



Launch of the HLPE Report Water for Food Security and Nutrition

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Presentation of the HLPE Report

Lyla Mehta

[Title Slide]

Good morning ladies and Gentlemen,

I am delighted and honoured to present the main findings of our Report on Water for Food Security and Nutrition. It has been an intense and exciting process over the past year working with so many colleagues across different disciplines, time and geographical zones. We were also grateful to receive so many constructive comments and responses through the different public consultations and were happy to see the wide interest generated.

It has also been challenging because, as you will see, this is a controversial and political issue with no easy answers or solutions. Moreover, the water and food domains are very different. While they intersect at the level of consumption and production and are key for human wellbeing at the local level, these linkages are often absent in policy formulation.

In my short presentation, I will focus on the following:

- How the report is organised and its structure
- What's new about this report
- Key messages and main findings

I'll then hand over to Maryam for the recommendations.

[Outline Slide]

Our report is organized in three parts, followed by the Recommendations:

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

[What's new?]

So what's new and novel about this report?

We believe this is the first comprehensive effort to bring together Water and Food Security and Nutrition that goes beyond the usual focus on agricultural issues. Thus, we also focus on crucial aspects concerning water and sanitation for human wellbeing and survival and for maintaining the functioning of various ecosystems (that is both WASH and water resources dimensions). This is done by bearing in mind future uncertainties and drivers of change (for example, climate change, changing diets and demand patterns).

The report is comprehensive in addressing a range of technical, institutional, socio-economic, cultural and political dimensions. It offers details of how to increase water, land and agricultural productivity in a range of food production systems (note here that much of agricultural production is also concerned with non-food crops – e.g. soybean for animal feed, biofuels, tobacco etc. often for export markets – and there are usually trade-offs between these and crops that meet food security aims.). It tackles the complex governance challenges from local to global as well as the need to improve policy coherence and prioritize water for FSN. Finally, it is original in examining the relationship between the right to water and the right to food issues

[Water is life]

Water is essential for human wellbeing and survival. Water is also important for the energy, industry and other economic sectors and there are usually competing demands and trade-offs between these. Water supports economic growth, and income generation, and thus economic access to food. Water is lifeblood of ecosystems, including forests, lakes and wetlands, on which depend the food security and nutrition of present and future generations.

[Multiple linkages]

Let me now highlight the multiple linkages. Water is essential to food security and nutrition. We link four dimensions of water (in blue): availability, quality, stability of water resources and access to water; and the four dimensions of food security (in yellow): availability of food, access to food, quality of food and nutrition, and stability.

First, water of appropriate quality and quantity is essential for drinking and sanitation.

Second, water is needed for food production (fisheries, crops and livestock) as well as for feed and other non-food crops. Irrigated agriculture uses 70% of total withdrawals globally: 90% in low income countries, 43% in high income countries. 16 % of all cultivated land is irrigated and contribute to 44% of total crop production.

Third, water of good quality is also essential for food processing, transformation and preparation.

The report reviews the challenges of the 4 different dimensions of water, and their food security and nutrition implications.

[Availability, scarcity and competing uses]

Our starting point is that there's enough water and food to go around. We follow the UNDP in rejecting neo-Malthusian notions of scarcity and food security. Annual renewable freshwater resources are adequate at global levels to meet human needs. Still, rainwater, surface and groundwater resources are very unevenly distributed across the globe, within regions and within countries. As the slide here shows, per capita annual renewable water resources are particularly low in the Middle East, North Africa and South Asia.

But these global portrayals, say little about how human-induced land and water-use policies, practices as well as socio-political dimensions cause water stress and scarcities. This means we need to go beyond physical scarcity to also look at its economic and socio political dimensions.

According to the OECD water demand is projected to increase by some 55% by 2050, mainly from manufacturing, energy, and domestic uses, and with little scope to increase irrigation.

[Access to water and stability]

Water availability doesn't lead to access. Instead, access to water for FSN is determined by socio-economic, political, gender and power relations.

Even though the water MDG was met in 2012, 768 million people around the globe lack access to safe drinking water. This includes 18% of the rural population worldwide of which 47% is in Sub Saharan Africa. 2.5 billion people lack access to improved sanitation with over one billion defecating in the open. This undermines good nutrition and health. This situation is a global outrage.

Securing access to water can be particularly challenging for small holders, vulnerable and marginalized populations and women. Women and girls are responsible for water collection, and may spend several hours per day collecting water, undermining their health, educational and life chances. They also often lack the necessary decision-making power around water resources.

With respect to stability: There is significant variability in water availability across the globe, often focussed in poorer regions, translating into floods or droughts. Climate change will add irregularity and uncertainty to the availability of water in many regions. However there is an uncertainty concerning local level impacts.

[Quality]

Water quality is crucial for both drinking as well as food preparation. Water-related diseases lead to food and nutrition insecurity and kill an estimated 2.2 million people annually. Most of these are children in the global South. Poor water quality affects human health and ecosystems' functioning.

Water-scarce countries often resort to wastewater reuse, a resource for the future if used with adequate safeguards.

[Metrics and data]

In our report we note several times the lack of timely and adequate data to both understand and manage water for FSN. For example, the data is rarely sex disaggregated and doesn't adequately say enough about gender, water access, control and food production or indeed about informal water and food systems.

There is extremely poor data on water pollution and inadequate data on water use across all sectors. Finally, aggregate figures as well as the use of certain data in mainstream water discourses obscure challenges related to rights, access and tenure, especially of vulnerable people.

[Managing scarcities]

In Chapter 2 we look at managing water scarcities in agriculture and food systems. We emphasize two complementary approaches to increase land and water productivity: means focused on water; and means focused on agriculture. These should be combined.

This chapter takes an ecosystems approach to integrate the management of water, land and living resources. It argues for the need to increase productivity of food production agro-ecosystems to meet FSN, generate income and preserve biodiversity. It also looks at a range of agricultural practices including plant and livestock breeding, agro-ecology, conservation agriculture to landscape management.

This is done recognising that water management needs to adapt to climate change and other uncertainties.

[Managing water for FSN]

Rainfed agriculture is the primary source of food production globally. 93% of agriculture in Africa is rain-fed. But it is a risky business: There is a need to make rain-fed agriculture a more reliable option.

Rainfed systems: upgrade both water and land productivities for increased resilience to water and other stresses within landscapes through better management of rainwater, soil moisture and supplemental irrigation.

Irrigation has been essential to achieve productivity gains and food security globally. Yet public investments have declined and there are margins to improve existing systems. For instance 34 million hectares are affected by salinity representing 11 percent of the total irrigation equipped area.

The challenge for irrigated systems in this century is to improve equity, reduce environmental damage, strengthen ecosystem functions and enhance management and productivity within larger hydrological units as well as manage competing demands with other sectors. In addition to surface water, groundwater is an important source for irrigation. But the sustainability of GW use is often poorly understood.

[Governance]

Chapter 3 focuses on water governance for FSN. It looks at the different processes affecting water governance, allocation, access and use from local to global. It also looks in detail at the relationship between the right to water and the right to food.

Water governance refers to the political, social, economic and administrative systems and rules that determine which allocation mechanism and decisions are taken or not in water management and water service delivery. It is also concerned with the processes through which decision makers are held accountable. Inclusive water governance is crucial to ensure sustainable, equitable and gender-just decision-making and allocation.

The choice of the water allocation tool and the way it is implemented can have a huge impact on food security and nutrition. Badly adapted tools can disrupt existing community-based systems. Market based tools often tend to give priority to the sectors which offer the highest economic value.

The challenge is to ensure that allocation systems give adequate priority to water for food production as well as for the basic needs of poor and marginalized populations. Land and water are linked: changes in land ownership and tenure in one location can have impacts on water access rights elsewhere.

Certain water reform processes and large scale land acquisitions often overlook and threaten the customary and informal rights of poor and marginalized women and men, with impacts on FSN.

In particular women's entitlements are often recorded or recognized as belonging to the male 'head of the household'. This has negative impacts on the FSN of female-headed households and female decision-makers and leads to gender bias in the benefits derived from farming and water. There is considerable evidence that equal access to resources by male and female farmers would substantially increase food production and FSN.

Private actors are playing an enhanced role in water management as providers of services, as big users outbidding smaller users and leading to water being re-allocated in significant ways. Because of their economic and political influence they have convening power and controlling the resource itself. In many countries there is insufficient regulatory oversight of governance and management, especially of private actors.

Water users associations play a key role in governing water for FSN but it's important to ensure that they promote equitable outcomes and are not captured by elites and powerful players.

[Governance]

Integrated Water Resource Management has been around for a while and has often helped to bring together social, environmental and economic objectives. Despite being widely used and promoted it has also been criticized for being too top down and abstract and it doesn't adequately integrate FSN concerns.

At the national level, ministries and departments dealing with agriculture, environment, water, food and land tend to be separate and do not adequately coordinate their efforts and

actions with each other, nor do they seek to develop coherent policy amongst each other. This in turn affects food security outcomes.

For instance, energy policies need to consider impacts on water demand and potential impacts on food security and nutrition, through competition with irrigation, consequences on rivers, fish and fishing livelihoods (for example through dams)

Investments in various economic activities can provide development opportunities, increase the provision of water, with positive impacts on FSN, particularly through enhancing income security. But they can also have negative impacts on local population

This calls for ex-ante assessments of impacts on the FSN.

Major global initiatives around water, land and food governance are not adequately integrated. For example, the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security adopted by CFS do not address the link with water.

The human right to safe drinking water and sanitation as well as the right to food are globally recognised rights. Still there are significant challenges in realising these rights. The right to water largely focuses on domestic aspects and has not been deployed to look at the productive uses of water.

The rights to water and sanitation and the right to food have close ties because water and sanitation are crucial for health and nutrition and because access to water is indispensable for food producers and the right to food of producers. It is important to note that local water users rarely separate out the domestic and productive uses of water or water and food issues. We thus call for an exploration of how these two rights can be joined up in a meaningful way in order to promote a human rights approach to water governance for FSN in order to ensure water for FSN for all, for now and in the future.

Thank you very much for your attention.

Maryam Rahmanian

[Recommendations]

The recommendations are addressed to governments and all other actors participating in CFS: private sector, civil society, international organizations. In particular, to governments, who are responsible both for water and for food security and nutrition.

Our key message is integration and prioritisation.

The report delivers messages for the food security and nutrition community, on how to manage water scarcities in agriculture and food systems, and how to better integrate water scarcity considerations in food security and nutrition policies. It also delivers messages for

the water community, on how important it is to consider food security and nutrition objectives in water management and governance.

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

The sustainable management and conservation of ecosystems is needed to secure the continued availability, quality and stability of water for FSN. It needs to be done through participatory mechanisms, and co-management of natural resources can be an option.

States should ensure the preservation of the quality of the water resource through regulatory systems, targeted incentives and disincentives, such as the polluter-payer principle, and accountability schemes.

[Ensure an integrated approach to water and FSN related policies]

While most states do have Integrated Water Resources Management plans these must better incorporate and prioritize FSN concerns. Also, all water related policies need to take into account food security and nutrition.

This is clearly the role and the responsibility of governments.

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

States should ensure that no action related to water has negative impacts on the access to water for the food security and nutrition of vulnerable and marginalized peoples. Women and men should be given equal access to water. Particular attention should be given to indigenous peoples, smallholder farmers, and other marginalized communities.

The specific water needs of women and girls need to be addressed, taking into account women's productive and reproductive roles. States and other relevant stakeholders should address the drudgery and burden of water collection and disposal, especially for women.

Rural women's participation and representation in water institutions need to be strengthened.

[Improve water management in agriculture and adapt agricultural systems to improve their overall water efficiency and water productivity, and their resilience to water stresses]

Water and land productivity improvements are central to development and to water management for food security and nutrition.

We call for more efficient and more productive uses of all water in agriculture, including rainwater.

There are two ways for doing this:

1. First, consider water management options such as water harvesting and supplementary irrigation, water storage infrastructure, and improving soil moisture retention capacity.

2. Second, improving the productivity of the agricultural system given water constraints, including rain-fed systems.

One key strategy is to reduce risks in order to enable investments, mobilizing a range of tools from plant and livestock breeding to agroecology. Appropriate governance mechanisms are needed for the sustainable management of groundwater, considering, when necessary, fixing maximum withdrawals levels and setting up systems to monitor and control individual water withdrawals.

[Improve the contribution of trade to “water for FSN”]

Water scarce countries depend on food imports. They are particularly vulnerable to food price volatility, and to other countries’ export restrictions. They need confidence in a rules-based, transparent and accountable multilateral trading system.

This includes rules that limit the use of export constraints. Strengthen the Agricultural Market Information Systems (AMIS) to improve transparency and access to information could play an important role. However, while growth and export needs must be taken into account, this must not be at the expense of ensuring local ecosystem sustenance and better working environments.

[Foster an inclusive and effective governance of water for FSN]

What do we mean by inclusive governance?

First, a level-playing field between different actors is key. States should ensure a full and effective participation of all actors, including the vulnerable and marginalized, recognize community-based actors and support them. Similarly, States should protect the access, use and tenure rights of these communities.

Decentralized governance enables actors to better take into account the needs of users and the state of the resource. Allocation tools need to give adequate priority to water for food production as well as for the basic needs of poor and marginalized populations and women. They should also not erode their rights in customary systems.

We also make recommendations about investments (which investments, by whom, where, to do what, impacting on whom)?

States should ensure that investments respect basic rights to water and sanitation as well as the right to food, and abide by the CFS principles for responsible investments in agriculture and food systems.

Finally, we recommend that a special meeting is organized, inviting all food security, nutrition and water-related actors to discuss how to coordinate policies and programmes towards progress in Food Security and Nutrition outcomes.

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

We reiterate the importance for States to comply with their obligations under international human rights treaties.

Therefore, States should ensure the full and meaningful implementation of the existing rights to water and sanitation, as well as the right to food. In addition, we call on the CFS to provide guidance on how to ensure access to water for food security and nutrition when implementing the Voluntary Guidelines on the Good Governance of Tenure.

Finally we call on the United Nations Human Rights Council and its Special Procedures to explore the implications of the linkages between water and food security and nutrition on the realization of human rights.

These would include the Special Rapporteurs on the Human Rights to Safe Drinking Water and Sanitation, the Right to Food, the Right to Health, the Rights of Indigenous Peoples and the Independent Expert on Human Rights and the Environment.

[Final Slide]

These recommendations serve as the starting point for your policy negotiations on water for food security and nutrition. We trust that they serve as a useful basis and we wish you productive deliberations.

Thank you very much for your attention.