



The FAO Regional Initiative on Water Scarcity

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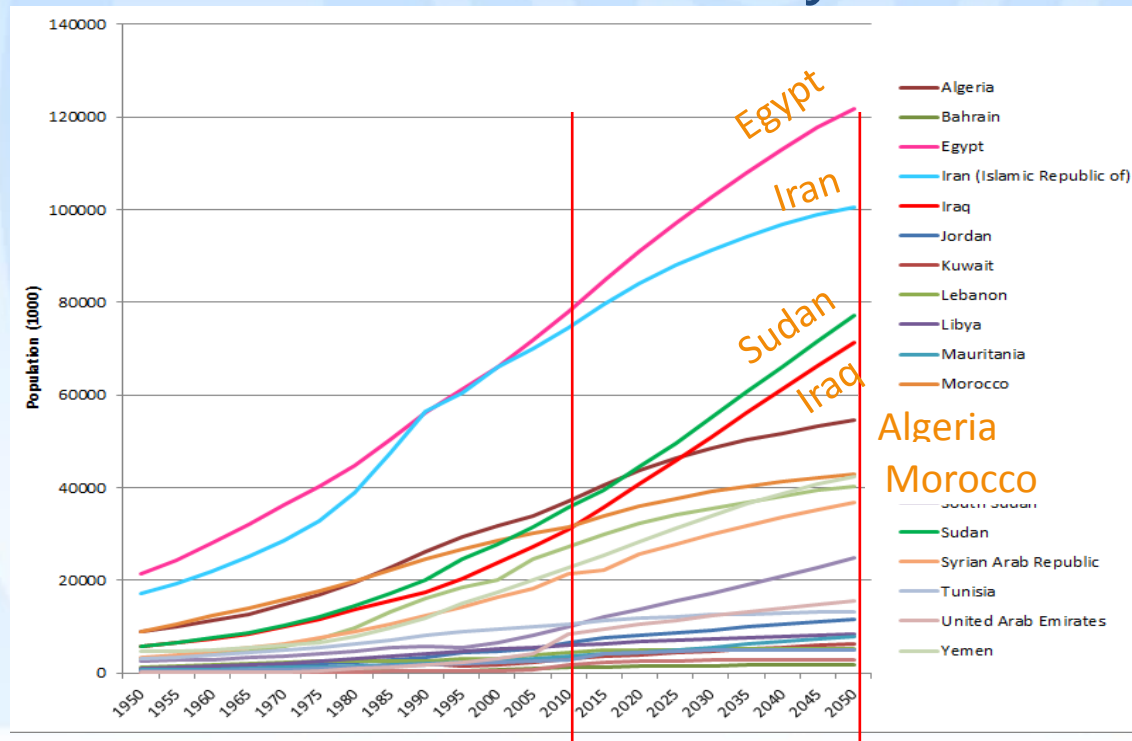
The context

Per capita fresh water availability = 1/6 of world average

- ✓ has decreased by 2/3 over the last 40 years
- ✓ it is expected to decrease of further 50% by 2050

Major drivers

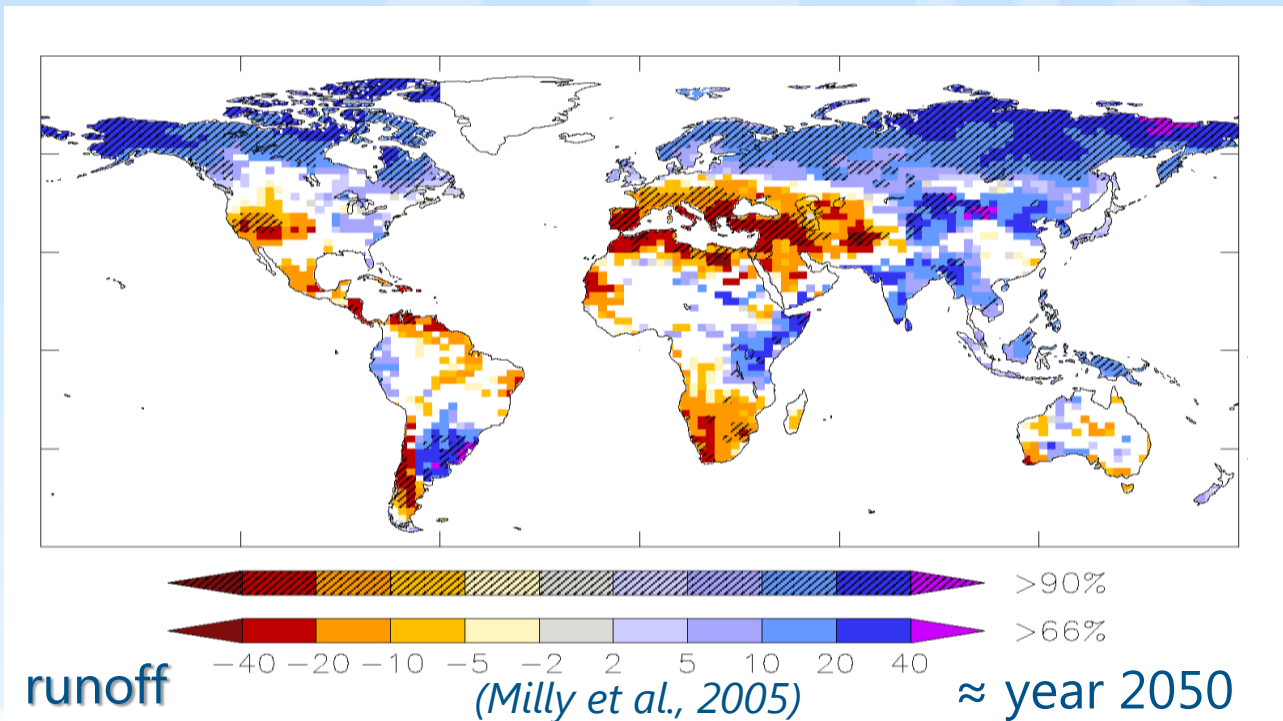
- ✓ population growth (+consumption pattern)
- ✓ climate change





Climate change is expected to accentuate the already severe shortage of water availability

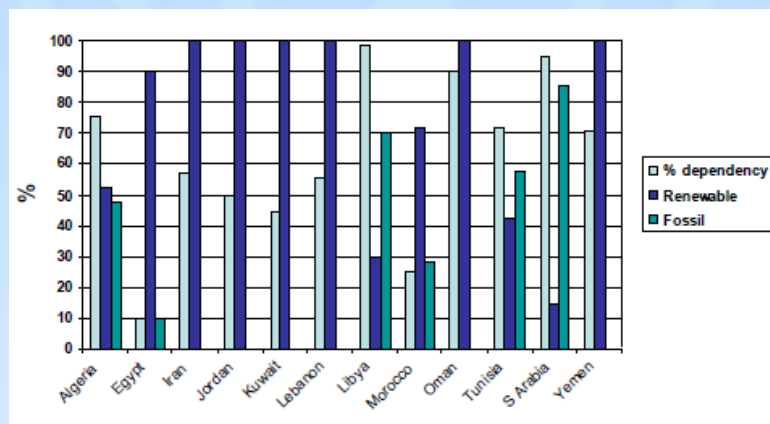
- ✓ rainfall reduction (and unpredictability)
- ✓ increasing the crop water requirements





Over **60%** of water resources in the Region **flows from outside** national and regional boundaries

Groundwater has been the basis for the rapid growth in the Arabian Peninsula, but now Countries are facing **excessive depletion**



Competition for water between all sectors is accelerating

Degradation of water quality is mounting





Major Thrusts

- ❑ The Near East and North Africa, already one of the most water scarce Regions in the world, may be facing over the coming years **the most severe intensification of water scarcity in history**
- ❑ **Agriculture**, using already > 85% of available fresh water resources in the region, will be **the sector suffering most** from water scarcity, with major consequences for food security and the rural economy
- ❑ NENA countries have made **relevant progress** in the management of their water resources but these improvements are still **not commensurate** with the real dimension of the problem



The Water Scarcity Initiative

The **Regional Initiative on Water Scarcity in Near East and North Africa** (WSI) has been established by FAO to support countries in identifying, adopting and implementing evidence-based policy-decisions, sound governance and institutions, cost-effective water investments and best management practices that can significantly improve agriculture productivity and food security in the region.

...innovation is key



Elements of innovation

- A *Regional Collaborative Strategy* among the NENA Countries
- A *Strategic Partnership*, actions-oriented and results-based, to generate a critical mass of 'capacities' for 'impact-at-scale'
- Forward-looking ways of visioning *future trajectories of development* for strategic planning of water allocation
- *Evidence*-based approaches
- *Farmers* as full partners (commercial operator and ultimate manager of soil and water)
- Involvement of *private sector* (food value chain, *technology*)
- Effective synergies in *innovation and learning* (from farmer-to-farmer exchange of solutions, practitioners as main actors)
- An *inclusive* approach to change



Focus Areas of Work

- **Strategic planning** & policies of water resources for water and food security (adopting a water-food-energy nexus approach)
- Strengthening/reforming **governance** at all levels
- Improving water management, **performances** and **productivity** in major agricultural systems (rainfed and irrigated) and in the food chain
- Managing the water supply through **reuse** and **recycling**
- **Climate change**, resilience, DRR and droughts management
- Building **sustainability**, with focus on ground water, pollution and soil salinity
- **Benchmarking, monitoring** and **reporting** on water use efficiency and productivity



The Partnership

ACSAD - Arab Center for the Studies of Arid Zones and Dry Lands

AOAD - Arab Organization for Agricultural Development

AWC - Arab Water Council

CEDARE - Center for Environ. and Develop. for the Arab Region and Europe

CIHEAM - International Center for Advanced Mediterranean Agric. Studies

DRC - Desert Research Center

DWFI - Daugherty Water for Food Institute

GIZ - German Cooperation Agency

ICARDA - International Center for Agricultural Research in the Dry Area

ICBA - International Center for Biosaline Agriculture

IWMI - International Water Management Institute

LAS - League of Arab States

NWRC-Egypt - National Water Research Center

UNESCO - UN Educational, Scientific and Cultural Organization

UNESCWA - UN Economic and Social Commission for Western Asia

WB - World Bank

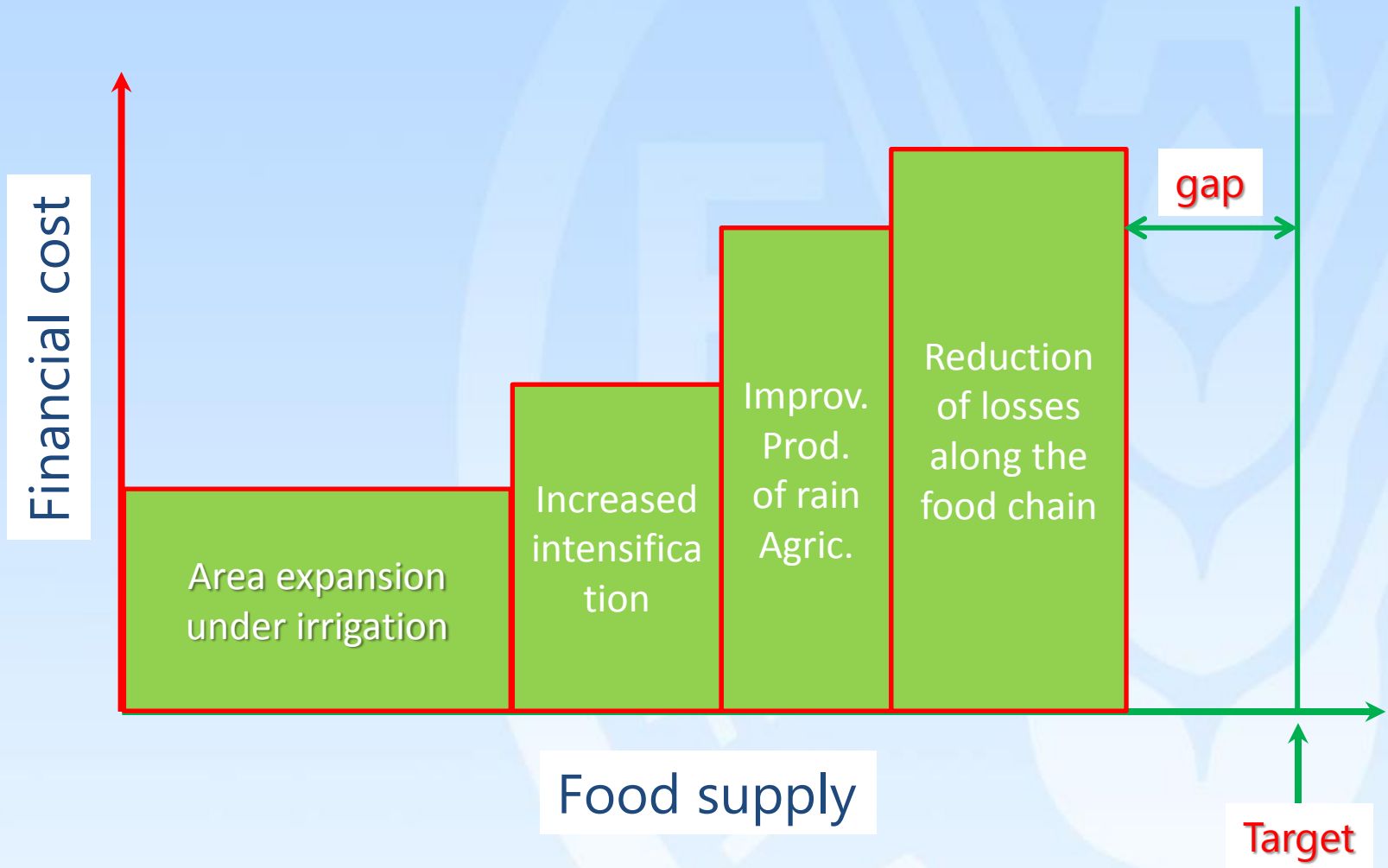
WFP - World Food Program

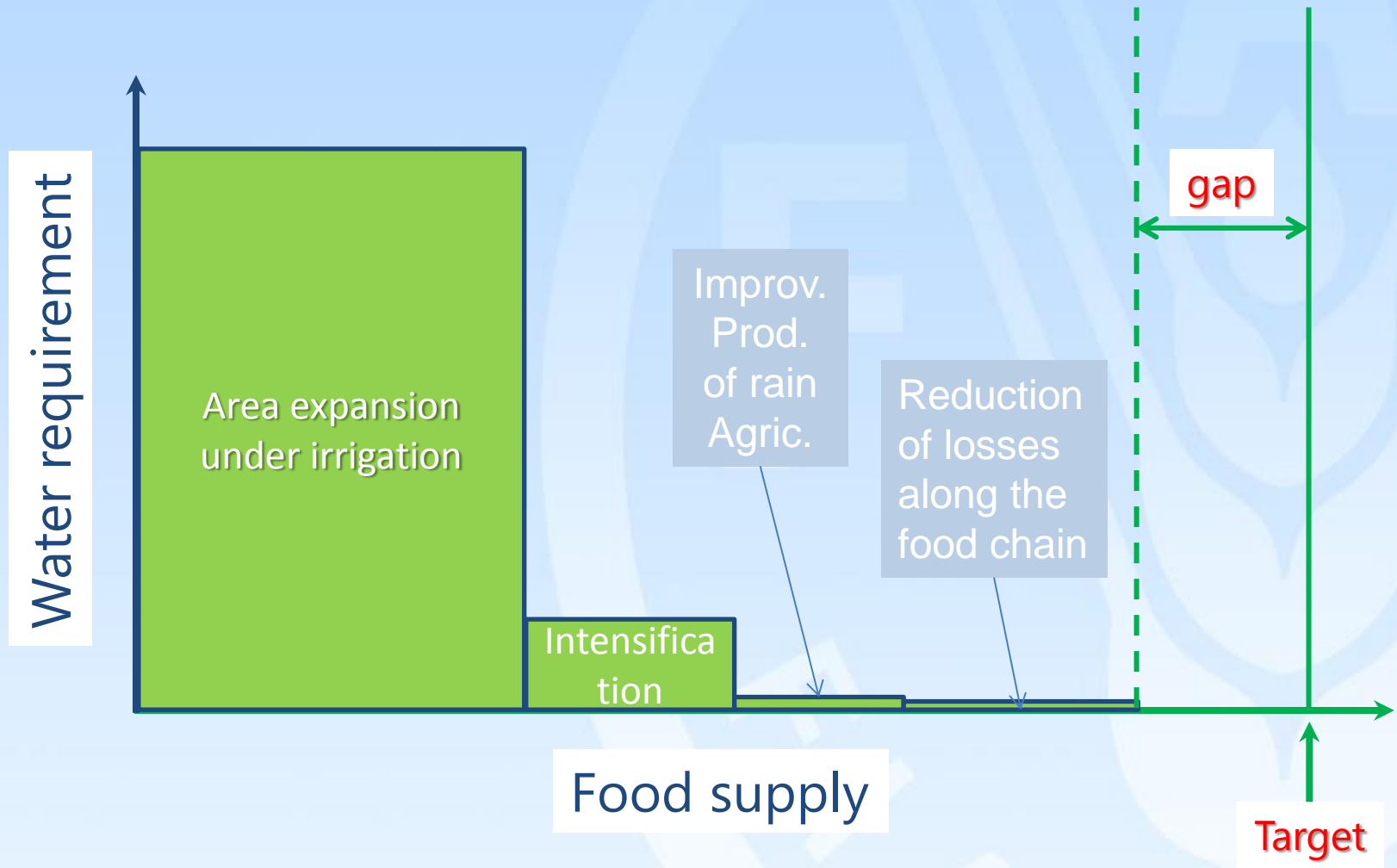


Morocco as Pilot Country

Starting in the fall 2013, **Six countries** (Egypt, Jordan, Morocco, Oman, Tunisia and Yemen) applying the initial analytical framework of the WSI:

- ✓ **'water accounting'** (availability, use and projections)
- ✓ **'food supply cost curve'** (identification and ranking options for future food supply and related economic and water costs)
- ✓ **'gap analysis'** (investigating policies, governance and performance of agriculture water management)







Concluding Remarks

Accelerating the implementation of measures reducing **'water productivity gaps'**

Developing analytical frameworks identifying **pathways to increase** physical and economical **water productivity** (water delivery; on-farm; market & value-chain)

Lead, inspire and influence other countries of the Region in the **water reform agenda** (scenario analysis; visioning development trajectories; strategic planning, policy change and governance restructuring)



Thank You



<http://neareast.fao.org>

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