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# Attaining Water Security in Fragile Contexts

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# What is water security and why does it matter?



## What is water security?

## **Many definitions**

Availability of water

Leveraging productive & managing destructive

Managing water risks

Delinking hydrology & growth



## What is water security?



# Water security is a dynamic goal

- Harness the benefits of water
- Manage the risks of water
- In a complex, dynamic context
- Greater scarcity
- Greater uncertainty

#### **UNWater (2013)**

## What is water security?

## Many (nested) levels



## Why does it matter?

## Global econometric analysis confirms a **causal** impact: **Water insecurity acts as a drag on growth** undermines well-being

and disproportionately harms the poor





Effect is greatest in countries:

- High water stress
- Low incomes
- High % of ag GDP

*GWP/OECD Securing Water, Sustaining Growth* Sadoff et al (2015)

## Challenge is generally greater for the poor



Wealthy economies (green dots) face simpler hydrology & have made more investments

Poorest countries (red/orange dots) face great challenges & have little investment Why does it matter?

## Water (in)security is challenging everywhere Hundreds of \$billions/yr at risk



#### **Relative economic risks**

(3 risks standardized to the same total economic impact globally)

GWP/OECD Securing Water, Sustaining Growth. Sadoff et al. (2015)

#### Total economic impact



Economic impacts of water scarcity for agriculture

Economic impacts of flooding

Economic impacts of inadequate water supply and sanitation

# What are the dynamics of water *insecurity* and fragility?



## Fragility

# Almost half of the world's poor are expected to live in countries affected by fragility, conflict & violence by 2030



## Dynamics

## A vicious circle of water insecurity in fragile situations







- Failure to provide services
- Failure to protect against hazards
- Failure to preserve adequate resources





## Failure to provide water services

### 28% Fragile states on track for water MDGs 61% Non-fragile achieved water MDGs (OECD 2015)

#### More difficult to achieve

- Costs are high
- Limited resources (focused on security)
- Weakened institutions & social systems
- Gains reversed by destruction & migration

#### More costly to fail

- Weakens the social contract
- Exacerbates inequities
- Compounds marginalization



A soldier distributes water to slum dwellers in Dhaka, Bangladesh, on Tuesday. The Bangladesh government has called in the army to help in maintaining security and water management owing to the acute water crisis in the capital. APRSS

## Failure to protect against water-related hazards

Where economic growth is impacted by rainfall, **episodes of droughts** & floods have generated waves of migration & spikes in violence within countries (World Bank, 2016)

#### More difficult to achieve

- Weak preparedness
- Limited resources
- Territorial access

#### More costly to fail

- Vulnerable populations
- Potential to spur rapid population shifts
- Potential to exploit gov't failure
- Perceived marginalization

#### Proceedings of the National Academy of Sciences

## nature International weekty journal of sele

#### Researchers Link **Syria**n Conflict to a Drought Made Worse by Climate Change

Researchers said Monday that a recent extreme drought in **Syria** was most likely linked to climate change, and that the drought was a factor in the violent uprising there.

### SPIEGEL ONLINE INTERNATIONAL

#### Taliban Courts Pakistan Flood Victims: Race to Provide Aid Emerges

#### **Between West and Extremists**

By Hasnain Kazim

August 16, 2010

# Failure to preserve adequate resource availability

## Growing scarcity

- Extreme scarcity in fragile regions
- Contributes to displacement, prevents return

Transboundary development

- Infrastructure
- Treaties



Wilson Center & USAID NewClimateforPeace.org

## Today's seminar:

Water insecurity can compound situations of fragility

Addressing water insecurity may help promote stability & resilience

How can water more effectively contribute to the challenges of development in fragile systems?

