



Presentation from  
**2015 World Water  
Week in Stockholm**

[www.worldwaterweek.org](http://www.worldwaterweek.org)

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Stockholm Water Prize Seminar 2015

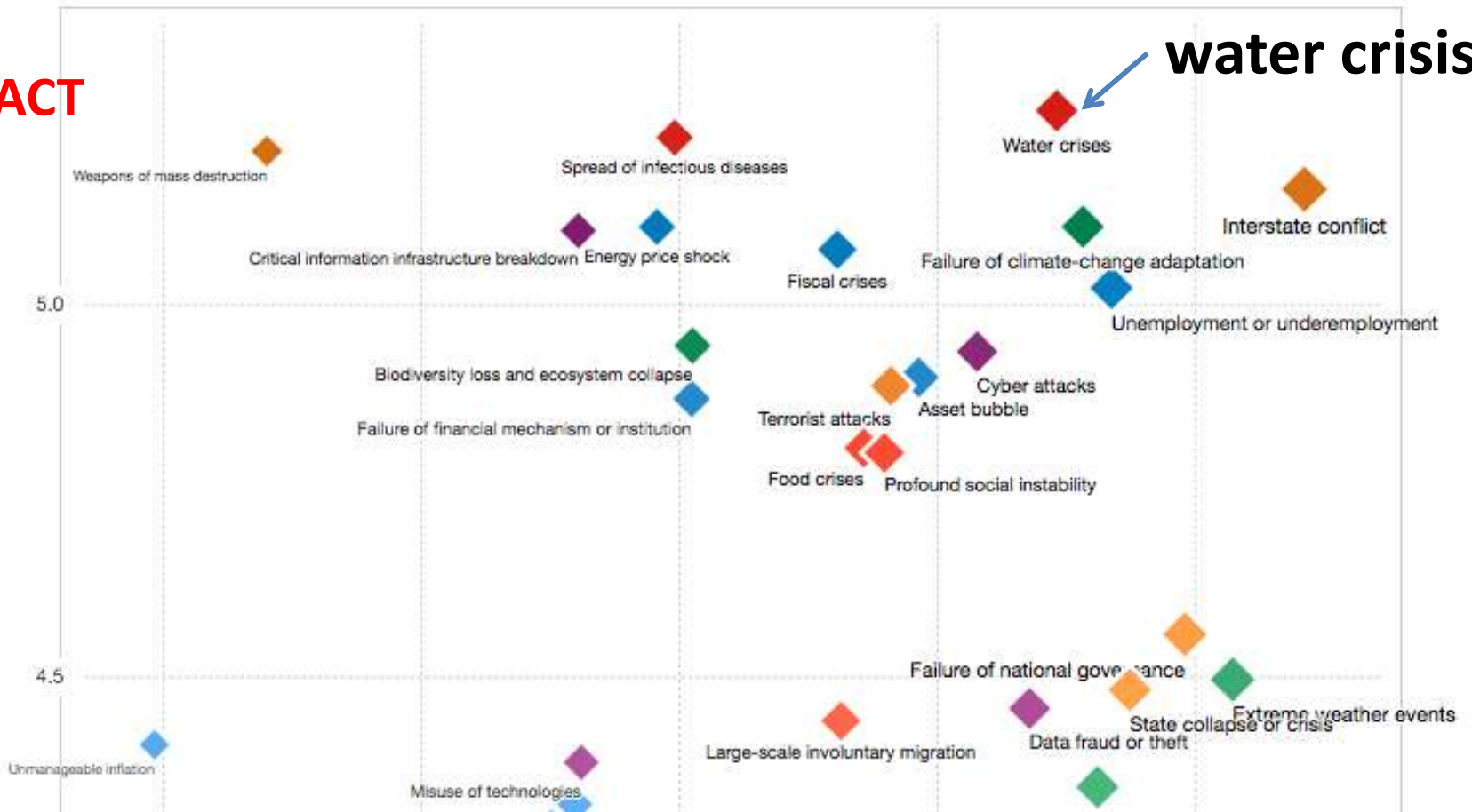
# Three pockets of water blindness

**An eye-opener**

**Malin Falkenmark  
Stockholm Resilience Center  
SIWI**

# World Economic Forum global crisis assessment 2015

**IMPACT**



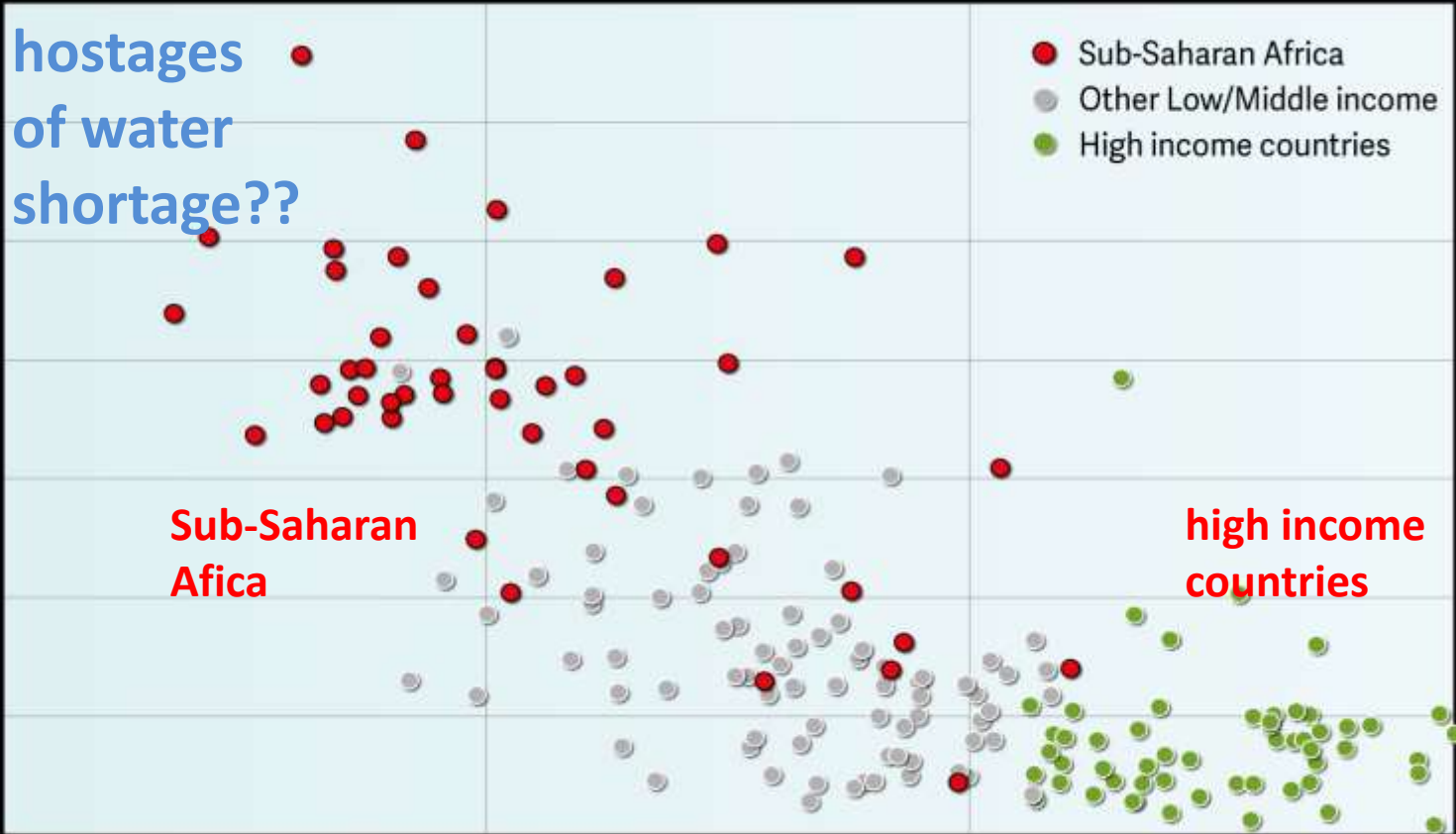
**water crisis**



**LIKELIHOOD**

# # 1. Water shortage in Africa

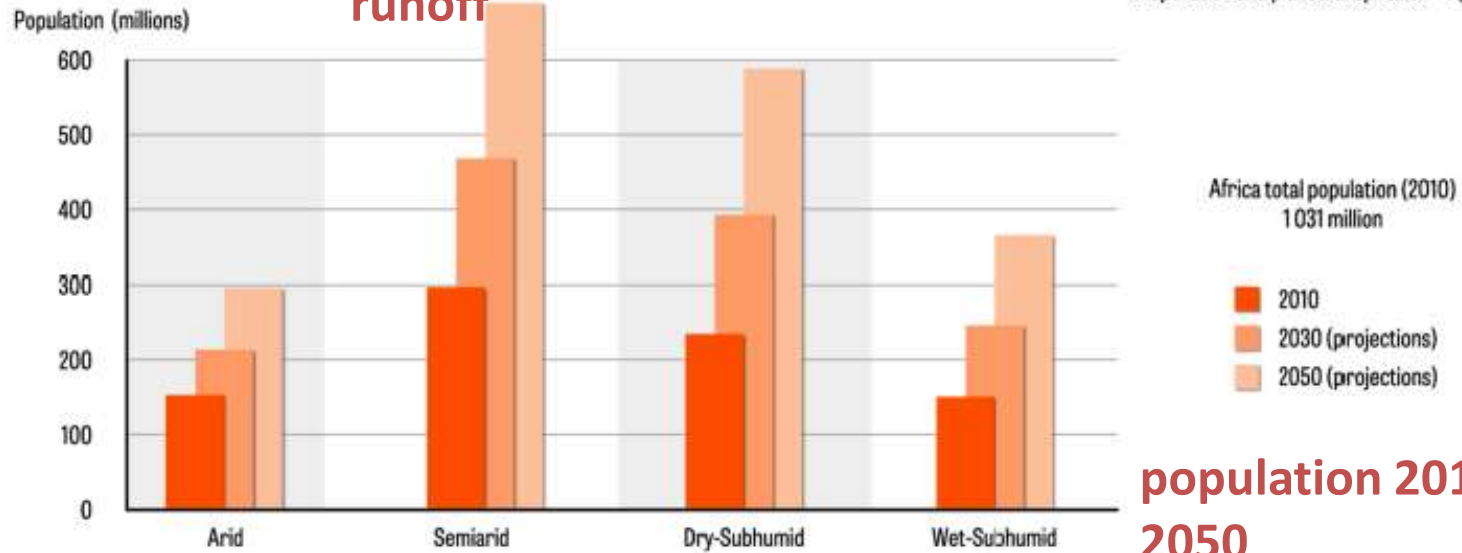
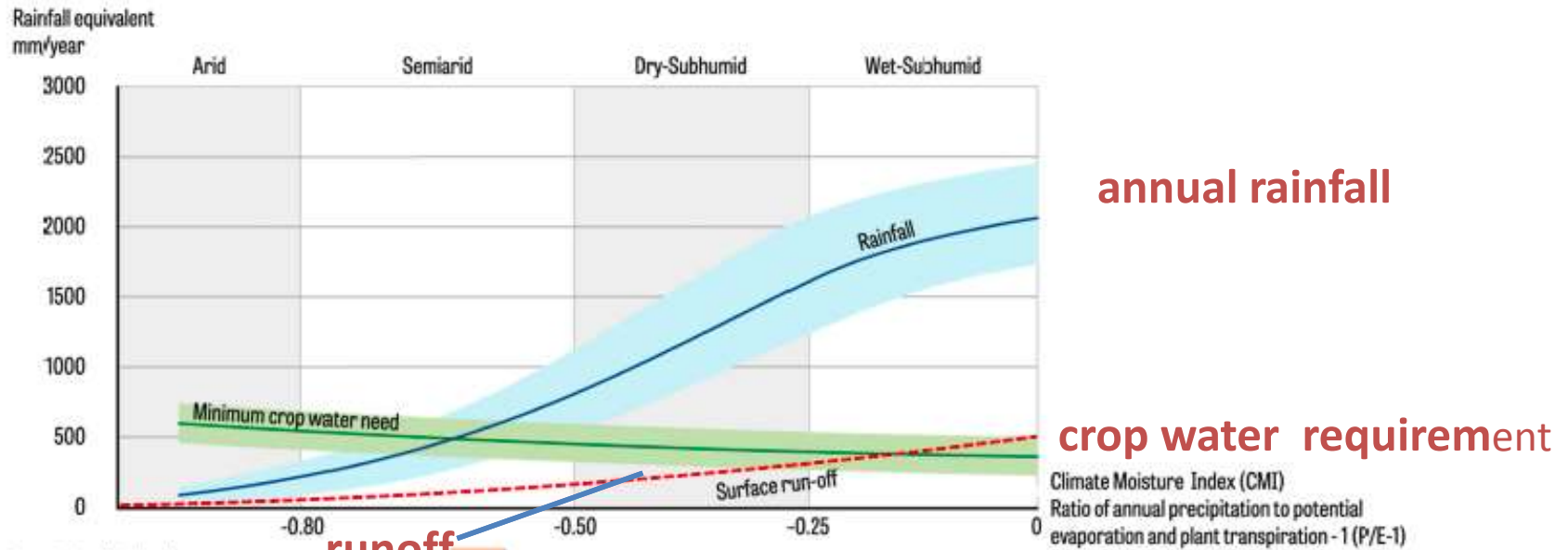
Children  
per  
woman



23 countries ←

GDP/capita

# Sub-Saharan rain profile

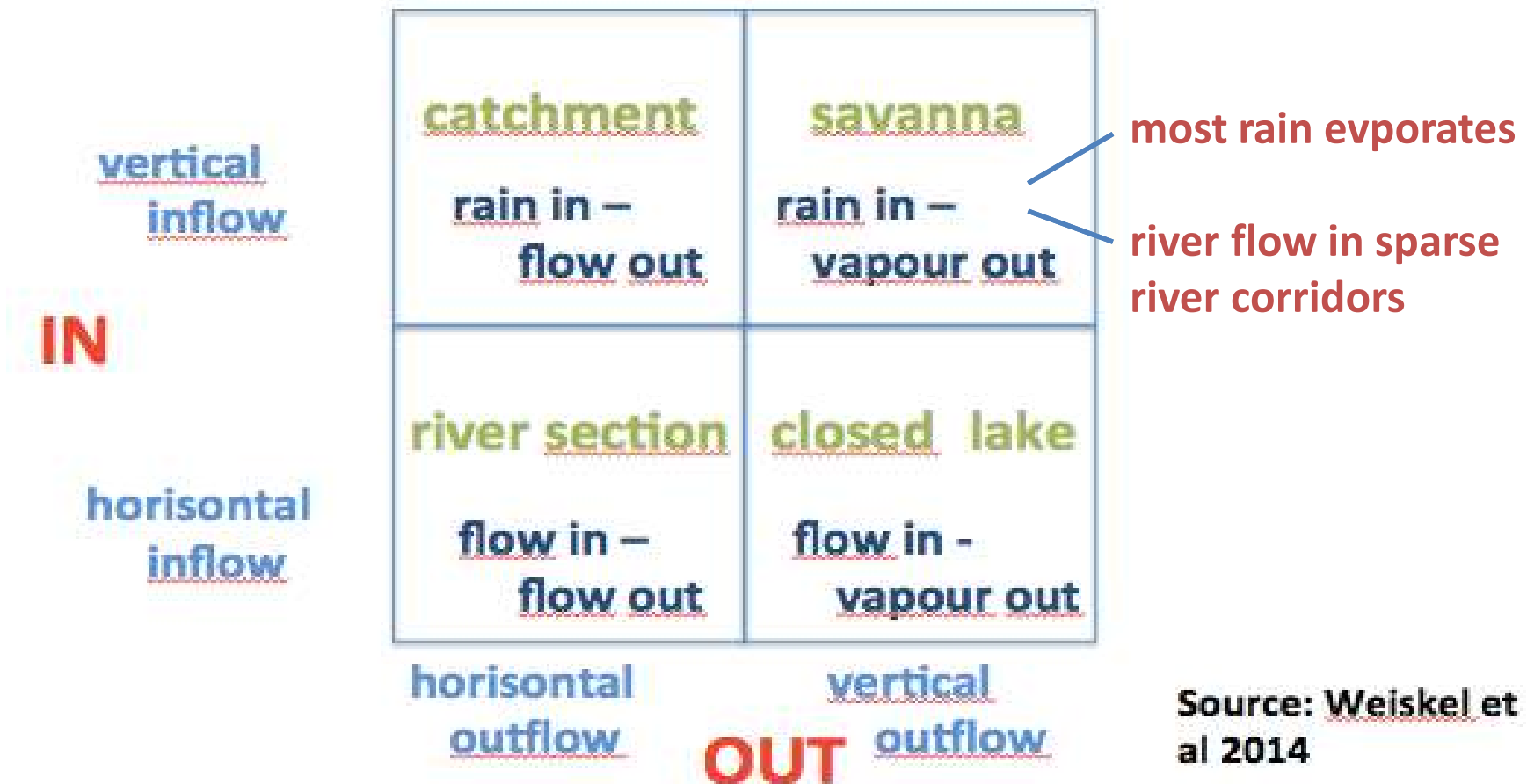


**population 2010, 2025, 2050**

# Savanna vulnerability

## very limited river runoff

landscapes are different



Source: Weiskel et al 2014

# # 2: Droughts are often dryspells

– can be overcome by rainwater harvesting

Growing season weeks

Sudan-Sahel region:  
annual dryspells

- four stations:

400 → 900 mm rain

- 1982-2006

- dryspells=grey



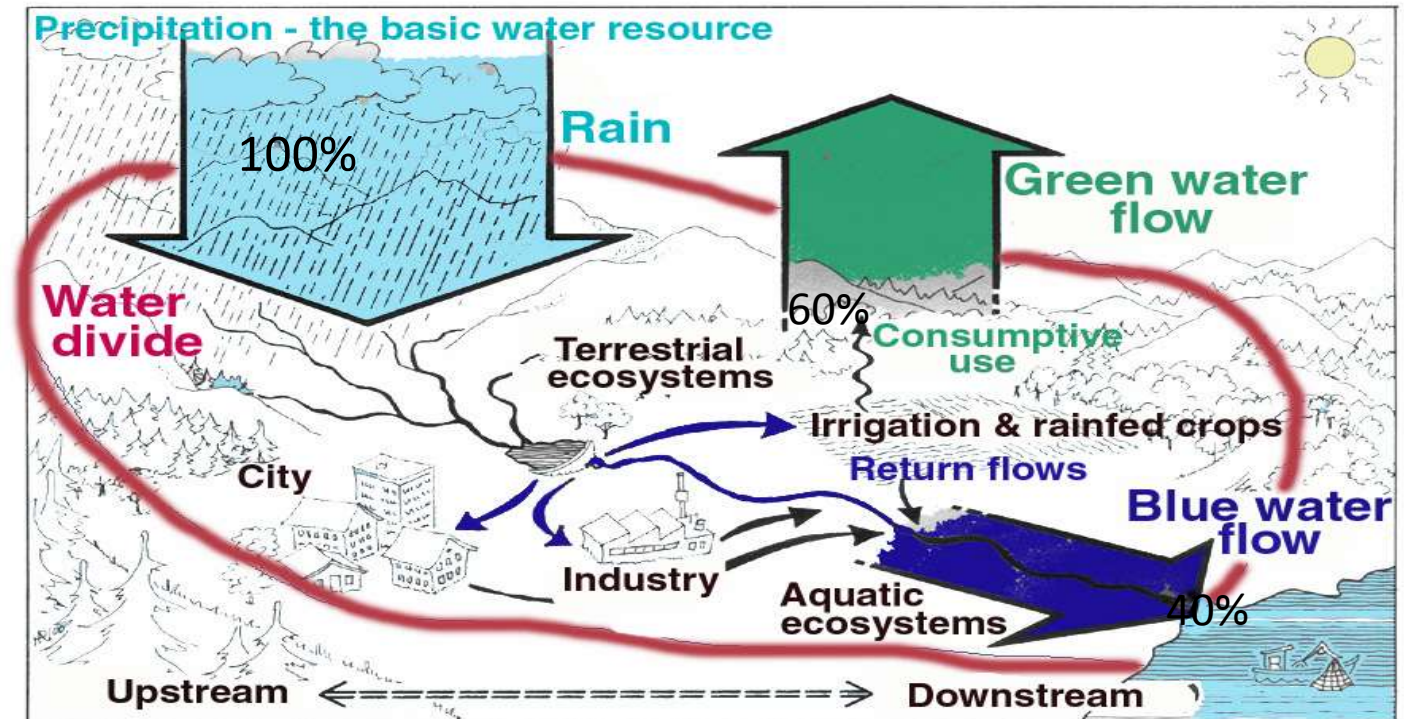
Source: Mertz et al 2012



# # 3. TWO types of water in a landscape

- blue in rivers and wells
- green hidden in the soil

Green water is crucial for agricultural development in sub-Saharan Africa





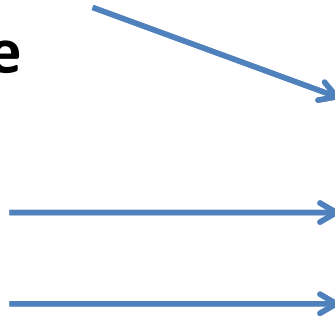
# Conclusions

- **Three eye openers:**

- \*understanding savanna hydroclimate

- \*many droughts are dryspells

- \*hidden water in soil



**RAINWATER**

**HARVESTING**

= essential

management

component

- **Asian "green" revolution NOT applicable**

- based on irrigation

- blue water in river corridors only

# African Green Revolution

= green water based

→ catch the rain before it evaporates

/ Thankyou!