

Water for Food Security and Nutrition

High Level Panel of Experts
on Food Security and Nutrition
(HLPE)

Outline of the Report

1. The multiple linkages between water and food security and nutrition
2. Managing water scarcities in agriculture and food systems
3. Challenges of water governance for food security and nutrition

Recommendations

What's new about this report?

- First comprehensive effort to bring together Water and FSN beyond agricultural issues (i.e. irrigation)
- Reviews emerging challenges, future uncertainties and drivers of change
- Technical, institutional, socio-economic, cultural and political dimensions
- How to increase water, land and agricultural productivity in a range of agroecological food production systems
- Competing governance systems and the need to improve policy coherence and prioritize water for FSN
- Rights to water and sanitation / right to food

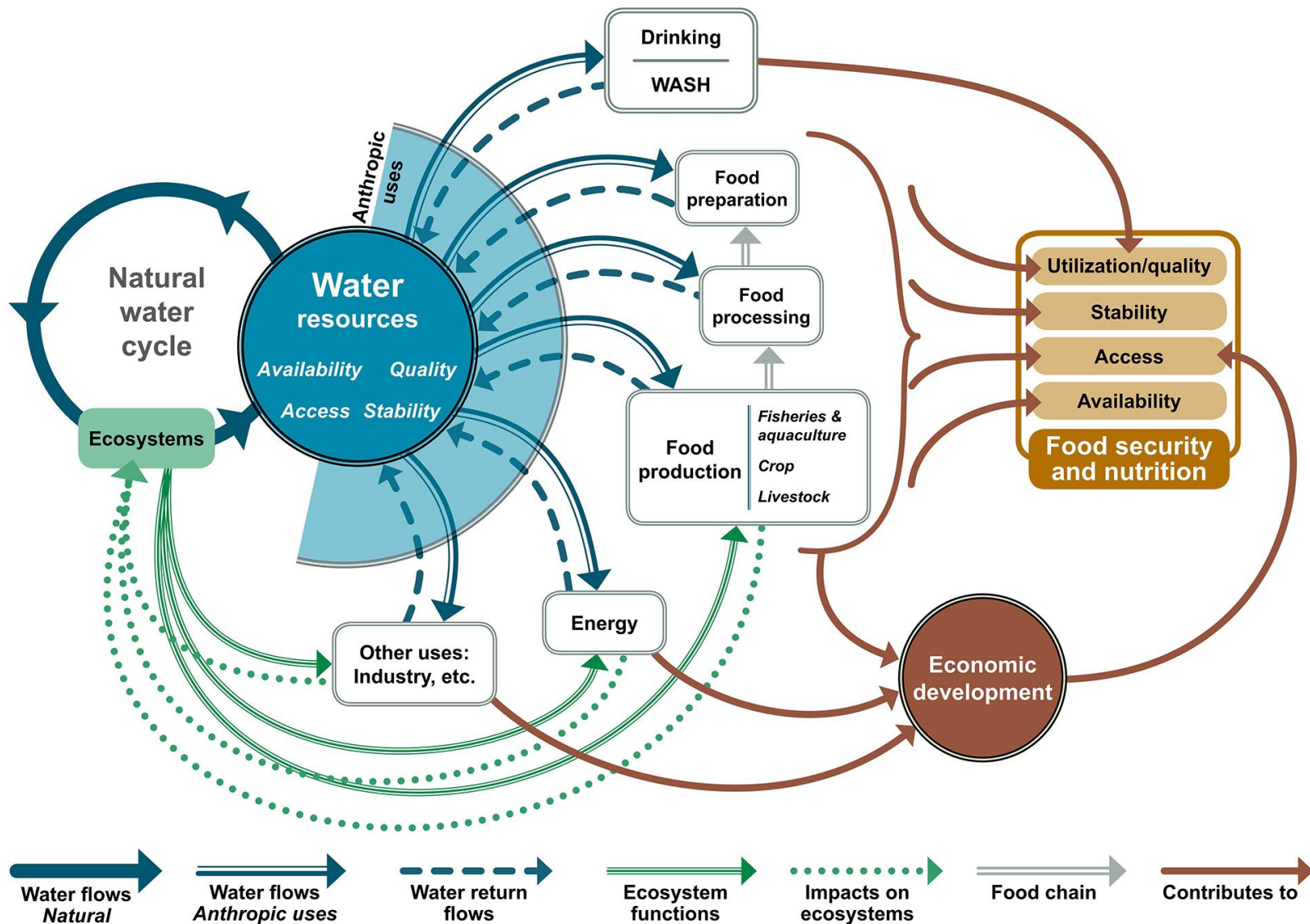
Water is Life



24745_0001.jpg © FAO/Rodger Bosch / UNFAO

Water for Food Security and Nutrition

Multiple linkages between water and food security and nutrition



Availability, scarcity, competing uses

Regions	2010	2050
North America	13 287	10 171
Latin America and Caribbean	21 450	16 957
South Asia	1 325	910
East Asia and Pacific	4 279	4 129
Europe and Central Asia	7 756	7 572
Middle East and North Africa	778	506
Sub-Saharan Africa	5 492	2 645
Developed Countries	7 510	6 099
Developing Countries	5 353	3 956
<i>World</i>	5 675	4 250

Source: IFPRI IMPACT Simulations

Access to water

Determined by socio-economic, gender and power relations

- 768 million - 18% of rural population still lack access to improved drinking water
- 2.5 Billion lack access to improved sanitation, undermining good nutrition and health
- Women and girls are usually responsible for water collection with limited decision making

Stability

- Variability
- Climate change



Quality of water for FSN

- Water quality is crucial for both drinking as well as food preparation and processing
- Water-related diseases lead to ill-health and poor nutrition outcomes
- Poor water quality also affects ecosystems' functioning
- Wastewater as a resource and threat



Problems with metrics and data

- Lack of timely and adequate data to manage water for FSN
 - Insufficient data on gender and water access and control
 - Extremely poor data on water pollution
 - Inadequate data on water use across all sectors
- Use of data in the water discourse obscures challenges related to rights, access and tenure

Managing water for FSN

- Ecosystem-based approach to integrate management of water, land and living resources;
- Need to increase productivity of food agroecosystems (both rain-fed and irrigated) to meet FSN, generate income and preserve biodiversity amidst climate change and other uncertainties

Managing water for FSN

- Rainfed systems: upgrade both water and land productivities for increased resilience to water and other stresses within landscapes
- Irrigated systems: enhance equity, management, and productivity within larger hydrological units; reduce environmental damage and manage competing demands with other sectors



Photo: © Hamish John Appleby / IWMI



Photo: © Theib Oweis

Governing water for FSN

- Inclusive water governance is crucial to ensure sustainable, equitable and gender-just decision-making and allocation of water for FSN
- Complex nature of water allocation tools & impacts on FSN
- Land and water are highly linked
- Impacts of water reform processes and large scale land acquisitions on customary rights of poor and marginalized women and men
- Overcoming gender biases can increase food production and FSN.
- Increasing role of private sector actors

Governance

- The potential and problems with Integrated Water Resources Management (IWRM)
- Lack of integration in national policies and programmes and their impacts on FSN
- The role of investments
- Major global initiatives around water, land and food governance are not adequately integrated (e.g. VGGT and VGSSF)
- The relationship between the rights to water, sanitation and food

Recommendations

Food Security and Nutrition

Ministries, Private sector,
Civil society, Research

Governments

Ministries, Private sector,
Civil society, Research

Water

Recommendations *(continued)*

Ensure sustainable management and conservation of ecosystems for the continued availability, quality and stability of water

Ensure an integrated approach to Water and FSN related policies

Recommendations *(continued)*

Prioritise the most vulnerable and marginalised, including mainstreaming gender and addressing the specific needs of women



Recommendations *(continued)*

Improve water management in agriculture

Two ways

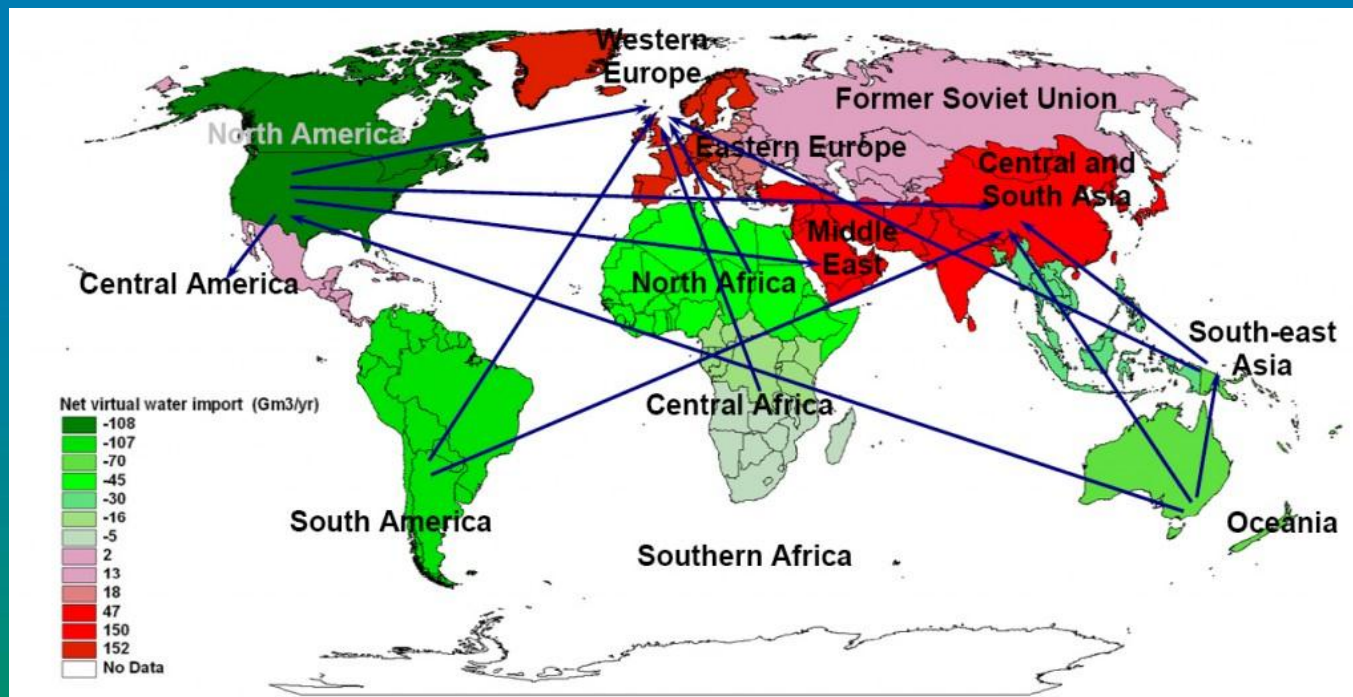
1. Looking at water in irrigated systems
2. Looking at agricultural systems given water constraints

Special attention to rain-fed systems



Recommendations *(continued)*

Improve the nature of trade to “water for FSN”



Regional virtual water balances and net interregional virtual water flows related to the trade in agricultural products.

Period: 1997-2001.

Source: waterfootprint.org.

Foster an inclusive and effective governance of water for FSN

Inclusive governance

- *Involve all actors, set a level playing field*
- *Protect vulnerable populations*

Tools and allocation systems

- *Ex-ante food security impact assessments*

Principles for responsible investments in agriculture and food systems

Land and water linkages: voluntary guidelines on land tenure

Promote a rights-based approach to governance of water for FSN

Full and meaningful implementation of the existing rights:

1) to water and sanitation

2) to food

UN HR Council Special Procedures:

Explore the implications of the linkages between water and food security on the realization of human rights



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A report by

The High Level Panel of Experts

on Food Security and Nutrition

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Thank you!

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