IAASTD
International Assessment of Agricultural Knowledge, Science and Technology for Development

Issues in Brief

Business as Usual is Not an Option: Trade and Markets

Underinvestment in developing country agriculture—including in local and regional market infrastructure, information and services—has weakened the small-scale farm sector in many countries. Trade liberalization that opened developing country markets to international competition too quickly or too extensively, further undermined the rural sector and rural livelihoods. Many countries have been left with weakened national food production capacity, making them more vulnerable to international food price and supply volatility and reducing food security.

Developments in agriculture over the last fifty years have increased yields sufficiently to provide enough food for every person on the planet. Yet approximately 850 million people around the world are not able to obtain enough food to lead healthy and productive lives. The recent volatility in food supply and price, which led to food riots in the summer of 2008, has placed some 100 million additional people at risk of food insecurity. Ongoing energy, financial and climate crises make it likely that food price volatility will persist in the future. Enhancing national food production capacity will help countries to better withstand international food price shocks.

Over 70% of the world's poor in developing countries live in rural areas and are directly or indirectly dependent on agriculture for their livelihoods. Historically, agricultural sector development and rising farm incomes have driven increased economic development across other sectors of the economy.

A sharp decline in the overall rate of growth in agricultural research and development investment in developing countries since the late 1980s, especially in sub-Saharan Africa, has limited agricultural technology development targeted to local needs. The decline has also hampered the development of local and regional market infrastructure (from roads to information technologies) that could benefit the rural sector and enable agriculture to better fulfill its role as an engine of development.

Developing economies often suffer when they open up to international trade before basic institutions and

Source FAO/Giulio Napolitano

infrastructure are in place, as large-scale imports out-compete small-scale producers in the domestic market. This situation undermines the livelihoods of many local producers, especially those who are unable to access new international market opportunities.

More Equitable Trade Policy

Reforming the international trading system to make it more equitable would enable agriculture to contribute more to sustainability and development goals, especially the goal of reducing poverty.

International trade in agricultural products offers some opportunities for developing countries to benefit from larger scale production for global markets; acquire some commodities cheaper than would be possible through domestic production; and gain access to AKST that is not available domestically. However, current trade regimes have major distributional impacts among and within countries, which in many cases, have not been favorable for countries at an earlier stage of industrialization or for small-scale farmers and rural livelihoods in general.

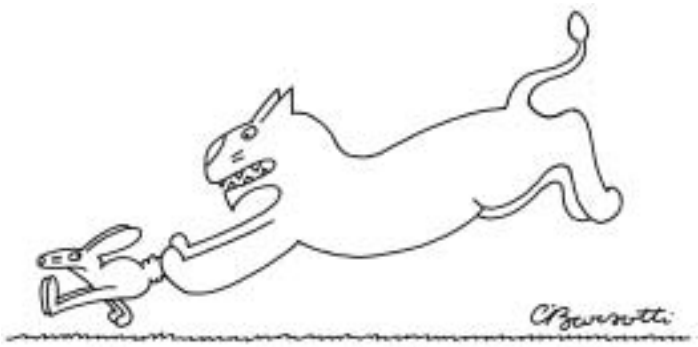
Policy Flexibility

For many developing countries, sustainable food security depends on national food production. These countries would benefit from policy flexibility in agricultural decision-making, paired with significantly increased international support and investment. This flexibility would allow for increased domestic production for national food security, which would buffer the devastating impact of global price volatility on their populations. It is especially important to ensure policy flexibility so that countries may maintain remunerative prices for crops that are important to food security and rural livelihoods.

Flexibility to allow developing countries to designate "special products," i.e., commodities that are critical for food security and livelihoods and for which agreed tariff reductions will not be fully applied, gives developing countries an important tool to protect small-scale producers from import competition until enhanced AKST, infrastructure and institutional capacity are in place to make the sector internationally competitive. Similarly, the special safeguard mechanism, designed to counter depressed prices resulting from import surges, is an important trade policy tool for avoiding possible damage to domestic productive capacity.

Non-reciprocal market access is another important approach that could help developing countries, and it has historically been part of the international trading system, whether between metropolitan countries and colonies, or between the US and Europe and Japan during the 1950s reconstruction. Today there are many such non-reciprocal arrangements, e.g., between the US and many sub-Saharan African countries in the African Growth Opportunity Act and the European Union's Everything But Arms Act. To further development and sustainability goals such non-reciprocal access should be systematized and made part of the international trading system.

Developing countries need to be able to link the pace of market opening with the pace at which they can reallocate surplus labor from agriculture to manufac-



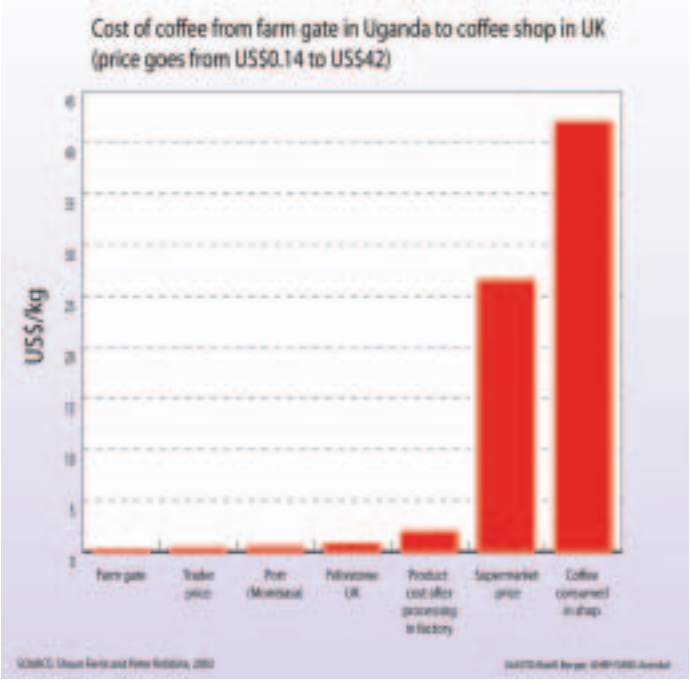
"What are you complaining about? It's a level playing field."

turing or services, as has been done by a number of Asian countries. Forcing developing countries to open their economies beyond such transition capacities will only continue to put the livelihoods of small-scale producers at risk.

Improving Market Opportunities for the Small-Scale Farm Sector

Investment in developing country agriculture has focused largely on export crops to generate foreign exchange, forcing countries to rely on continued low international food prices to meet national food demand. Although the IAASTD was approved by governments before the recent round of food price volatility, the report presaged the emerging consensus that trade and market strategies must be re-evaluated and made more equitable to provide greater food security for developing countries.

There has been insufficient investment targeted to the needs of the small-scale farm sector, e.g., investment in AKST focused on local food staple crops, local and regional market infrastructure, post harvest facilities, local value-added processing, and marketing and information services. Opening markets without investing in new opportunities for the small-scale farm sector has had a negative effect on the livelihoods of producers in many developing countries. Examples are diverse, including increased exports of non-timber forest products from unmanaged commons, leading to a rapid depletion of the resources; sales of basic grains on the international market at below the cost of production; imports of dressed chickens into sub-Saharan Africa, while local producers are unable to compete because of poor infrastructure; and an emphasis on infrastructure development for export to the international market at the expense of local market feeder roads, postharvest facilities and regional market integration.



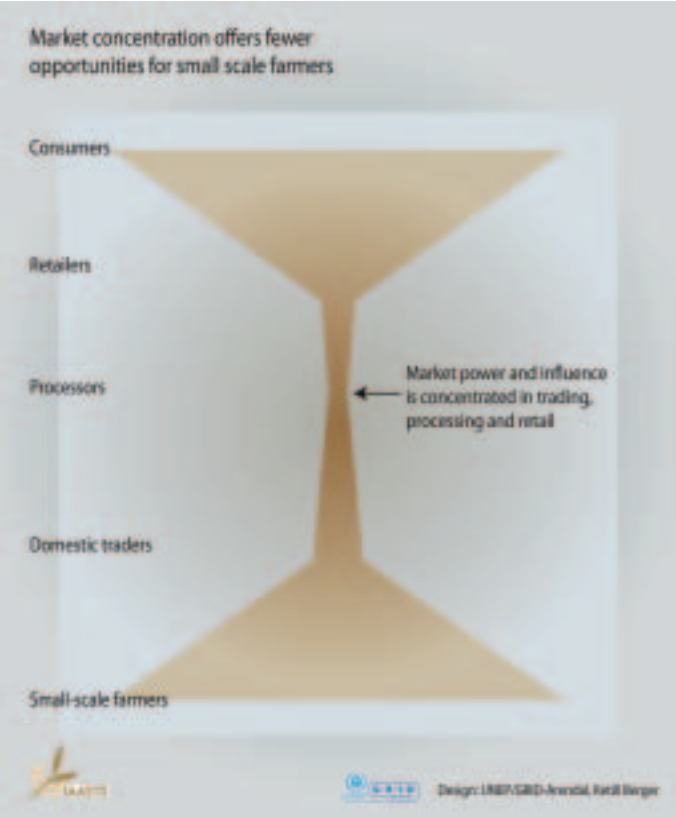
Source: Ferris and Robbins, 2003.

Value Chains and IPRs

Today, agricultural production, processing and marketing are linked in global value chains. Developed country firms dominate processing and marketing, and thus capture a larger share of the overall value added in processed agricultural products. More value is captured in the processing, packaging and marketing of agricultural products than in the raw material production. The elimination of tariff escalation for processed products could enable developing country firms and small-scale producers to move up the chain and increase their share of the overall value added in a commodity.

For such movement up the value chain, intellectual property rights (IPRs) systems also need to be tailored to the development needs of each country. The WTO's Trade Related Intellectual Property Rights (TRIPS) recognizes that there can be a need for *sui generis* intellectual property systems.

The benefits received from freely sharing data and information are restricted by patenting. Strong IPRs



that provide financial incentives for innovation also increase the price of knowledge generation and exchange. For developing countries there is a need to put in place systems that promote the generation, diffusion and local adaptation of data, information and technologies.

Payments and Rewards for Environmental Services

Modern agriculture generates large environmental externalities, including accelerated loss of biodiversity and ecosystem services, such as water cycling and quality, intensive energy use and greenhouse gas emissions; and the environmental health impacts of synthetic pesticides. Many of the externalities derive from the failure of markets to value environmental and social harm and provide incentives for sustainability. In a number of cases, e.g., loss of biodiversity and greenhouse gas emissions, there is clearly an inadequate pricing system, as these negative externalities are simply not priced at all. Adequate pricing of such negative externalities would also help drive research in the direction of reducing their production. For instance, livestock systems that reduce methane gas emissions or rice cultivation that reduces the need for flooding in rice fields, could contribute to mitigating climate change. One option to reduce the environmental footprint of agriculture and provide incentives for sustainable practices is the development of rewards and payments for agroenvironmental services, including the extension of carbon financing. Payment for Environmental Services (PES) should be designed to generate stable revenue flows for local communities and farmers, thus improving rural livelihoods as well as helping to ensure long-term ecosystem sustainability.

Agriculture could increase its contribution to climate mitigation, for example, if a number of the positive externalities were also rewarded or paid for as environmental services. Payment for avoided deforestation can improve the livelihoods of small-scale farmers and forest dwellers (among the poorest people on the planet) and reduce their need to extract income by transforming forest into agricultural lands. Similarly, payments to those who live upstream for improved water quality could also contribute to arresting the deterioration of water quality.

The Way Forward: Policy Options

Trade and market policy reforms aimed at creating a more equitable trading system and improving market opportunities for small-scale farmers can make a significant contribution to the alleviation of poverty and hunger. Policy options for consideration include:

- Ensuring sufficient policy flexibility in trade regimes for developing countries so that they may maximize agriculture's potential to drive development. Differences in tradition, history, context and resource endowments argue for

rules that permit flexibility on national agricultural and trade policy on the grounds of food security, farmers' livelihoods and rural development.

- Generalizing the principle of non-reciprocal market access, i.e. that industrialized countries and wealthier developing countries should grant non-reciprocal access to countries that are less developed, and allow different levels of inclusion in the international trading system based on the level of development of a country.
- Facilitating adequate remuneration and a minimum level of price stability for the small-scale farm sector in developing countries to encourage investment in increased production and improved agricultural and environmental practices. Policy options include regulation of middlemen and a renewed direct role for government in providing credit and marketing opportunities for the small-scale sector. For some lower income countries, the only available policy tools to help provide adequate remuneration and price stability may be tariffs as embraced by the Doha framework agreement.
- Integrating development requirements into intellectual property regimes.
- Removing trade barriers for products in which developing countries have a comparative advantage, and providing deeper preferential access to markets for least developed countries.
- Eliminating or reducing tariff escalation on processed agricultural products to encourage investment in local, value-added processing in developing countries.
- Increasing public investment in agriculture targeted to the small-scale sector, including market roads, extension, marketing information and services, postharvest facilities and support for cooperative marketing.
- Facilitating collective efforts of farmers' organizations to improve their access to markets under more favorable terms. This may include investment in local value addition and diversification; facilitation of farmer collective action to take up scale-sensitive functions and improve negotiating power with buyers; improving regional market integration; and promoting alternative trading channels to help improve the bargaining position of small-scale producers within global chains.
- Supporting the development of fair trade and certified organic agriculture to offer alternative trading channels to mainstream commodity markets that can help improve the social and environmental performance of agriculture, and provide more favorable and stable returns to farmers and agricultural workers.
- Improving tenure and access to resources and credit, including microfinance options, for small-scale producers to increase the sector's ability to benefit from market access.
- Implementing programs to provide payments and rewards for environmental services and promote adoption of sustainable agricultural practices such as low-input production, conservation tillage, watershed management, agroforestry practices and carbon sequestration.

Source: FAO/A. Conti

The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) provides information on how agricultural knowledge, science and technology can be used to reduce hunger and poverty, improve rural livelihoods and human health, and facilitate equitable environmentally, socially and economically sustainable development. The full set of IAASTD reports includes a Global and five sub-Global reports and their respective summaries for Decision Makers as well as a Synthesis Report, including an Executive Summary. The reports were accepted at an Intergovernmental Plenary in Johannesburg in April 2008.

The assessment was sponsored by the United Nations, the World Bank and the Global Environment Facility (GEF). Five UN agencies were involved: the Food and Agriculture Organization (FAO), the UN Development Program (UNDP), the UN Environment Programme (UNEP), the UN Educational, Scientific and Cultural Organization (UNESCO) and the World Health Organization (WHO).

IAASTD Issues in Brief are taken directly from the IAASTD Reports published in 2008 by Island Press.

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