ISTANBUL 18 MARCH 2009

WATER AND FOOD FOR ENDING POVERTY AND HUNGER

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Several thousand people are gathered here in Istanbul to answer the key questions around water. Are they really aware of the need for water to feed the world? We know that our issues are complex. We are dealing simultaneously with macro economy and familial poverty, government policies and local rural development, global trade and farm gate prices, high technology and local knowledge, productivity and water conservation. We encourage our friends of the other water sectors to come with us and help to act in these complex but so sensitive key questions.

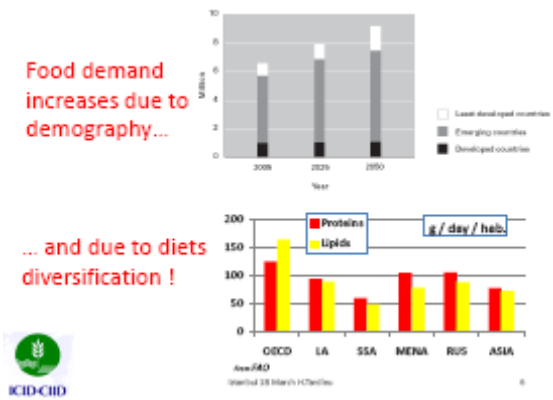
Under the leadership of our former President Bart Schultz, the International Commission on irrigation and Drainage (ICID) has taken care for the preparation process of topic 2.3: *Water and Food for ending poverty and hunger* placed under the Theme 2: *Advancing Human Development and the Millennium Development Goals*.

We have organized 4 sessions dealing with 4 key questions which are:

- Session I. How to achieve the required food production to meet the growing demand?
- Session II. How can food market measures boost rural development and poverty alleviation?
- Session III. Water for bioenergy or food?
- Session IV. How can better water management reduce poverty and hunger? A synthesis.

Our Topic Report, largely discussed with all of you, tries to give an overview of the relevant aspects and some first answers to these questions. Sure these answers will be better tomorrow evening!

To launch the 4 sessions I will present the main points of our topic report. Many of them are well known. But one of them is very new: the crazy increase in 2008 of the agricultural commodity prices and the risk of a global food crisis.



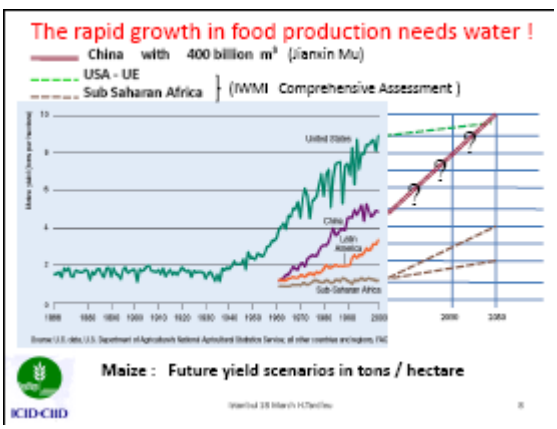
We know that the global demand for food will double in the next 25 to 30 years due to population growth and to diversification of diet.

For several years ICID has stressed the need of water to meet this demand. Producing 1 kg of cereals needs from half to two cubic metres of water; it's a large range of productivity. But producing oil or meat needs ten times more. Producing 1 kcal requires roughly 1 litre of water. Each person requires a minimum of 2,800 kcal or litre per day. It means 1,000 m^3 per year. We need twenty times more water for food than water for drinking and washing!

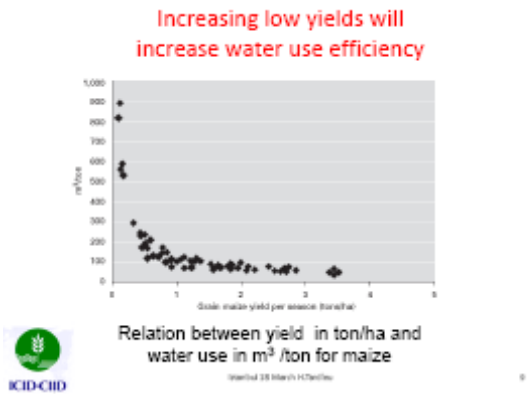
We also know that at present 40% of the food production is achieved on irrigated lands which are 18% of the cultivated lands. 15% is achieved on rainfed land provided with a drainage system. But 45% of the global food production is achieved on lands without any water management system. By agricultural water management, we actually mean a continuum of water management solutions from rainfed conservation farming, water harvesting, drainage, supplementary irrigation, to wholly irrigated agriculture.

The extension of cultivated area is now limited by the need to protect the biodiversity. Therefore the growing demand for food requires important progress in agricultural productivity of land and water which are actually liaised.

It also means a need for a huge enhancement of labour productivity: with 1 ha and 1 ton per ha a small-scale farmer in Mali or Zambia, where I just come from, produces a thousand times less cereals than a farmer in my Gascony.



ICID collects and disseminates elements to assess the future water and food balances. Regarding China, for example, simulations show that food security could be maintained without increasing the current water allocation to agriculture (400 billion m^3). But the condition is that high yields of cereals should be achieved (10 tons/ha for maize) with a very strong growth in the next decades similar to those observed in developed countries since the 1960s.



It is particularly important to target increase of low yields (say less than 2 tons/ha) which generally imply excessive evaporation. If all yields would be above 2 - 3 tons/ha, the global water use would be reduced by about 1.5 trillion m^3.

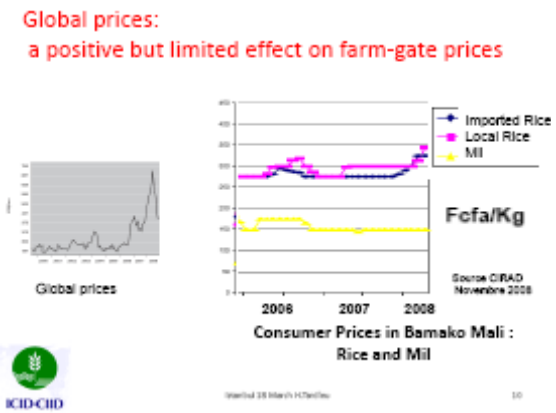
Water security for farmers is largely a condition of these increases in yields. It needs higher level of water management.

However, the large investments required should mostly be borne by the countries themselves, while these investments are since twenty years not so much on the agendas of donors. This abandon may be partly due to inadequate management of a number of irrigation schemes in the emerging and least developed countries. ICID does a lot of work to promote the financial sustainability of irrigation services.

But it is probably more significantly due to the continued decline in agricultural prices, discouraging farmers to take financial risks beyond the survival of their own families.

It is the key question for Session 2, on commodity prices, global and local markets.

Yes we need higher agricultural commodity prices. Reasonably higher prices are required to avoid a world food crisis by facilitating reengagement in agricultural water development, in particular in the least developed countries in Africa.



Better prices may catalyze the so-far less-rewarding agricultural sector in least developed and emerging countries, wherein more than half of the poor are engaged. Farmers, who can sell a substantial part of their harvest, may benefit from these better prices, likely less than the traders... a win-win, even though not equally.

Indeed the world market prices are not farm gate prices which are depending on local trade and transport conditions. Even in a landlocked country such as Mali, global prices have had a limited but positive effect on the farm-gate prices.

Better prices at farm gate will generate more income for farmer. Part of it being used for operation and maintenance, it will generate a better financial sustainability of the irrigation services.

The session 3 will deal with biofuel. The debate on biofuels is a sort of alert on how difficult could be the debate on agricultural prices in the future!

Our conviction on the positive effect of higher prices is not largely shared. The risk of increasing urban poverty generates major opposition.

In this context the development of biofuels has led to violent reactions from the champions of the "right to food" against public decisions for biofuel development that are aimed at three goals: fight against climate change, energy security, economic development in rural areas.

It has been said that growth of biofuel production is the cause of rising food prices.

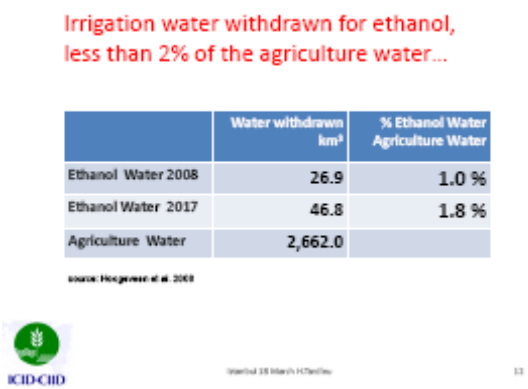
But the reversal of agricultural prices happened in 2008 without any change in the growth of biofuel production. Discussions on the impact of biofuels on food prices have now disappeared, leaving room for those on the impact of the crazy traders suddenly interested in gambling with wheat and maize. In 2009 the market is expected to reflect the real driving forces of production and demand, hoping that the futures markets could play a better role of anticipation.

Higher but not speculative agricultural prices are an opportunity to generate the necessary investments in agriculture, especially for water management. The development of biofuels may help to sustain and stabilize prices. As other crops contracted with industry, it would contribute to temper the price volatility which is so deterring for investment.

But the risk of speculation remains. Today the cereal prices are in better shape than oil prices. Would it attract the traders again?

An important issue for session 3 on biofuels is the competition for water.

World production of ethanol is expected to double in the next ten years, representing by this date 7.6% of the global fuel consumption.



The withdrawal of irrigation water for biofuel is expected to follow the same growth. Compared to the total water demand for agriculture, the share of biofuels is expected to increase from 1% to 1.8%. Therefore the global risk of competition for water is not so significant.

But to limit this competition, biofuel production would have to continue to be given priority in rainfed agro-systems. If necessary, investments in water management should anticipate impacts of climate change. It would, for example, be not advisable to develop biofuel in Morocco where the annual water resources of the main basin has yet come down by 40% in 20 years due to climate change!

It is also recommended to prioritize reversible crops, which can be reoriented to food production if needed by food markets. When a farmer grows maize he can either ‘feed a person, a chicken or fuel a car’.

This implies that farmers and governments should keep control of these developments, keep them integrated in sustainable rural development, do not give way to hyper specialization. Thus development of biofuels can generate income in poor rural areas.

To conclude on poverty alleviation and rural development, I would say that increasing productivity requires increasing farm sizes with farmers who are in a development mode and not in a survival mode.

However, in many least developed countries, local markets are almost inexistent, do not allow farmers to market their products and push urban people to get imported food products cheaper than local ones.

Rural exodus has positive and negative sides. A good balance between farmers and poor population migrating to urban areas is therefore a key to development and to food sovereignty.

To summarize I propose on this slide, three contributions for the debates.

Increasing the productivity of agricultural water is crucial for doubling the food production in 25-30 years; targeting low yields (i.e. less than 2 tons/ha) will reduce evaporation and contribute to poverty alleviation.

Higher agricultural prices are an opportunity for new investments in agricultural water management; biofuels should help to sustain prices if they are integrated in sustainable rural development.

Empowering farmers on local markets will result in better prices at farm gate; better income for farmers should also result in a better financial sustainability of irrigation services.

Finally a few words on the process that we have followed and will have to follow with respect to out Topic.

The Topic Report and Sessions have been prepared, based on regular consultation with Consortium Partners, Consultation Partners and others interested in the Topic.

The four sessions on Topic 2.3 would have to focus on comments on the Topic Report and to result in recommendations and points of interest for the synthesis report that will be prepared shortly after the forum.

We hope that the results of this Topic may contribute to improved water management in support of adequate food production for ending poverty and hunger

Thank you for your attention.