

2008 High-level Segment Thematic Debate on Rural Development

Panel Discussion on “Harnessing the current boom in agricultural commodities for poverty eradication and sustainable development: the case of small-scale farmers”

ECOSOC Chamber, 3 July 2008

Summary

This panel discussion, organized by the Department of Economic and Social Affairs, IFAD, FAO, WFP, UNCTAD, UNEP, UNDP and UN-Habitat, featured as panelists H.E. Mr. Frank Mwenifumbo, Deputy Minister of Agriculture and Food security of Malawi, Dr. Robert T. Watson, Chief Scientific Advisor in the Department of Environment, Food and Rural Affairs of the United Kingdom, Mr. Steven Schonberger, Lead Operations Officer in Agriculture and Rural Development of the World Bank, Ms. Sandra Polaski, Senior Associate and Director, Trade, Equity and Development of the Carnegie Endowment for International Peace, and Mr. James Borel, Group Vice President, DuPont Crop Protection and Pioneer Hi-Bred.

The main messages emanating from the discussion in this roundtable included the following: Overall, current terms of trade and trade policies, together with growing water and land scarcity, as well as projected changes in climate, are all projected to constrain growth in food production worldwide. There was a need for formal, traditional and community-based agricultural knowledge, science, and technology (AKST) to respond to increasing pressures on natural resources, such as reduced availability and worsening quality of water, degraded soils and landscapes, loss of biodiversity and agro-ecosystem function, degradation and loss of forest cover and degraded marine and inshore fisheries. Agricultural strategies will also need to include limiting emission of greenhouse gases and adapting to human-induced climate change and increased variability. The point was made that to accomplish this, a “business as usual” approach would not be enough; traditional knowledge and community-based AKST will need to be tapped. In addition, there was an unanimous call to invest in agriculture as the most efficient means to alleviate poverty and improve food security, and that within the agricultural sector, it was critical for small-holders and women to be targeted. Most panelists pointed out that small-holders were more efficient and were producing a large quantity of crops. Moreover, the trade regime should leave sufficient policy space for developing countries to adapt to the fluctuations of world food prices, and programs to increase the value added captured by farmers, should be scaled up and expanded. Many specific examples that have worked to answer the market access and input and knowledge need were presented.

This summary is structured around the following sets of issues that were addressed during the course of the debate:

- *What are some of the domestic policies geared towards increasing productivity (technological innovation, rural infrastructure and access to credit to land and to information) that can advance the objectives of food security and sustainable development? In this context, what are the best ways to target women farmers?*

The Malawi experience

The point was made that prioritizing investment in agriculture, especially in developing countries where small holders face resource constraints, was imperative. Malawi was highlighted as one model of how this can be achieved. That country improved its agricultural production by small holders through putting in place an input subsidy program which helped them attain self-sufficiency over the past three years. The country was harmonizing investment in the agricultural sector. To achieve that, it had identified food security, risk management, commercialization, and land and water management as major areas of focus over the next five years. Other policies were being put into place to improve the sustainability of the programme, and these included the prevention of commodity leakages and an increase in diversification of crops.

The importance of small-scale producers

Another important point made was that significant pro-poor progress required creating opportunities for innovation and entrepreneurship, which explicitly targeted resource-poor farmers and rural labourers. Targeting small-scale agricultural systems was critical, and this should be done through new and innovative public-private partnerships, increased public investments in research and extension systems, and development-oriented local governance and institutions. This required simultaneous investments in infrastructure and facilitating access to markets and trade opportunities, occupational education and extension services, capital, credit, insurance and in natural resources such as land and water. The increasing market influence of large scale buyers and market standards were especially challenging for small producers, necessitating further innovation in public and private training, education and extension services and suitable legal, regulatory and policy frameworks. Emphasis needed to be placed on developing cooperatives, farmer organizations, business associations, scientific organizations explicitly supporting the needs of small-scale agricultural producers, and entrepreneurs to capture and add value to on-farm, post harvest and off-farm enterprises. In some instances, opportunities existed in those small-scale farming systems that have high water, nutrient and energy use efficiencies and which conserve natural resources and biodiversity without sacrificing yield. However it was noted that high marketing costs did not allow them to harness these opportunities. The underlying principles, processes and knowledge may be relevant and capable of extrapolation to larger scale farming systems, particularly in the face of the effects of climate change.

The role of women

Women, who play a critical role in agriculture in most developing countries, must be empowered and be involved in decision-making. Women farmers, processors and farm

workers have benefited less from AKST than men overall and poor women least of all. Realizing the potential of women in agriculture requires strengthening public institutions and NGOs to understand the changing roles of women as well as their access, *inter-alia*, to education, market and S&T information; and ownership and control of economic and natural resources. This can be accomplished through legal measures, appropriate credit schemes, support for women's income generating activities, reinforcement of women's organizations and networks, and providing explicit priority to women's farmers groups in value-added chains so that they can benefit from market-based opportunities.

Addressing barriers to increasing agricultural production

Some farmers are able to seize agricultural opportunities through the empowerment of the value chain. But barriers must be addressed to increase producer knowledge of market demand and pricing; the provision of an environment for farmers and others to spur investment, especially amongst small-holders; increasing access to technical knowledge and technology; reducing transaction costs to farmers and other players along the supply chain; and increasing the value added captured by farmers.

These barriers can largely be overcome by providing better means of communication and by improving the investment environment and business climate to attract long term/partner investors especially in countries with small domestic markets, and by providing more secure property rights especially to women. This in turn will help with access to credit. All require innovative financing mechanisms and investment in agriculture, rural infrastructure, and education. Transaction costs can be reduced through strengthening of the legal framework. Small farmers are more efficient producers in many cases, especially measured by its multifunctional outputs, and given the increase in demand for environmental services from agriculture. Payments for environmental services would also be beneficial. Successful examples exist that could be scaled up, such as grain partnerships in Ghana and organic cocoa producers in Sao Tome.

It was noted that rebuilding the agriculture system will require investment that stimulates cooperation among stakeholders; it would also require national governments to provide optimum policy environments, significant financial resources from donors, and must involve local farmers, entrepreneurs, retailers, transport services, grain handlers, food processors and extension services.

Panelists stressed that market access was key. However, as farmers needed to produce amounts that exceeded self-sufficiency needs, they had to have easy access to inputs and information. To enable this to occur, there was a need for ready access to credit, a removal of regulatory constraints for improved seeds and chemicals, access to products and agronomic knowledge, and secure land tenure, which is especially crucial for women.

It was important for Governments to pave the way for the introduction and accessibility of a reliable and competitive choice of quality inputs so that they can prosper, not just survive. Equally important was access to quality extension services and

agronomy programs, which are necessary to empower farmers to make product choices, based on what they can see works in their own environment. Infrastructure necessary to access markets, such as roads and storage facilities, needed to be adequate.

Small-scale farmers' relative isolation to markets puts them at a disadvantage. Information technologies, such as cellular telephones and laptops computers can help reduce this isolation, by limiting their reliance on middlemen to gain access to markets and information—especially prices. The Ethiopian farmer that bought certified seeds, increased production with which he bought a cell is a good example of this. Technology and knowledge can also provide weather forecasts to better plan planting, as well as access agronomy information to diagnose and treat plant diseases and prevent crop losses. Technology could also help farmers to minimize pre and post harvest losses, which currently can reduce agricultural output in developing countries by up to 40 percent. It was pointed out that such expertise was available, so it was therefore important to equip small-scale farmers with these resources. Linking these producers with markets was crucial to paving a path out of poverty.

Interactive Discussion

A number of delegations raised the question as to how much government intervention was needed as well as in what specific area so as to not repeat the mistakes of the past. Many also highlighted the importance of the role of the banking sector, especially in the area of micro-financing. One delegation noted that Africa has not yet benefited from increases in food prices. Another pointed out that it would take time to move small holders on the African subcontinent from subsistence to market oriented production. This would require better extension services backed by research and relevant conditions in each country, legal empowerment of the poor, fair trade, and value addition. A civil society organization suggested that excess revenues from the peak in prices be directed to a fund to support the poor and for assisting in the formation of cooperatives. Delegations also remarked that discussions, such as the ones being undertaken in the present roundtable panel, were extremely important for moving forward.

In response to the questions posed, the panel responded that Government policies needed to be adapted to agro-climatical conditions and be flexible, depending on the scale of production – business as usual will not work. This could perhaps best be achieved through reallocating resources to local authorities. It was also noted that the agricultural system was systemic and required a systemic approach to resolve problems- this could best be done through the creation of partnerships. The panel also stressed that the previous perception that investment in agriculture did not bear fruit was changing and there was a need to ensure that attention to private and public investment was maintained and new types of partnerships forged. Each country must develop their homegrown strategy adapted to their reality and take ownership of it. There was a need to recognize the multi-functionality of agriculture, and social, environmental and economic aspects must be taken into account using a combination of traditional and modern knowledge.

- *What international policies in trade, aid and technology can help to promote agriculture development?*

Trade reform

Panelists stressed that there was an urgent need to reduce and eliminate trade distorting subsidies and support the development of basic institutions and infrastructure prior to opening national agricultural markets to international competition. Otherwise, there can be long-term negative effects for poverty, food security and the environment. The challenge was to make small-scale farming profitable and enable small-scale farmers to benefit from an equitable trade regime. While trade can be beneficial to the poor, it will, however, require: (i) differentiation in policy frameworks and institutional arrangements; (ii) national policy flexibility in order to assist the small-scale sector; (iii) removal of barriers for exports where developing countries have a competitive advantage; (iv) reduction of escalating tariffs between developed and developing countries, and between developing countries for processed commodities; and (v) deep preferential access to markets for LDCs. These trade reforms needed to be accompanied by increased access to credit for small-scale farmers, increased public investment in rural infrastructure and public goods, removal of resource-use distorting subsidies, taxes on environmental and social externalities, addressing property rights and payments to farmers for ecosystem services, e.g., carbon sequestration.

The small-scale farm sector in the poorest developing countries is a net loser under most trade liberalization scenarios that address this question. These distributional impacts reinforce the need for using the special and differential treatment for developing countries in accordance with the Doha negotiations. Suitable action is necessary at the international and national level to enable small farmers to benefit from those provisions. New payment mechanisms for environmental services by public and private utilities such as catchments protection and mitigation of climate change effects are of increasing importance and open new opportunities for the small-scale farm sector.

Developing countries could benefit from reduced barriers and elimination of escalating tariffs for processed commodities in developed and developing countries. They could also benefit from reduced barriers amongst themselves; deeper generalized preferential access to developed country markets for commodities important for rural livelihoods; increased public investment in local value addition; improved access for small-scale farmers to credit; and strengthened regional markets.

The role of the trade regime

Given the decreasing real prices in food and their volatility and the wide difference in which countries are affected by these price fluctuations, the trade regime should leave ample flexibility for countries to put in place policies to increase food production, raise agricultural production, and reduce rural poverty.

It was pointed out that agricultural prices were always volatile since both demand and supply are inelastic. However, past periods of low prices have been much more persistent than peak prices. Low prices have dominated for the past 30 years, with a downward trend over the last century. Current real prices are still low. The labor market plays an important role in transmitting food price impacts to poor households. India has the largest reservoir of poverty in the world; however it was noted that food price increases, especially rice prices, has helped alleviate poverty in that country. The same was true in China, and these two countries together account for 54% of the world's poor. However, increases in food prices has shown to negatively affect low income countries and food importing countries. This variability calls for careful negotiation at Doha (which is not a short term solution) to maintain policy space to put in place agricultural subsidies and food aid (through Special Products - critical products), Special Safeguard Mechanisms (that allow developing countries to raise tariffs in crisis). Research has shown that premature trade liberalization can create poverty traps in developing countries. Care must also be taken to analyze the impact of tariff reductions on government budgets -sometime up to 25% of revenues come from these tariffs. If tariffs are eliminated, where will the money come from for education, health, infrastructure and other investments?

Interactive discussion

One panelist expressed the view that he did not feel the rapid conclusion of the Doha negotiations was the solution. Another stated that the current increase in demand for agricultural production of 3.5% per year could be met by increased transfer of technology. In her view, in fact supply could even increase faster. It was also noted that harder factors to predict were biofuel demand since it was policy driven and linked to oil prices. However, despite that, she did not expect those factors to sustain the current high prices. The lack of attention to Africa and acceptance of structural adjustment policies occurred because prices were low. For that reason it was important that one not allow misguided policies to be drafted in Doha within the context of high food prices. Those negotiations needed to allow flexibility in order to respond to both increase and decreases in prices.

- *What are the opportunities for Africa to leapfrog, i.e., to improve on the previous green revolution and achieve a true green revolution for Africa based on current technologies and systems of productions, even with limited targeted external supports? How can South-South Cooperation contribute?*

One panelist reported that his country's (Malawi) agricultural plan was supplemented by land and water management initiatives including rain water harvesting, use of organic fertilizers and other conservation farming technologies to replenish soils. All of these efforts had proved quite beneficial.

Another observed that the agricultural sector had significantly increased production over the last 40 years resulting in more food per capita and lower food prices. However, he noted that the benefits were uneven with over 850 million people going to sleep each night hungry and with about 150 million children under 5 years of age being severely under-nourished. Also noted were the adverse effects resulting from increasing emissions of greenhouse gases, loss of biological diversity and land and water degradation. Regrettably, the agricultural sector had to date largely focussed on production alone rather than acknowledging that agriculture was multifunctional¹ and also provided economic, environmental and social services.

Importance of agricultural research and development

It was critical that increased agricultural production in the future did not lead to environmental degradation, but resulted in social cohesion, gender equality, improved human health and respects local and traditional knowledge. Environmental sustainability required increased investments in agro-ecological research, which can be most effective when it is participatory in nature, with the farmer in the middle. It was critical to integrate local and traditional knowledge with the knowledge of researchers from universities, government laboratories and the CGIAR system. New and innovative applications of existing AKST and new approaches to agriculture and NRM were needed to address the challenges ahead. Approaches needed to include integrated pest and nutrient management, improved water management, use of improved genotypes, advances in classical plant and animal breeding, and use of remote sensing and information technology. The application of those approaches could lead to site-specific and resource-efficient production.

The next “green revolution” would require quality inputs and aggressive farmer education. Of critical importance was the need to empower small-scale farmers with modern technologies and knowledge.

- *How can farmers, particularly small agricultural producers in developing countries, be enabled to better integrate with local, regional, and international markets on fair and competitive conditions?*

Attention was drawn to the fact that increased public sector investment in R&D and extension services had a high economic pay-off and was urgently needed in many developing countries where investments to date were largely inadequate. In addition, there was a need to stimulate private sector investments. AKST was therefore needed to reduce production costs in order to make food affordable to the consumer and profitable for the farmer, while being environmentally and socially sustainable.

¹ Multifunctional here express the inescapable interconnectedness of agriculture’s different roles and functions. The concept of multifunctionality recognizes agriculture as a multi-output activity producing not only commodities (food, feed, fibers, agrofuels, medicinal products and ornamentals), but also non-commodity outputs such as environmental services, landscape amenities and cultural heritages.)

- *What are some of the new business models and innovations (for example, ICTs, greater use of organic agriculture) that can help them in this regard?*

It was pointed out that seeds adapted to local environment. In India, mustard seeds historically had been planted in September and harvested in late December/early January. But often, up to 30% of the harvest was lost to frost. A seed with a shorter maturation was developed by plant breeders, to harvest in early December, avoiding the frost and since they reached the market before the bulk of the production, could fetch a higher price. In Ethiopia, certified seeds allowed a farmer to double production and thereby escape the poverty trap.

In Kenya, Brookside Dairy, a national dairy company, has set up a network of depots and ‘bicycle boys’ who collect milk on a daily basis from small-scale producers to be sold through this dairy. Providing this type of service alleviated the problem small-scale producers’ faced due to lack of refrigeration and bottling facilities that prevented them from selling in a larger market.

- *What can the international community do to help governments develop programmes to improve access to inputs, better infrastructure, secure land tenure and better organization of poor farmers?*

It was once again stressed that “business-as-usual” will not work. What was needed was to build upon the successes of the past and avoid the mistakes – to summarize the key messages:

- agriculture must be viewed as multi-functional;
- there was a need for increased emphasis on agro-ecological approaches and use of appropriate technologies;
- support was needed for the small-scale farmer, mainly through policies and investments;
- empower women;
- integrate local and traditional knowledge with formal knowledge;
- equitable trade reform with national flexibility; and
- increased investments in R&D and extension services.

At the international level, urgent challenges remained that call for additional effective agreements and bio-security measures involving trans-boundary water, prevention of emerging human and animal diseases, agricultural pests, effects of climate change, environmental pollution and the growing concerns about food safety and occupational health. Achieving development and sustainability goals call for national and international regulations to address the multiple economic, environmental and social dimensions of these trans-boundary issues. These policies needed to be influenced by broad-based evidence from natural and social sciences with multistakeholder participation. Improved governance and strengthening engagement of stakeholders can redress some of the inadequacies identified in AKST arrangements that often favour

short-term over long-term considerations and productivity over environmental and social sustainability and the multiple needs of the small-scale farm sector.

While public private partnerships are to be encouraged, the establishment and enforcement of codes of conduct by universities and research institutes could help avoid conflicts of interest and maintain focus on sustainability and development in AKST when private funding complements public sector funds.

Relevant United Nations agencies, such as the World Food Programme, can implement a procurement policy that favor locally produced goods.

- *What can be done to prioritize sustainable land management, land degradation and desertification at national and international levels?*

Declining environmental sustainability

Emphasis on increasing yields and productivity has in some cases had negative consequences on environmental sustainability. These consequences were often not foreseen as they occurred over time, with some occurring outside traditional farm boundaries. For instance, 1.9 billion hectares (and 2.6 billion people) today are affected by significant levels of land degradation. Fifty years ago water utilization from rivers was one-third of what it is today: currently 70% of freshwater utilization globally (2700 km³ – 2.45% of rainfall) is attributable to irrigated agriculture, which in some cases has caused salinization. Approximately 1.6 billion people live in water-scarce basins. Agriculture contributes about 60% of anthropogenic emissions of CH₄ and about 50% of N₂O emissions. Inappropriate fertilization has led to eutrophication and large dead zones in a number of coastal areas, e.g. Gulf of Mexico. Inappropriate use of pesticides has also led to groundwater pollution, and other effects, for example loss of biodiversity.

The environmental shortcomings of agricultural practice associated with poor socioeconomic conditions has created a vicious cycle in which poor smallholder farmers have to deforest and use newer and often marginal lands. This has led to increasing deforestation and overall degradation. Existing multifunctional systems that minimize these problems have not been sufficiently prioritized for research. There is little recognition of the ecosystem functions that mitigate such environmental impacts.

Agricultural soil and biodiversity, nutrient, pest and water management, and the capacity to respond to environmental stresses such as climate change can be enhanced by traditional and local knowledge systems and current technologies. Technological options such as new genotypes of crops, livestock, fish and trees and advances in plant, livestock and fish breeding, biotechnology, remote sensing, agroecology, agroforestry, integrated pest and nutrient management and information and communication technologies (ICTs) will create opportunities for more resource-efficient and site-specific agriculture. Such AKST can contribute to solutions provided appropriate institutions and capacities are in place. Examples include combating livestock diseases, e.g. vaccine development;

mitigating greenhouse gas emissions from agriculture; reducing the vulnerability of agriculture to a changing climate; reducing the heavy reliance of agriculture and commodity chains on fossil fuels; and addressing complex socioeconomic issues regarding local, national and international public goods.

Interactive discussion

It was noted that India was in a position to successfully feed itself for the next 25 years through the utilization of the “Intensive Rice System”. But unfortunately, there was instead a large- scale move to export this commodity rather than capitalize on this food crop. Such a trend would serve to undercut small holders especially women and sustainable agriculture.