

**REFORMING AGRICULTURAL TRADE UNDER COMMODITY PRICE
VOLATILITY: CAN POOR AFRICAN COUNTRIES ACHIEVE FOOD
SECURITY AND ECONOMIC DEVELOPMENT?**

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REFORMING AGRICULTURAL TRADE UNDER COMMODITY PRICE VOLATILITY: CAN POOR AFRICAN COUNTRIES ACHIEVE FOOD SECURITY AND ECONOMIC DEVELOPMENT?

Abstract

Global agricultural trade liberalization of the Doha Development Round has been advertised to governments of poor countries as a forum to reduce rich country subsidies, raise commodity prices and to galvanize agricultural trade as an engine of economic growth and development. However, successive talks have hit a stalemate, and recent commodity price surges are a concern for food importing African countries. In principle, trade liberalization is expected to remove trade barriers and lower subsidies in developed country markets so as to improve international prices for farmers in developing countries. Commodity price increases are also viewed as a major catalyst in spurring economic development by increasing export and foreign exchange earnings.

This paper (i) explains the arguments for global agricultural trade reforms to ensure the pro-development and pro-poor outcomes of the DDR; (ii) discusses the causes of recent volatility in global food prices and their contribution to the food crisis facing some African countries; (iii) analyzes the economic performance and the state of African agriculture stemming from the global food crisis in light of the failure to achieve multilateral agricultural reforms; and (iv) derives implications for ensuring food security and economic development especially for poor and vulnerable African countries.

Key Words: price volatility, agricultural trade reforms, food security, poverty alleviation.

JEL Classification: F10, F13, O55, Q17, Q18

Introduction

Since the 1960s economic development experts have been concerned that low commodity prices have been a key obstacle for developing countries that are highly dependent on agricultural production and export for their revenue generation. Therefore, commodity price increases are viewed as a major catalyst in spurring economic development by increasing export and foreign exchange earnings. Likewise, international trade liberalization, if done well, is expected to remove subsidies in developed country markets so as to improve international prices for farmers in developing countries. Accordingly, global agricultural trade liberalization of the Doha Development Round (DDR) has been advertised to governments of poor countries as a forum to reduce rich country subsidies, raise commodity prices and to galvanize agricultural trade as an engine of economic growth and development. For many developing countries, especially the poor countries in Africa, agriculture is very important in providing secured jobs, food, foreign exchange, and even linkages to other sectors of the economy through diversified economic activities and to keep the people out of poverty. However, failure to achieve global agricultural market reforms and commodity price surges of the past few years appear to portend looming food crisis that may stifle efforts by African countries to achieve food security and development.

Discussions on furthering reform of agricultural trade at the World Trade Organization (WTO) commenced in March 2000, drawing its mandate from Article 20 of the 1994 Uruguay Round of the General Agreement on Tariffs and Trade's (GATT) Agreement on Agriculture that committed members to initiate further negotiations at the end of 1999. Following the Doha Ministerial meeting in November 2001, the DDR of

trade talks ushered agriculture as a key pillar in negotiations, bringing to the fore developing country interests in agricultural trade liberalization. Whereas the GATT historically emerged as a developed country club, the number of developing country members in the WTO has swollen giving developing countries greater power to both set the agenda as well as shape and ratify agreements. Therefore, the focus of agricultural negotiations has shifted from the traditional pitched battles between the U.S. and the E.U., supplanted by the growing cadence of demands for market access by developing countries and reduced subsidies by rich countries.

Whereas the DDR set an ambitious timetable for completion of talks and the culmination of agreement by January 2005, many so-called deadlines have passed without consensus and agreement, including the WTO Ministerial Meeting at Cancun in September 2003 that ended in acrimony, and the Ministerial Meeting in Hong Kong, China, in December 2005 during which an agreement on the modalities of negotiations could not be reached. In July 2008, talks on agriculture came to a screeching halt once again when the U.S. could not see eye to eye with India and China on certain details surrounding the Special Agricultural Safeguard Mechanism (SSM) to ensure protection for poor farmers.

During spring 2008, as finance ministers gathered in Washington, D.C. to grapple with ongoing global financial crisis, *The Wall Street Journal* reported that the event was upstaged by concerns about food security. The United Nations Food and Agriculture Organization (FAO, 2008) reports that of the 37 countries worldwide that are facing food crisis, 21 are in Africa. Ostensibly, African countries such as Burkina Faso, Cameroon, Cote d'Ivoire, Egypt, Ethiopia, Madagascar, and Senegal, and other developing countries

have experienced violent riots caused by food shortages; a major challenge to their vulnerable governments. Surging commodity prices have pushed up global food prices in the past four years (see Figure 1), putting huge stress on some of the world's poorest nations and, especially on the real incomes of poor households.

The World Bank's recent report on rising food prices recounts that U.S. wheat export prices rose from \$375/ton in January to \$440/ton in March and Thai rice export prices increased from \$365/ton to \$562/ton during the same period¹. This came on top of a 181 percent increase in global wheat prices over the 36 months leading up to February 2008, and an 83 percent increase in overall global food prices over the same period. Additionally, World Bank President Robert Zoellick warned at the concluding press conference of the World Bank Group-International Monetary Fund's 2008 Spring meetings in that "based on a very rough analysis, we estimate that a doubling of food prices over the last three years could potentially push 100 million people in low-income countries deeper into poverty" (World Bank, 2008b). These high food prices not only threaten access to food by the poor, but also access to health and education.

This paper is motivated by the following objectives: (i) to understand the arguments for global agricultural trade reforms to ensure the pro-development and pro-poor outcomes of the DDR; (ii) to understand the causes of recent volatility in global food prices and their contribution to the food crisis facing some African countries; (iii) to analyze the economic performance and the state of African agriculture stemming from the global food crisis in light of the failure to achieve multilateral agricultural reforms; and (iv) to derive implications for ensuring food security and economic development, especially for poor African countries.

¹ See World Bank (2008a). Both U.S. and Thailand are major grain exporters.

In the first section, we discuss the ambition of promoting global agricultural trade reforms and the pro-development mandate of the WTO's Doha Development Round. Next, we discuss the causes of recent surges in global food prices. This is followed by analysis of recent African economic performance. We then explain why agriculture is important to many African economies. The next section analyzes the impacts of multilateral trade reforms on Sub-Saharan African (SSA) countries. Finally, we provide a summary of findings and draw implications for food security and economic development.

The Ambition of Promoting Global Agricultural Trade Reforms for Development

Agriculture had remained outside the purview of multilateral trade negotiations under the General Agreement on Tariffs and Trade (GATT) up until the Uruguay Round of 1994. For the first time the world focused on making trade distorting mechanisms in agricultural markets more transparent. However, to date, many countries, especially rich countries, have managed to employ all kinds of loopholes to limit the agreement's impact in promoting trade opportunities for developing countries. Indeed, it was acknowledged from the onset of the DDR of multilateral negotiations in 2001 (under the auspices of the WTO) that agriculture would be crucial in concluding trade talks. Certainly, this has proven to be the case!

The most recent DDR of WTO negotiations began on July 21, 2008 in Geneva and concluded on July 29, 2008. The DDR had been stalled, and for seven years since its inception at Doha in Qatar, negotiations appeared to be arduous and protracted with deep divisions between rich and poor nations. It was expected to adopt modalities² for agricultural and industrial goods, and to make progress in the services negotiations.

² Modalities set the parameters for Members to establish commitments in terms of lower tariffs, subsidies, or new disciplines.

Consistent with previous DDR negotiations, Members failed to build consensus and the latest talks broke down when emerging juggernauts, India and China, stood their ground against the U.S. which objected to details of a Special Agricultural Safeguard Mechanism (SSM), designed to protect poor farmers in developing countries against temporary import surges or sudden price fall. Specifically, the SSM would enable a country to apply exceptional tariffs on agricultural commodities when import surges occurred and/or commodity prices fell. In particular, India was backed by about 100 developing countries represented by various groups such as the G33³, Africa, the African, Caribbean and Pacific (ACP) group of nations, least developing countries (LDCs), etc., that needed the SSM to protect millions of subsistence farmers from market uncertainties created by opening up their borders as a result of trade reforms. These groups wanted the threshold for imposing the SSM measures to be placed quite low, but U.S. negotiators opposed it by expressing concern that it would translate into a protectionist device. In addition, Members could not reach convergence on the type of remedy nor the magnitude of extra duty to be imposed on imported goods so as to protect a country's market.

This latest turn of events for multilateralism bodes rather poorly for poor African countries that have harbored ambitions of promoting trade as an engine of economic development. Since developing countries generally benefit from special and differential treatment (SDT) with little in the way of reciprocal tariff concessions, many developing countries did not plan to expend significant negotiating capital establishing the case for extending it. Josling (2006) counseled, for example, that if too much STD was demanded by developing countries during negotiations, the chance of a satisfactory outcome to the DDR would be reduced. If too little is demanded, developing countries may have lost an

³ The G33 is a group of developing countries including India, Indonesia and China.

opportunity for significant “gains.” But the nature of the negotiations is that since political success may not have much economic value, a good strategy is to search for the outcome that maximizes the economic benefit relative to cost for developing countries over time, given their limited political clout. This strategy shows the importance of ranking options by their economic merits, especially with respect to their impact on economic growth and development, followed by consideration of the political price to be paid as a way of gaining those benefits. As Josling notes furthermore, economic benefits from open trade are a positive-sum game that attracts other countries (including developed countries) to such an outcome, rather than the zero-sum political benefit-seeking game with its associated negative economic benefits.

One well-noted strategy for developing countries in gaining the most economic benefit possible is in selling off depreciating assets in negotiations such as an end to preferences in return for using negotiating power to build market position such as through compensation in trade and aid, and to relinquish the “right” to non-reciprocity in return for specific market access benefits. In fact, we agree with Josling’s analysis that although the July Framework Agreement’s provisions on agriculture give developing countries more time to make adjustments (the most important are cuts in tariffs to improve market access), yet if the protective trade policies that are subject to discipline are not in the long-run interests of developing countries, delaying cuts would not increase economic value over time. Rather, by negotiating to enable developed countries to increase tariff cuts on products of export interest to developing countries or to provide increased technical assistance for trade-related goals may possibly increase the economic value for developing countries. A second issue is to what extent some developing countries would

be required to lower tariffs further on products of interest to other developing countries?

A third issue is whether all developing countries should get the same SDT?

Given the development focus of the DDR, we further agree that a potential win-win approach would be garnered if agricultural policy reforms raise standards in developing countries, where further integration into the world economy would benefit other countries as well as the those countries undergoing reforms. Should poor agriculturally dependent African countries raise their incomes through trade, for example, that would have a positive payoff to all Members of the WTO. However, the term *developing country* is not defined in the WTO, such that in the view of most developed country negotiators, mainly because of their relative success in trade, countries such as Brazil, China and India may not be accorded nonreciprocal benefits in trade talks. Indeed, this sentiment may have been at the heart of the United State's unwillingness to cede its position with regard to the SSM.

Inclusion of the SSM for developing countries was suggested in the Harbinson draft of the Agriculture text, was incorporated in the EU-U.S. proposal of August 2003, and included in the Derbez text at the end of the Cancun Ministerial of 2003. Therefore, Members were quite conversant with the SSM proposal; it had been accepted by the Group of 20 and other developing countries, even if the technical details were not so apparent. Politically and economically, there is no question about its merit and benefit, especially to small, open economies that are particularly vulnerable to changes in world market prices. As Josling (2006) noted, "a simple, transparent mechanism for temporary levies triggered by both price drops and import surges could give countries the security they need to stabilize domestic markets without creating too much temptation to protect

inefficient sectors in the longer run.” The issue during the July negotiations was how wide a coverage that could be granted to developing country commodities by developed countries? Of course developing countries would have liked wider latitude of coverage, but developed countries saw that as a means of limiting their market penetration, especially where the trigger price is set too high and the trigger quantity is set low. Would it have made a difference if developing countries had preannounced the coverage and trigger conditions that would have been acceptable prior to the July talks?

Nevertheless, the forgone opportunities from this latest failure in trade talks include the reduction of unfair agricultural subsidies; reduction of tariff walls on industrial and agricultural goods; the reduction of barriers to trade in critical services such as banking, insurance, energy, and environmental services; and a myriad of new trade rules (Lamy, 2008). At least, a 2013 deadline has been set (stemming from the Hong Kong Ministerial Meeting of December 2005) for ending agricultural export subsidies and to provide duty-free/quota-free access for exports from least developed countries. Therefore, opportunity still exists to move beyond the principle of less than full reciprocity, where the rich countries were expected to make two-thirds of the contribution and emerging developing countries to make one-third contribution by cutting subsidies, into establishing new ceilings per product. According to Lamy’s assessment, the African Cotton-4; Benin, Burkina Faso, Chad and Mali were disappointed because negotiations did not get to establishing new ceilings for cotton.

However, for now protectionist tendencies are set to continue, although commitments have been made outside the negotiations, such as Aid for Trade (AfT), to help poor countries integrate into the global economy. Members appear determined to

also preserve progress made on the July package, and to build on it toward potential future agreements. Therefore, these appear to be one of the few silver linings in a rather gloomy global economic outlook, compounded by recent energy and commodity price volatilities. Regardless of what happens in the immediate aftermath of the latest multilateral discussions, all countries are expected to continue to reform their trade regimes. In other words, African countries are still expected to step up trade reforms as part of broad strategies to promote economic efficiency and growth, reduce poverty, and to stem budgetary waste.

Agricultural trade reforms are particularly important to the DDR because of the importance of agriculture in developing countries (especially the least developed)⁴, and the slow growth of agricultural trade from developing countries to developed countries. As McCalla and Nash (2007) note, the share of agricultural exports from developing countries to industrial countries has stagnated from about 26 percent in 1980/81 to 23 percent in 2000/01. This is consistent with the hypothesis that developed economies' barriers to agricultural trade have effectively stifled that segment of agricultural trade. Therefore, developing countries potentially have a lot to gain from global trade reform.

Indeed, unlike Africa and other developing countries where agriculture holds a significant relative percentage of national output and employment⁵, the farm sector's contribution to global GDP has declined in importance from about 10 percent in the 1960s to 3 percent (and about 6 percent when food processing is added) to date. In

⁴ Agriculture is the largest employer, the largest source of GDP, and the largest source of exports and foreign exchange earnings in most developing countries. About 75 percent of poor people worldwide who live in rural areas are mostly dependent on agriculture. The World Bank documents that the rural poverty rate exceeds the urban rate by a large margin (about 7 percent on average) in almost all developing countries for which Poverty Reduction Strategy Papers have been prepared (see McCalla and Nash, 2007; p.2).

⁵ About 52 percent of employment in developing countries is in agriculture, and 44 percent of all jobs globally are on farms. Therefore, agricultural trade liberalization offers potential benefits to these farmers.

developed countries agriculture accounts for only 1.8 percent of GDP and a slightly larger share of employment. Agriculture's share of world trade has fallen from 22 percent to 9 percent over the past three decades, and from 42 percent to 11 percent in developing countries. Agriculture and food together account for only 7 percent of world trade in goods and services (Anderson and Nash, 2006).

Nevertheless, a thriving agricultural sector is very important in reducing poverty by stimulating economic growth, and in improving food security and ensuring natural resource conservation (Ingo and Nash, 2004). According to the authors, agricultural trade reform is, therefore, very important to developing countries when integrated in world markets because trade liberalization fuels prosperity. Additionally, as it stands, agriculture has had the largest levels of trade distortions and, therefore, has great potential to benefit from reform.

According to Anderson and Nash (2006), another important reason to liberalize trade through multilateral negotiations is the fact that liberalization is a global public good such that its benefits are not adequately internalized in the decision processes of individual liberalizing countries. Additionally, trade policy reforms (that lower tariffs) and investments in trade instruments (such as customs reform and ports) can have significant externalities or spillover effects from the country undertaking the reforms or making investment to other countries. In other words, all countries stand to benefit from a country's trade reforms and trade-related investment; and such benefits are multiplied when many countries concurrently undertake such reforms.

Standard Ricardian analysis of international trade also attributes specialization in the production of goods and services to comparative advantages.⁶ For many SSA countries, agriculture is the sector of comparative advantage. Therefore, they specialize in the production of particular agricultural commodities and then trade them for other (industrial and value-added) goods and services produced by other countries in which the other countries enjoy comparative advantage. Of course, unless they can invest in expanding and increasing agricultural productivity and competitiveness, and gain greater access to markets, these countries would continue to face economic stagnation.

We may consider as well the additional linkage between trade and economic development resulting from greater openness stemming from trade liberalization. Increased availability of information as a direct result of reform is expected to reduce cost of production, market transactions costs, and to enhance efficiency on the market for the goods and services being traded as well as from the effects of knowledge spillovers. Moreover, as Anderson and Nash (2006) illustrate, economies that are more open tend to attract more investment from abroad, which raises their stock of capital relative to output. More open economies tend to be more innovative as well, because of greater trade in intellectual capital (in the form of information, ideas, and technologies). Assuming that trade reform was to energize entrepreneurship creation it would result in higher rates of capital accumulation and productivity growth in the reforming economy.

Yet, according to the authors agricultural trade barriers have persisted in part because changes in product prices resulting from trade liberalization or cuts in subsidies tend to also change the prices of the services of productive factors such as land, labor,

⁶ Here comparative advantage simply refers to the relatively lower cost of production of that good or service.

and capital. Therefore, although a country's total income and wealth are expected to grow when trade distortions are reduced, not all production sectors may gain since certain industries may become worse off than previously. Usually the few winners are unwilling to compensate the losers; therefore potential losers would support politicians to resist reforms. Whenever that happens, consumers are the worse off, since their net gains from trade when distributed across a large population becomes infinitesimal and, therefore, may not provide the necessary inducement for consumers to get together to lobby for reform. In addition, although export firms and potential winners from increased exports may be poised to counter protectionist forces, under the status quo prior to reform they may be weaker than antireform forces that may carry the day.

Furthermore, Anderson and Nash (2006) explain that agriculture appears to be particularly resistant to reform in many countries because many farmers would rather not give up their traditional livelihood that has been handed from prior generations. This closeness to the land, for example, appears to be at the heart of support by congressional delegations for U.S. farm bills that continue to dole out subsidies to farmers. In part, this explains why agricultural trade policy tends to be so contentious. In fact, subsidies granted under domestic support of agriculture in the 2008 U.S. Farm Bill passed by the U.S. Congress is incompatible with cuts in subsidies agreed to by the U.S. during the recent WTO talks.

Aside from resistance to global trade reforms by nongovernmental organizations (NGOs), less developed countries which are net food importers are likely to resist global trade reforms if they have to pay higher prices for food on international markets, especially as developed country subsidies and protections are cut. More than likely, as

food exporters they are able to gain access to protected rich-country markets under various trade preference schemes food-exporting low-income countries might receive less for their products when domestic prices fall in those protected rich countries. Other concerns include protection for subsistence farmers against import surges by rich countries into poorer net-food importing countries and sudden fall in commodity prices (as argued by many developing countries during the recent Doha agricultural talks), and especially U.S. domestic subsidies for export commodities such as cotton.

Causes of the Global Food Price Surges

Recent oil price spikes are believed to have been driven mainly by demand for oil that is beyond the limits of global capacity. In tandem, at least in part, rising food prices are believed to have been prompted by rich countries' (mainly U.S. and E.U.) policies⁷ wherein subsidies are provided to farmers to produce crops such as corn and soybeans, pushing the substitution of corn-based ethanol and oil crops such as palm oil as bio-fuel (bio-diesel) for hydrocarbons instead of human consumption. In fact, according to the World Bank's *World Development Report* (2008c), over 528 pounds (about 240 kilograms) of corn is required to produce 26 gallons (about 100 liters) of ethanol necessary to fill the tank of a modern sports utility vehicle. Therefore, 50 million tons of the increase in global corn production of some 51 million tons from 2004 to 2007 went to bio-fuel use in the U.S. while global consumption for all other uses increased by 33 million tons, causing global stocks to fall by over 30 million tons (World Bank, 2008). Increasing fuel costs also typically cause rapid increases in the prices of agricultural

⁷ The U.S. has mandated using 28.4 billion liters of bio-fuels for transportation by 2012, whereas the E.U. has stipulated the goal of 5.75 percent of automobile fuel use from bio-fuels by 2010.

inputs such as fertilizers, pesticides and seeds, and contribute to spiraling transportation costs in moving food from sources of production to consumption points.

As world population is growing, more and more people are moving into urban from rural areas, placing greater stress on food demand. The emerging middle class in developing countries (such as China, India and Brazil) that are experiencing recent economic growth are also increasingly demanding cereals and are diversifying their dietary patterns by consuming greater meat and dairy products than prior generations. But feed grains are also being diverted to feeding livestock. For example, Von Braun (2007) noted that the real GDP in Asian developing countries increased by 9 percent per year between 2004 and 2006. Africa has also experienced rapid economic growth of nearly 6 percent in the same period. Moreover, certain traditional grain exporting regions, such as Australia, have experienced poor harvests brought about by drought and crop failures that have created scarcity in global cereal supply. Although it is uncertain how long climate change will persist and whether it is, in fact, caused by global warming, one thing is certain; when we factor in potential impacts of policies directed at achieving energy security and reduced carbon dioxide emissions, tradeoffs with food security concerns would likely contribute to dwindling stocks of available world grain resulting in high food prices at least in the medium run. To date, speculation on financial derivative markets, based on agricultural commodities have also become attractive and may be contributing to upward trending in prices.

Meanwhile, some countries have announced export bans and other trade restricting policies such as export taxes to control grains from being diverted out of country so as to protect consumers, and import tariffs to protect producers. Countries

importing commodities from the U.S. that have experienced appreciation of their currencies against the dollar have realized cheaper imports and, thereby, caused their demand for commodities to grow contributing to altered patterns of trade. Lastly, donor countries of the OECD, especially the U.S., have reduced funding in support of global agricultural research and development, and there is added concern about the potential threat of plant disease epidemic on agricultural yields. For example, the Bill and Melinda Gates Foundation recently announced a grant of \$25 million to Cornell University aimed at fighting a deadly wheat disease called stem rust. The sum total of listed factors reinforces the risk and volatility facing agricultural markets today. This must be a cause of concern for governments, institutions that govern global trade, producers, marketers, and consumers all over the world.

Recent African Economic Performance

The *Economic Report on Africa* (2008) documents that African economies recorded an overall real GDP growth rate of 5.8 percent in 2007 from 5.7 percent in 2006 and 5.2 percent in 2005, fueled by robust global demand and high commodity prices (for agricultural exporting nations), consolidation of macroeconomic stability and improving macroeconomic management, increased oil production in certain countries, increased capital flows, and debt relief. Global economic growth, on the other hand, slowed from 3.9 percent in 2006 to 3.7 percent in 2007 in large part because of high oil prices and turbulence in financial markets. Economic growth in developing countries minimally declined from 7 percent to 6.9 percent for the same periods.

Africa has also been the beneficiary of South-South trade and capital inflows. African exports to China, for example, are reported to have quadrupled between 2000 and

2005 to \$19.5 billion; although African countries continue to be flooded with imports of manufactured goods from Asia. Also, foreign direct investment (FDI) is recorded to have increased from 5 percent in 1990 to 17 percent in 2005, originating from Asia⁸ (*Economic Report on Africa*, 2008).

However, Africa faces a major problem of meeting earmarks established to achieve the Millennium Development Goals (MDGs)⁹ in producing adequate employment and reducing poverty. Although economic growth rates have been strong lately, overall growth rates have been modest (about 0.3 percent from 1990 through 2002 and 3 percent in 2003-2007) and appear inadequate in attaining the MDGs. In a statement issued by the MDG Africa Steering Group at Sharm El-Sheik, Egypt on July 1, 2008 during the African Union Summit, it was recognized that at the mid-point in the global effort to achieve the MDGs by 2015, progress in many African countries is not on track. The Group called on the G8 to make good on its promise to assist Africa in speeding up poverty reduction on the continent by increasing official development assistance to \$25 billion (in 2004 dollars) annually as promised during the G8 meeting at Gleneagles. It noted furthermore, that rising food prices, record energy costs and climate change all threaten to reverse existing advances toward the MDGs. Therefore, among other recommendations, the Group called for targeted investments in agriculture to launch a green revolution in Africa (MDG Africa Steering Group Press Release, 2008).

⁸ Asian FDI flows are mainly from China, India and the Gulf States.

⁹ The Monterrey Consensus (MC) of 2002 and other United Nations and G8-led meetings such as the Millennium Summit in 2000 all have pledged commitments to make progress towards achieving the MDGs by 2015 in ending poverty, providing universal education, ensuring gender equality, providing adequate child and maternal health, combating HIV/AIDS, achieving environmental sustainability, and global partnership. The MC seeks to mobilize domestic and international financial resources, technical cooperation, international trade, debt relief and systemic approaches to achieve development.

Statistics also reveal that the modest gain in African economic growth has been led by 13 oil-exporting countries which registered average fiscal surplus of 5.3 percent of GDP in 2007 and 6.1 percent in 2006. Nevertheless, oil-importing countries in Africa saw their average budget deficits increasing slightly from -1.1 percent of GDP in 2006 to -1.2 percent in 2007; although the countries facing the largest budget deficits tend to be more prone to both internal shocks such as irregular weather and political conflicts, and external shocks such as is happening with the effects of agricultural commodity prices.

Certainly, high oil prices continue to impose inflationary pressures (contained around about 7 percent registered for the past five years) in both African oil-exporting and oil-importing countries. According to the *Economic Report on Africa* (2008), this rate of inflation has been higher than those experienced in Latin America and the Caribbean, East and South Asia, and the average recorded for all developing countries. More specifically, about 60 percent of African countries registered inflation rates of about 5 percent or higher in 2007, up from 52 percent of African countries in 2006. Be that as it may, such inflationary pressures must be a concern especially for poor landlocked and food deficit African countries since it potentially has stronger impacts on the price of basic food items stemming from high transportation and other logistical costs.

Agriculture is Important to African Economies

Agriculture's contribution to GDP in Africa tends to be diverse, ranging from a high of more than 32 percent in West Africa to 8.7 percent for Southern Africa in 2006. Agriculture employs about 70 percent of the African workforce and generates an average 30 percent of GDP. Led by North Africa with 7 percent growth, agriculture in general recorded a 5 percent growth rate through 2006 (*Economic Report on Africa*, 2008).

For many African countries, agricultural exports are the main source of foreign exchange earnings. The agricultural sector's contribution to total exports ranges from about 80 percent for Burundi, to less than 1 percent for Gabon and Equatorial Guinea¹⁰. Because of colonial ties, most African agricultural exports are destined for the EU.

Table 1 reveals that African commodity production grew on average by 1.8 percent in 2006. Yet, key agricultural products exhibited varied levels of growth rates across the principal regions. For example, by benefiting from good rains, North Africa experienced positive commodity growth of 4.3 percent in 2006, especially fueled by bumper growth in wheat, barley and olive. East Africa also benefited from a positive commodity growth of 1.7 percent, driven by wheat, animal products, green coffee, and cocoa beans. Southern Africa registered commodity growth of 3.6 percent, with gains from bananas, dates, wheat, rice, cassava, fruits and vegetables, animal products, and cocoa beans. West Africa registered negative overall commodities growth of 3.8 percent in 2006, largely from export crops such as green coffee, cocoa beans, cottonseed, and food staples such as rice and cassava. But positive growth was registered in West Africa for wheat, groundnuts, animal products, and barley. In addition, Central Africa experienced negative commodities growth in 2006, driven mainly by crops such as groundnuts, cottonseeds, dates, cocoa beans, green coffee, oil seeds, and rice. In fact, both West and Central Africa experienced negative growth in commodities linked to food security such as rice, cassava and bananas. Overall, exportable commodities, such as coffee and cocoa, registered positive growth in Africa.

Panagariya (2004) has predicted that net agricultural (food) importers in Africa are poised to suffer static balance of payments losses from negative terms of trade effects

¹⁰ Gabon and Equatorial Guinea are oil exporting countries.

as world prices rise and that many low-income countries that receive preferential access to developed country markets will see their competitive advantage from preferences reduced during multilateral talks. Indeed, aside from a few countries, such as South Africa, many African countries are net food-importing countries principally of food products (such as cereals, livestock, dairy products, and fruits and vegetables). Gleaning the Food and Agricultural Organization's (FAO) data, import bills for cereals for African countries have increased steadily from 2002. Cereal import bills in low-income food-deficit countries (LIFDCs) in the African region have been the second largest since 2002 (when it was about \$6.5 billion), accounting for about 46 percent of all world cereal imports (see Table 2). The FAO (2008) estimates the total import bill as \$812 billion in 2007. Developing countries as a whole would face an increase of 33 percent in aggregate import bills, coming at the heels of a 13 percent increase in the previous year. Based on historical averages and accounting for continued price increases for cereals, it is forecasted that total cereal imports destined for LIFDCs in Africa would amount to nearly \$18 billion during fiscal year 2007 and 2008. This rapid increase in import bills, compounded further by higher energy prices, will place a heavy financial burden on several countries.

To illustrate the magnitude of the impacts of food import bills facing African countries, we review the balance of trade in cereals for some selected African countries (see Table 3). All listed countries were faced with relatively higher import bills for cereals as compared to their exports revenue. Therefore, it appears that if commodity prices continue increasing, all listed countries would be adversely impacted; some more so than others. In particular, the two leading countries facing the largest cereal trade

deficits of \$790 millions and \$340 millions, Nigeria and Sudan, respectively, are also oil exporting countries that must have benefited from windfall gains from recent oil price surges to be able to finance their import bills for food. However, many countries such as Senegal, Cote d'Ivoire, Zimbabwe, Kenya, Ethiopia, Ghana, Cameroon, and Mozambique are mainly dependent on agricultural production for their export revenues¹¹. Therefore, their current account balances should be further weakened by relatively high food import bills. In particular, the FAO (2008) reports that The Gambia, Liberia, Mauritania, Niger, and Zimbabwe are among seven countries¹² that are most vulnerable, with very high current account deficits and predicted increases of their cereal import bill of more than 2 percent, and that they could experience severe balance of payments problems as a result of higher food prices.

Impacts of Multilateral Trade Reform on Sub-Saharan Africa

Chen and Ravallion (2004) indicate that Africa now accounts for one-third of the world's population living on less than \$1 a day. As indicated earlier, because a vast majority of the population is dependent on agriculture for their livelihood and for much of their food, raising agricultural productivity is very important in alleviating poverty in SSA. Another alternative is through cuts to agricultural protection in developed countries, as envisioned by the WTO's DDA. Whereas it is expected that comprehensive multilateral trade reform would boost economic growth and contribute to reducing poverty, Pangariya (2004) has questioned if net agricultural importers, in particular net food importing countries in Africa, would stand to benefit from multilateral trade reform? He provides two reasons to explain the African case. First, net-food-importing African

¹¹ As reported earlier, Cote d'Ivoire, Cameroon, Ethiopia and Senegal have recently experienced violent riots caused by food shortages.

¹² Jordan and Republic of Moldova are the other two.

countries would face higher food import prices. Second, African countries that are net exporters of agricultural products already enjoy duty-free access to the important markets of the U.S. and E.U. based on various trade preference arrangements. Consequently, any cuts to most-favored-nation (MFN) import tariffs by rich countries would erode SSA preference margins. Third, export expansion of a small number of similar products following SSA's trade liberalization would deteriorate its terms of trade following participation in multilateral reforms.

In the following, we report one of a number of results of studies by World Bank researchers to illustrate potential gains from trade liberalization¹³. Of course, we do not necessarily aim to deride the serious research effort undertaken by researchers. Our goal is to discuss the results in terms of the issues raised by Pangariya. Anderson *et al.* (2006), by using the World Bank's computable general equilibrium (CGE) LINKAGE model of the global market and its global protection database, find that following full global liberalization of merchandise trade¹⁴ over the 2005-10 period leads to global real income gains by 2015 of \$287 billion per year¹⁵. Of the amount, \$202 billion (two-thirds) goes to high-income countries and \$85 billion goes to developing countries. As a share of total income, developing countries would gain additional average income of 0.8 percent compared to 0.6 percent for high income countries. SSA is expected to enjoy a 1.1 percent income boost. Therefore, for a poor farmer earning \$50 a month in 2001 that amounts to a raise of \$5 by 2015. Expressed as a percentage of value added in terms of

¹³ Gallagher and Wise (2008) generally view these research exercises from the World Bank and their assumptions with suspicion – an example of the prevailing dichotomy between research and practice.

¹⁴ This involves removing all merchandise (though not services) trade barriers and agricultural subsidies globally between 2005 and 2010. Note that in reality full liberalization is difficult to achieve.

¹⁵ Hertel and Keeney (2006) by using a version of the GTAP model generated \$84 billion from their simulation.

the goods sectors (excluding the service sector), the value doubles to between 2 and 3 percent for SSA countries. What is not clear is which SSA countries become winners and losers?

It is important to note that in 2001 (the baseline), SSA was a slight net exporter of food and agricultural products with \$6 billion realized net income. According to the simulation, by 2015 SSA becomes a slightly greater net exporter of farm products by realizing \$19 billion in net income, assuming no further trade policy changes. SSA realizes net gains in income of \$27 billion were there to be full liberalization of global merchandise trade by 2015. At least in principle, these positive gains from freer trade could be plausible if total global liberalization were possible since it is expected to increase international prices for farm relative to non-farm products. Unfortunately, as proven by recent talks the assumption of eliminating all tariffs, subsidies, and other trade distorting measures by all countries does not appear realistic. The authors also find that SSA realizes a terms of trade loss of -0.7 percent. They calculate that the positive effect of trade liberalization would more than offset this negative terms of trade effect stemming from the rise in food prices. In sum, the net effect would be small but positive.

According to the authors, liberalization of agriculture and food markets also yields 63 percent of the total global gains¹⁶. Indeed, this is considered substantial given agriculture's share of global GDP of 4 percent and global merchandise trade of 9 percent. About half of the gains are accounted for by the farm policies of high-income countries. The authors also find that much of the gain to developing countries from farm trade reform is because of improvements in access to other developing country markets (about 33 percent) as well as increased access to high-income country markets (about 30

¹⁶ This is similar to Hertel and Keeney's 66 percent.

percent). This leads to the conclusion that trade policy reforms by developing countries is as important in terms of economic welfare gains to the South as reform by high-income countries, especially since South-South trade is important.

For SSA (excluding South Africa) countries agricultural reform in high-income countries is more important to their welfare (it contributes 43 percent to the region's real income) than in other developing countries (with contribution of 35 percent). At least in principle, this raises into question Panagariya's (2004) argument that such reform would raise the price of imports for net food-importing countries and lower the price of preference-receiving agricultural and food exports from least-developed countries. Evidence provided by Anderson *et al.* (2006) indicates that SSA's agricultural and food import price index rises by 4.3 percent stemming from rich country liberalization of agricultural markets, but so also does export price index rise by 2.5 percent. Therefore, according to the authors, increase in demand for SSA exports that enjoys little or no preferential access more than outweighs reduced earnings from their exports that have been enjoying substantial preferences. The other side of the story is that the price of other imported goods rises slightly (presumably from growth in demand for them relative to supply) in high-income countries. Therefore, the contribution to SSA welfare from higher import prices is offset by the positive gains from higher export prices. Additionally, results show that contributions from exports and imports are larger from non-agricultural than from agricultural price changes. This implies that although the price effects may be relatively smaller than farm products stemming from high-income country agricultural liberalization, the greater size of non-farm products imposes greater net positive welfare gains to SSA through its terms of trade effect.

Lastly, the results appear to indicate that agricultural trade liberalization is expected to benefit rural areas in SSA because of higher world agricultural prices. Results reveal that agriculture and food output in SSA are expected to grow by 2 percent to \$2.6 billion, agriculture and food exports would grow by 48 percent to \$16 billion, and real net farm incomes would increase by 7 percent to \$4.5 billion by 2015. These numbers have implications on alleviating poverty among millions of rural SSA farmers that are dependent on agricultural production, although in per capita terms, the gains are quite miniscule. Therefore, it appears that not many people would be moved out of poverty. Moreover, Anderson and Martin (2006) also show that preference erosion resulting from global agricultural liberalization will have a significant negative impact on a few SSA countries and that the impact is so small for most poor countries that it could be resolved through compensating those countries through increase in aid.

But these scenarios deal only with the agricultural portion of the negotiations. There are additional issues with tariff reductions that could adversely impact many developing countries, especially the most vulnerable African countries. Cutting tariffs would constrain their ability to raise the necessary revenues to establish new industries so as to better integrate into the global economy, as well as protecting infant industries. In the past, many developing countries have seen their terms of trade decline. Declining terms of trade tend to highlight problems with balance of payments that would add pressure on African economies to diversify their production base. Unfortunately, the traditional protection measures afforded countries in the past in the development path through manufacturing would be nonexistent following global trade liberalization.

Summary and Implications for Food Security and Economic Development

This paper has analyzed how recent failures in multilateral agricultural trade policy talks and price volatility on global markets are impacting agricultural dependent nations in Africa. Specifically, we focus on understanding the causes of the food crisis, the importance of agriculture in the economies of many African countries, the potential deleterious impacts of the food crisis on agricultural and food markets in Africa, and seek to answer the question whether current trade liberalization talks under the DDR would successfully mitigate the food crisis and ensure food security as well as alleviate poverty in Africa. Of course, with the agricultural talks of the DDR coming to a screeching halt at the end of July 2008, the answer to the latter question is quite obvious.

Price volatility has potentially diverse effects on different countries, depending on whether they are net food exporters or net food importing countries. In Africa, there are not many of the former. Therefore, our focus has been drawn mainly on the low-income food-deficit countries since many have radically increased their dependence on food imports, are facing high food importing bills and macroeconomic vulnerability¹⁷. Faced with resource scarcity, many lack the necessary capital investment and institutions to achieve sustainable levels of food production. This would have dire implications on maintaining food security, proper nutrition, and in making progress toward achieving the poverty and hunger aspects of the MDG. However, as the paper shows, the extent of these impacts depends on the country's resource endowment and other existing constraints facing the economy. Many of the poor African countries lack the capacity and technical know-how to grow their agricultural sector to the extent necessary to

¹⁷ The FAO (2008) demonstrates correlation between macroeconomic vulnerability and food security, where countries facing vulnerable macroeconomic conditions also face acute undernourishment rates.

compete on the international market. Therefore, volatile prices have negative impacts on their foreign exchange earnings, incomes, general health, and welfare of their people. Consequently, many poor countries in Africa are set to cut down on programs that provide access to social safety nets and protection, unless the international community can come to their aid by accelerating investments in food production initiatives in these countries to prevent suffering due to hunger.

Moreover, many rural communities in countries where poor farmers reside would be most vulnerable without tangible opportunities for wage creation, capital inflows, and new income opportunities. Therefore, the poor may consume less meat and cereal which prices continue to rise, and would experience worse dietary quality and nutrient intake. Additionally, the loss in purchasing power is expected to impact their ability to afford other goods and services, utility, sanitation, health and education. Therefore, the global community would need to undertake some form of emergency outreach in the form of humanitarian assistance to food-insecure populations in developing countries, especially in poor African countries.

To date, some countries have responded to the food crisis with various trade policy interventions, including export bans and export taxes, and tariff reductions and/or value added taxes on imports. With tariffs falling and the need for income support programs curtailed by high prices, one would think that the current food crisis would have bolstered the resolve of WTO members to successfully conclude DDR talks on agriculture. Unfortunately, the talks were unsuccessful. In any case, at least in principle without concessions to protect smallholder farmers in vulnerable countries, further trade

liberalization are expected to lead to increased prices of agricultural commodities that would potentially add to current volatility on international commodity markets.

In our assessment, developing country negotiators were right in not buckling under U.S. pressure during the latest agricultural talks for the following reasons. First, the WTO has woefully failed to live up to its role in enabling successful negotiations that would help spur economic development in poor countries. It simply has no mandate to mitigate the key sources of market uncertainties that are the sources of ongoing price volatility in the agriculture and food sector such as rapidly increasing oil prices, rapid expansion of bio-fuels production, climate change and natural resource scarcity, increased demand for food by emerging economies, and the lack of competition by food-deficit developing countries on international markets.

Second, rules established by the WTO to ensure trade reforms as well as structural adjustment programs supported by the World Bank constrain the ability of developing country governments to support agricultural production and trade through direct interventions, whereas governments in developed countries, such as the U.S. and E.U., continue to provide domestic support and export subsidies to their agricultural producers. A good case example is that of Malawi, which ignored the advice of its creditors, including the World Bank, by undertaking a fertilizer subsidy program¹⁸ to intensify production of maize so as to feed itself. According to African News Network (2008), although the subsidy can create market distortion and discourage farmers from diversifying their maize enterprise, Malawi had no viable option against rapidly increasing maize prices and the need to achieve food security in the short term. Another

¹⁸ The Agricultural Inputs Subsidy Programme (AISP) was introduced in 2004. It enables Malawi's smallholder farmers to receive coupons to buy 100 kilograms of fertilizer for around \$14, a quarter of the normal market price.

reason is that as a land-locked country, Malawi faced pressure to grow its own food, since imports were rendered more costly because of transportation and other logistical complications. Maize is the main staple for 90 percent of the population. In 2007, the scheme is estimated to have earned between \$100 million and \$160 million at a cost of \$74 million.

Third, trade liberalization, especially the reduction of import tariffs, has bolstered major multi-national agribusinesses from developed countries in gaining a stronghold on developing country markets and dumping commodities, whereas neglect of domestic agriculture by net food importing countries have increased their dependence on imported food. As is illustrated by Table 3, many African countries face major negative balances in meeting their food import bills; a major constraint in affording investment to alleviate poverty. As noted by Murphy (2008), strengthening domestic production and building resilient local markets should provide the building blocks for larger national, regional and global markets. Since the WTO has failed to provide the stability necessary in today's food markets it is important to ensure public stockpiles of food rather than the export restrictions recently imposed by certain countries in the face of popular protests in a number of countries. Export bans stand to exacerbate price volatility for food importing poor countries, most of whom can ill-afford additional price increases.

We also contend that it was a mistake to collapse the July WTO talks without agreeing to honor existing agreements. As it stands, developed countries can continue to wreak havoc on international markets under existing trade protections. There are two diverging views on the so-called SSM which proved impossible to reconcile during the negotiations. One view is that developing countries need to have a safety net against

import surges of agricultural products in order to be able to protect their farming systems, and that this safeguard should be easy to use.¹⁹ A second view is that, like all safeguards in the GATT and WTO, the SSM should be subject to certain conditions, in order to ensure that it does not hamper normal trade flows and that it should not be abused.²⁰

These differences notwithstanding, the recent WTO negotiations should not have been abandoned. WTO members from rich countries should have had the political will to overlook the apparent threat to their agribusiness interests in competing with emerging economies like China, India and Brazil by providing a signal to the poorer member countries at least that they feel their pains at the world market and are willing to remove remaining obstacles to trade which currently penalize developing countries in their fight to alleviate poverty and improve the welfare of their people.

¹⁹ Actually this represents the overwhelming viewpoint supported by many developing countries.

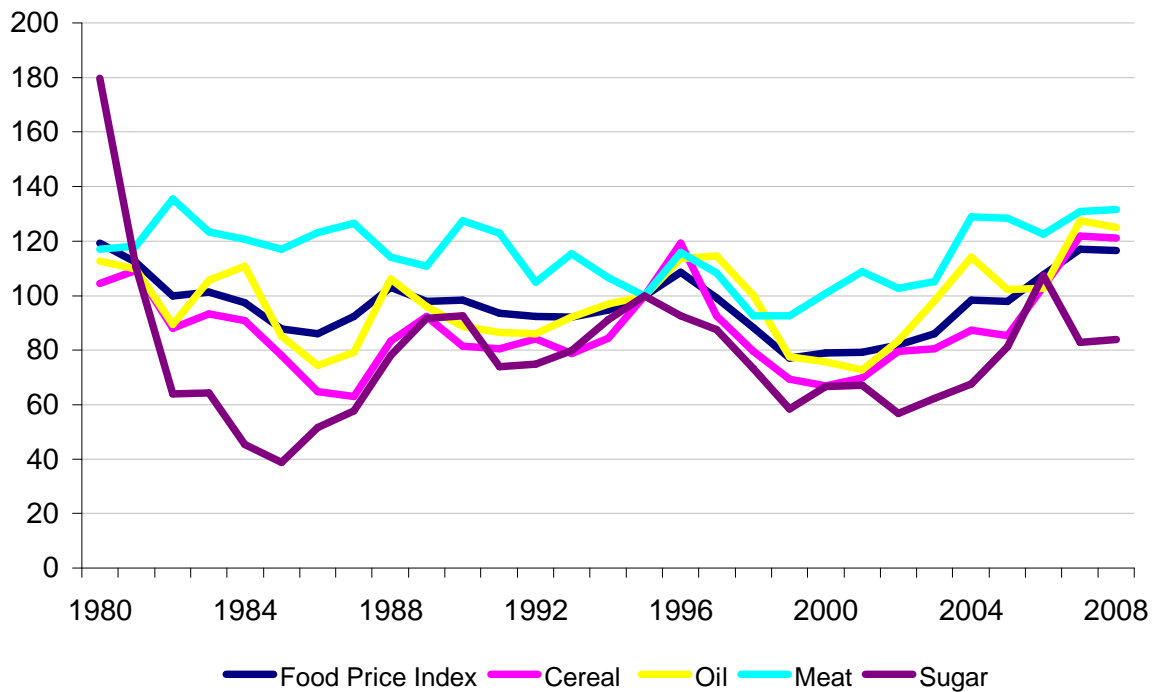
²⁰ This is the viewpoint defended by the United States of America.

References

- African News Network (2008), "African Agriculture: Fertilizer Subsidy Boosts Malawi Maize Yields But Questions Remain," <http://africanagriculture.blogspot.com/2008/07/fertilizer-subsidy-boosts-malawi-maize.html>
- Anderson, Kym and John D. Nash (2006), "Trade Reform and the Doha Development Agenda," In Vinay Bhargava (ed), *Global Issues for Global Citizens*, World Bank, Washington, DC, USA.
- Anderson, Kym and Will Martin (eds) (2006), *Agricultural Trade Reform and the Doha Development Agenda*, Palgrave Macmillan, London, U.K. (co-published with the World Bank, Washington, DC, USA).
- Anderson, Kym, Will Martin, and Dominique van der Mensbrugge (2006), "Would Multilateral Trade Reform Benefit Sub-Saharan Africans?" *Journal of African Economies*, Vol. 15, No 4, pp. 626-670.
- Chen, S. and M. Ravallion (2004), "How Have the World's Poorest Fared since the Early 1980s?" *World Bank Economic Review*, Vol. 19, No 2, pp. 141-70.
- Economic Report on Africa 2008, Africa and the Monterrey Consensus: Tracking Performance and Progress*, United Nations Economic Commission for Africa, Addis Ababa, Ethiopia, March.
- Gallagher, Kevin P. and Timothy A. Wise (2008), "Back to the Drawing Board: No Basis For Concluding the Doha Round of Negotiations," RIS Policy Briefs, No. 36, April.
- Hertel, T.W. and R. Keeney (2006), "What's at Stake: The Relative Importance of Import Barriers, Export Subsidies and Domestic Support," Chapter 2, In K. Anderson and W. Martin (eds), *Agricultural Trade Reform and the Doha Development Agenda*, Palgrave Macmillan, London, U.K. (co-published with the World Bank, Washington, DC, USA).
- International Monetary Fund (IMF) (2007), *World Development Outlook Database*, October, <http://www.imf.org/external/pubs/ft/weo/2007/02/weodata/index.aspx>
- Josling, Tim (2006), "Special and Differential Treatment for Developing Countries," In Kym Anderson and Will Martin (eds), *Agricultural Trade Reform and the Doha Development Agenda*, Palgrave Macmillan, London, U.K. (co-published with the World Bank, Washington, DC, USA).
- Lamy, Pascal (2008), "Members Asking to Build on Enormous Progress for Final

- Agreement,” Speech Presented before the Annual 2008 Session of the Parliamentary Conference of the WTO, September 11, http://www.wto.org/english/news_e/sppl_e/spp199_e.htm
- McCalla, Alex F. and John Nash (2007), “Agricultural Trade Reform and Developing Countries: Issues, Challenges, and Structure of the Volume,” In: *Reforming Agricultural Trade for Developing Countries*, Alex F. McCalla and John Nash (eds), World Bank, Washington, DC, USA.
- MDG Africa Steering Group Press Release (2008) “Recommendations of the MDG Africa Steering Group,” July 1, http://www.mdgafrica.org/media_kit/PRESS%20RELEASE%20English.pdf
- Murphy, Sophia (2008), “Will Free Trade Solve the Food Crisis?” Institute for Agriculture and Trade Policy, Vol. 3, Issue 2, summer.
- Panagariya, A. (2004), “Subsidies and Trade Barriers: Alternative Perspective 10.2,” In B. Lomborg (ed), *Global Crises, Global Solutions*, Cambridge, U.K. and Cambridge University Press, New York, USA.
- The Wall Street Journal* (2008), “Food Inflation, Riots Spark Worries for World Leaders,” Volume CCLI, No 87, p.A1, April 14.
- United Nations Food and Agriculture Organization (2008), “Soaring Food Prices: Facts, Perspectives, Impacts and Actions Required,” HCL/08/INF/1, Rome, (June 3-5).
- Von Braun, Joachim (2007), *The World Food Situation: New Driving Forces and Required Actions*, Food Policy Report No. 18, International Food Policy Research Institute, Washington, DC, USA.
- World Bank (2008a), “Rising Food Prices: Policy Options and World Bank Response,” Paper prepared as background to the Meetings of the Development Committee, April. http://siteresources.worldbank.org/NEWS/Resources/risingfoodprices_backgroundnote_apr08.pdf
- World Bank (2008b), “Food Price Crisis Imperils 100 Million in Poor Countries, Zoellick Says,” April 14, <http://lgo.worldbank.org/5W9U9WTJBO>
- World Bank (2008c), *World Development Report 2008: Agriculture for Development*. Washington, DC, USA.

Figure 1. Commodity Price Index for Food and Selected Commodity Groups (1995 = 100)



Source: International Monetary Fund (2007), World Economic Outlook Database, October.

Notes:

- **Commodity Food Price Index** includes cereal, vegetable oils, meat, seafood, sugar, bananas, and oranges price indices.
- **Commodity Cereals Price Index** includes wheat, maize (corn), rice, and barley.
- **Commodity Vegetable Oil Index** includes soybean, soybean meal, soybean oil, coconut oil, palm oil, sunflower oil, olive oil, fishmeal, and groundnut price indices.
- **Commodity Meat Price Index** includes beef, lamb, swine (pork), and poultry price indices
- **Commodity Sugar Index** includes European, free market, and U.S. price indices

Table 1. Commodities Production Growth Rates in Africa, 2006

	Central Africa	East Africa	North Africa	West Africa	Southern Africa	Total Africa
Commodities	-1.3	1.7	4.3	-3.8	3.6	1.8
Crops	-3.6	2.2	7.2	-7.0	5.2	1.5
Wheat	0.0	16.7	22.4	8.4	6.9	20.0
Barley	0.0	2.9	51.9	4.1	0.0	33.7
Rice	-1.6	1.9	5.8	-14.3	8.7	5.0
Oil Seeds	-5.6	0.4	7.4	0.4	-1.9	-0.6
Olive	0.0	0.0	20.5	0.0	0.0	20.5
Groundnuts	-25.4	-1.3	-0.3	10.0	1.3	0.7
Fruits and Vegetables	1.2	0.3	1.5	-0.3	4.3	2.3
Cassava	1.9	-0.9	0.0	-0.8	8.4	3.9
Citrus Fruit	-0.5	0.0	0.0	0.0	-6.2	-5.7
Date	-7.6	-91.4	-1.7	0.0	11.4	-2.0
Bananas	-0.6	-1.0	1.1	-0.8	14.8	1.1
Animals Products	-0.6	8.5	0.7	2.8	2.6	3.1
Others	-17.7	6.5	3.6	-14.0	-2.4	-2.0
Cocoa Beans	-7.4	6.3	0.0	-9.6	4.4	3.6
Coffee, Green	-7.1	23.0	0.0	-30.1	-18.7	4.0
Cottonseed	-25.0	-8.9	2.8	-11.2	-5.8	-6.8

Source: United Nations Food and Agriculture Organization. 2007. FAOSTAT

Table 2. Cereal Import Bill in Low-Income Food-Deficit Countries (LIFDCs) By Region and Type (US\$ million)

	2002/03	2003/04	2004/05	2005/06	2006/07 Estimate	2007/08 Forecast
LIFDC	14 025	15 792	18 825	18 028	24 749	38 696
Africa	6 501	7 088	8 372	8 369	10 297	17 892
Asia	7 014	8 050	9 767	8 900	13 498	19 277
Latin America and Caribbean	308	380	407	468	594	898
Oceania	69	76	78	82	100	164
Europe	133	198	201	209	260	464
Wheat	7 762	8 802	10 814	10 589	14 083	22 705
Coarse grains	3 281	3 300	3 395	3 099	4 522	6 097
Rice	2 982	3 689	4 616	4 340	6 144	9 894

Source: FAO (2008), "Low-Income Food-Deficit Countries Food Situation Overview."

<http://www.fao.org/docrep/010/ai465e/ai465e07.htm>

Table 3. Import and Export of Cereals in selected African Countries (2004)

Countries	(US\$ '000)		
	Import	Export	Balance of Trade
Angola	176,379	340	-176,039
Benin	139,528	6	-139,522
Burkina Faso	47,626	5,215	-42,411
Burundi	22,437	87	-22,350
Cameroon	161,134	48	-161,086
Congo	40,095	5,420	-34,675
Congo, Democratic Rep of	72,408	1,598	-70,810
Côte d'Ivoire	282,132	2,574	-279,558
Eritrea	91,386	19	-91,367
Ethiopia	187,665	2,396	-185,269
Gabon	44,190	237	-43,953
Gambia	22,970	20	-22,950
Ghana	181,568	308	-181,260
Guinea	49,806	615	-49,191
Kenya	193,254	4,020	-189,234
Lesotho	3,500	104	-3,396
Liberia	36,700	788	-35,912
Malawi	8,213	2,006	-6,207
Mozambique	152,708	2,735	-149,973
Nigeria	789,853	227	-789,626
Rwanda	9,982	295	-9,687
Senegal	340,700	23,299	-317,401
Sudan	342,391	2,093	-340,298
Togo	21,630	8,681	-12,949
Uganda	112,397	14,457	-97,940
Zimbabwe	200,332	99	-200,233

Source: FAO (2006), *Food Situation*.