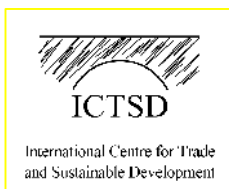


The Political Economy of Trade and Food Security

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Published by**International Centre for Trade and Sustainable Development (ICTSD)**

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Acknowledgements

This think piece has been produced under the ICTSD Programme on Agricultural Trade and Sustainable Development. It was prepared by Andrea Woolverton, Anita Regmi, and M. Ann Tutwiler in preparation for an expert meeting entitled “What kind of trade policy framework is needed to support food security goals?,” organised by the International Centre for Trade and Sustainable Development (ICTSD) and the United Nations Food and Agriculture Organization (FAO) from 25–26 March 2010 in Cartigny, Switzerland. The activities of this programme have benefited from support from the FAO, the UK Department for International Development (DFID) and the Dutch Ministry of Foreign Affairs (DGIS).

For more information about ICTSD’s programme on agricultural trade and sustainable development, visit our website at www.ictsd.org

ICTSD welcomes feedback and comments on this document. These can be forwarded to: jhepburn@ictsd.ch

Citation: Woolverton, A, Regmi, A, and Tutwiler, M.A. (2010). The Political Economy of Trade and Food Security. International Centre for Trade and Sustainable Development, Geneva, Switzerland.

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The views expressed in this publication are those of the author(s) and do not necessarily reflect the views of ICTSD or the funding institutions.

ISSN 1887–3551

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1. THE GLOBAL FOOD SECURITY CHALLENGE

More than one billion people - nearly a sixth of the world's population - suffer from chronic hunger (FAO, 2008). Global hunger is not just about the availability of food, it is also about accessibility - the ability to purchase or obtain food. Chronic hunger and under-nutrition primarily result from poverty—poor people often simply cannot afford to buy food (FAO, 2008). Moreover, food often cannot travel from surplus to deficit regions within and across countries because of poor roads and barriers at the border further contributing to increases in food prices and access to fresh food. Without enough food, adults struggle to work, children struggle to learn, and health problems are exacerbated, making sustainable economic development difficult to achieve.

Hungry families spend over half their income to buy the food they need to survive, leaving them little to fall back on. In the case of Tanzania, for example, for every additional one dollar of income, 54 cents is spent on food as opposed to about 2 cents in the United States (Regmi and Seale, 2010). Additionally, during periods of price surges low-income consumers are also at greater risk of making larger cutbacks on their food expenditures, by over 8 percent for every 10 percent hike in food prices, while consumers in the United States barely adjust their food expenditures (Seale, Regmi and Bernstein, 2003). In short, limited food access coupled with highly vulnerable household

budgets leads to food insecure populations.

Dealing with global food security challenges will hinge upon a country's ability to produce or purchase staple foods at affordable prices. Growth in agricultural productivity, already lagging globally, faces increasing threats from climate change, scarce water supplies, and competition for energy resources from industry and urbanization (see figure 1). On a global scale, an additional 24 million children could be under-nourished by 2050 as a result of climate change-induced reductions in agricultural yields (Nelson, 2009). Along with a strategy to increase agricultural productivity and diversity, improved global and regional trade must be part of the solution to provide adequate global nutrition.

2. PROJECTED GLOBAL FOOD PRODUCTION AND DEMAND DIVERGENCE REQUIRES TRADE

Ensuring global food security will only become more difficult as future food demand is expected to increase by 70 percent by 2050 (FAO Issue Brief, 2009). Today, the world is generally food secure *on average*; however, access to the available food varies greatly by level of income and geography across and within countries (World Bank, 2008). In the next few decades, climate implications for food production and growing global populations are expected to add pressure to the world's food supply. Both today and in the longer-term, global trade, in addition to increased productivity, is necessary to provide sufficient access to calories and the diet diversity required to avoid undernourishment.

Demand growth may not necessarily occur in regions with the capacity to increase food production. Developing countries will account for most of the increase in global food demand over the next couple of decades due to population and income growth and changing food demand patterns. At the same time, food availability in developing countries is increasing, but remains far below that of developed countries. For example, in 2005, about 2,300 calories were available per person in Bangladesh, while food availability in the United States was about 3,900 calories per person (FAOSTAT, 2010).¹

¹ Although calorie availability excludes non-food use (including for feed) in its estimation, it does not equal access and consumption (USDA ERS Briefing Room, 2010).

Developing countries are undergoing rapid urbanization. Food demand, particularly for higher valued products, is expected to experience the fastest growth in urban centers. Many developing countries lack sufficient capability to connect their rural production centers to urban consumers. Moreover, some developing countries are land-locked and may possess limited transportation links connecting even their urban centers to international food markets. Domestic production may expand to meet part of the growing food demand, but it is likely that food production in many developing countries will be constrained by limited resources and prevailing weather patterns. In addition, limited domestic resources and investment likely translates into an inefficient domestic supply chain.

Global, long-term projections suggest a growing geographical divergence between where food is demanded and produced. During the coming decade, USDA projects Africa and the Middle East to account for the majority of wheat, rice and soybean oil imports. In contrast, other countries are making significant investments in their agricultural sectors and increasingly pursuing policies to encourage agricultural production, including Brazil, Russia, Ukraine and Kazakhstan. These countries are expected to have an increasing presence in export markets for basic agricultural commodities (Liefert et al, 2010).

The implications of this geographical divergence extend far beyond staple foods in terms of food security. Trade may also contribute to

achieving dietary diversity and supporting improved nutrition subject to purchasing power. Modern food supply chains operating in joint venture partnerships or strategic firm alliances in the northern and southern hemispheres are playing a key role in ensuring year-round supplies of fresh produce in different parts of the world (Regmi et al, 2005). Thus trade presents a great opportunity not only to import needed food into a developing country, but also to generate income through exports of fresh horticultural and tropical products to temperate markets.

Rising incomes add an additional layer of complexity to the geographical challenge. Income growth among consumers in developing countries usually leads to substitution away from staple foods and towards more expensive sources of calories such as meat, fruit and vegetables, and processed products (USDA ERS, 2001). Frazao, Meade and Regmi find that rising incomes across countries bring large absolute increases in food spending but comparatively smaller increases in calorie consumption which implies an increase in the cost per calorie (2008). The greater cost per calorie may reflect both the value-addition through processing as well as more expensive sources of calories such as meat and dairy products. A greater demand for animal products increases demand for grains and oilseeds which are often used for livestock feed.

Long term projections regarding the global poultry trade illustrate the link between rising incomes and increasing demand for higher value

products. Poultry is the most efficient feed converter making it the most economical meat to produce *ceteris paribus* and therefore often the first meat consumed as an addition to grain-based staple diets. Poultry production, unlike cattle and many other agricultural commodities, can be undertaken in many different environments as long as capital and labor are available. Modern confined poultry operations are not generally hampered by lack of grazing lands or weather patterns. Nevertheless, poultry production does require feed which is generally tied to production in countries that are endowed with ample agricultural land. For example, between 2000 and 2010 poultry, production in Mexico increased by 45 percent and was accompanied by 450 percent growth in soybean meal imports (FAS PSD, 2010).

Production of other food commodities may not be as widely feasible as poultry and may depend on available land and weather patterns. Some countries may have a comparative advantage for certain cash crops, others for horticultural products, while others for cereals. Nevertheless, even countries making significant strides in agricultural production may use trade to achieve food security. For example, Indonesia's agricultural export value has grown on average almost 9 percent annually, from a base of nearly \$900 million in 1975 to nearly \$18 billion in 2007 (FAO, 2009). At the same time, Indonesia's agricultural import value has also grown at an 8 percent annual rate during the same period. While export growth has been driven by

increases in tropical perennial crops such as rubber, cocoa, coffee, and palm oil, imports are largely feed and fodder to meet the needs of a growing livestock sector and high value-foods such as dairy products, fruit, and vegetables (Rada and Regmi, 2010).

Countries vary in their trade orientation because of underlying forces affecting demand and supply which are influenced by changing consumer preferences, geography, infrastructure and technology, and policies affecting market access (Regmi et al, 2005). As globalization of the food industry enables firms to have easier access to commodity, capital, and technology markets, countries can specialize in commodities for which they have an inherent comparative advantage. Thus, trade links food supply to demand and ensures stable access across all food categories and countries.

3. GLOBAL TRADE AS PART OF THE SOLUTION

While recognizing that a large share of food will be grown and consumed locally, the 2008 rapid rise in internationally traded food commodity prices and subsequent trade policy responses highlight challenges facing countries when global markets experience price surges. Many countries reduced import tariffs; however, a few key exporters restricted exports. For example, India banned exports of 2 to 3 million metric tons of rice which typically constitute only about 2-3 percent of the domestic Indian market. However, the withheld rice was a much larger percentage of the global long-grain rice trade market, approximately 10 percent, and had a much larger impact on global prices. Given a sensitive and thinly-traded market, rice export bans coupled with panic and hoarding during this time period are said to have caused the early 2008 global rice price spikes (Childs and Kiawu, 2009; Dollive, 2008; Trostle, 2008; Timmer, 2010).

The steep rise in prices in 2008 was particularly devastating for the poor in import-dependent developing countries. As Sarris recently discussed, increased food import dependency as part of country's evolution toward a more diversified economy is not necessarily a problem (2009). However, in the case of many LDCs, food import dependence has not been coupled with increased productivity in agriculture or other sectors to generate revenues. In this situation, vulnerability in terms of food access due to low purchasing

power is heightened during global price surges.

To anticipate how countries may react in future crises, it is useful to take a closer look at the role of political economy forces within agricultural policymaking. Also, viewing some of the recent policy responses to the food price crises through the political economy lens underscores how strong these forces may be.

3.1 The Political Economy Shapes Trade Policies

The conflicting interests of producers and consumers of a commodity in an economy are fundamental problems for government policy decisions (Timmer, Falcon and Pearson, 1983). Policy decisions incorporate various perspectives found within the domestic economy. It is difficult for politicians to invest in policies designed for the long-run as adjustment costs result in both winners and losers in the short-term when election pressures may be more immediate.

Drawing from the political economy literature, Swinnen summarizes the empirical evidence of the political economy of agricultural trade into three patterns: anti-trade, development, and relative income (2010).² First, the anti-trade pattern refers to import-competing sectors being taxed less than export-competing sectors. Many developing countries impose taxes on farmers in

² This summary draws from several political economy sources including Olson, 1965; Bates and Rogerson 1980; Anderson, Hayami et al 1986; Lindert 1991; Anderson, 1995 and Bates and Block, 2009.

the export sector as an important source of revenue while developed countries heavily subsidize farmers. High agriculture taxation is associated with low agriculture growth and slower growth in the economy (World Bank, 2008). When a large proportion of the population is rural, then the agricultural sector is typically large and comprised of many small producers across the rural areas. Rural populations tend to generally be less affluent and less educated, thereby having a weaker voice in policy-making compared to the stronger voice of the urban population. In this case, consumers are found to have a relatively stronger lobby.

The development pattern refers to the shift from agricultural taxation to protection as countries develop economically. As countries develop, consumers tend to spend less on food as a proportion of income and the pressure for adopting policies which lower food prices tends to decline.

The “relative income pattern” refers to the observation that protection increases when farm income falls relative to the rest of the economy. A parallel to this is when agriculture and farmers represent a smaller portion of the economy and labor force and governments tend to adopt policies which favor farmers’ incomes. Often this pattern is prevalent in countries with a political framework that accommodates equal representation to different localities regardless of actual population. Thus a sparsely populated rural region may wield the same political powers as a densely populated urban center.

Looking to the 2008 food price crisis, there is evidence of these political

economy patterns entering into countries’ response policy choices. The majority of countries which changed or implemented policies lowered import tariffs; however, as discussed earlier, targeted export restrictions were used by some countries for reasons which are likely better explained from political economy perspective than that of neoclassical economics (FAO table, 2008; Woolverton and Kiawu, 2009). Policy responses by Argentina, India, and Vietnam are notable examples that had significant impacts on global commodity markets.

Argentina’s 2008 decision to increase taxes on grain exports as international prices rose generated revenues at the producers’ expense. At the time, Argentina had publicly identified income redistribution a domestic priority and rising commodity prices provided an opportunity for the Argentine government to increase revenues (CNN, 2008). While many producers protested against higher export taxes, agricultural producers are a small fraction of the labor force at 1.2 percent. In contrast, despite many socio-economic similarities to Argentina in terms of global export competitiveness, per capita GDP, agricultural GDP and percentage of rural population, Brazil, with agriculture representing 21 percent of the labor force, has moved away from export taxes (CIA World Factbook, 2010; World Bank Indicators, 2009; Cardoso, 2001).

The rice export bans implemented in India and Vietnam effectively taxed domestic producers by prohibiting sales in the international market to

shield domestic consumers from rising prices. In India, domestic incentives for implementing policies that signaled stabilization in the near-term were likely amplified with the highly-competitive Indian General Elections occurring in April 2009. Food price stability is a major issue within Indian national politics, particularly with an upcoming election (Gentleman, 2007). However, Vietnam's motivation may have been more closely-linked to revenue generation. The majority of Vietnamese rice surplus is exported through state-backed companies, VinaFood 1 and 2, which continued to fill old rice contracts during the export ban. Global rice price spikes outpaced increases in the domestic consumer rice prices in both countries (Childs and Baldwin, 2009; India, 2009; Vietnam, 2009).

In general, policies implemented were on behalf of consumers at the expense of producers in countries where a strong consumer voice prevailed relative to a relatively dispersed agriculture sector. Export restrictions and domestic price ceilings in developing countries were implemented at the expense of exporting domestic producers and foreign consumers in the rest of the world. Export restriction, in particular, has tremendous implications for import-dependent countries seeking stable food supplies and are generally inconsistent with policy prescriptions for longer-term food and nutritional security and stability (Von Braun, 2008; ADB, 2008).

Timmer argues there has been a universal shift in the agricultural policy toward greater government

intervention to increase food production, lower food prices and assure more reliable food access for poor households (2010). Global trends of increasing urban populations and decreasing agricultural share of domestic product suggest that this shift parallels some combination of the "development" and "relative income" policy patterns. If the balance in agricultural policies shifts toward import substituting protection rather than investments in areas of comparative advantage, it is unlikely these policies will result in lower food prices or reliable food access (Rada and Regmi, 2010).

Recent estimates show that the global costs of trade tariffs and subsidies could reach \$100 to \$300 billion a year by 2015 from which about two-thirds come from agricultural tariffs and subsidies (World Bank, 2008). Developing countries' trade policies are estimated to account for approximately 30 percent of these welfare costs (World Bank, 2008).

Global welfare costs due to market access restrictions such as tariffs and non-tariff barriers (NTBs) far outweigh costs resulting from export subsidies or domestic support across all products. According to World Bank data, overall average applied agricultural tariffs have decreased significantly from 1981-2007.³ However, NTBs, may quickly displace import tariffs as a serious obstruction to trade, particularly for countries which are less adept at navigating

³ This summary draws from several political economy sources including Olson, 1965; Bates and Rogerson 1980; Anderson, Hayami et al 1986; Lindert 1991; Anderson, 1995 and Bates and Block, 2009.

different regulations. Kee et al estimate that NTBs contribute to more than 70 percent of world trade restrictions which underscores the importance of addressing these measures within trade negotiations (2006)⁴

A variety of forces are behind trade restrictions, not the least of which is politics. From a political economy perspective, incentives exist across countries to implement short-term policies which potentially stabilize domestic jobs and hunger immediately as opposed to long-term policies which promote competitive global markets and stable access to food. These incentives must be borne in mind as strategies are formed to help countries maintain *stable* food access by mitigating the immediate costs of reducing trade barriers.

3.2 Physical and Informational Infrastructure Inhibit Participation in Global Trade

“There is an enormous market for agribusiness on the continent... one of the first needs is to build infrastructure, with as much as 75 to 80 percent of production not getting to market in parts of Africa due to a lack of roads, transportation, processing, refrigeration and other infrastructure.” - Stephen Hayes, President, The Corporate Council on Africa, June, 2008.

Countries cannot fully leverage the global trading scheme to address food security issues without a strong market infrastructure such as roads, market information, established grades and standards, and contract enforcement. Market function affects livelihoods, welfare and food security (World Bank, 2008). While changes in income and demand across countries have created market opportunities for higher-value food products, food staples remain a mainstay for many households in countries with undernourished populations. Concurrently, staple food market performance in many of these countries continues to be challenged by poor infrastructure.

Infrastructure to support trade in agricultural products appears to have suffered from similar political economy incentives as experienced by trade policies. For example, country leaders may be driven to allocate a greater share of scarce funds to support more vocal urban constituents rather than allocate these resources to less organized and less educated rural constituents. Within an opaque and less than fully accountable system, incentives to sustain power may also allow rent seeking behaviors to prevail within a poorly connected agricultural value chain.

Given the relative neglect in connecting the rural agricultural base to markets, transport costs can account for up to one-third of GDP and can represent much of the export value for many landlocked countries. The high transport costs in these countries inflate the prices of consumer goods through increased fuel, capital goods, and intermediate

⁴ Here, NTBs are defined as price and quantity control measures, technical regulations, monopolistic measures, such as single channel for imports, and agricultural domestic support.

input costs. Additional transport costs increase the overall cost of domestic agricultural and industrial production. For example, freight costs for landlocked developing countries in West Africa were approximately 24.6 percent of cost/insurance/freight import value in 1995. In contrast, freight costs in the more developed countries were about 3.4 percent with the world average at 4.4 percent (UNCTAD, 2001).

Empirical evidence supports that physical and communication infrastructure is a significant determinant of trade flows. Bouet and Roy find that under-developed transport and communication infrastructure in the region has affected Africa's economic activity (2008). Africans enjoy greater market access now relative to the rest of the world in terms of both tariff and nontariff barriers. However, they have not been able to expand their exports. A much higher proportion of African exporters are landlocked compared with non-African exporters creating disproportionate infrastructure costs.

There are countless examples of limitations to efficient trade due to poor domestic market infrastructure that impact the ability to feed vulnerable populations. It is clear that efficiency and the ability to react to market signals reduce transaction costs and maximize income. Reductions in food costs are critical when a population spends a large proportion of income on basic food needs. What remains is the question of how to overcome these challenges.

4. The USG Feed the Future Initiative as a Global Partnership to Reduce Hunger

In response to food security challenges facing the world, the Obama Administration launched the Feed the Future (FTF) Initiative in spring 2009. FTF aims to support global efforts to empower undernourished populations by reducing poverty and increasing purchasing power.⁵ This Initiative recognizes the limitations countries face due to political economy and infrastructural issues in their efforts to increase domestic food security and, ultimately, develop human capital. The Initiative seeks to help countries identified as FTF Focus Countries across Africa, Asia, and Latin America and the Caribbean overcome these domestic challenges by providing cohesive, comprehensive, and accountable external support.

The Initiative, which is focused on a dedicated and comprehensive program, aims to facilitate moving from a short-term to a long-term food security strategy by partnering with countries themselves committed to a comprehensive strategy. Furthermore, the Initiative's long-term focus on strengthening domestic infrastructure and regional trade integration is expected to help producers and consumers respond more easily to market signals and

reduce costs throughout the supply chain.

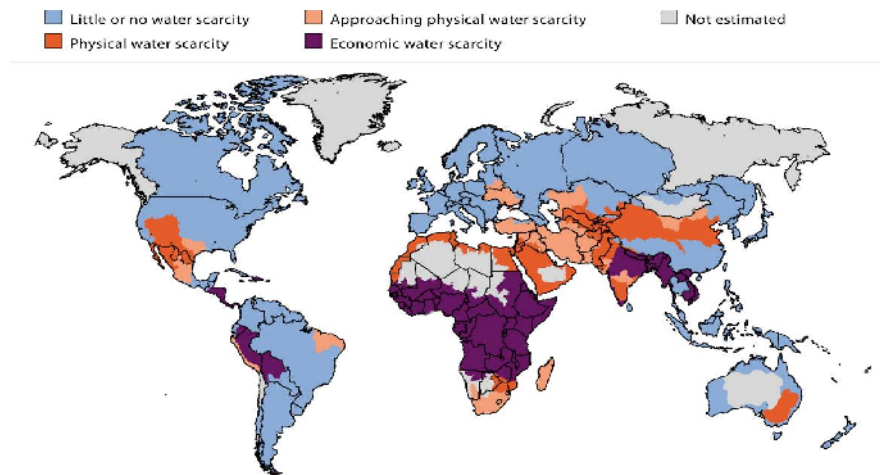
Ownership and accountability are intended to be at the Initiative's core. FTF will therefore seek to invest in country-owned plans that support results-based programs and partnerships accounting for each country's unique socio and economic characteristics. Within these plans, there will be guidance toward a comprehensive approach that is intended to accelerate inclusive agricultural-led growth and improved nutrition. The approach aims to hold partners accountable for commitments designed jointly. To maintain a long-term perspective, investments should be phased in using benchmarks and targets, and hold stakeholders publicly accountable.

Political economy forces are likely the least transparent and straightforward of the challenges faced by the Initiative in significantly affecting global food security. There is not a clear path to follow for success in overcoming these forces. However, aligning incentives and interests across all parties involved with the Initiative is likely to be the key to any successes achieved. To both align these interests and achieve efficiencies, the Initiative intends to focus on strengthening strategic resource coordination across a diverse set of partners and stakeholders. Specifically, leveraging the benefits of multilateral institutions ought to better align priorities and approaches, coordinate investments and fill financial and technical assistance gaps.

⁵ The USG has pledged a minimum of \$3.5 billion over three years to improve global food security, leveraging an additional \$18.5 billion from other donors for a total global commitment of \$22 billion. For more information, see www.feedthefuture.gov.

Despite the many challenges, the Feed the Future Initiative aims to achieve a lasting foundation for change by addressing the root causes of global hunger.

Figure 1: Climate change expected to worsen production potential in vulnerable regions



Source: Comprehensive Assessment of Water Management in Agriculture, 2007.

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