



Food & Water Security to improve Resilience

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Presentation Overview

- Water for food, food for water
- Definitions: FS, WS, resilience
- Sahel: Overview
- Sahel: how to?
- Sahel: Activities







Water Needs (per cap)

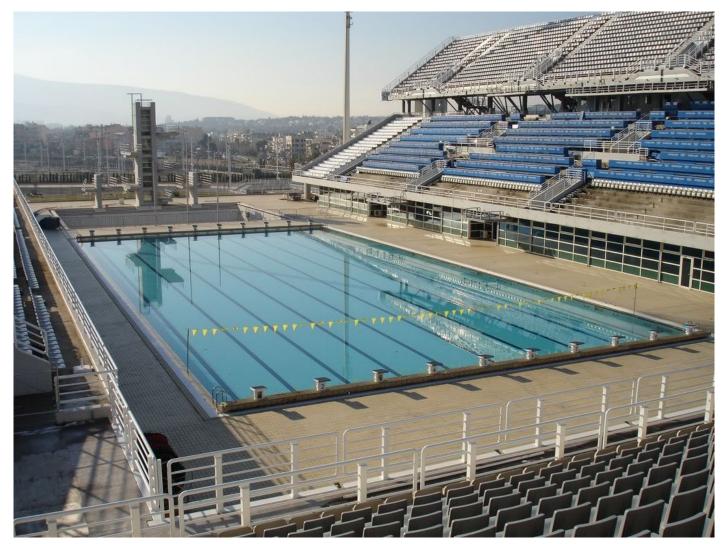
M3/cap/yr	Developed	Developing
Food production	1400-2000 (4-6,000 l/c/d)	700-900 (2-2,500 l/c/d)
Domestic use	50-150 (100-500 l/c/d)	5-20 (20-50 l/c/d)
Industrial/powe r production	200-300	20-100
Total	~ 2,000 -2,500	~ 1,000







Water for life: 1000-2500 m3/cap/day

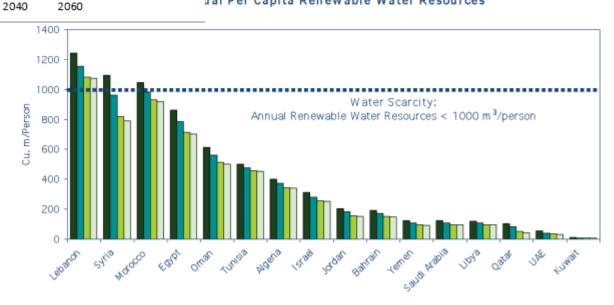








Water Needs – Now & then China China France Israel Italy South Africa Spain California

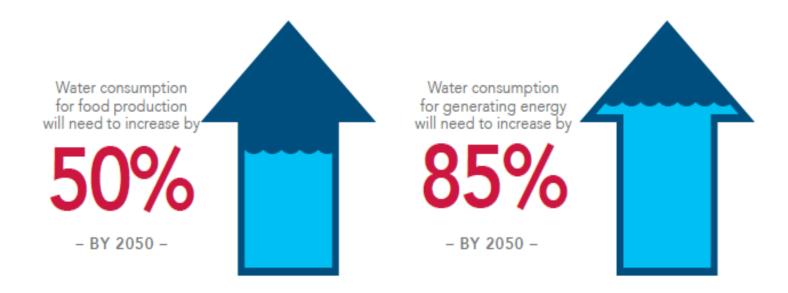


ual Per Capita Renewable Water Resources





Water Needs – Now & then









Food for water?

- Afghanistan:
 - 35% of 30,182 water points surveyed are non-functional (2011)
 - Nationally, 45% school water systems need extensive repair/replacement (2010)
- Ethiopia:
 - 25.5% of 93,000 water schemes non-functional (nat. WASH inventory 2011)
 - Non-functionality of rural water schemes ranges from 18% to 35% (2010)
 - 33% rural water schemes are non-functional at any time (2007)
 - 60% of Somali region's birkados damaged & unused, calling into question the building of new birkados versus rehabilitating existing structures (2007)
- India: 25% of India's water infrastructure is believed to be in need of repair (2014)
- Kenya:
 - 2010 pilot mapping showed that, of 1011 'improved' water points, average rates of non-functionality were 20% to 32%
 - Only 58% of rural water sources are functional (2009)
- Liberia: 40% of 10,000+ improved water points failing or needing repair (2011)







Food for water?

- Building water systems wo communities capable of covering O&M and depreciation costs: like pouring water in a leaking bucket
- Saving lives... over and over again
- => What about running ourselves out of a job?
- => What about moving from relief & recovery to growth & resilience?

In many developing countries, 50-70% population is rural, 80% of which live from agriculture, i.e. food production for

- 1) subsistence first
- 2) livelihoods when surplus
- => Food for water, food security for water security







Definitions

- **SWP Definition:** Water security is the adaptive capacity to safeguard the *availability* of, *access* to, and *safe use* of an adequate, reliable and resilient quantity and quality of water for health, livelihoods, ecosystems and economies
- UN Committee on World Food Security: Food Security means that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life
- Self-reliance or resilience (because of life's "bumps"): capacity to recover quickly from difficulties
- "Ability of people, households, communities, countries, and systems to mitigate, adapt to, recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth."







Sahel today

- Poverty, illiteracy, environmental degradation, poor access to water, sanitation & health services, low agricultural productivity - all exacerbated by
- Poor governance, gender & social inequities
- Recurrent shocks (droughts, floods, epidemics, price hikes, local conflicts, etc.) & stresses (population growth, climate change)
- => Food & water insecurity, frequency & magnitude of shocks has exceeded local coping capacity
- => Malnutrition, rural exodus, migrations, increased vulnerability to conflict & violent extremism







Water Security for Resilience, how to: principles

 Improve water security, notably enhance equitable sustainable productive water use

Improve food security, notably enhance equitable sustainable productive land use

- Improve management of shocks & stresses
- Work at household, community & sub-regional levels (rural communes)
- Strengthen rural communes as resilience hubs
- Increase agency & voice of vulnerable groups
- Deploy systems-based/risk-focused WS approach









Water Security for Resilience, how to: activities

- Improve monitoring of water & land resources
- Develop & support implementation of water, land and risk management plans
- Promote & disseminate effective & sustainable practices for use of water & land resources.
- Catalyze internal resource mobilization
- Disseminate use of CIS to improve livelihoods, reduce exposure, improve response to risks
- Improve access of women, youth & marginalized groups to water & land resources
- Prevent or facilitate resolution of conflicts related to sharing these resources











THANK YOU

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