case study in Jordan:**
 - Key critical interlinkages of the WEF Nexus**
 - Existing policy framework for WEF nexus**
 - Existing coordination modalities**
 - New coordination modalities**
 - Priority capacity development needs**

Why a nexus study in the MENA region

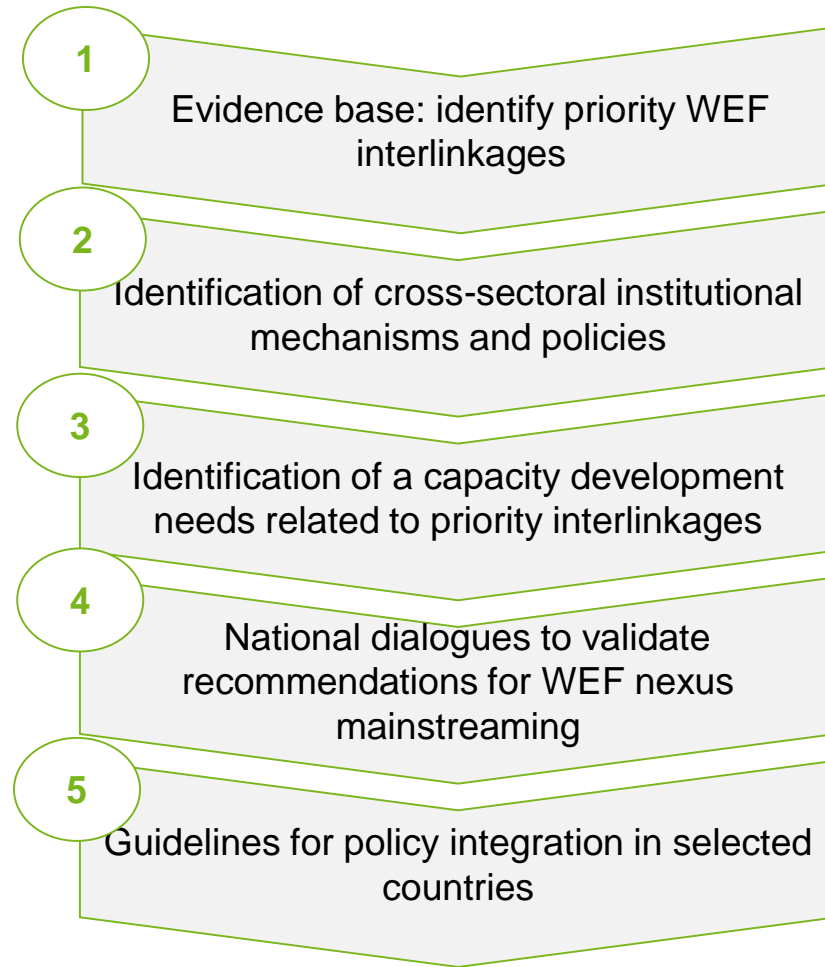
The study's core objectives

- Identify entry points, processes and partners for WEF nexus mainstreaming into regional and national policies and institutions in the MENA region
- Through adoption of a nexus approach support to national SDG implementation and climate change adaptation

Which nexus? Resources & Securities



National approach of the WEF nexus



National WEF nexus steps

Assisting countries to have a nexus vision:

1. **Evidence Base** on resources and human security situation and trends in the region and in the pilot countries
2. **Institutional and Capacity Assessment** based on a review of the most important strategies, policies and institutional arrangements and on interviews with key stakeholders
3. **Guidelines for mainstreaming of the WEF Nexus** to be jointly developed with the concerned stakeholders for implementation at national and regional level



Priority key interlinkages for WEF nexus

1. Energy use for water treatment and conveyance

- Around 15% of Jordan's total power production goes into pumping water.
- The energy bill of the Jordanian water sector in 2014 amounted to 301 million JD (of which 54% were energy subsidies that the government paid)
- The energy demand of the water sector is projected to increase by more than 50% from 2017 to 2025

Opportunities:

- ✓ increasing energy efficiency in water treatment and conveyance (reducing pressure and leakages)
- ✓ reducing disincentive subsidies
- ✓ increasing use of renewable energy in the water sector
- ✓ exploiting potential to generate energy from wastewater

Priority key interlinkages for WEF nexus

2. Water use for power generation

- ✓ Jordan's strategy includes objectives to increase domestic production through oil shale, and nuclear energy
- ✓ Some of these solutions can be water intensive, e.g. production from oil shale and cooling of nuclear power plants

Opportunities

- ✓ existing objectives to promote renewable energy (planned to reach 10% of the energy mix by 2020)
- ✓ focusing on non-water intensive renewable energy sources

Priority key interlinkages for WEF nexus

3. Water use for food production

- The agricultural sector uses 65% of total water resources (but generates only 3% of GDP)
- Efforts to increase food security need to take into account effects on water security

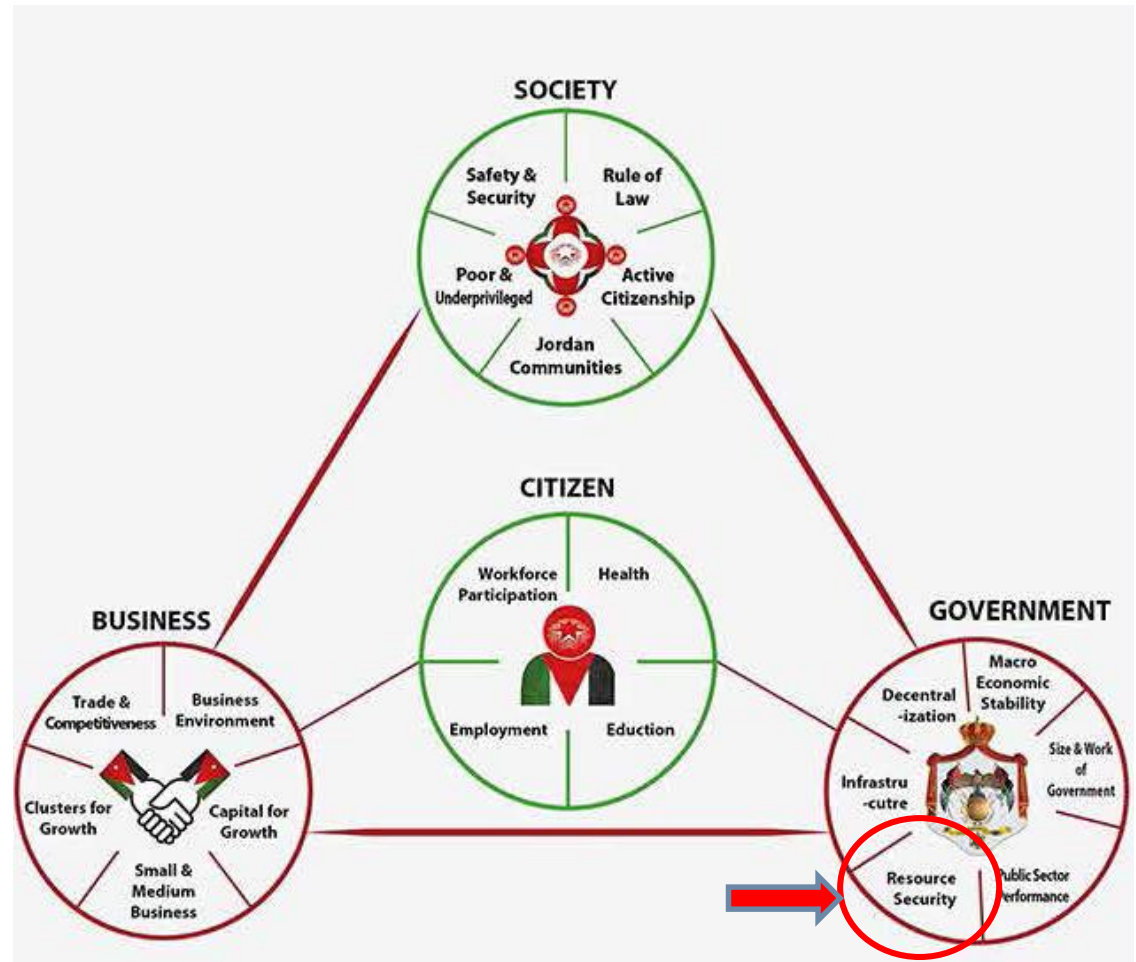
Opportunities

- ✓ increasing water-use efficiency, improving agricultural practices, including drip irrigation
- ✓ promoting reuse of treated wastewater and non-conventional water sources for agricultural irrigation
- ✓ reducing disincentives, such as energy subsidies for pumping water in the agricultural sector

Existing policy framework for WEF nexus

“Resource Security” within the framework of Jordan’s Vision 2025

- “Sustainable long-term management of food, energy and water requirements” as part of an efficient and effective Government response



Existing policy framework for WEF nexus

1. Executive Development Programme (2016-2018)

Covers WEF sectors without capturing important interlinkages

- ✓ opportunity to ensure that the preparation of the next EDP
- ✓ adopting a WEF nexus approach
- ✓ priority programmes and plans includes key interlinkages

2. Significant and solid policy framework and which can be used as an entry point for WEF Nexus mainstreaming in Jordan

- National Water Strategy 2016-2025 and the Water Policies,
- National Energy Strategy 2007-2020
- National Strategy for Agricultural Development 2016-2025
- Pathways towards a Green Economy
- Sustainable Consumption and Production Action Plan in the agricultural sector and food production
- Intended Nationally Determined Contribution (INDC) of Jordan

Existing coordination mechanisms

At the level of each sector

- technical committees established cross-sectoral in nature
- mandates not dedicated to mainstreaming of WEF nexus
- Example: **National Committee for Water Scarcity**

At a more cross-sectoral level

- national committees for the Rio Conventions: **CC, BD, CCD**
- National committee for **Disaster Risk Reduction**

Other inter-sectoral mechanisms

- mandated with aspects related to the WEF nexus
- exist at the highest political levels in Jordan
- **Supreme National Committee for Sustainable Development**
- **Highest Committee for Green Economy**

New coordination mechanisms

1. Establishing a WEF Nexus Council at the level of the Prime Ministry

- similarly to the Economic and Social Council
- institutionalize participatory actions and partnerships between the public and private sector
- advance WEF Nexus interlinkages at the highest political level

2. Establishing a WEF Nexus Committee at the level of the Ministry of Planning and International Cooperation

- composed of the sectors' "Liaison Officers" (ضابط ارتباط)
- mainstream WEF nexus within policies and programmes under the Executive Development Programme (EDP) of Jordan in line with the Jordan Vision 2025

Priorities for Capacity Development Needs

- 1. Strengthening M&E systems for mainstreaming priority WEF Nexus interlinkages**
- 2. Data bases and data/information management for mainstreaming the WEF Nexus**
- 3. Strengthening the technical capacities related to the priority WEF Nexus interlinkages**
- 4. Communication and outreach on the WEF Nexus approach**

Thank you !