Conference Summary:

TROPICAL AGRICULTURE AS "LAST FRONTIER"?

Food Import Needs of the Middle East and North Africa, Ecological Risks and New Dimensions of South-South Cooperation with Africa, Latin America and South-East Asia

Barcelona, 29-30 January 2015

The Middle East and North Africa (MENA) is one of the most water-stressed regions in the world and its largest net-importer of cereals. Affordable food imports are crucial for its future food security. Countries with tropical agriculture like Brazil are playing an increasing role in MENA food supplies. Apart from policy options to sustainably intensify regional agricultural production, trade will play a crucial role for MENA economies to achieve food security.

Given the environmental value and sensitivity of tropical ecosystems sustainable intensification in countries like Brazil, Sub-Saharan Africa and South-East Asia is crucial. For this reason, King's College London (KCL), the OCP Policy Center, the Barcelona Centre for International Affairs (CIDOB), the Getulyo Vargas Foundation and Wageningen University organized a conference on **"Tropical Agriculture as 'Last Frontier'? Food Import Needs of the Middle East and North Africa, Ecological Risks and New Dimensions of South-South Cooperation with Africa, Latin America and South-East Asia".**

The conference was held on 29-30 January 2015 at the Barcelona Center for International Affairs (CIDOB). It provided an interdisciplinary perspective on how to open up opportunities for a new geopolitical-environmental cooperation between regions faced by either physical or economic water stress. Over a dozen academic papers were presented, some of which will be later published in a special section of the journal *Food Security* in December 2015. Topics ranged from trade maps and complementarities in food and input provision to environmental and biophysical risks to opportunities for greater MENA collaboration with tropical economies and the role of agricultural technology transfer.

Particular attention was paid to the impact of climate variability and change on MENA food security and transboundary food-dependence. Gender aspects and possible transformation trajectories of farming systems in tropical zones were other issues of concern. The increased interest in farmland investments since the global food crisis of 2008 formed part of many presentations. How social and environmental needs in target countries could be safeguarded to avoid land grabbing was discussed in this context. Tweets of the conference with the hashtag #TropicalMENA were summarized here.

In his opening key-note speech **John Waterbury**, professor emeritus at Princeton University and former president of the American University of Beirut, dealt with processes of policy making in the MENA around the Water-Energy-Food nexus. He pointed to the historical concerns of Arab countries about reliable food imports that go back to the 1970s when the food gap in the region grew, alongside skyrocketing food prices on global markets and Western musings to curtail food exports to retaliate against the Arab oil embargo.

Being one of the least democratic regions in the world, policy processes in the MENA are often opaque. The *what* of policy can be analyzed ex-post, but the ex-ante process, the *how* of it, remains

obscure. After showing how some MENA countries have implemented top down decisions to address environmental issues, Waterbury outlined how crises (e.g. food price spikes), third-party leverage (e.g. donor institutions) and expert communities of practice in governments, academia and international organizations can push for such policy changes. Yet he cautioned not to confuse legislative changes with realities on the ground. Entrenched deep states are not inclined to take bold initiatives, while interest groups usually enter the policy process *after* policies are made. Such ex-post strategies to undo policies are a perfectly sensible approach in authoritarian systems as the legislature is not the ultimate source of law. Given the multilayered nature of issues around the Water-Energy-Food nexus this points to considerable challenges of policy implementation.

In the opening session **Jeroen Warner** of Wageningen University outlined peculiarities of South-south development cooperation (SSDC). He cautioned against overt optimism of such cooperation as being anti-colonialist and a benign alternative to cooperation with developed countries. SSDC is not egalitarian he argued, but often driven by regional hegemons like South Africa, Egypt or Brazil, which are investors and investees alike in a global push towards acquisitions of farmland and resources. States are a driving force in this development often via public private partnerships and have not been superseded yet by transnational corporations as the prime mover.

The MENA is the world's largest net importer of wheat, rice, corn, sugar and poultry as **Eckart Woertz** of CIDOB pointed out. In contrast to earlier food regimes, the southern hemisphere has become a major provider of such imports; a third of Brazil's exports of sugar, poultry and cereals goes to the MENA, which is also a large recipient of palm oil from South-East Asia and basmati rice from South Asia. Sub-Saharan Africa has been singled out as a "last frontier" of agriculture, as it has not witnessed a green revolution like other developing countries. Middle Eastern oil exporters have indeed announced agricultural investments in Africa and other tropical regions, but Woertz pointed to a huge implementation gap of such projects. However, as far as they have materialized, non-inclusionary project designs and negative impacts on land tenure and the environment have proved to be issues of concern.

Martin Keulertz of Purdue University discussed the recent emergence of food trading houses in Asia like Noble, Olam and Wilmar that compete with established players in the West like ADM, Bunge, Cargill and Dreyfus. He discussed whether the MENA might develop similar food trading strategies and argued that they will likely affect agricultural transformations more decisively than the widely publicized intention to acquire land.

Three presenters discussed the Brazilian model of agriculture, its successes in terms of production and productivity growth, but also its social and environmental implications. **Marina Drummond** of Getulio Vargas Foundation outlined the business model, the concentration of production and income and a prevalent dualism between farmers of the large-scale agribusiness complex and smallholders who use only primitive production techniques. She pointed to the positive and far-thinking role of the state in encouraging research and development and discussed how the new agroforestry techniques developed by Embrapa (Brazilian Agricultural Research Corporation) could increase the environmental sustainability of agribusiness farming practices. She also analyzed efforts to replicate Brazilian experiences in Africa via south-south development cooperation. While projects with a focus upon developing agricultural research have been well received, the attempt to introduce large-scale high input farming in Mozambique via the Prosavannah project has met with some resistance on socio-environmental grounds.

Vanessa Empinotti of ABC Federal University – UFABC in Brazil analyzed land tenure and showed how the opening of the Brazilian *cerrado* savannah to soybean farming cannot be seen in pure

dichotomies of small-scale vs. large-scale. Beside latifundias there are smaller entrepreneur and family farming operations and production expansion has often allowed former smallholders from the south of the country to increase their holdings and improve their livelihoods.

Gabriela Marcondes of the Research Institute for Work and Society in Leuven analyzed food security interventions of Brazil's Zero Hunger program and attempts to replicate them in African development cooperation. The Zero Hunger program that the Lula administration launched in the 2000s has encompassed conditional cash transfers (Bolsa Familia), school meals and other nutrition interventions, income generation, social safety nets and strengthening of family farms. It has led to a measurable decrease of hunger in the country and has been lauded internationally. However, inequality of income and land ownership remains stubbornly high.

Negative socio-economic effects of agricultural investments and their impact on gender relations were highlighted in several presentations. **Henk Hobbelink** of the Barcelona based NGO GRAIN argued that high input farming is a problem rather than a solution and drew on work of his organization whose website www.farmlandgrab.org has developed into a major source base for studies by academics and international organizations like the World Bank. He pointed out that most producers in the world are small-scale farmers, a majority of whom are women. They are more productive and environmentally less disruptive than large-scale farms yet they only occupy a quarter of the world's farmland and face encroachment by the interests of agribusinesses. Hobbelink argued that development policies would need to focus more on such smallholders.

Deepa Joshi and **Harriet Larrington-Spencer** of Wageningen University analyzed how grape production for global markets has affected gender relations and the very perception of gender roles in rural India. The highly complex social outcomes cannot be adequately grasped in simple binaries of "men" and "women", but cut across multiple social stratifications like income, caste, class, age, religion and geographic location. Their colleague **Juana Vera Delgado** showed how the Water Transfer Agribusiness model in Peru increased agricultural production via large-scale irrigation schemes and deviation of water from the highlands to arid coastal areas, while at the same time it led to heightened vulnerabilities on the levels of environment, climate, class and gender.

On a more positive note **Eduardo Lopez Rosse** of UMSS, Cochabamba in Bolivia dealt with the hidden potential of agroforestal systems and showed how they use fewer chemical inputs than coca production, which they managed to supersede partly in the Chapare area of Bolivia. **Rachid Doukkali** of the Institute Hassan II and the OCP Policy Center in Rabat discussed how cow breeding for manure greatly improved productivity on small-scale farm projects of IFAD in Burundi. **Violette Geissen** of Wageningen University showed the great diversity of tropical soils in Africa and identified healthy soils as an indispensable production factor. Yet in contrast to water or climate issues there is no international body for soil preservation so far.

Mark Mulligan of King's College, London built scenarios for tropical agriculturalization and analyzed how they might affect forests, protected areas and biodiversity. After discussing probabilities and uncertainties of climate change models he outlined how climate change might affect supply chains and therefore food supplies from tropical regions to the MENA. **Joan Martinez Alier** of Universidad Autònoma de Barcelona, a pioneer of ecological economics and co-founder of the namesake academic journal discussed in a dinner key-note speech extractive aspects of increased commercial biomass production. He argued that negative environmental impacts of monocultures can lead to ecological distribution conflicts, which his research team has collected in the Environmental Justice Atlas (www.ejatlas.org).

Two policy panels dealt with aspects of practical implementation. The father of the virtual water paradigm, **Tony Allan** of King's College London, **Guy Jobbins**, of the Overseas Development

Institute (ODI) in London and **Riad Al Khouri** of Development Equity Associates in Jordan discussed the role that private sector companies play in investments along the value chains of food production and water utilization. **Karim El Aynaoui** of the OCP Policy Center, **Khalida Bouzar** of the International Fund for Agricultural Development (IFAD) and **Olantuji Akomolafe**, the president of the Village Pioneer Project in Nigeria examined international cooperation potential on the level of international organizations, private donors and grass root organizations. El Aynaoui emphasized the role of infrastructure to foster agricultural productivity and development. He called for a "big push" in this area and more broadly in financing of rural development that should include smallholders, value chains for enhanced local transformation, and modern agribusiness alike.

The following day was dedicated to case studies from the MENA and tropical countries. **Michael Gilmont** of King's College London identified food trade and "water resource decoupling" in the MENA as a mechanism for circumventing national water scarcity. The OECD has described the concept of decoupling as "breaking the link between 'environmental bads' and 'economic goods'". Gilmont modelled how MENA countries can considerably reduce the environmental impact of economic growth by outsourcing the production of water intensive crops. **Ahmed Ghoneim** of Cairo University dealt with the political economy of food price policy in Egypt and its implications for legitimacy. **Eckart Woertz** of CIDOB discussed the oil for food trade off and related policy stances in the Gulf countries and Iraq, while **Jeannie Sowers** of the University of New Hampshire contributed insights from her book about environmental politics in Egypt. **Said Zarouali** of the Haut Commissariat au Plan in Morocco showed wheat import dependencies of Maghreb countries and how they could address them with joint trading, storage and distribution strategies. **Francis Ghilès** of CIDOB dealt with the history of agricultural development in Maghreb countries and its relative position in policy processes.

Challenges of agricultural projects in Sub-Saharan Africa were echoed by three presentations. **Olantuji Akomolafe**, president of the Village Pioneer Project in Nigeria told the audience how his project has struggled for 30 years with national policies that have been geared towards urban classes and the oil sector. **Tim Williams** of the International Water Management Institute (IWMI) in Accra showcased several examples of foreign direct investments in African agriculture and analyzed reasons for their failure or lack of full implementation. Inadequate understanding of the social and institutional milieu in the host country, poor assessment of the biophysical status of leased land, inappropriate business models and political instability have been among the problems. Yet he argued that large-scale commercial agriculture is feasible and can co-exist with smallholder agriculture if social and environmental impacts are managed and business models and business environments are overhauled. Similarly, **Laurent A. Lambert** of Europaeum (Oxford University) discussed with which business models Gulf investors like the Islamic Development Bank or Qatar could contribute to sustainable intensification of agriculture in Mozambique. He stressed the importance of transportation, logistical infrastructure and market access without which farming development as such risks to remain a stranded and commercially marginalized activity.

On a concluding panel **Tony Allan**, **John Waterbury**, **Rabi Mohtar** of Texas A&M University and **Robert Springborg** of the Naval Postgraduate School and SciencesPo discussed policy implications of the conference. The pivotal role of farmers, increased green water efficiency and the threats of corruption and political instability were highlighted. Despite much skepticism a picture emerged in which the potential for increased south-south cooperation between the MENA and countries with tropical agriculture is considerable. This calls for increased capacity building to facilitate such cooperation and associated know-how transfer.

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