

Water in the balance

Overview and Policy Insights

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*Workshop on Economic Implications of
Climate Change and Water Scarcity in
the Mashreq Region*

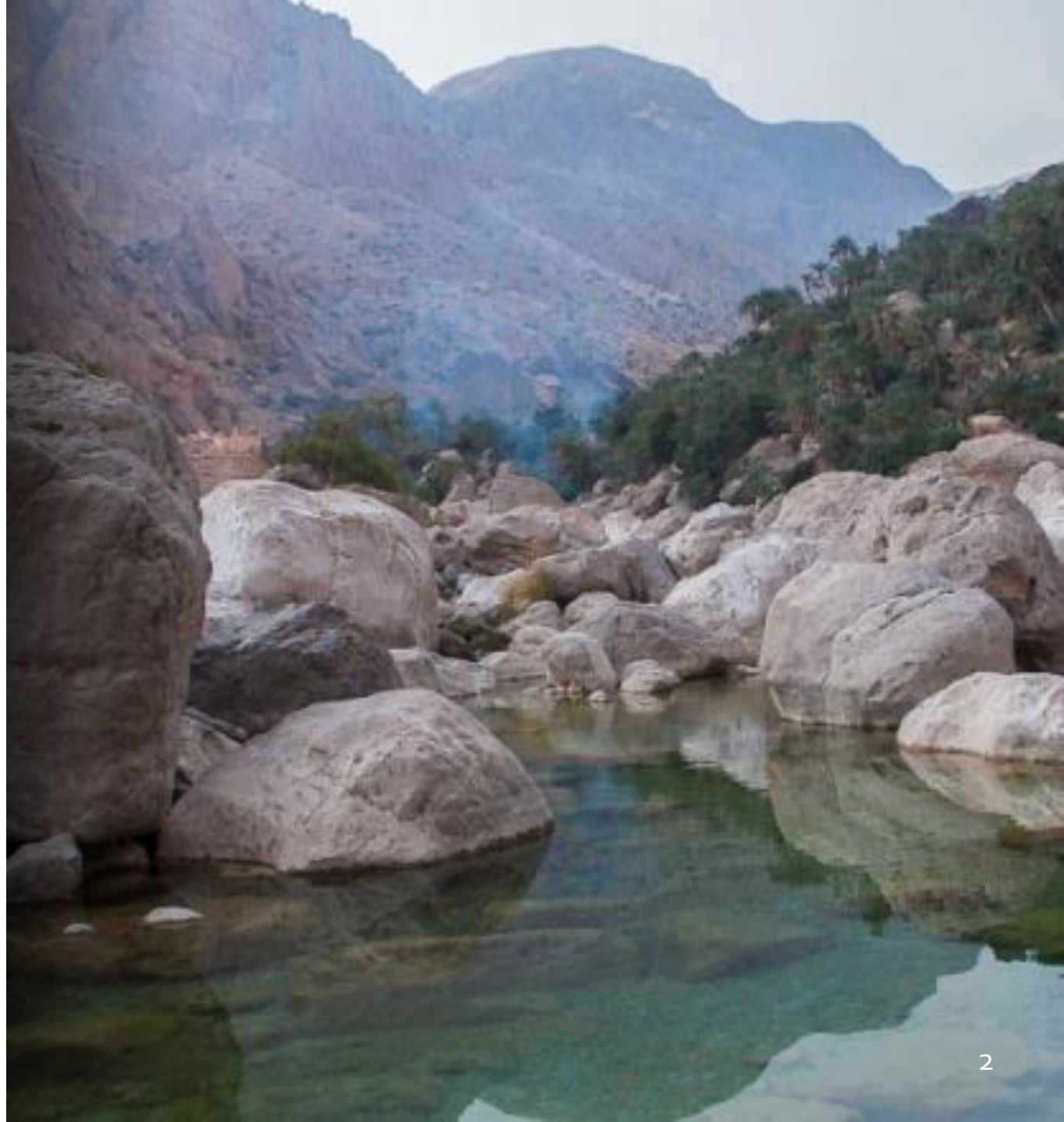


An old problem in an uncertain world

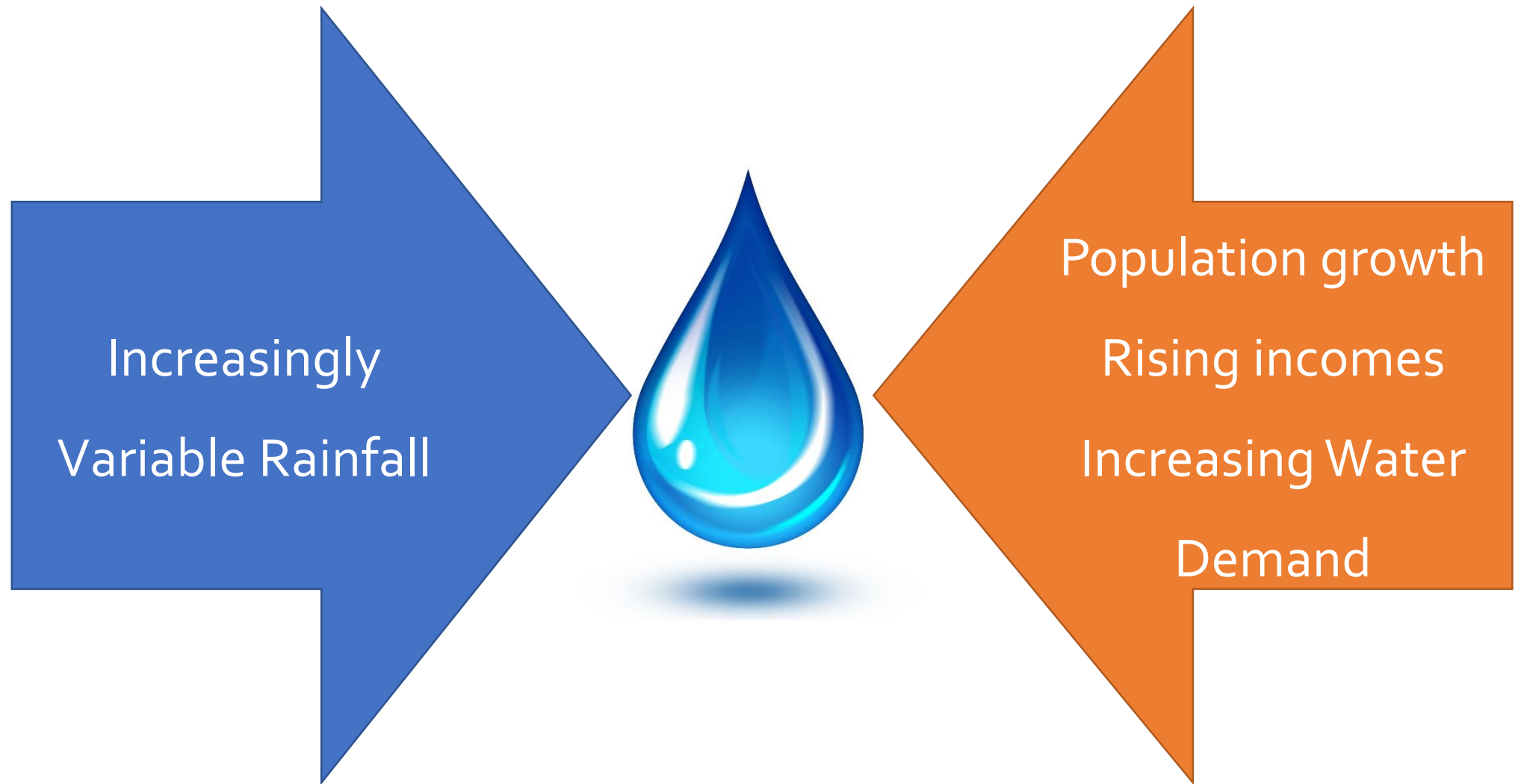
Water might seem like a
secondary issue for
development

Scarcity: new and different
challenge than ever before

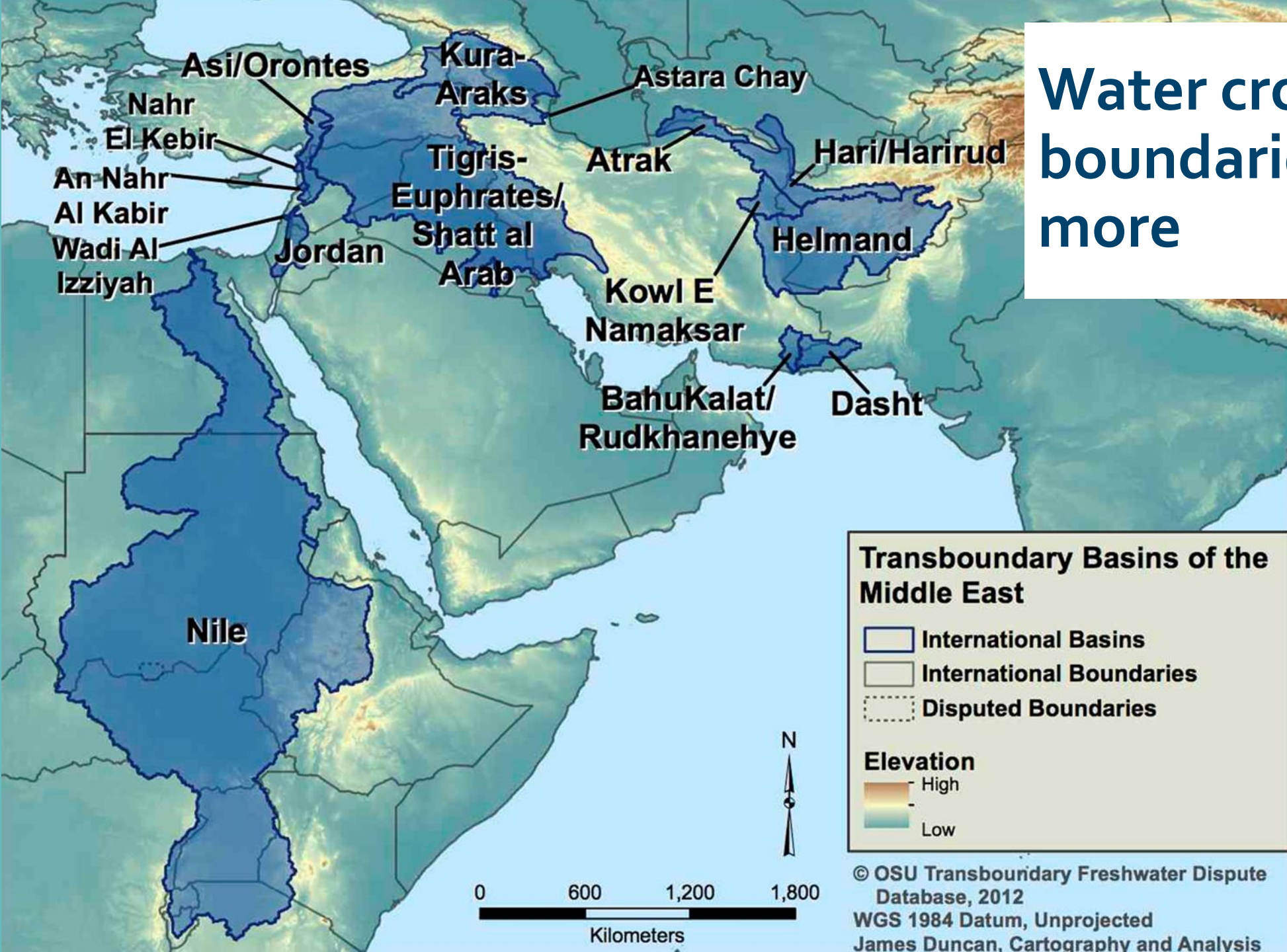
Supply-side fixes are not
enough



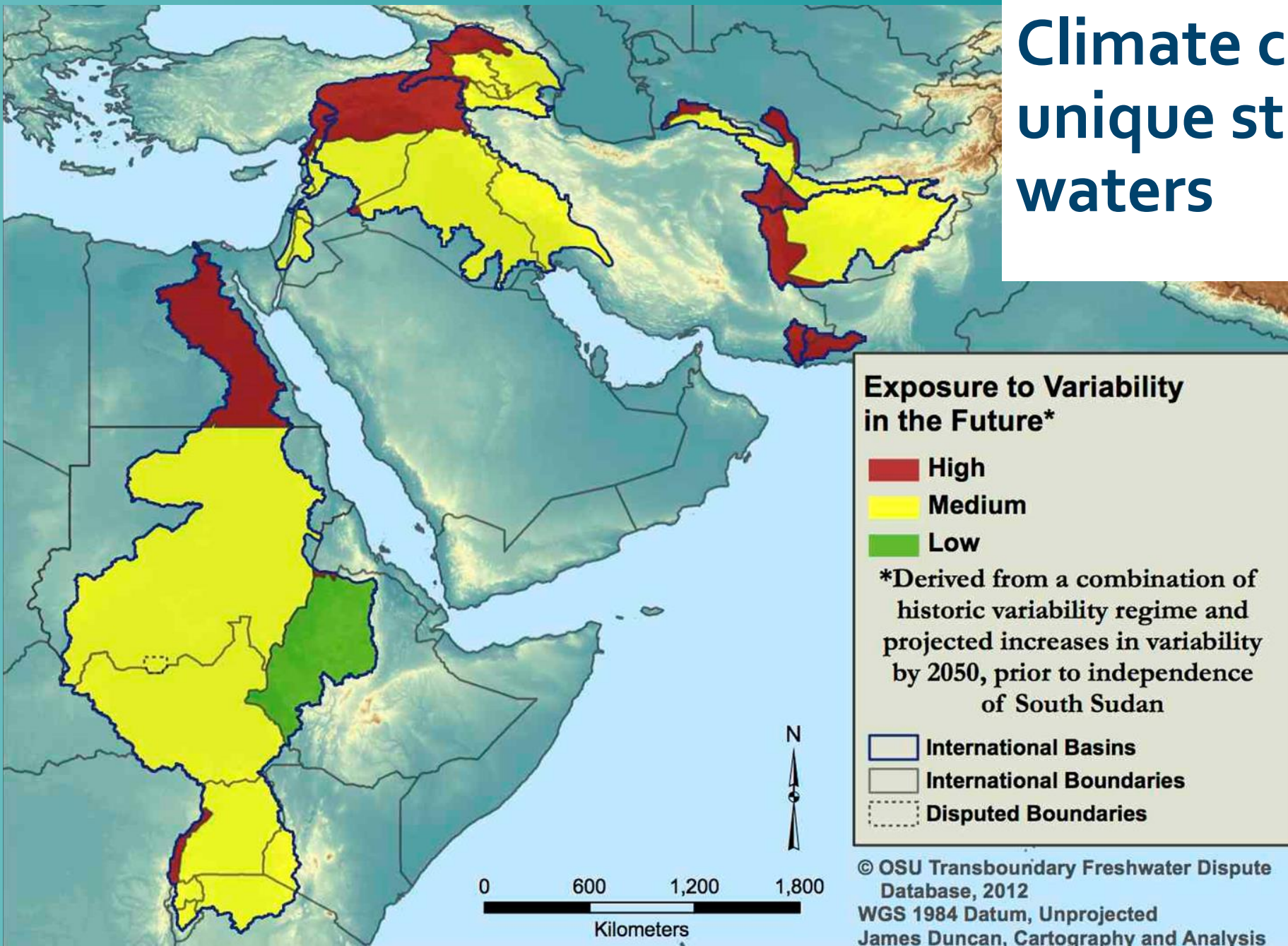
Water, climate change, and development



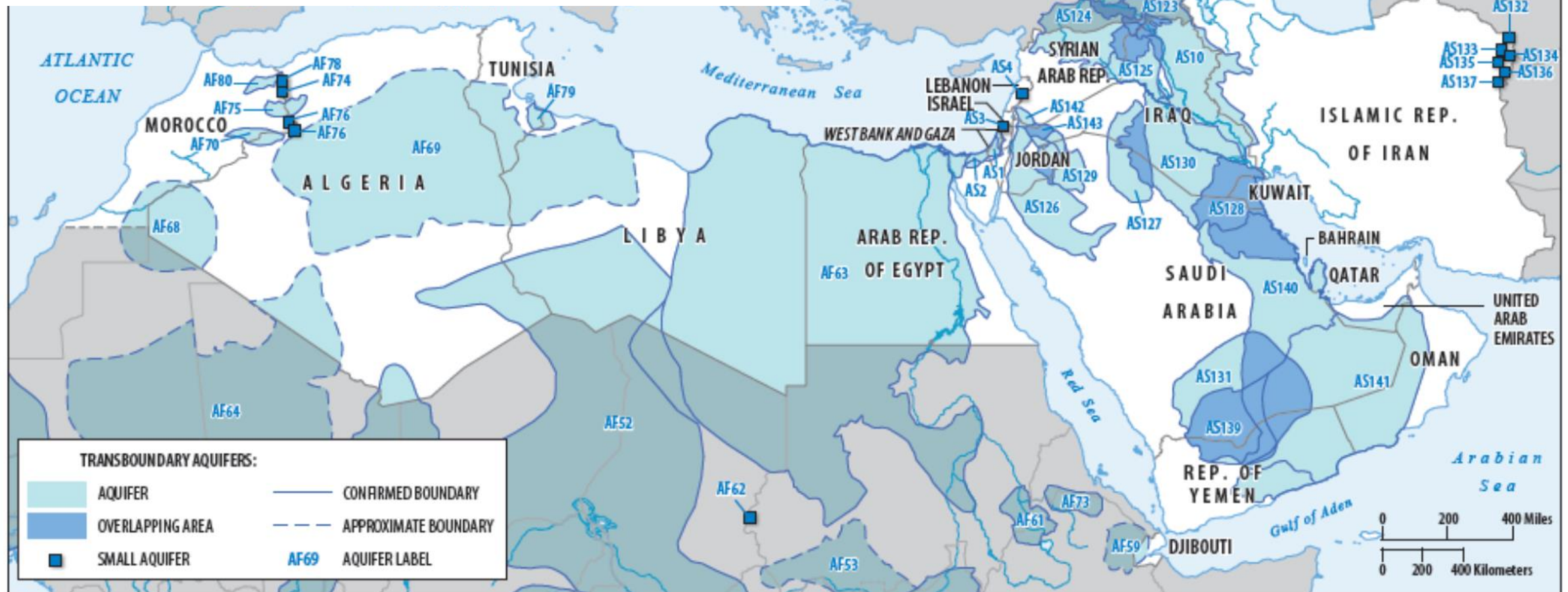
Water crosses political boundaries - and much more



Climate change places unique stresses on shared waters



Essential to share transboundary aquifers cooperatively



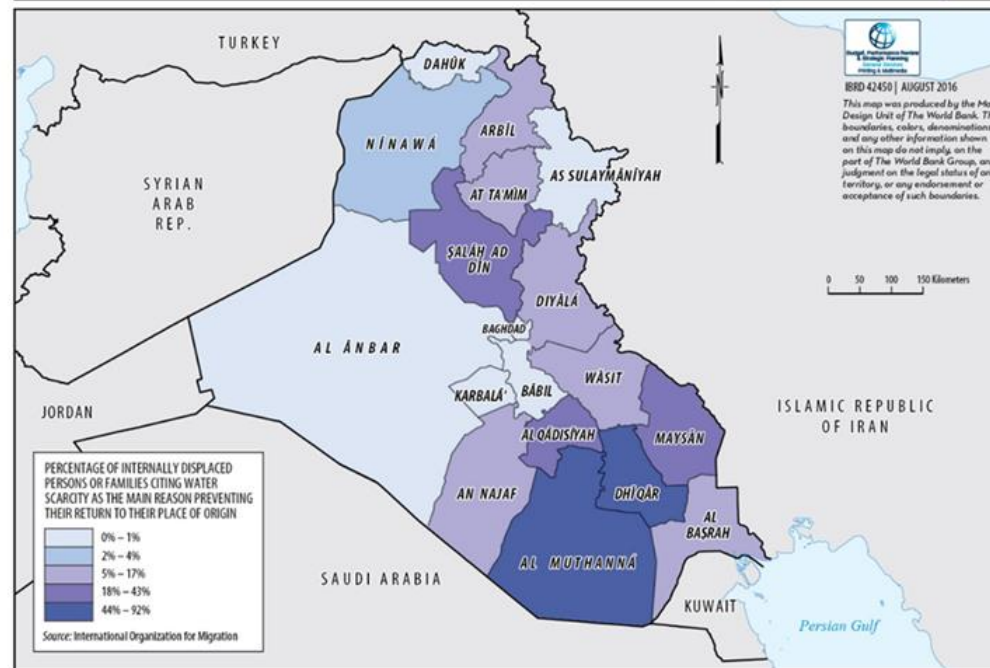
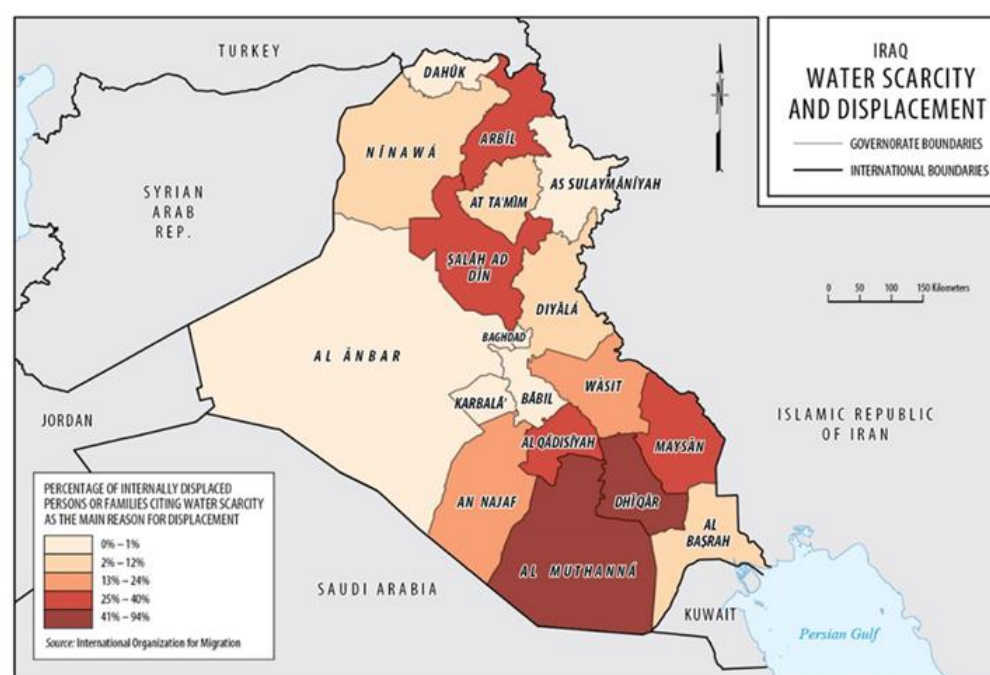
IBRD 42540 | APRIL 2017

Source: IGRAC, *Transboundary Aquifers of the World*, 2015.

MIDDLE EAST AND NORTH AFRICA MAJOR TRANSBOUNDARY AQUIFERS



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Failure to address shared water challenges contributes to displacement – for instance in Iraq

Policy insights

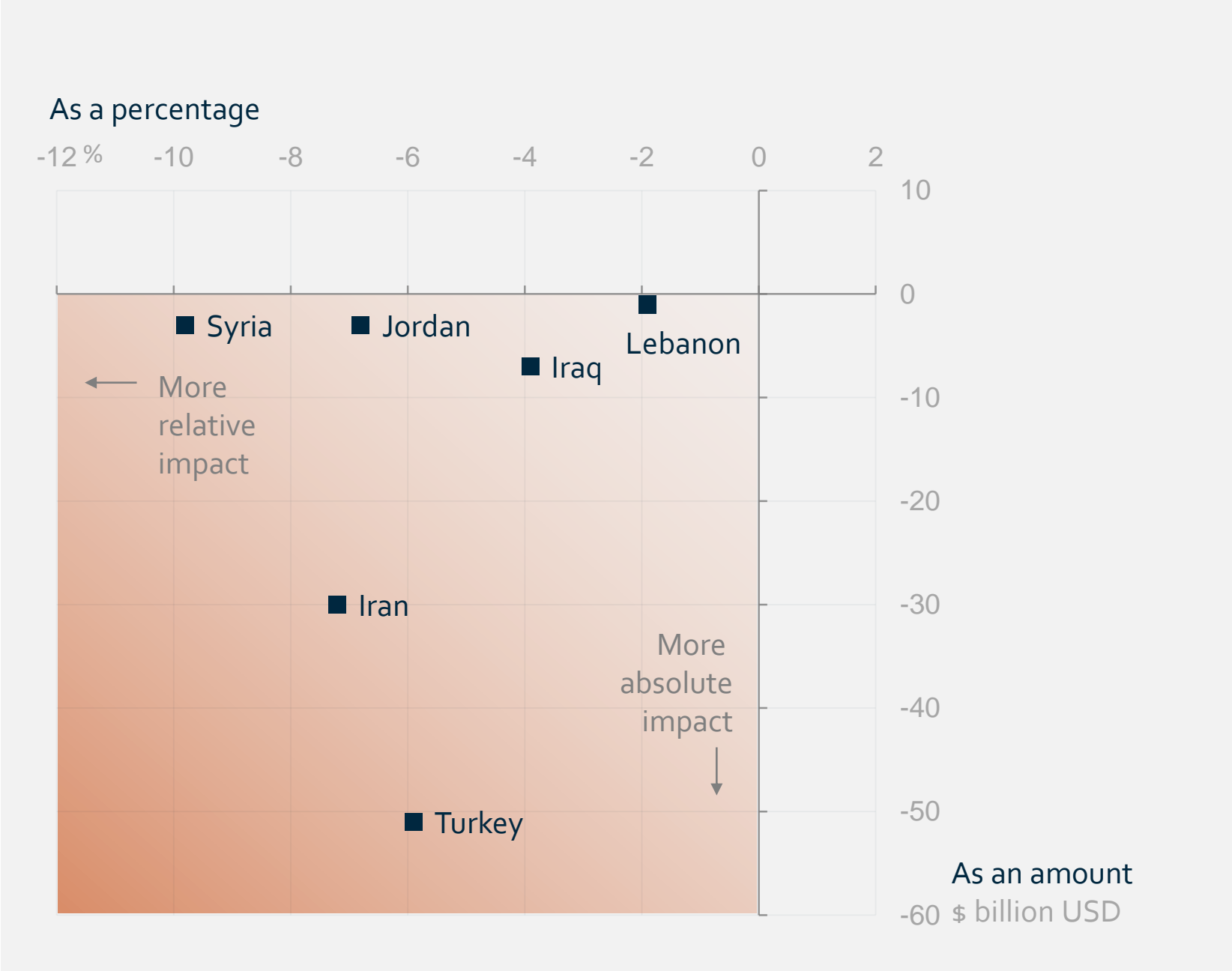
*Quantified by
simulations*



1 Water scarcity is a drag on economies

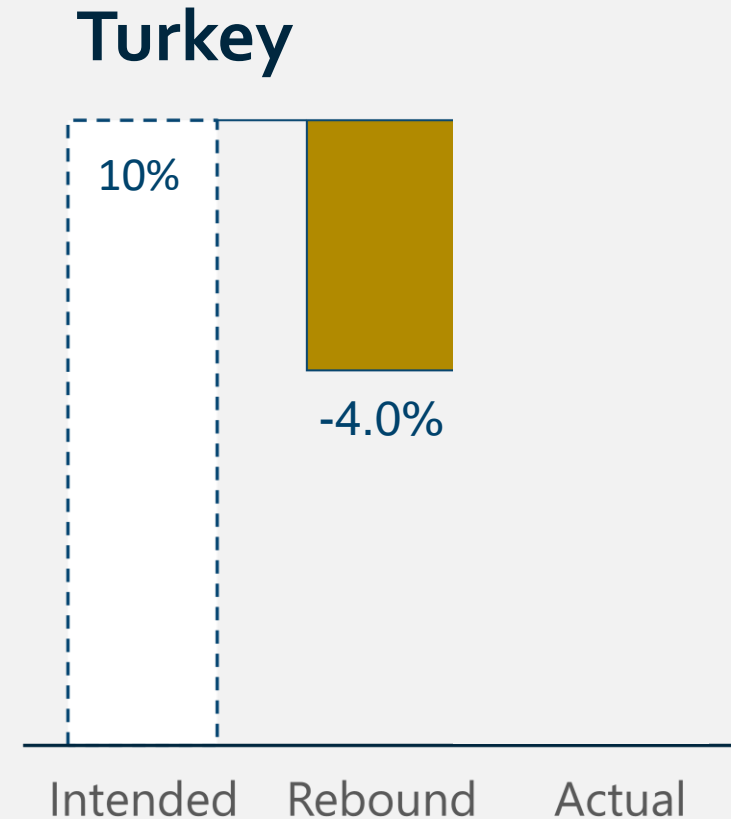
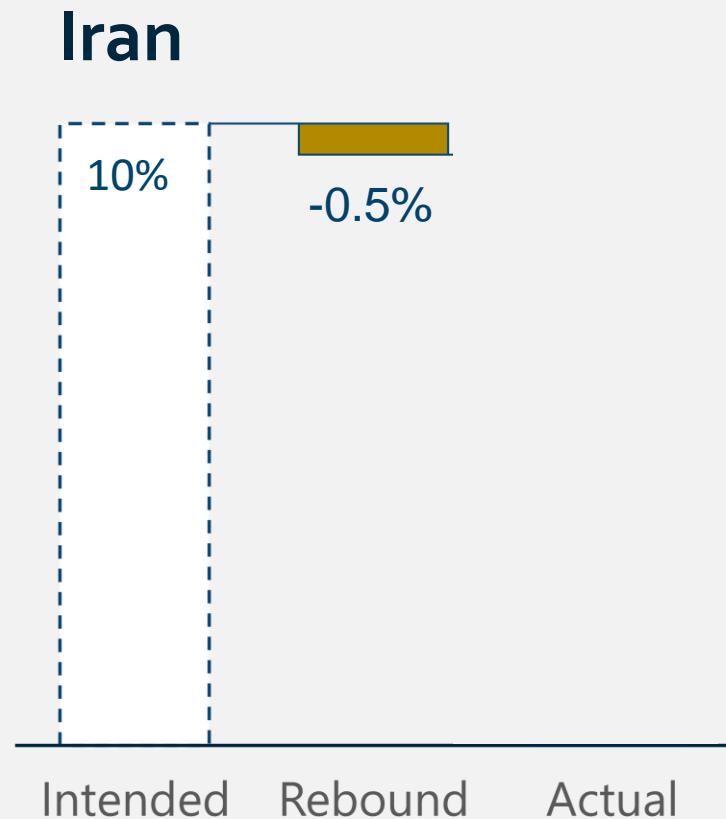
Impact on GDP when no policy is put in place

- + 20% water scarcity
- 5% to - 10% GDP



2 Water-use efficiency can increase water use

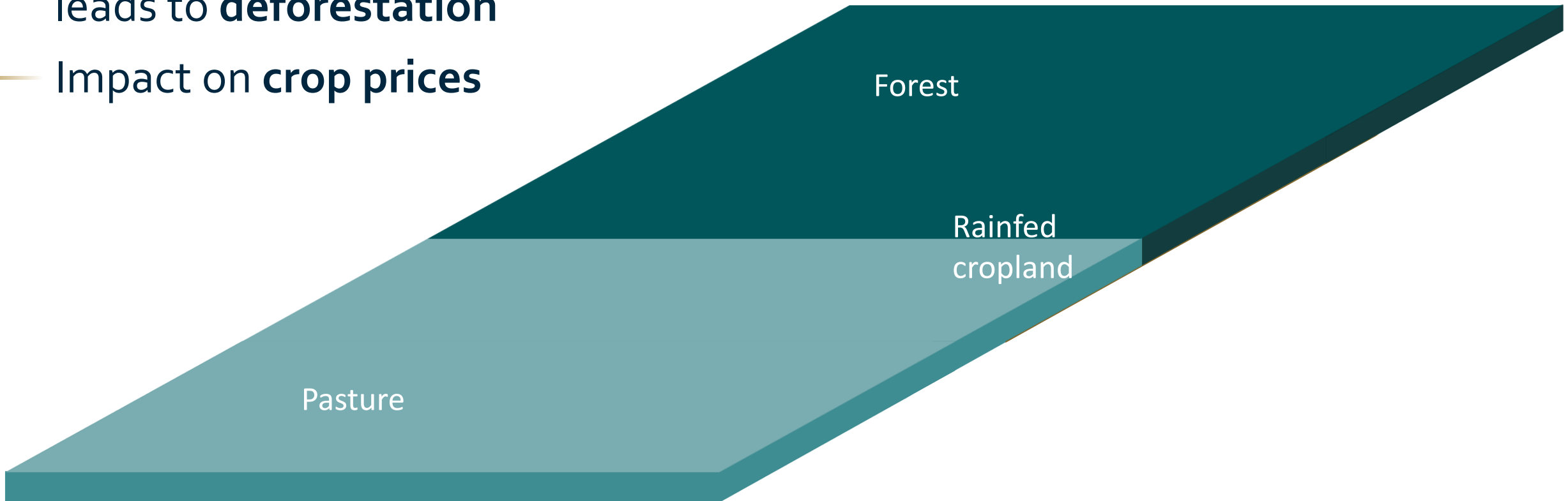
+10% Water use efficiency



3 Water scarcity impacts land use

Reduces **irrigated area** and leads to **deforestation**

Impact on **crop prices**

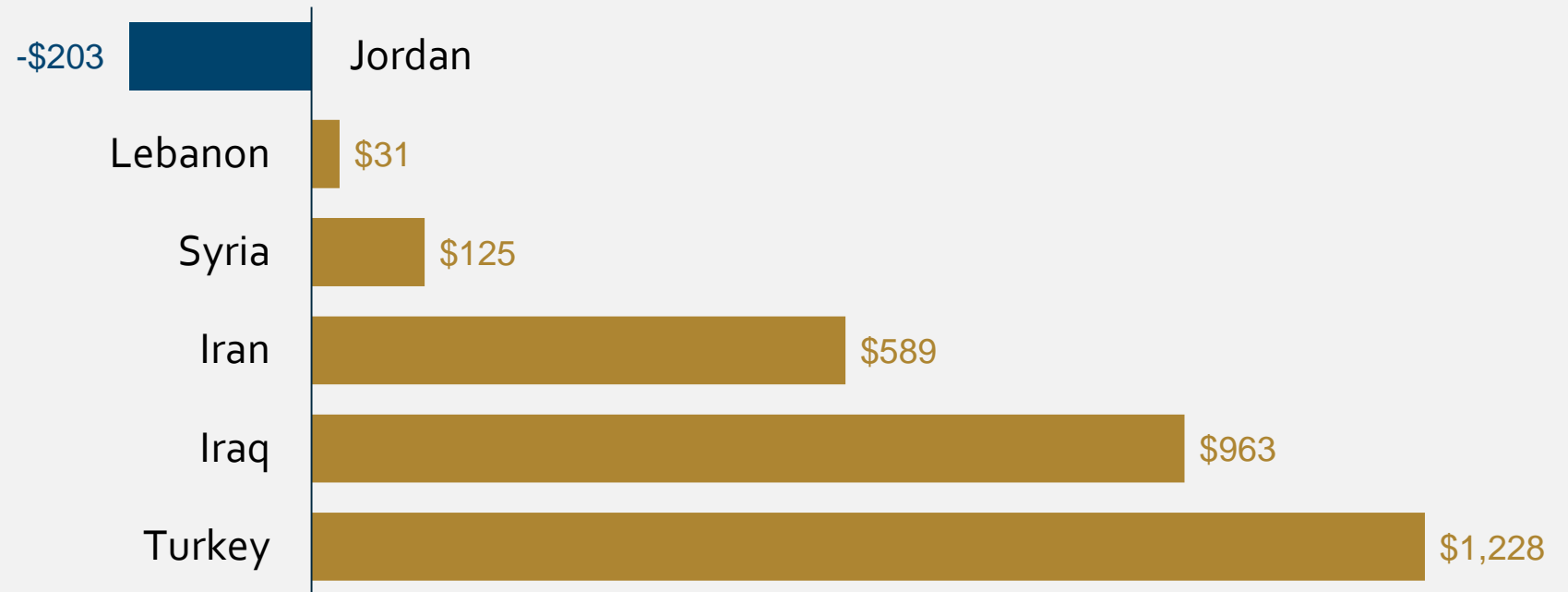


4 Policy levers outside of water

Water scarcity leads to a **higher food bill**.

Align water, trade and agricultural policy

Change in net imports of food items (million USD)



No water efficiency improvement
Food items: Crops, livestock, processed food and feed

5 Working together

Most freshwater resources in the Middle East are **shared between countries**

Makes **economic sense to cooperate**

Joint efforts promising avenue to adapt to inevitable impacts of scarcity



Policy insights - summary



Climate-driven water scarcity could reduce economic growth by **more than 6%** in some countries



Water-use efficiency improvements can be counterproductive without **proper regulation, water accounting and measurement**



The impacts of water scarcity cascade consequences from **declining irrigated agriculture to shrinking forests**



Policy levers outside of water are key to addressing scarcity, emphasizing the need for complementary **actions** and **investments**



Joint regional efforts to address water scarcity are a promising avenue to adapt to climate change, reap economic gains and advance regional cooperation

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<https://bit.ly/399p3vE>

