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The Importance of International Trade Reform in Making Agriculture Truly Sustainable

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Chapter One

INTRODUCTION

THE intersection of international trade and agriculture has become increasingly important as more and more countries and their farmers participate in global markets. National trade-related policies, such as subsidies and support measures, trade restrictions and tariffs, have a major impact not only on national agricultural and food systems, but also on agricultural performance in other countries. Due to the increasing importance and binding nature of multilateral, regional and bilateral trade agreements, the rules established therein have significant effects on national trade policies as well as on the structure and nature of the global system of agricultural trade and production patterns. National trade policies and international trade rules can therefore have a significant impact on food security.

The trade framework that has influenced the policies and practices of many developing countries comprises the following: loan conditionalities of the international financial institutions, rules of the World Trade Organization (WTO), rules in bilateral and regional trade agreements as well as unilateral policy measures (South Centre, 2011). Guided or obliged by the rules and conditionalities within this framework, many developing countries have significantly lowered their agricultural tariffs and their domestic support for farmers. At the same time, liberalization of markets has increased pressure on costs,

prompting producers towards greater specialization, which often results in monocropping, increased mechanization and utilization of chemicals (leading to higher dependence on external inputs), and enhanced scales of production.

In contrast, developed countries have not been subject to the conditionalities of the international financial institutions. Moreover, WTO rules, by and large, have allowed them to maintain their traditional support for domestic agriculture through a combination of high subsidies, high tariff peaks and export promotion. And in the free trade agreements (FTAs) involving developed and developing countries, agricultural subsidies are generally omitted from the agenda. The trade framework governing global agriculture is thus an awkward combination of liberalization and protectionism. While developing countries are required to undertake greater liberalization, developed countries have been able to retain their protectionist policies.

Although increased agricultural trade can offer opportunities for the poor, the benefits have been unevenly distributed. Growing evidence indicates that, to date, small-scale farmers and rural communities in many countries have not benefited significantly from agricultural trade liberalization (IAASTD, 2009); instead it is the largest agricultural producers who have been able to benefit more easily from the opportunities resulting from improved market access. Thus, overall, the distributional effects of trade liberalization, among and within countries, have resulted in the poorest developing countries and farmers being net losers.

The most vulnerable groups who experience hunger are the smallholders, landless labourers, pastoralists, fisherfolk, forest dwellers and the urban poor. Any trade regime that fails to benefit these groups, or affects them negatively, is likely to lead to the denial or violation of the right to food (De Schutter, 2009a).

Such a denial of an essential right underlines the importance of ensuring access of all people, especially the poor, to food, as well as the need for giving priority to food security in developing countries.

While many developing countries once sought food self-sufficiency, this objective was gradually tempered by a perception of economic efficiency that recognized the advantages of importing food at cheaper cost, so long as there was sufficient foreign exchange to pay for the imports. As a result, local food production was not given high priority in national policies. Cheaper food imports took an increasing share of the domestic market in many countries. However, while this gave consumers access to lower-priced food, there were drawbacks, including a decline or stagnation in domestic food production and adverse effects on small farmers' livelihoods and rural development. In some cases, the foods imported from developed countries were heavily subsidized, while the poorer countries did not have the resources to match the subsidies.

This situation has been exacerbated by rising world prices of many food items in recent years, resulting in more expensive food imports and inflation of food prices in local markets, often leading to social instability. A further increase in world food prices in 2011 has given rise to uncertainty and insecurity in the net food-importing countries. As a result, some of these countries have shifted their focus back to achieving greater self-sufficiency and increasing local food production, and to adopting trade policies in support of this objective (IAASTD, 2009; Khor, 2009; South Centre, 2011).

It is now increasingly recognized that the immediate need is to ensure availability of food in countries currently dependent on imports. However, a long-term solution should include boosting local food production in developing countries where conditions are suitable. While there are many factors involved in increasing

local production, an appropriate trade policy framework is a very important requirement. Trade policy reform aimed at creating a fairer global trading system could make a positive contribution to food security and poverty alleviation.

At the same time, there is a growing realization that agriculture cannot proceed on the energy- and input-intensive paths of the past, and that a paradigm shift towards sustainability is needed, where small-scale farmers and agroecological methods provide the way forward (e.g., De Schutter, 2010; Herren et al., 2011; IAASTD, 2009). Reducing dependence on fossil energy inputs and cutting down on greenhouse gas (GHG) emissions from agriculture will require increasing local food self-sufficiency and promoting less fuel- and petrochemical-intensive methods of production.

To the extent that trade rules are fair and promote sustainable or ecological agriculture, they should be maintained and promoted. However, there are aspects of existing international and regional trade rules that run counter to the promotion of a trading system supportive of sustainable agriculture. In addition, the prevailing market structure, where the supply chain is dominated by a few multinational companies, has led to the marginalization of small farmers and the further entrenchment of unsustainable agricultural practices. This situation is exacerbated by pressure on countries to specialize in producing commodity cash crops and undertake large-scale farming.

This paper thus addresses four key interrelated areas: structural adjustment and import liberalization, the imbalance in trade rules governing agriculture, the imbalance in market structure, and environmental sustainability. It raises issues that need to be addressed with a view to establishing a trade policy framework that is supportive of food security and sustainability.

Chapter Two

STRUCTURAL ADJUSTMENT AND IMPORT LIBERALIZATION

AN important factor in the decline of agriculture in many developing countries, especially in Africa, has been the structural adjustment policies prescribed by the international financial institutions. These policies affected rural producers directly, as they led to the dismantling of institutions and national policy measures that assisted farmers, including the reduction or removal of subsidies and credit, withdrawal of assistance in marketing and food processing, and a drastic reduction in agricultural tariffs (De Schutter, 2009a; Khor, 2009). The implementation of the WTO Agreement on Agriculture also led countries to liberalize their agricultural trade, thereby compounding the effect on agricultural producers in developing countries.

Studies by the Food and Agriculture Organization of the United Nations (FAO) have revealed that many developing countries significantly liberalized their agricultural imports by lowering tariffs as required by the conditionalities attached to loans extended by the international financial institutions. As observed by FAO:

> Structural adjustment programmes implemented over the past few decades have resulted in radical reform of the agricultural sectors of many developing countries, a period during which the majority of OECD agricultural sectors have continued to be heavily protected. The process adopted has, in many cases, severely damaged the capacity of developing countries to increase

levels of agricultural production and/or productivity. These unilateral reforms tend to have been reinforced by multilateral agreements (FAO, 2003: 75, cited in South Centre, 2011).

At present, many of the poor countries that had originally lowered their applied tariffs under structural adjustment policies in the 1980s and 1990s are no longer so tightly bound by loan conditionalities. However, several of these countries still maintain their low applied tariffs, which are far below their WTO bound rates (South Centre, 2011). For example, many African countries have applied agricultural tariffs of 10-20 per cent, compared with their bound rates of 80-100 per cent (WTO, 2010).

As a result, a number of countries that were net exporters or self-sufficient in many food crops have experienced a rise in imports – some of which are heavily subsidized – and a decline in local production. Table 1 highlights some cases of import surges, the extent of the surges and the impact on local production. The import surges (FAO, 2003 and 2006) have led to such low prices on domestic markets that they have tended to drive local producers out of business, threatening the ability of those producers to feed themselves and their families (De Schutter, 2009a and 2011).

There have been many case studies of the incidence and damaging effects of import liberalization on local communities and rural producers in developing countries (see, for example, ActionAid, 2008; FAO, 2003; Raman, 2004). These studies show how farmers involved in the production of various food commodities (e.g., staple crops such as rice and wheat, as well as other produce such as milk and other dairy products, vegetables and fruit, poultry and sugar) experienced a fall in incomes and threats to their livelihoods as a result of an influx

Table 1: Import surges of selected commodities, and their impact on local production volume, various years

Country/commodity	Extent of increase in imports	Percentage fall in local production	Time periods compared
Senegal: tomato paste	15 times	50 per cent	1990-1994; 1995-2000
Burkina Faso: tomato paste	4 times	50 per cent	1990-1994; 1995-2000
Jamaica: vegetable oils	2 times	68 per cent	1990-1994; 1995-2000
Chile: vegetable oils	3 times	50 per cent	1985-1989; 1995-2000
Haiti: rice	13 times	Small	1984-1989; 1995-2000
Haiti: chicken meat	30 times	Small	1985-1989; 1995-2000
Kenya: dairy products	52 times	Cut local milk sales	1980-1990 1990-1998
Benin: chicken meat	17 times	Stunted	1985-1989; 1995-2000

Source: Based on FAO (2003) and ActionAid (2008).

of imports which undermined otherwise viable, efficient domestic production (see Box 1 for a case study of Ghana). As a result, the development of the agricultural sector in developing countries, and therefore agriculture's significant potential growth multiplier for the whole economy, was undermined. And the effects on human welfare, national food production and food security were severe.

Box 1: The impact of trade liberalization in Ghana

The policies of food self-sufficiency and government encouragement of the agricultural sector in Ghana (through marketing, credit and subsidies for inputs) helped to increase food production (for example of rice, tomatoes and poultry). However, these policies were reversed starting from the mid-1980s, and especially in the 1990s. For example, the price of fertilizer increased following an elimination of the subsidy, and the marketing role of the state was phased out. In addition, the minimum guaranteed prices of rice and wheat were abolished, as were many state agricultural trading enterprises and the seed agency responsible for producing and distributing seeds to farmers. Subsidized credit was also discontinued. Applied tariffs for most agricultural imports were reduced significantly to the present 20 per cent, even though the bound rate committed to the WTO by Ghana was around 99 per cent. As a result, local farmers were no longer able to compete with imports, the prices of which were kept artificially low by high subsidies in exporting countries, especially for rice, tomatoes and poultry.

Rice output in the 1970s could meet all the local needs, but by 2002 imports constituted 64 per cent of domestic supply. Rice output fell from an annual average of 56,000 tons (in 1978-1980) in the northern region to only 27,000 tons for the whole country in 1983. In 2003, the United States, which provided subsidies to its farmers for rice amounting to $1.3 billion, exported 111,000 tons of rice to Ghana. A study by the United States government found that 57 per cent of United States rice farms would not have covered their costs without subsidies. In 2000-2003 the average cost of production and milling of United States white rice was $415 per ton, but it

was exported for just $274 per ton – a price 34 per cent below production cost.

Tomato production in Ghana, especially in the upper eastern region, had been thriving until a privatization programme resulted in the selling off or closure of tomato-canning factories, while import tariffs were reduced. This enabled the heavily subsidized EU tomato industry to penetrate Ghana, displacing the livelihoods of tomato farmers and industry employees. Tomato paste imported by Ghana rose from 3,200 tons in 1994 to 24,077 tons in 2002. Local tomato production has stagnated since 1995. Meanwhile, tomato-based products from Europe have made inroads into African markets. In 2004, EU aid for processed tomato products was €298 million, and there were many more millions in indirect aid.

Ghana's poultry sector began growing in the late 1950s, reached its prime in the late 1980s then declined steeply in the 1990s. The decline was due to the withdrawal of government support and the reduction of tariffs. Poultry imports rose by 144 per cent between 1993 and 2003, a significant share of which consisted of heavily subsidized poultry from Europe. In 2002, 15 European countries produced 9.010 million tons of poultry meat and 1.147 million tons were exported at a value of €928 million, or an average of €809 per ton. It is estimated that the total subsidy on exported poultry (e.g., export refunds, subsidies for cereals fed to the poultry) was €254 per ton. Between 1996 and 2002, EU frozen chicken exports to West Africa rose eightfold, mainly due to import liberalization. In Ghana, this adversely affected half a million chicken farmers. In 1992, domestic farmers supplied 95 per cent of Ghana's market, but this share fell to 11 per cent in 2001, as imported poultry became cheaper than local poultry.

Source: Khor (2008).

The situation has been exacerbated by high agricultural subsidies in developed countries, which enable them to penetrate developing countries' markets with cheap exports, thereby disrupting local production in the importing countries, preventing access by those countries to developed-country markets and outcompeting developing countries' products in third markets (South Centre, 2011). Several studies have shown that the high subsidies have allowed many agricultural products to be sold below the cost of production. For example, a calculation of the dumping margins for United States commodity crops from 1990 through 2003 showed that wheat, corn, soybeans, rice and cotton were consistently exported at well below the cost of production, ranging from 10 per cent for corn to more than 50 per cent for cotton.

According to the United Nations Special Rapporteur on the right to food, the opening up of the agricultural sector to competition by binding countries to low import tariff rates may therefore constitute a serious threat to the right to food, especially in the least developed countries (LDCs) where agriculture remains a fragile sector (De Schutter, 2009a). This is because the greatest threat to food security is in the rural areas, and a larger proportion of the populations in the countries that are the most vulnerable depend on agriculture for their livelihoods.

Chapter Three

IMBALANCE IN TRADE RULES GOVERNING AGRICULTURE

THE trade rules that underpin the global agricultural trade regime are also a source of concern. The WTO's Agreement on Agriculture contains rules in three areas – market access, domestic support and export subsidies – in which the developed countries were expected to reduce their protection. However, they have done very little in this regard.

There are many loopholes in the system, which allow the developed countries to continue to subsidize and protect their agriculture at the expense of the developing countries. The average support to agricultural producers in the major developed countries as a percentage of gross value of farm receipts was 30 per cent during the period 2003-2005, representing almost $1 billion per day. These policies cost developing countries about $17 billion per year, a cost equivalent to five times the recent levels of official development assistance (ODA) to agriculture (Anderson and Van der Mensbrugghe, 2006, cited in Hoffmann, 2011). It should be pointed out that these figures refer exclusively to agricultural subsidies, and do not include indirect subsidies for energy (fuel and electricity) used in agriculture.

The situation has improved only slightly in recent years: the Organization for Economic Co-operation and Development (OECD, 2010) estimates that the subsidies given to farm

producers in all OECD countries totalled $252 billion in 2009, which is 22 per cent of the total value of gross farm receipts that year. This is about the same level as in 2007 and 2008. The level of support is even higher than this average in some countries: in 2006-2008, it was 27 per cent in the EU, 49 per cent in Japan, 60 per cent in Switzerland and 62 per cent in Norway (OECD, 2009). The level of support is also very high for certain products. Specific support for rice amounted to 60 per cent of total producer rice receipts in 2006-2008 (OECD, 2009).

There are at least three adverse effects of developed countries' subsidies on farmers in developing countries: (i) they are unable to export to the subsidizing developed countries' markets; (ii) they are unable to compete in third markets because the developed countries' products are sold at artificially low prices; and (iii) they have to compete in their own local markets with subsidized products coming from developed countries, which adversely affects their market share, incomes and livelihoods (South Centre, 2011). The elimination or substantial reduction of both subsidies and protectionism in industrialized countries is therefore important, particularly for small-scale farming around the world (IAASTD, 2009).

Under the WTO, there has been some apparent progress in trying to address export subsidies. The WTO's Hong Kong Ministerial Conference in 2005 agreed that as part of the Doha Round of trade negotiations, export subsidies of the developed countries would be eliminated by the end of 2013. However, this may not be realized if the Doha negotiations are not concluded, and there has not been a binding agreement on these elements as yet.

On the issue of domestic subsidies, a major loophole in the WTO Agreement on Agriculture is that countries are obliged to

reduce their bound levels of domestic support that are deemed "trade-distorting", but there are no constraints on the amount of subsidies deemed to be non-distorting or minimally distorting, which are placed in the so-called Green Box. However, recent studies have shown that many of the Green Box subsidies are also trade-distorting as they have significant effects on the market and on trade. Therefore, the major subsidizing countries can reduce their "trade-distorting" subsidies while changing the types of domestic subsidies they give, effectively providing similar levels or even increasing the total amount of subsidies (Khor, 2009). Unfortunately, the Doha negotiations are unlikely to impose new effective disciplines on the Green Box items, as the developed countries have successfully insisted that there be no new rules that would place a cap on the Green Box subsidies (South Centre, 2011). The negotiating text of July 2011 proposes some changes to the Green Box, but these do not alter the basic elements, especially as there is no cap on the Green Box subsidies. Thus they could increase without limit in the future.

The Doha negotiations are mandated to substantially reduce (other) domestic support in developed countries. However, to date, the offers of the United States and the EU indicate their overall trade-distorting domestic support (OTDS) would be reduced at the bound level, but not at the applied level (Khor, 2009). At present, the level of the actual OTDS of these two economies is far below the level of their total allowed trade-distorting support. Therefore, they can afford to reduce the level of allowed trade-distorting support significantly before the cut reaches the level where the present actual trade-distorting support is affected (South Centre, 2011). In other words, they would only cut "water" (i.e., the difference between allowed and actual subsidies) and not their actual subsidies.

The figures in the agriculture negotiating group Chair's text would not reduce the actual present domestic support for the United States. The allowable OTDS for this country is to be cut by 70 per cent (i.e., from the present $48.3 billion allowable level to $14.5 billion). The proposed $14.5 billion level is in fact double the estimated 2007 actual OTDS of $7-8 billion, thus effectively allowing the United States considerable "water" to increase from this level. Meanwhile, the allowable OTDS for the EU is to be cut by 80 per cent, which would reduce the EU's present allowable OTDS of €110.3 billion to €22 billion. According to one estimate, however, the actual OTDS is expected to drop to €12 billion at the end of the Common Agricultural Policy reform in 2014. Thus the cut, though it appears to be large, would allow for "water" vis-à-vis what is planned.

While there has been a lowering of the applied OTDS of the United States and the EU in recent years, this has been accompanied by a rise in their support to Green Box items. As actual OTDS is cut, subsidies could be shifted to the Green Box and therefore total domestic support may not decline. Thus the cuts in their allowable OTDS may appear large, but in fact will not reduce applied or planned OTDS, and moreover, these will be offset by an increase (in the case of the EU) in Green Box subsidies (South Centre, 2011). An objective conclusion would be that the OTDS figures of 70 per cent cut for the United States and 80 percent cut for the EU are not adequate as they do not constitute effective and substantive, or real, cuts.

Meanwhile, the developing countries are being asked to reduce their agricultural tariffs further. The Chair's proposal at the Doha talks is for a maximum 36 per cent tariff cut by developing countries, while the LDCs are exempted from any tariff reduction, and small, vulnerable economies will be accorded more lenient treatment. However, the combination of high

subsidies in developed countries and low applied tariffs in developing countries has caused highly frequent import surges, which have adversely affected farmers' livelihoods and incomes.

Due to increasing concern over this, a majority of developing-country members of the WTO (which include the G-33, the African Group and the LDC group) have proposed two new instruments – Special Products (SP) and a Special Safeguard Mechanism (SSM) – to be introduced into the rules of the WTO as part of the Doha negotiations. The objective of both instruments is to promote the livelihoods of small farmers, food security and rural development in developing countries. Such policy flexibility is critically important to advance development and sustainability goals (IAASTD, 2009), and would shield developing countries' producers from competition from industrialized countries' farmers (De Schutter, 2009a).

Under the SP concept, developing countries would be entitled to have no or lesser reductions of tariffs on a certain percentage of their agricultural tariff lines as part of the Doha Round's agriculture modalities. Under the SSM, developing countries would be allowed to impose an additional increase in tariffs, on top of bound rates, in situations of reduced import prices or increased import volumes, in order to protect local farmers from import surges and to avoid possible damage to domestic productive capacity.

Acceptance of these two instruments was formalized in the WTO's Hong Kong Ministerial Declaration of 2005, which stated:

> Members will have the flexibility to self-designate an appropriate number of tariff lines as Special Products guided by indicators based on the criteria of food security, livelihood security and rural development. Developing country Members will also have the right to have recourse to a Special Safeguard Mechanism

based on import quantity and price triggers, with precise arrangements to be further defined.

The acceptance of these two concepts and instruments was a major step forward in recognition by the WTO of the right of developing-country governments to take trade measures in defence of their farmers' livelihoods.

However, there is considerable opposition from some agricultural commodity-exporting countries, including several large developing-country agricultural exporters,[1] which fear that the use of the SSM could result in losses of legitimate exports. However, the restrictions they have proposed would prevent this instrument from working in an effective and simple way. As such, the SSM, even if established, may have very limited use in enabling developing countries to protect their farmers from import surges. In any case, the Doha negotiations have hit an impasse, and it is unlikely that the SSM will be established any time soon.

[1] Many developing countries have adopted a defensive stance in relation to the liberalization of trade in agriculture. However, the developing countries with more efficient agricultural sectors, which would benefit from higher earnings from their exports if there were fewer restrictions on their market access, especially to developed countries, have now been at the forefront of attempts to liberalize global agricultural trade through the Doha negotiations. There is tension between these countries and the majority of developed countries that have tried to retain their sizeable agricultural support and relatively high tariffs, as well as between them and those developing countries that are seeking to defend their small farmers' livelihoods from import surges. The agriculturally efficient countries have been advocating restrictions on the use of the SSM for developing countries to avoid import surges, on the grounds that their own farmers would be affected by import restrictions (South Centre, 2011).

Ironically, there is already an agricultural safeguard in the WTO (known as the special agricultural safeguard, SSG), but the eligibility criteria have disadvantaged most developing countries, resulting in only 20 developing countries being eligible to use the safeguard. Thus, most developing countries have no proper instrument to counter import surges. In order to rectify the imbalance and enable developing countries to safeguard their food security and farmers' livelihoods, more countries should be eligible to make use of the SSG.

In addition, regional and bilateral FTAs have prevented developing countries from using the flexibilities in the WTO agreements (De Schutter, 2009a). Moreover, many of these FTAs require developing countries to reduce or eliminate their tariffs even further (Khor, 2009; De Schutter, 2011). For example, in the Economic Partnership Agreements between the African, Caribbean and Pacific (ACP) countries and the EU, the ACP countries are asked to eliminate their tariffs on 80 per cent of their tariff lines, including for agricultural products, over varying time periods. Yet the reduction of agricultural subsidies is not part of the FTA agenda. Thus developing countries are not able to gain from what may have been the most advantageous area for them, while having to eliminate their agricultural tariffs to a larger extent than required of them by their obligations at the WTO (South Centre, 2011).

Chapter Four

IMBALANCE IN MARKET STRUCTURES

INCREASED trade in agricultural products implies that food production is redirected towards serving external instead of domestic markets. In addition, as larger farmers are more easily able to access foreign markets and benefit from such access, the increase in agricultural trade risks marginalizing small farmers. And since market power is rarely equally distributed along the value chain, this enables the more powerful actors to pass on costs and risks to the weaker actors – typically smallholder farmers (IFAD, 2010).

As such, the role of multinational corporations, particularly commodity traders, food processors and global retailers, becomes more important (De Schutter, 2009a; Herren et al., 2011). The world has witnessed a trend towards agribusiness consolidation, and this trend is seen all along the value chain, with a few multinational companies providing the majority of inputs such as pesticides, seeds and crop genetic technologies, or undertaking marketing, food processing and retailing. This has resulted in national, regional and global supply chains that bypass traditional markets where smallholders sell to local markets and traders (World Bank, 2008).

The world seed, agrochemical and biotechnology markets are dominated by a few mega companies. In 2004, the market share of the four largest agrochemical and seed companies reached

60 per cent for agrochemicals and 33 per cent for seeds, up from 47 per cent and 23 per cent in 1997 respectively (World Bank, 2008). Where new technologies and products (e.g., transgenic seeds) have been developed and protected by intellectual property rights (IPRs), industry consolidation has taken place rapidly (PANNA, 2010). The four leading companies in terms of ownership of biotechnology patents had a market share of 38 per cent in 2004, and in 2004 one company had a 91 per cent share of the worldwide transgenic soybean market (World Bank, 2008).

These companies have a vested interest in maintaining a monoculture-focused, carbon-intensive industrial approach to agriculture, which is dependent on external inputs (Hoffmann, 2011). International supply chains, often dominated by major food processors and retailers, also tend to source from large-scale monocrop production, rather than from diverse multicropping and integrated livestock and crop farming systems. This trend reinforces the marginalization of small farmers and of sustainable production systems. In addition, to comply with the standards of global retailers, many farmers are encouraged to use improved varieties of seeds and external inputs, often supplied by oligopolistic companies, which further exacerbates dependence and reliance on conventional agriculture (De Schutter, 2009a).

Given their increased market power, commodity buyers and larger retailers which dominate global food chains impose their prices on producers (who are in an unfavourable bargaining position) and set standards that many small-scale farmers are unable to meet (De Schutter, 2009a; PANNA, 2010). Small-scale farmers are therefore unable to compete and are relegated to low-value, local markets, which strongly disadvantages them in the competition for land, water or other productive resources

(De Schutter, 2009b and 2011). This risks perpetuating unsustainable agricultural practices, as small farmers are further marginalized. Furthermore, dependence on this increasingly concentrated global food supply chain intensifies vulnerability to shocks, whether from extreme weather events or excessive financial speculation in agricultural markets.

However, multinational corporations are neither subjected to much discipline, nor to obligations relating to their exercise of power on the market, which results in a critical governance gap (De Schutter, 2009a). Because of this and their market positions, most of the benefits from global food supply chains accrue to commodity buyers, food processors and retailers, rather than to developing-country producers (De Schutter, 2009b and 2011).

Improving the rural poor's market participation is important, because if these markets work well and are inclusive of smallholder farmers, they can provide strong incentives for those farmers to make the necessary investments and take the requisite risks to enhance their ability to respond to market demand (IFAD, 2010), including investing in ecological agriculture for which there are valuable niche markets (e.g., for organic produce, as discussed in the next chapter). Moreover, if poor rural farmers were able to benefit from their participation in markets, they could gradually save and accumulate assets, increasing not only their own prosperity but also their capacity to deal with risks and shocks (IFAD, 2010). This would also enable them to better deal with some of the challenges associated with climate change, for example.

Chapter Five

ENVIRONMENTAL SUSTAINABILITY

CONVENTIONAL and intensive agriculture is characterized by mechanization and the use of chemical fertilizers and pesticides, as well as a reliance on irrigation and fossil fuels. These have contributed to considerable environmental damage, including accelerated loss of biodiversity and ecosystem services such as those necessary for the production of food and water or for controlling disease, increased GHG emissions, as well as considerable health impacts (IAASTD, 2009; World Bank, 2008).

Moreover, climate change has the potential to undermine the resource base on which agriculture depends. Agriculture has to cope with increased climate variability and more extreme weather events. While local mean temperature increases of 1°-3°C would affect crop productivity differently depending on latitudes, with tropical and arid regions suffering more, warming above 3°C would have increasingly negative impacts in all regions (Easterling et al., 2007). In some African countries, yields from rain-fed agriculture, important for the poorest farmers, could be reduced by up to 50 per cent by 2020 (IPCC, 2007), which would increase the number of people at risk of hunger.

However, the impacts of agriculture on the environment and human health, and the relationship between agriculture and climate change, are usually ignored in international trade

discussions, despite the repercussions these could have on the right to adequate food (De Schutter, 2009a).

A progressive switch to more input- and energy-intensive forms of agricultural production cannot be attributed directly to the increase in global trade in agricultural commodities, but this trend has been encouraged by the specialization of countries in cash crops for export (De Schutter, 2009a). Intensive, large-scale industrial export-oriented agriculture has increased under the trade liberalization agenda, with adverse consequences such as the loss of soil nutrients and water from agricultural lands, and unsustainable soil and water management (IAASTD, 2009).

In addition, the failure of markets to value and internalize environmental and social costs in the prices of traded agricultural products, or to provide incentives for sustainability, has also played a part in entrenching unsustainable practices in agriculture (IAASTD, 2009). Inappropriate pricing and subsidy policies and the failure to manage externalities also hinder the widespread adoption of more sustainable agricultural practices (World Bank, 2008). The situation is compounded by price volatility, where extremely low agricultural commodity prices over the past two decades followed by the recent price hikes has discouraged long-term investments in more sustainable, ecological agriculture.

Given the growing concerns about climate change and the imperative for alleviating rural poverty, there is an urgent need to move towards more sustainable, environmentally friendly agricultural practices that are more resilient and less input- and energy-intensive (De Schutter, 2009a and 2010). This is especially pertinent in the current context of the scarcity and high prices of oil. There is increasing evidence that sustainable or ecological agriculture can contribute to climate change

adaptation and mitigation while also being productive (e.g., De Schutter, 2010; ITC and FiBL, 2007; Niggli et al., 2009; Scialabba and Müller-Lindenlauf, 2010).

According to the United Nations Special Rapporteur on the right to food, future regulation of international trade in agriculture should take into account the impact of various modes of agricultural production on climate change to allow countries to provide incentives in favour of forms of production, such as organic agriculture and agroecological practices, which respect the environment while at the same time contributing to food security. This supports the call by the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) for a paradigm shift in agriculture towards agroecology.

A major task is to transform the uniform model of quick-fix industrial agriculture that is highly dependent on external inputs into flexible, "regenerative" agricultural systems that continuously recreate the resources they use and achieve higher productivity and profitability (of the systems, but not necessarily of individual products) with minimal external inputs, including energy (Hoffmann, 2011). A mosaic of regenerative systems may include biodynamic agriculture, organic agriculture, agroecology, integrated crop and livestock farming, and similar practices.

The trade policy framework should support such a transformation of agriculture, rather than encourage the prevailing unsustainable system. Moreover, if the impacts of structural adjustment and import liberalization and the imbalances in trade rules and market structure are not addressed, countries are unlikely to move towards more sustainable modes of production. It is unlikely, for example,

that large farms that rely on significant subsidies to be profitable will make a significant shift to ecological agriculture practices, unless there is comprehensive reform of the system of subsidies, including lowering or removing some of the so-called "green" subsidies that fall in the Green Box (Hoffmann, 2011). At the same time, farmers should be given adequate support for ecological agriculture practices.

However, a supportive trade framework should avoid protectionism in the guise of environmental protection (South Centre, 2011). It should also support the "greening" of subsidies and in ways that will give greater policy space to developing countries. Environmental standards, labelling and other issues would also need to be dealt with from a "sustainable development" perspective. Developing countries should be provided with resources and technologies for upgrading their existing environmental technologies and standards. In addition, the full and effective participation of developing countries in setting international standards should be assured, as also the concomitant assistance, particularly to small-scale farmers, to comply with such standards.

Measures should also be taken to encourage organic farming, which is not only beneficial to the environment, but also provides trade opportunities for smallholder farmers in developing countries. Niche markets such as organic can provide price premiums and/or long-term contracts (IFAD, 2010). The total global organic market was worth $55 billion in 2009, having grown by 5 per cent from the previous year, despite the economic and financial crisis (Willer and Kilcher, 2011). Global revenues have increased more than threefold from $18 billion in 2000, and double-digit growth rates were observed each year, except in 2009. As there is a significant increase in consumer demand for organic foods worldwide, there is also

an opportunity for small farmers to market their surplus organic products in national, regional and global markets. Thus a change in consumer tastes and demand towards organic foods, or more generally foods produced using ecological agriculture methods, can motivate changes in production systems. At the same time, it can increase the opportunities and markets for small farmers, thereby improving their livelihoods (South Centre, 2011).

Many governments in both developed and developing countries have announced plans to increase organic farming practices. However, while developed-country governments offer significant subsidies for organic farming, similar financing is scarce in developing countries. More proactive measures are required in developing countries to promote organic farming and to overcome obstacles to production, marketing and trade.

One issue that needs to be addressed is the difficulties faced by developing-country producers in adhering to organic standards. This is not so much an issue at the national level, but is a major problem for potential exporters who need to comply with many technical regulations, standards and certification systems. As UNCTAD (2004) points out, it is important to find a balance between the need for harmonization for trade and fair competition, and the need to take into account local and regional conditions and requirements. To overcome the challenge faced by smallholder farmers in developing countries of third-party certification, which is expensive, various schemes have been developed, such as participatory guarantee systems and group certification. These alternatives, which are more accessible to smallholder farmers and provide the quality assurance that consumers need, should be further promoted.

A supportive trade framework can thus assist in the transition to ecological agriculture and organic farming. Farmers using sustainable approaches should be supported by proactive state intervention (South Centre, 2011), including public sector financial and technical support, as well as extension services to introduce best practices in ecological agriculture. Other state-led services could include ecological rehabilitation, provision of organic seeds, credit and marketing support. Concurrently, the domestic tariff policy should enable small farmers to withstand competition from imports.

Chapter Six

A TRADE FRAMEWORK SUPPORTIVE OF FOOD SECURITY AND SUSTAINABILITY

A TRADE framework that is supportive of food security and sustainability will need to focus on smallholder farmers in developing countries, and encourage domestic production. This could be achieved by helping small-scale producers improve their productivity, particularly through ecological means, and strengthening their access to local markets while shielding them from the negative impacts of unduly subsidized imports of food commodities (De Schutter, 2009a). Support to sustainable small-scale agriculture, especially in terms of ensuring access to land, water, genetic resources and credit, and by investing in and improving access to rural infrastructure, is critical, as is the need to untangle local food economies from the grip of supply chains dominated by multinational corporations.

In other words, the plight of small-scale farmers in developing countries should be addressed through a combination of policies that support ecological agriculture (through investments in R&D, extension services and rural infrastructure, subsidies and marketing support) along with an appropriate trade policy that protects farmers from cheap imports. At the same time, reform of the international trade regime should include requiring developed countries to sufficiently reduce or remove harmful subsidies, while providing developing countries with special treatment and safeguard mechanisms to promote their small farmers' livelihoods (Khor, 2011).

At the international level, this should include the elimination of subsidies for agricultural exports (as agreed in the WTO's Hong Kong Ministerial Declaration, 2005) and further discipline on domestic support, and the reduction of trade distortions caused by the large domestic subsidies provided by developed countries (as stated in the WTO's Doha Ministerial Declaration, 2001).

At the national level, developing countries should calibrate their degree of trade liberalization so that it is in line with their objectives and national realities. Countries that do not have the potential or intention to produce certain foodstuffs may have low or no import tariffs to enable their populations to obtain imported food at the lowest cost. Those countries that intend to increase food production can take advantage of the flexibilities allowed in the WTO by setting their tariffs at the appropriate levels in order to nurture a viable domestic food sector, as long as the applied tariffs do not exceed the bound rates (South Centre, 2011). Furthermore, those developing countries with an export interest should be given the opportunity to expand their export earnings through improved market access.

However, the flexibilities available in WTO agreements may be affected if countries enter into FTAs in which they commit to eliminate their tariffs for a large percentage of their products. Furthermore, although LDCs are exempted from reducing their bound tariffs in the Doha negotiations, they are not provided with similar exemptions on the basis of their LDC status in FTA negotiations. Thus bilateral FTAs should allow sufficient policy space for developing countries to promote their agricultural development.

Besides the establishment of an appropriate tariff policy, governments can provide various forms of encouragement to boost agricultural activities, including subsidies, credit, establishing security of land tenure and provision of inputs (South Centre, 2011). The WTO Agreement on Agriculture sets the rules on the extent of subsidies allowed. Since many developing countries previously provided only limited subsidies, if any (mainly because they lacked the financial resources), they are not allowed to provide the high levels of support given by developed countries. However, the Agreement on Agriculture allows developing-country governments to provide a certain level of *de minimis* support, equivalent to 10 per cent of total agricultural value, as well as to make use of the category of non-trade-distorting support in the Green Box. The developing countries can avail themselves of these flexibilities to provide subsidies as they deem appropriate, especially for ecological agriculture. However, many of them face budgetary constraints or simply lack the financial resources to do so.

The international trade regime needs to be reformed to bolster efforts to promote ecological agriculture systems, which would benefit smallholder farmers by increasing productivity, while also being more resilient to shocks such as climate change. Such systems would also reduce the impacts of agriculture on the environment and health, and are therefore urgently needed.

The options for action discussed below are based on the four themes of this paper.

Review of structural adjustment recommendations and agricultural liberalization policies

In general, the need for special treatment for food products, allowing gradual and lenient liberalization, instead of steep tariff

reductions, is important for developing countries. They should be allowed to provide adequate support to their agricultural sectors and to have realistic tariff policies to advance their agriculture, especially in view of the persistently high subsidies of developed countries (Khor, 2009). The developing countries should be allowed to calibrate their agricultural tariffs in such a way as to ensure that their local products can be competitive, farmers' livelihoods and incomes sustainable, and national food security assured.

(1) The policies of the international financial institutions and regional development banks should be reviewed and revised as soon as possible, so that they do not continue to serve as barriers to food security and agricultural development in developing countries (Khor, 2009). An independent ongoing review of the trade aspects of the present and proposed conditionalities of loans is needed.
(2) Loan conditionalities should not oblige developing countries to undertake liberalization (in rate and scope) that is beyond their coping capacity, or which would be damaging to the livelihoods and incomes of their rural producers. The approach to liberalization in developing countries should be reoriented to be more realistic, especially since developed countries continue to maintain high subsidies (South Centre, 2011).
(3) At present, developing countries have flexibilities under WTO rules to adjust their applied tariffs upwards to their bound rates, and even beyond the bound rates in certain circumstances. Loan conditionalities should not prevent or hinder developing countries from making use of these flexibilities (South Centre, 2011).
(4) There is an urgent need to provide a special safeguard facility which could be used simply and effectively by developing countries so that the needed increase in tariffs

can better protect their producers from the impacts of import surges (as discussed in the next section).

(5) Revenues from such tariffs could be used to finance rural development and infrastructure schemes aimed at benefiting farmers. Public investment in social protection for non-food-producing households living in poverty is also needed (De Schutter, 2011). Complementary policies and programmes to facilitate transitions from conventional to sustainable agriculture, and to support the net trade losers through public investment to stimulate long-term growth in the agricultural sector are also important (World Bank, 2008).

Reforming trade rules governing agriculture

A major challenge at the international level is to modify a number of key market distortions that act as a disincentive to the transition to sustainable agricultural practices in developing countries (Hoffmann, 2011). Such distortions arise from the significant subsidization of agricultural production in developed countries and their export of this output to developing countries. As long as such subsidies are not significantly altered by the current WTO negotiations, it is difficult to imagine how developing-country producers could implement a paradigm shift towards ecological agriculture on the massive scale necessary to have an impact. Apart from real reduction of domestic support in developed countries, reforms should include improved market access for developing-country produce and policy space to support the agricultural sector, allow expansion of local food production, and the use of effective instruments to promote food security, farmers' livelihoods and rural development. This necessitates a reconsideration of trade rules in the WTO and in various FTAs (South Centre, 2011) as follows:

(1) Export subsidies in developed countries should be eliminated by 2013, as agreed in the WTO's Hong Kong Ministerial Declaration.

(2) There should be an effective deep reduction of domestic support (in actual levels, and not just the bound levels) in developed countries, with as few loopholes as possible and with no or minimal "box shifting" (i.e., shifting of subsidies towards those deemed to be non-distorting or minimally distorting, which are not subject to any disciplines but which could also have significant effects on the market and on trade). This should include reductions in the actual OTDS as well as an objective review of the nature and effects of various subsidies now classified as Green Box subsidies, leading to stricter disciplines and reductions.

(3) Developing countries should be allowed adequate policy space to enable them to use domestic subsidies for supporting farmers' livelihoods and food security. These could include the provision of low-cost credit, assistance for the supply of inputs, storage facilities, road and transport infrastructure, strengthening of extension services, marketing facilities and networks, and support for value-added processing of agricultural products. Developing countries could examine the avenues available to them for making use of domestic subsidies, for example through the *de minimis* subsidies, and if this is not sufficient, explore the possibility of using more subsidies, including those in the Green Box.

(4) Developing countries should have adequate policy space to make use of tariffs to protect the interests of their domestic farmers and promote food security and rural development. They should be able to use the flexibilities in the WTO rules to adjust their applied tariffs to the appropriate level as long as these do not exceed the bound level.

(5) The WTO rules should enable developing countries to promote food security, farmers' livelihoods and rural development through the effective use of the SP and SSM instruments. So far, only developed countries and a few developing countries are able to make use of a special agricultural safeguard (SSG); all developing countries should be allowed to make use of this facility to prevent import surges until a permanent SSM for developing countries is established.

(6) The developing countries' goals of food security and protection of farmers' livelihoods should be given priority by negotiators of FTAs. The percentage of goods identified for tariff elimination by developing countries should be adjusted, if necessary, to accommodate the need to exclude sensitive agricultural products. In the light of the food crisis, developing countries that have signed or are negotiating FTAs should ensure that such agreements will provide enough policy space to allow them to impose sufficiently high tariffs on agricultural imports so that they can rebuild and strengthen their agriculture sectors in order to achieve food security and promote farmers' livelihoods and rural development.

Addressing imbalances in market structure

Steps should be taken for the establishment of national and international rules for regulating the activities of commodity buyers, processors and retailers in the global food supply chain. Specific policies to support smallholder farmers, particularly women farmers, in gaining access to markets would also be important.

(1) The application of competition law to prevent the creation, maintenance and abuse of buyer power/domination

positions in supply chains is necessary. Competition regimes sensitive to excessive buyer power in the agrifood sector, and competition mechanisms that allow affected suppliers to lodge complaints without fear of reprisal by dominant buyers are needed (De Schutter, 2009b).

(2) There is a need for antitrust measures to break up monopolies and global price-fixing cartels, an international review mechanism to investigate and monitor concentration in the agrifood sector, and investigations into the behaviour of international corporations engaged in agricultural trading and food retailing, and their impacts on farmers, farm workers, consumers and vulnerable populations (PANNA, 2010).

(3) States should proactively adopt public policies aimed at expanding the choices of smallholders to sell their products on local or global markets at a decent price by strengthening local and national markets and supporting continued diversification of channels of trading and distribution; supporting the establishment of farmers' cooperatives and other producer organizations; establishing or defending flexible and efficient producer marketing boards under government authority but with the strong participation of producers in their governance; using the public procurement system to support small farmers; and promoting and scaling up fair trade systems, including by ensuring access to productive resources, infrastructure and technical assistance (De Schutter, 2009b; IFAD, 2010; PANNA, 2010).

(4) Understanding gender-related opportunities and risks in agricultural value chains and markets, and promoting gender equality in accessing emerging opportunities, are important to support the emergence of pro-poor agricultural markets (IFAD, 2010).

(5) Agricultural research and aid have often served powerful commercial interests, including multinational seed and food retailing companies, at the expense of the values, needs, knowledge and concerns of the very people who provide the food. Farmers and other citizens need to play a central role in defining strategic priorities for agricultural research and food policies (Hoffmann, 2011).

An agenda for environmental sustainability

The regulation of international trade in agricultural commodities should take into account the impact of various modes of agricultural production on the environment and climate change in order to allow countries to provide incentives in favour of sustainable production, such as organic farming or agroecological practices, both of which respect the environment and contribute to food security (De Schutter, 2009a).

(1) Perverse incentives and subsidies that promote or encourage the use of chemical pesticides and fertilizers, water and fuel, or encourage land degradation, should be avoided (IAASTD, 2009; World Bank, 2008). At the same time, regulations and their implementation are needed to protect the environment and address pollution, as input-intensive agriculture has adverse impacts on the environment and human health (IFAD, 2010).
(2) Agricultural subsidies need to be redirected to encourage diversified crop production for long-term soil health and improved environmental impacts. A major shift in subsidies is needed so that governments can help reduce the initial costs and risks to farmers of transitioning towards more sustainable farming practices (Herren et al., 2011). Subsidies should be confined to those essential for facilitating the transition to sustainable production

methods, such as support for extension services and research and development, rewarding environmental services, ensuring protection against volatile prices and providing specific support to smallholders (Hoffmann, 2011).

(3) Farmers should be given access to support for ecological agriculture practices. Developing countries could consider devoting a larger share of their agricultural budgets to promoting ecological agriculture, which can boost both small farmers' livelihoods and food production, while protecting the environment and conserving resources such as soil fertility and water. The support should include extension services to train farmers in the best options available for sustainable development techniques, and the development of ecological infrastructure, including improved water supply and soil fertility. Farmers should also have access to credit and marketing support.

(4) Both developing and developed countries should be encouraged to take measures to facilitate trade in organic foods originating from developing countries. Developing countries could consider the following measures: (i) increase awareness of the benefits of organic food production and trading opportunities; (ii) promote research and development and training; (iii) identify marketing strategies and partnerships, with government support; (iv) provide financial support to organic producers; and (v) promote farmers' associations and non-governmental organizations (NGOs) (UNCTAD, 2004).

(5) Importing countries could also implement measures to promote imports of organic foods from developing countries by providing information on organic standards, and on regulations and market opportunities for developing countries' exporters. They should also facilitate access to their organic food markets by simplifying requirements

and procedures for importing products from developing countries and applying the concept of equivalence between national organic standards (UNCTAD, 2004).

(6) Bilateral and multilateral donor agencies could provide appropriate technical assistance for the export of organic products from developing countries.

(7) More generally, developing countries could consider the following strategies to promote organic agriculture: (i) organic policy and action plans should be linked to the overarching objectives of the country's agriculture policies to make them mutually supportive, and to remove obstacles and biases against organic agriculture; (ii) the government should give recognition and encouragement to the organic sector, closely cooperate with the sector's organizations and farmers, and play an enabling and facilitating role; (iii) establish a participatory process, with action plans and projects based on overall policies and objectives (UNCTAD and UNEP, 2008).

(8) Barriers to the participation of small farmers from developing countries in organic markets should be removed. Efforts to address issues such as difficulties of market access, lack of market infrastructure, prohibitive third-party certification, and the lack of research, technical, policy and financial support are needed (UNCTAD and UNEP, 2008). Growing domestic markets are also important, and urban markets could start to provide significant opportunities for smallholder farmers (IFAD, 2010).

(9) Efforts should be made to enable smallholder farmers, particularly women farmers, to access productive resources and participate in agricultural decision-making, so as to facilitate their investment in and adoption of ecological agriculture approaches.

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THE IMPORTANCE OF INTERNATIONAL TRADE REFORM IN MAKING AGRICULTURE TRULY SUSTAINABLE

Reforms of the international trade regime require a significant reduction or removal of harmful subsidies currently provided mainly by developed countries, while at the same time allowing special treatment and safeguard mechanisms for developing countries in order to promote their smallholder farmers' livelihoods. Such reforms, coupled with policies in support of sustainable small-scale agriculture in developing countries, would improve local production for enhancing food security.

There is also a need for regulatory measures aimed at reorganizing the prevailing market structure of the agricultural value chain, which is dominated by a few multinational corporations and marginalizes smallholder farmers and sustainable production systems. Policies that increase the choices of smallholders to sell their products on local or global markets at a decent price would complement efforts to rectify the imbalances.

In addition, a shift to more sustainable and ecological agricultural practices would benefit smallholder farmers by increasing productivity while strengthening their resilience to shocks, such as climate change, and reducing the adverse impacts of conventional agricultural practices on the environment and health. The trade policy framework should therefore support such a shift.

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