Food for thought
A synopsis of the food security debate

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In the four weeks since the food security debate started, international researchers, politicians, practitioners and entrepreneurs have fed the debate from many angles. They have shed light on what should be key strategies, and what should not be overlooked in analysing and researching the best approach to achieve global agricultural, food and nutrition security. All participants addressed the key question: What policy, innovations and partnerships are needed to achieve a food secure world?

Debating food security means discussing an integrated food system: from production, distribution and technological innovation to market mechanisms. Also eminent is the need to debate food security in its wider context, as an integrated food system that functions in the global and regional context and responds to the challenges presented by trade, market regulations, land grabbing, consumer education, gender balance, climate change, access to natural resources, etc. Taking all this into account it is important to understand how effectively global knowledge and expertise on food security works and how it can be useful for practitioners in the field.

After outlining a few major challenges, this first phase of the food security debate has focused on where to start to achieve a comprehensive knowledge agenda that secures good quality food for the growing world population. The participants argued first of all that the role of small farmers is most important. They produce at least half of the global food supply, offer most of the employment in rural areas and provide local people with a fall-back option in times of economic crisis and shortages. Food security policy should provide food sovereignty so that these small farmers have ownership of their land, and should focus on a resilient society in which the population is able to fend for itself.

Secondly, local and regional distribution systems need improvement to reduce major losses. In some African regions, up to 50% of food is wasted before reaching the market. Thirdly, innovative local SME (small and medium enterprise) partnerships that are technology-driven, for example cooperative partnerships between farmers and entrepreneurs, can successfully intensify agricultural production. To achieve inclusive economic growth, these agricultural partnerships should be made accessible to the poorer population, especially small-scale farmers, women and the urban poor. This integrated approach also includes informal markets where poorer populations mainly buy and sell their products. In India and Africa 80-95% of total food production still passes through these informal markets.
Recommendations so far

What recommendations have the participants made so far for a comprehensive knowledge agenda on food security and nutrition?

- Focus on improving small-scale farmer production;
- Integrate a food security and nutrition approach with the principles of food sovereignty;
- Develop new partnerships between small-scale farmers (including female farmers) and local entrepreneurs;
- Develop an integrated approach to pricing food that includes the full costs of natural resource use from food production, over-use and exploitation of these resources over time;
- Develop models for urban and peri-urban agriculture that are of value to the urban poor;
- Focus on ways in which regional economic integration processes can stimulate efficient food distributions;
- Study the value chain approaches with a 'nutrition lens';
- Focus research on land grabbing and biofuels more directly on food security;
- Include accessibility of renewable energy in rural areas within the integrated food security approach.
- Develop new business models that suit the small-scale farmers and that take the livelihoods of local people into account;
- Look at knowledge management and sharing in Africa and develop new ways to improve knowledge transfers;
- Study the politics and power relations surrounding food security and nutrition policies.

From small-scale farmer production…..

Western food security policy mainly targets global hunger by implementing measures that intensify the production of food. Furthermore it relies on a top-down approach. However, in one of the earliest contributions, Fantahun Wakie from SNV Ethiopia critically outlined the importance of a renewed strategy. According to Wakie, decennia of food security policy in Ethiopia have not produced a result that is sustainable, has empowered communities and the nation, and reduced dependency on foreign technological, market and inputs. He emphasized the need to start researching carefully and critically what should be done to achieve policy that benefits local people.

The enormous potential of small farmers in particular deserves to be fully unleashed, and not only to improve production and economic development. Hunger, vulnerability and poverty are concentrated in rural areas. And in resource-constrained areas, the local knowledge of small-scale farmers offers the solution.

Diana Lee-Smith, founder of the Mazingira Institute in Kenya, stressed the importance of focusing on resilience and small-scale farming in relation to the urban population. As more and more people move from rural areas to the city, food scarcity and malnutrition in urban areas is a growing problem. Producing food in and around the city, often called urban and peri-urban agriculture, is attracting more attention for the opportunities it offers to feed the growing population in the cities. But Lee-Smith warned that urban agricultural policy needs to target the urban poor more. Currently, urban agriculture targets city-dwellers with access to backyards to produce food. But the urban poor tend to live in dense slums or informal settlements with little access to land for growing crops or keeping livestock. Ironically, the poor have been found to be under-represented among those practising urban farming.

Our Food Security Dossier

In four weeks, The Broker has published 20 blogs posts and 15 comments from five continents. Experts from civil society organizations, governments, private sector companies, farmer organizations and knowledge institutions have joined in the debate. Additionally, discussions have continued on the online platforms of the Agri-hubs in Uganda and Rwanda resulting in another 20 contributions. African entrepreneurs and farmers have shared their local expertise on, for example, how ICT can improve the lives of women and men equally, what donor countries can do to improve regional trade, and how better to include informal markets. The debate extended to Twitter, where people recommended and retweeted content, and The Broker joined LinkedIn groups setting out questions on food security, nutrition and agriculture.

.... to effective (regional) distribution
But investing in food security means more than optimizing production by small farmers. More can be gained from optimizing regional trade, instead of focusing on global trade. Ian Sayers from the International Trade Centre said: “Distribution chains from rural food production areas to cities tend to be poorly organized and suffer from a lack of investment.” For example, a large number of non-tariff measures (NTMs) in developing areas, such as plant pest control, health and food safety, are not yet harmonized between neighbouring states. The demand for agri-food products is very variable, and limited transport linkages or mal-equipped border-crossing points undermine an efficient flow of food products and excessive spoilage. Food security policies that concentrate too much on increasing productivity negatively impact suppliers because the imposed quality ‘standards’ increase costs. Those who are least able to afford it are burdened even more.

Effective food security policy makes regional distribution more efficient, to avoid the waste of more than 50% of food grown in Africa before it reaches the markets. Mumbise John, a consultant at Apex Business Skills Uganda Limited, illustrated the scale of this problem on Agri-Hub Uganda: “If donors were concentrating on production [only], then there would be a lot of food lying around and rotting in the villages unsold because of poor transport infrastructure.” Investment must be made in post-harvest conditioning and value addition (appropriate technology for drying, freezing, chilling, packaging) and facilities to keep food fresh.

However, the key question is what to focus on with limited financial resources. Ideally, food security policies and research should aim to improve both production and distribution, but looking at the reality of financial constraints, some disagree with the focus on distribution. Frank Bakx from Agri-Hub Rwanda, for example, says: “Rwanda is an expensive producer of food and cash crops, but it cannot nourish its own population and does not have the funds to keep on importing food.” Therefore, if policy focused solely on regional trade, it would result in Rwanda importing cheaper maize from Uganda and Kenya and destroying its own agricultural potential.

Others, like Albertien van der Veen, team-leader Nutrition at the Royal Tropical Institute, argued for looking at any value-chain approach through a ‘nutrition lens’. Solving the challenge of feeding the poorer population particularly benefits from technical innovation, financial innovation and cost sharing in the value chain, for example if nutritious crops are chosen and if the crop is consumed by a large group of consumers, thereby reducing costs.

…by including informal markets

One challenging step to improve regional distribution is to integrate informal markets. Initiatives aiming to include small-scale farmers in modern markets struggle with formalization and often have mixed results. Local producers and distributors are often linked to informal markets, limiting their ability to participate in the regional market and benefit from trading standards. As informal markets, almost by definition, operate outside the reach of the state and formal chains, extensive supply networks remain consequently beyond the scope of ‘fair’ and ‘sustainable’ trade or ‘inclusive business’ initiatives. But there is much to gain from including these markets. The most efficient food chains are still the informal ones: whether it is grains and tubers in India, West Africa and the Latin American Andes, fruit and vegetables in East-Southern Africa, South-East Asia and China, or livestock in India and Africa, 80-95% of total food production still passes through informal markets.

Furthermore, as with formal markets, traders, vendors and consumers inspect the quality of the product before the purchase – moreover, prices depend on it – and the myriad of farmers, collectors, traders and vendors show high degrees of cooperation or interdependence.
but not least, women occupy a prominent place as farmers, processors and traders. But on the other hand, informal markets are not necessarily ‘best performing’ markets: there is little social security and few hygiene checks. Integrating informal and formal markets allows standards, including hygiene, to be improved. To do this effectively, according to Robert Kintu from the Agri-Hub Uganda, we need to start with governments’ attitudes: “Respect for procedure, reducing red tape, eliminating corruption and taking a step to punish the corrupt or corrupter. The current standard should not increase the cost of the suppliers if the suppliers are not forced to take our bribes or pay more.”

Extending the debate on LinkedIn

On LinkedIn, professionals can discuss in closed network groups. The Broker has joined groups on food security strategies, agriculture, sustainable international development and sustainable agriculture to include their knowledge in the debate. Because these groups are by invitation only, the responses below are anonymous.

For example, in response to our question, ‘Should countries be looking more at regional transport, trade and tariffs in their food security policies than at production?’ The Broker received several answers, which suggest that the focus is on production, but in an ideal world all the aspects should be included.

From a Canadian consultant: ‘I work with smallholders in Eastern Africa and have to tell you the “harmonized agronomic standards” would be WAY down the list for most of them. Ways of reducing post-harvest losses is, generally, a far more significant issue. Of course in an ideal world we would work on all positive change simultaneously.’

From an Italian civil society worker: ‘I agree, governments should look at building infrastructure and cross-border protocols between African countries as trading partners. I think that credit and rural infrastructures are also pivot points for farmers producing for the market at local and national level. But to me there is an important point to clarify: food security policies (FSP) are mainly aimed at reducing food insecurity of the poorest people in rural and urban areas with the aim of granting them the access to enough food all the time. So, food security policies are not agricultural development policies, but a tentative to provide food insecure people with some assets improving their livelihoods. In Central America (where I worked for several years) FSP have a strong element of social assistance and health care for undernourished children.’

An American agricultural entrepreneur gave the following answer to The Broker’s question, ‘How can you implement better pricing mechanisms in the market to give farmers an incentive to adopt resource-saving technologies?’: ‘I feel these better pricing mechanisms will come from the end user of the commodity (food processor) a go directly to the grower. Farmers will start selling directly to the processors for premium prices, there will not be as many middle-men involved (if any).’

What should be done about biofuels?

Many contributors emphasized, however, that two impediments to food production and distribution must not be overlooked. Donors have a severely negative impact when they support policy that mainly supports
Importantly, the increased demand of biofuels has hindered the production of food in many developing countries. Land which is labelled vacant, is rarely vacant in reality. Frequently it is informally cultivated for grazing or pasture by local farmers, while, watercourses may be used for fishing. Selling this land to multinationals, known as ‘land grabbing’, causes many farmers to emigrate from their land, impeding the food sovereignty of these local communities. The interventions of donors on behalf of food security makes no sense if the same donors attach much more priority to land grabbing and biofuels.

On the other hand, biofuels can benefit local development if made accessible to the local population. Improving local access to basic sustainable energy services like biofuels is important, especially for innovation. As Andy Wehkamp, Managing Director Renewable Energy at SNV, commented this is often left out of the debate: “Billions of people lack access to the most basic energy services: 1.3 billion people are without access to electricity and 2.6 billion people rely on the traditional use of biomass for cooking.” This harms their health and the environment. Improving access to renewable energy in rural energy helps improve cooking facilities, food production and processing. It also reduces the food sector’s dependence on fossil fuels, lowers emissions and helps to achieve sustainable development goals to tackle climate change.

**Social-economic spin-offs of food security policy**

Food security policy can achieve maximum impact by investing in the domestic agricultural and food sector. This automatically means investing in domestic entrepreneurship, in the development of local SMEs and in strengthening national economic and innovative capacities. Shenggen Fan, director general of the International Food Policy Research Institute, agreed that this also includes advancing policy to integrate food security and nutrition. Worldwide one billion people suffer from hunger, but another billion lack the essential nutrition to live a healthy live. This ‘hidden hunger’ undermines the physical and mental development of children from birth. According to the Copenhagen Consensus (2008) investing in human capital through better nutrition is one of the most cost-effective ways of helping countries’ economic growth.

According to Fan, therefore, an integrated approach to food security includes the full costs of natural resource use from food production, over-use and exploitation of these resources over time. It has a strong system to protect poor people in the short run if food and natural resources become more expensive for them, based on a proper cost-benefit assessment. And policy can only advance food security through such a sustainable and inclusive approach. Fan emphasized that new players in the private sector have become increasingly important. They can work together towards better pricing mechanisms that provide an incentive for agricultural producers to adopt resource-saving technologies and practices. These mechanisms will also encourage consumers to reduce waste and losses along food value chains.

**Partnering up in inclusive cooperative**

The participants agreed that a comprehensive, inclusive and bottom-up approach is the only solution for Africa. For example, Nelson Godfried from the Farmers of Atwima Kwanwoma Association and the Coalition of Farmers Ghana, pleaded for a comprehensive business model that takes account of all relevant factors and elements necessary for successful farmers and rural entrepreneurs, farmers’...
organizations, farming businesses, rural enterprises, complete value chain development and targeting special populations including young people, women and rural entrepreneurial role models and mentors. Pascal Murasira from the Rwanda Agri-Hub proposed that cooperatives can be a solution to enable asset-poor farmers to participate in and compete with capital intensive agriculture by, for example, making it possible for them to buy machines to intensify their farm operations.

An integrated strategy should build on new forms of cooperatives that include the small-scale farmer. Morisson Rwakakamba from the Agency of Transformation added to the discussion that farmers who have good connections to internet can organize themselves in new and innovative ways. [LINK] “With over 10,400,000 citizens connected to mobile phones in Uganda (according to the International Communication Union), over 5,000,000 browsing internet daily and millions tuning into more than 228 FM radio stations broadcasting in local languages, do we still need the kind of cooperatives that operated in 1970s and 1980s to connect farmers and small businesses to markets?” He criticized the elite cooperatives that have greatly mismanaged development in Uganda since the 1970s and claimed that the revival and restoration of old cooperatives is out-dated.

However, policy-makers should be careful not to reinforce social inequity using technology-driven and knowledge-based policy, especially concerning women. Although participants are in favour of disseminating practical information to farmers by developing affordable ICT services for them, experience shows that this can widen the gender gap. Women in rural areas tend to have less access to mobile devices and internet due to cultural, linguistic and other social-economic issues. A survey in Kenya shows that 70% of male farmers have access to cell phones, while this is only 45% for women farmers. Thus, when talking about inclusiveness extra attention must be paid to women.

An inclusive approach

Vivienne Bennett from the California State University San Marcos agreed that inclusiveness of women is key for any policy to be successful. Since, in the world of smallholder farming, most roles in the production process are gender-assigned, we must support women’s capacity to function effectively in the public sphere by developing laws that create equity in land tenure, and by having the political will to implement such laws.

Going back to the initial question of this article, to start mapping out a sustainable, integrated, inclusive approach: where do we start? Myra Wopereis-Pura from FARA Africa emphasized the effect of knowledge. More can be done if African agricultural research, education and community development agencies work together to improve access to information and knowledge sharing among various actors in agriculture and other economic sectors such as finance and infrastructure.

Recent studies show that improved access to knowledge will stimulate innovation that can drive positive changes in farming productivity and profitability and environmental ownership, ultimately leading to improved food and nutrition security at household level. In a number of countries, including Ethiopia, Kenya and Burkina Faso, the economic outlook has been changing positively with some countries achieving economic growth rates of more than 5%. They do not necessarily have abundant natural resources, but have succeeded in improving agricultural productivity by providing better access to knowledge and through capacity strengthening activities. This confirms the statement that investing in local SMEs strengthens national economic and innovative capacities.

However, food security will only be advanced if civil society organizations are involved more closely. According to Claudio Schuftan of the Steering Group of the People’s Health Movement, Vietnam, this is problematic: “One of the problems of food and nutrition research organizations is that they try to connect policy with science-and-knowledge and not with politics. (…) Policy makers do not always really (want to) listen…unless beneficiaries put pressure on them.”

Changing the debate:
What about the Dutch approach?
This debate started by addressing the food system as a whole – from the inputs, primary production, processing and manufacturing of food, to
distribution, logistics, retail and domestic food preparation. It aimed to discuss food security in this holistic context and study its external influence and outcomes.

Having aligned the key global food security issues that our contributors have put forward so far, the focus changes from here on. For example, how to implement a bottom-up approach that includes small-farmers within regional markets, by advancing cooperation between farmers and entrepreneurs through the development of new ICT services, and that uses knowledge to build resilient societies.

**Dutch Food Security Policy**

The Dutch government has formulated a policy with knowledge and research as a fundamental asset for development cooperation which, according to its Kennisbrief, the current policy lacks. Food security will be one of the key themes of this new policy. Seeing knowledge as the basis of an effective policy transformation, the government has created platforms with civil society organizations, knowledge institutions and the private sector. A Food and Business Knowledge Forum has been set up to determine key questions for the discussion of future policy based on consultations with other key actors. The Broker food security debate is one of their consultations.

The second phase of this debate aims to address what the European and Dutch governments should do with this knowledge. How can knowledge-based policy implement the right initiatives based on the right analysis?

To formulate food security policy Ruerd Ruben and Ferko Bodnar, director and inspector of the Policy and Operations Evaluations Department at the Dutch Ministry of Foreign Affairs, have a pragmatic recommendation: “Choose interventions that have a maximum impact given the limited financial resources available to us.” The government has formulated a development cooperation policy based on sharing expertise between the Dutch agro sector and recipient countries (see for example the speech by the Secretary of State on Economic Affairs. Is this the most effective approach? Do public private partnerships offer an integrated approach that is the solution to food security, or should we establish different forms? Do agriculture, food security and nutrition need to be addressed in an integrated approach or separately? And how should knowledge partnerships be given shape? We are interested in hearing your opinions on these questions.