

food --- FIRST

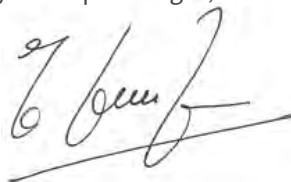


FoodFirst on the Floriade Venlo 2012

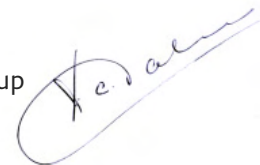
During spring and summer 2012, Socires and the FoodFirst Coalition organised 7 conferences on the global food problematic. In these conferences — one at the Rabobank Head office in Utrecht, the other 6 at the Floriade 2012 in Venlo — the following issues were discussed: the production of food, the value chain, and logistics; breaking the hunger cycle and the commercial opportunities in Africa; healthy food and sustainable production; the role of cooperatives; urban agriculture; cooperation in the golden quadrangle of government, civil society, business, and science.

Speakers and participants from The Netherlands and abroad contributed plenty and rich material which can all be found on www.foodfirst.eu. The main conclusions on development cooperation and food security are, first, to focus on food production by smallholders to enable them to produce for the booming markets in the city. Second, that close cooperation within the golden quadrangle is required, both within The Netherlands as well as in the developing countries. It is a 'double golden quadrangle', where local parties take the lead and are reinforced in their independence.

Jos van Gennip, President FoodFirst Coalition



Doeke Faber, President FoodFirst Steering Group



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FoodFirst

How can we produce enough food, of good quality, for a decent price, and with everyone's stomach filled? And what does international cooperation contribute? From March until October 2012 Food-First organized seven conferences, in which various aspects of these questions were discussed. Two issues recurred. One is that of the cooperation in the double 'Golden Quadrangle', i.e. business, science, government and NGOs working together, both at home and abroad. Technical solutions or new policies or investments are not effective when done in isolation. They need a context of concerted action, on both sides.

The second issue focuses on the position of smallholders in relation to the developing urban markets. Connecting the smallholders' increasing production to nearby urban markets is the most effective way of feeding the cities and of stimulating the economic development of the countryside. Smallholders around the city should feed the city, especially with products with a competitive edge such as vegetables, fruit, dairy and meat.

A summary of the presentations in seven steps: First the developing food crisis is confronted with some realism about agricultural production (1), after which the problem of hunger is refocused on the role of the smallholder (2). Following a discussion on urban agriculture (3) and some critical remarks on traditional and modern agriculture (4) the role of the Golden Quadrangle (5) and the focus on the smallholder (6) is further elaborated. In (7) two recommendations for policy are formulated.

Food Business Without Borders, 15 March 2012

Image: WuTtY @ photoXpress





1 Food for 10 billion people

The currently accepted predictions state that by 2050 we will have to feed a total population of 9 billion. Does this pose a problem? In one way, we can answer this question with “No!” How does that work? At the moment, the earth has 6.5 billion inhabitants and we have enough produce available to feed these 6.5 billion people. But one-third of the total food production is lost in transport and storage for the markets and shops, and in preparation after it has been bought. Count the losses in, and actual production is enough to feed almost 10 billion people.

The expectation is that in 2050 we have only half the agricultural area available for growing our crops, but doubling agricultural production might very well be possible. The FAO expects that much of the production needed in 2050 will be realized in Africa. And though it is a question how much more we can improve on the technology behind a green revolution, the large continent of Africa has not developed its potential because a green revolution has not yet been rolled out there. That leads to the contradiction that Africa is the most food insecure continent, and has the largest potential for food production due to its land area. And it makes Africa also a good business opportunity.

Ton Dietz and Rudy Rabbinge showed that the potential of Africa for food production is being realised: in many African countries food production is growing faster than the population. And there is more evidence that we can produce twice the food, with less available land and fewer farmers who can do the job. Water is the primary requirement for agriculture. Janneke Hadders showed how with an irrigation management system available, water can be used much more efficiently by applying the right amount at the right time—for maximum yields, plants need specific amounts of water at specific stages during growth; irrigating at the wrong time means wasting your scarce water. Experiments by Prem Bindraban showed that adding nutrition spectacularly increases yields even when the quantity of water is not increased. Relatively simple good farming practices make a huge

One aspect which did not get much attention in the discussions was the limited resources of phosphate. We have to look for alternatives at some time in the future. Using human waste, which would mean a complete redesign of our sewer systems, could be a solution as was alluded to in the discussion on urban agriculture by Diana Lee-Smith.

meat consumes four times the amount of grain compared to a vegetarian diet, which is why many promote a vegetarian diet. However, Prem Bindraban added, this is true for omnivores such as pigs and grain-fed chicken. The food we grow for these animals we could eat ourselves. But nobody eats grass, and ruminants such as cows and sheep eat grass. There is already enough grassland available which is not otherwise suitable for major food crops, so there is no need to take valuable land that could grow other crops, or clear-cut forests to make pastures—so do enjoy your steak! with the compliments of Prem Bindraban.

2 Where does it go wrong?

Food security is not a technical problem, but a political problem. The food crisis is a political and governance problem, according to Paul Engel; there is enough land and technology to feed the people of the

difference.

Some realism about what to grow is also welcome. With the growth of the urban population, and thus with the growth of an urban middle class, dietary requirements will change: the demand for dairy products and meat will increase. Meat and dairy products are considered not to be a very efficient way of using agricultural land. When measured in 'grain equivalents', producing

Cooperatives and Development, 24 April 2012

Image: Agriterra



earth, now and in the future. The problem is what, where, by whom, and for whom, food is produced, and the political and institutional framework around food production.

Taken at face value, land, water, fertilizers, and farmers each have a proven potential to sufficiently increase food production. Reality shows that despite this potential and despite the available technology, hunger is a reality for 870 million people, and most of those belong to the rural and urban poor. Political problems and climate factors also play a role. At the same time, obesity is a growing problem around the world, partly due to malnutrition, partly due to overeating. Where does it go wrong then? If knowledge and technique are available, why do farmers not profit from it? And how is it that one person has too much food, and another too little?

First, who are the farmers? Minister Henk Bleker stated that the increase in production has to be realized by about 2 billion farmers, the majority of which are women. Vincent Lokin specified this further: a vast majority of farmers worldwide are smallholders, 85% has less than two hectares of land, 97% less than ten ha. These farmers have to seize the opportunity as the demand for food and agricultural products increases.

For Africa, statistics show that the export of food is growing, mainly in the segment of luxury foods (green beans), food for livestock, and basic foods. The import of basic foods has grown as well, but at prices even higher than those during the peak of 2007. As a result, most countries have more food per person available. The problem is access to food, both equal access and minimum access. And whereas urban food demand is growing

In het presentation, Lia van Weesenbeeck showed how science and research can contribute to less waste in transport: measuring how produce deteriorates during transport, one can better calculate a sufficient margin and invest in better packaging etc.

Too Good To Waste: Gazpacho from 'best-today' or 'do not sell after yesterday' tomatoes



enormously, the rural and urban poor have less to eat, as Ton Dietz showed. Those who produce the food are themselves also in danger of not having enough and cannot take advantage of the rise in demand for food in the cities.

3 Urban Agriculture

The rate of growth of urban populations is higher than that of the total population. Everywhere on the planet, people are moving away from the countryside towards the cities. Most of the 9 billion people in 2050 will be consumers of food, not producers. Within the cities, an urban middle class develops, and this middle class eats meat and dairy products and buys its food in supermarkets. The cities of the developing world are ill-prepared for the explosion of urban living, said Jan Hak referring to an FAO report from 2009. Food production has to face up to the urban explosion. Smallholders have to find their way to the (urban) market so that urban and rural people have sufficient access to food.

Urban agriculture, farming done within the city borders, can mean a reconnection between urban and rural poor that improves the food security for both. Urban agriculture is a way of providing food directly for (urban) families in Africa. Although this phenomenon is not new let alone revolutionary—until recently, western cities had farms within the city borders—reintegrating urban agriculture requires a change in the nature and architecture of city planning. It requires turning consumers into producers, and changing the landscape of cities. Urban agriculture could mean a solution for global problems at a local level, and it fits in with the growing popularity of local markets and consumers' desire for locally produced food.

However, urban agriculture is not directly a solution for the urban and rural poor in Africa. Urban



Food and Sustainability, 8 May 2012
Image: *alphaspirit* © *PhotoXpress.com*



agriculture is done by a middle class who owns some land. The rich and those with a middle income are relatively more involved with urban agriculture than the poor, making the poor much more food insecure, up to 77% in some places. The poor have often limited access to land compared to middle income and richer groups in the urban populations; urban agriculture mainly brings food security to higher incomes. Diana Lee-Smith stressed the need to link farmers to policy processes for urban agriculture. Then urban agriculture can benefit farmers in two ways: it provides food security of the urban poor, and it intensifies the agricultural production within the city.

It is of primary importance that farmers get linked up to the market in the city. To make this work, farmers have to grow the right quality in the right amount at the right time. Produce has to be packed so waste is minimal during transport. To this end, it is necessary to consider crop diversification, allocating funds for investments, organizing distribution, technological adaptation, creating an increase of value in the production chain, and marketing. That is what CETEC in Cali, Colombia, has done.

The message seems to be that food security is not helped by making smallholders self-sufficient, but by creating access to markets, local and possibly global. Whereas the example of Cali shows how farmers can organize themselves and get access to the (super)market in the city, the initiative can also originate from the consumers in the city. In Lagos, Nigeria, for example, private parties in the city have improved logistics to get fresh produce into the city, also largely circumventing the government and NGOs.

In Cali, Colombia, smallholders around the city produce directly for the supermarkets. CETEC started in 1985 linking smallholders to the markets in the city. CETEC now works with 28 rural organisations and 1200 participating families, 12 urban organisations, and second grade organizations that help with political representation (Alberto Rodriguez).

4 Tradition and modernity?

The experiences in Cali and Nigeria put big question marks behind the analysis made by some who see two food systems developing in Africa, one of large scale, possibly high-tech agriculture for supermarkets and the urban working class, the other of small farmers for rural areas, using traditional techniques. And as most of Africa's agriculture is private and small scale, it supposedly cannot benefit from producing for the cities. For the rural crisis, a different approach would be needed. The urban people and the rural people rely on different food systems and both should be supported on their own terms. Africa, it is said, would like to preserve their local food because that food is also healthy for them. "Feeding Africa starts with letting Africa define what food for it is."

An obvious question is to which extent a green revolution can be applied to traditional farming. And as the example of Cali shows, smallholders can feed the urban dwellers to their mutual benefit, so one has to question seriously whether separating the food production for rural and urban populations is a path to follow.

5 Technology in context: the Golden Quadrangle

As Ton Dietz stated, improving food security is not only about improving food production and value chains. It is also about public-private partnerships to improve what he called agro-hubs: knowledge and support clusters in and around the big cities. And it is about separate policies to reach the poor, both in more marginal rural areas, but also in the cities. Or as Raoul Bino said: one needs both



Breaking the hunger cycle in Africa, 29 May 2012

Image: Courtesy of the International Federation of Red Cross and Red Crescent Societies



Pluk de Stad / Pick the City: Jam from fruits that grow in city parks

hardware, ‘orgware’, and software—the tools and technology, organizations of and for the people involved, and the knowledge and skills of the people themselves.

Technical solutions for food production can only be implemented when there is a certain infrastructure. For the practical implementation of an irrigation management system on a farm, one needs an infrastructure of electricity and communication. To make such innovations feasible, a wider context of policy and governance is needed. Government policy, academic research and training, businesses, and NGOs working together can provide such a context—these four partners form the ‘Golden Quadrangle’. Such a Golden Quadrangle should function both here, in The Netherlands, as well as locally, i.e. where the food is produced.

There is a shift in investments from governments to the private sector in international cooperation, and also business and NGOs have found each other. There is a need to reform development cooperation because capital flows are much less predominantly North-South. Furthermore, the emphasis in development relations has shifted to more responsibilities for all partners involved.

In The Netherlands, the government’s policy of ‘Top Sectors’ brings together research institutes and enterprises in the agri-business with an aim of achieving higher food security. These Top Sectors can contribute to development cooperation by sharing knowledge and making innovations available. For all programmes aimed at food security, the availability and pooling of a skilled labour force, the availability of specialized service suppliers, good access to markets, an active circulation of infor-

There are several initiatives that aim especially on Africa: the NWO-WOTRO programme Global Food Systems (Eric Smaling); the African Agro-business Academy at the WUR (Piet Heemskerk); the cluster approach from the Maastricht School of Management (Diederik de Boer); the FoodBEST-programme (Martin Kropff).



mation between academics, businesses and governments, and firm support by government and institutions are necessary. Atzo Nicolai formulated the necessity of a combined approach as follows: “No single party is capable of providing an overall, sustainable solution. Concerted action is the only way forward. And one must realize how important it is to engage with the ‘base of the pyramid’, to understand, to forge relationships, to forge trust—and thus lay a solid foundation for gradual change.”

6 Focus on the smallholder

Fighting hunger means to tackle the problem of smallholders and get them out of a situation of hunger. The problems for smallholders are manifold: higher transaction costs for getting food to the market; problems with meeting quality standards; a lack of schooling; and their number is shrinking due to aging as well as the decreasing popularity of farming as a job. Government policies should be aimed at providing better access to (super-)markets by smallholders. For one, this means that we approach, train, and treat them as entrepreneurs and give them the tools to be entrepreneurs. It also means reform of the markets, as Naidoo stressed when he called to “try to develop a model that makes the markets work for the poorest of the poor.”



Investing in Food Security and Food Markets in Africa, 19 June 2012

Image: Peet Hiddink

7 Conclusions: What to do ...

The seven conferences in the FoodFirst-Floriade cycle have delivered numerous insights and recommendations. In connection with the four pillars of the Dutch Development Cooperation policy concerning food security—increase in sustainable food production, better access to quality food, better access to markets for farmers, and a better environment for entrepreneurs—two concrete recommendations can be formulated.

[A] Concentrate aid on food production by smallholders in the vicinity of big cities. Pursue two goals simultaneously: provide more and better food to the city, and develop smallholders to become efficient producers for the urban and national market.

The rapidly growing demand for quality food and fresh produce in the booming African cities offers a huge opportunity. What is important is to turn this into an incentive for the economic development of smallholders in the urban periphery, and to provide them with the tools and capabilities to make use of this chance. This is a huge challenge with many aspects: land rights, productivity, manufacturing, marketing, organisation and development of the value-chain, infrastructure and transport, as well as social-cultural and governance changes.

[B] Because of this complexity, Development Cooperation around food security requires the close cooperation of businesses, science, government, and NGOs—the Golden Quadrangle. This goes for The Netherlands and the developing country, so it is actually a double golden quadrangle. In this cooperation the local party is leading, and the cooperation should reinforce their organisational and institutional strength—the aim being that local businesses, research institutions, government agencies, and social organizations can function without requiring outside aid.



The 7 FoodFirst Conferences

Over 750 persons from about 25 countries attended the conferences. 5000 persons around the globe have visited the website www.foodfirst.eu. This website contains full reports on the 7 conferences, the discussion forum **FoodFirst for Thought**, and continuously updated information on the FoodFirst programma.

Presentations were held by:

Prem Bindraban, Director ISRIC World Soil Information, Wageningen UR (8 May 2012)

Raoul Bino, Director Agrotechnology & Food Sciences Group, Wageningen Universiteit (15 March 2012)

Henk Bleker, Minister of Economic Affairs, Agriculture & Innovation (15 March 2012)

Frans van den Boom, Executive Director / CEO NCDO (29 May 2012)

Diederik de Boer, Director Round Table Africa / Senior Project Consultant Maastricht School of Management (19 June 2012)

Heleen Bos, Accountmanager Organics Rijk Zwaan (15 March 2012)

Ton Dietz, Director African Studies Centre, University Leiden (19 June 2012)

Nitin Desai, Trustee WWF International, Member of the Indian Prime Minister's Council on Climate Change, Secretary-General of the World Summit on Sustainable Development in Johannesburg, 2002 (8 May 2012)

Ton Duffhues, Coordinator Agriculture & Society ZLTO (24 April 2012)

Hans Eenhoorn, Worldconnector, Former Senior Vice President of Unilever, Initiator 1-2-1 Food Losses Initiative (8 May 2012, 29 May 2012)

Gerard van Empel, Director Advisory Services, Rabo Development (19 June 2012)



The Business of Nutrition Security, 28 August 2012, Image © GAIN

Paul Engel, Director of ECDPM and Professor Public Policy and Innovation, Maastricht School of Management (8 May 2012)

Adri Duivesteyn, Deputy Mayor of Almere (2 October 2012)

Doeke Faber, President FoodFirst steering group (2 October 2012)

Sriparna Ganguly Chaudhuri, Director The Hunger Project India (28 August 2012)

Janneke Hadders, Director Dacom, winner MKB Innovation Top 100 with an irrigation system for crops (29 May 2012)

Jan Hak, Chairman <i>Groep Fabrieken van Machines voor de Voedings- en Genotmiddelenindustrie (GMV)</i> (15 March 2012)	Vincent Lokin, Director Cooperatives and Governance, Rabobank Nederland (24 April 2012)	Frank van Ooijen, Corporate Director Sustainability Friesland Campina (24 April 2012)
Piet Heemskerk, African Agribusiness Academy, Wageningen (19 June 2012)	Ellen Mangnus, Advisor Royal Tropical Institute (24 April 2012)	Rudy Rabbinge, Sustainable Development & Food Security, Wageningen University (19 June 2012)
Pierre van Hedel, Managing Director Rabobank Foundation (24 April 2012)	Sathis de Mel, Executive Director Arthacharya Foundation (24 April 2012)	Christiaan Rebergen, Deputy Director General International Cooperation, Ministry of Foreign Affairs of The Netherlands (24 April 2012)
Madeleen Helmer, Director Policies and Communication Concerns Red Cross Climate Centre (29 May 2012)	Anna Meroni, President Nutrire Milano (2 October 2012)	Alberto Rodriguez, Director CETEC Cali, Colombia (2 October 2012)
Hans Hoogeveen, Director General, Ministry of Economic Affairs, Agriculture and Innovation (2 October 2012)	Professor David Millar, Pro-Vice Chancellor University for Development Studies Ghana (29 May 2012)	Dr. Stefan Schmitz, Head Task Force for Rural Development and Global Food Security, Federal Ministry for Economic Cooperation and Development, Germany (19 June 2012)
Paul Jansen, Director Corporate Public Affairs Agri at VION NV (8 May 2012)	Jay Naidoo, Chair of the Global Alliance for Improved Nutrition (GAIN) Board (28 August 2012)	Eric Smaling, Member of the Board of WOTRO Science for Global Development (15 March 2012)
Elijah Kang'ara, Ugandese entrepreneur (19 June 2012)	Wim Naudé, Acting Dean Director MSM (28 August 2012)	Wouter Verhey, Policy Coordinator Food Security, Ministry of Economic Affairs, Agriculture and Innovation (8 May 2012)
Ben Knapen, Minister for Development Cooperation (28 August 2012)	Atzo Nicolai, President of DSM Netherlands (28 August 2012)	Paulus Verschuren, special advisor to the Ministry of Foreign Affairs in the field of nutrition security (28 August 2012)
Martin Kropff, Member Topteam Agro&Food (15 March 2012)	Daniel Njenga, Manager Kiambaa Dairy Farmers Cooperative, Kenya (24 April 2012)	Lia van Wesenbeeck, Senior researcher Stichting Onderzoek Wereldvoedselvoorziening, Vrije Universiteit (SOW-VU) (15 March 2012)
Diana Lee-Smith, Founder Mazingira Institute Nairobi, Kenya (2 October 2012)	Joseph Nyagah, Minister of Cooperative Development and Marketing of Kenya (24 April 2012)	



Urban Agriculture, 2 October 2012 Project: Sky Village, Rodovre © MVRDV + ADEPT

Presentations by Young Professionals

(in cooperation with NCDO)

Michel Scholte, WorldConnector / The True Price
(8 May 2012)

Joris Lohman, chairman of Youth Food Movement
(29 May 2012)

Chantal Engelen, Too Good To Waste (winners of NCDO's "Battle of the Cheetahs") (28 August 2012)

FoodGuerrilla initiatives, Lise Alix, Urban Gardening, From Tiles to Strawberries
Elma Roelvink, Pluk de Stad, Harvesting the City (2 October 2012)

Locations

15 March 2012 Voedselzaken over Grenzen Heen

Rabobank, Utrecht

24 April 2012 Cooperatives and Development

Innovatoren, Floriade, Venlo

29 May 2012 Breaking the Hunger Cycle

Innovatoren, Floriade, Venlo

8 May 2012 Sustainable Food Production

Innovatoren, Floriade, Venlo

19 June 2012 Investing in Food Security & Food Markets in Africa

Innovatoren, Floriade, Venlo

28 August 2012 The Business of Nutrition Security

Innovatoren, Floriade, Venlo

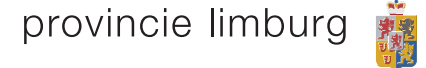
2 October 2012 Urban Agriculture

Innovatoren, Floriade, Venlo



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