International Conference on Policies for Water and Food Security in Dry Areas

















25 June, Cairo, Egypt





Policy interactions: water scarcity, food and employment

Day 2 of the conference saw a series of policy interactions and debates that brought new perspectives on the conference themes of: water-food-employment policies and coping with water scarcity. These findings will feed into the synthesis process on the final day of the meeting.

Paul Siegel, consultant to the World Bank, highlighted a series of cases and examples of how information and communication technologies can be a strategic tool for food security in rural areas.

He spoke of technological approaches to information sharing and gathering to improve water and food security. He was particularly keen to involve youth in information and communication technologies of water management and make better use of farm-level data collection and analysis to improve access to food and to manage agricultural risk. He stressed the importance of local data and delegating more responsibility for managing information to farmers, for example for the collection of local data on weather, water, market prices and related matters.

Clemens Breisinger, Research Fellow at the International Food Policy Research Institute, presented the results of a global modelling study, asking what kind of investment is needed in water for agriculture. Investments that affect water go beyond and include, research, infrastructure - such as roads - access to markets and education.

In the model, one indicator is poverty. A more precise one is nutrition, especially childhood nutrition. Dr. Breisinger warned that without investment, other countries are likely to join the 'water stress' club in the coming decades. So continued investment is needed, even for today's wealthy countries.

Testament to water security and food security progress and challenges came from many countries. A raft of new policies seem to be making the difference.

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A new framework for water and food security

The conference is a process of group reflection and synthesis, feeding into a set of conclusions and recommendations, to be finalized by the group on the final day of the

- Incentives for sustainable and efficient water allocation and management.
- Interactions between water management, food security and employment
- Coping with water scarcity results of policy dialogue.
- Policies for enhancing food security.

Words of wisdom

Dr Mohamed Ait Kadi, Morocco **Ministry of Agriculture** "Governments need to roll up their sleeves to understand water and make difficult decisions"

Dr John Pasch USAID

"To solve water problems we need more women and youth involved" "Behaviour change is necessary farmers take notice of neighbours not professors or government agents"

Dr Jeremy Bird IWMI

"With water and water payment one size doesn't fit all. We must look at water quality as well as water quantity as this impacts on water











In China, said Dr Jing Liu of the Chinese Academy of Agricultural Sciences, there have now been nine straight years of growth in cereal production, an increase never seen before. This has been achieved through Government incentives and financial instruments as well as technological improvement. But there is a growing water scarcity problem in China, especially in the North of the Dr Jing Liu, the Chinese Academy



of Agricultural Sciences

But she struck an optimistic note, confident that new technology such as improved crop varieties along with Chinese ingenuity will keep food production on a growth track. One big problem though - how to close the gap between urban and rural incomes?

Delegates heard from Ethiopia that food security resilience has markedly improved since the 1970s and 1980s. Dr Dawit Alemu of the Ethiopian Institute of Agricultural Research, pointed to a new integrated approach in water security policy with a watershed approach showing the value of collaboration between all users. With careful management some previously dry rivers and lakes are starting to flow and have water in them again. The national water policy seems to be working.



Dawit Alemu, Ethiopian Institute of Agricultural Research

But Dr Alemu admitted there was still much to do in tackling the five to seven million Ethiopians who are chronically food insecure each year. Climate change is looming as another threat. On food security he pointed to new varieties of crops such as lentils and cereals as having made a huge impact on the farming output of Ethiopia and on the nation's food security.

The fourth most water scarce country - Jordan is battling to apportion water between agriculture and human consumption, said Dr Mohamed Hiary of the Ministry of Agriculture in Jordan. There is still much to do in re-aligning water policies and improving distribution.

In the current dam systems, only two per cent of rainfall is captured each year, giving scope for big water harvesting improvement. Monitoring of wells is being improved to cut down on the 1/3 of wells that are operated illegally. And a big effort is being made on wastewater treatment - the so-called grey water source.

The debate of self-reliance verses self sufficiency was touched on by Dr Mohamed Ait Kadi, Director in the Ministry of Agriculture and Maritime Fisheries in Morocco. Self-reliance means a mixed economy with trade allowing food imports to be purchased on the world market, whereas self sufficiency means an aim to produce all of one's food in country. Over 80% of water in Morocco is used for agriculture, but it is a sector that far out-guns general industry as a motor of the Moroccan

New laws and economic pressures are regulating water use with farmers encouraged to take part in tariff structures aimed at efficient use. There is a big push to convert production widely to drip irrigation, which is already a great success and saving valuable water.



Policy Dialogue on Water & Food Security

A special policy-research-civil society dialogue brought perspectives from Iraq, Egypt, Oman, Yemen, representatives of FAO's Near East and North Africa Regional Office and two international experts. The FAO set the scene with the results of its recent gap analysis of water and food security in the region, from its regional water scarcity initiative, presented by consultant Andy Bullock.

He pinpointed three areas where improvements can be made to improve food and water security - at country and regional level. These are: the gap between successful demonstration projects and the failure to bring these to scale to benefit millions of smallholder farmers; the fact that water policy is influenced by other factors that lie outside the water policy arena - such as agriculture, environment and food trade. The third gap is the general absence of specific food security strategies in many countries. He commented that it is difficult to design a national strategy and action plan without a clear picture of targets for the near and medium-term.

One pressing issue highlighted in the policy dialogue is need for better 'knowledge translation' of research and policy concepts to make them more useful to smallholder farmers. The group felt that - while solutions to water and food security are well developed and debated between the research and policy community - very few of these concepts leave that circle. Consequently, there is an urgent need for strategies, processes and initiatives to move practical information on land and water management to rural communities.



Q&A with

Dr. Abdessalam Ould Ahmed,FAO urgency to address water and food

escalated its goal to eradicating hunger and to step up our efforts, we are now focusing more on

partnerships with international organizations that share the same objective and mandate like ICARDA. The big push for water comes from our key objective of sustainable provision of agricultural products and services. Since water is the basis for it, the big question is how to improve the availability of water irrigation cycle and reducing indirect wastage. Unfortunately, there is no quick fix solution for sustainable water experiences of organizations like ICARDA can provide