

PRACTICAL PROJECT IN DEVELOPMENT COOPERATION –
SDC

Food Security

Possibilities within and beyond the
WTO-Framework

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Introduction

“The human right to adequate food is recognized in international law. It is indivisibly linked to the inherent dignity of the human person and is indispensable for the fulfillment of other human rights enshrined in the International Bill of Human Rights”

(Economic and Social Council, 1999).

The right of every human being to be free from hunger is a fundamental human right. However, food insecurity remains a horrendous reality (FAO, 2002). The last food crisis in 2008 definitely showed that an extensive gap exists between the standards set forward in the conventions and the reality. According to the Food and Agriculture Organization, the number of undernourished people has almost reached the 1 billion mark. The problem of food accessibility is especially prevalent in underdeveloped areas.

Agriculture plays a central role in the economies of low-income countries, those where more than 70 percent are employed in that particular sector – compared with 30 percent in middle-income countries and just 4 percent in high-income countries (UNDP, 2003, p. 109). A competitive agricultural sector could not only serve as an engine for further development but also contribute to food safety.

However, these small-scale farmers simply cannot compete on the world market with the big players, especially as they usually do not have sufficient arable land, access to credit, water, technical assistance and other inputs (Kwa & Shah, 2008, p. 34). It is the international community’s task to support underdeveloped countries and to ensure that access to food safety is guaranteed (FAO, 2002).

Since developing countries have lowered their tariffs in the agricultural sector, they were confronted with numerous import surges, which led to a deterioration of domestic production. The international community has recognized this trend as being problematic. The purpose of the so-called Doha “Development” Round, marked by the core concern to help developing countries out of their destitution, is to find a way to improve food security in developing countries. At the same time, the WTO is not the only organization that is active in the field of food security. Several others propose alternative solutions in addition or complementary to those of the WTO. We therefore asked ourselves the following question:

What are the possibilities within and beyond the WTO-framework to enhance food security?

In order to find an answer to this question we proceed as follows: In the first part, the concept of food security is defined and an overview as well as an evaluation of the Special Agricultural Safeguard (SSG) mechanism is given. This mechanism is the predecessor of SSM and thus basis for WTO negotiations on this subject. In the second part, we focus on current WTO negotiations. Key elements of SSM important to their

efficiency and efficacy are highlighted. Can there ever be an outcome achieved which is beneficial for the third world if the industrialized countries have the say in major decisions? We attempt to find an answer to this question in the next section, where the power distribution in WTO negotiations is discussed. In the run of this, different points of views of the negotiating parties are presented and it is examined how their clashing interests result in an impasse.

The question evolves whether the WTO at all is an adequate forum to tackle the problem of food security. Are there other institutions or regimes, which are better suited to help these disadvantaged countries out of their precarious food situation? In the third part, an alternative approach and ways to guarantee food security are proposed. First, it is shown that the changing environment poses new challenges to the international community. Second, trade models show that there is need for Special and Differential Treatment for developing and Least Developed Countries, which goes beyond the traditionally narrow scope of measurements foreseen by the WTO. Third, instruments outside the WTO framework, which might enhance productivity of and attract investment to the agricultural sector, are taken into consideration. Finally, we will highlight the need for national policies and the involvement of alternative organizations, as a holistic approach is indispensable in order to solve this complex problem.

I) Food Security and the Special Safeguard Provision within the AoA

1. What is food security?

Food security has been recognized as one of the most fundamental of all human rights at many multilateral conferences. It is not without reason that the first of the eight Millennium Development Goals declared by the UN is to eradicate “*extreme poverty and hunger*”. The stated objective is to:

- *Halve, between 1990 and 2015, the proportion of the world’s population whose income is less than one dollar a day.*
- *Halve, between 1990 and 2015, the proportion of people who suffer from hunger (UN, Millennium Development Goals, 2000).*

Achieving food security has been the subject of countless international conventions, declarations and resolutions. However, it is a flexible concept, which has developed over time. The nowadays recognized definition has been declared at the State of Food Insecurity Conference in 2001. Food Security is defined as follows: *Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life (FAO, 2003, p. 29).*

Accordingly, food security is a tripartite concept, reflecting the three dimensions of availability, access and stability. Despite all the efforts made, more than one billion persons were estimated in 2009 to be chronically undernourished (FAO, www.fao.org, 2010). Undernourishment describes the status of persons whose food intake regularly provides less than their minimum energy requirements (UN E. a., 2010).

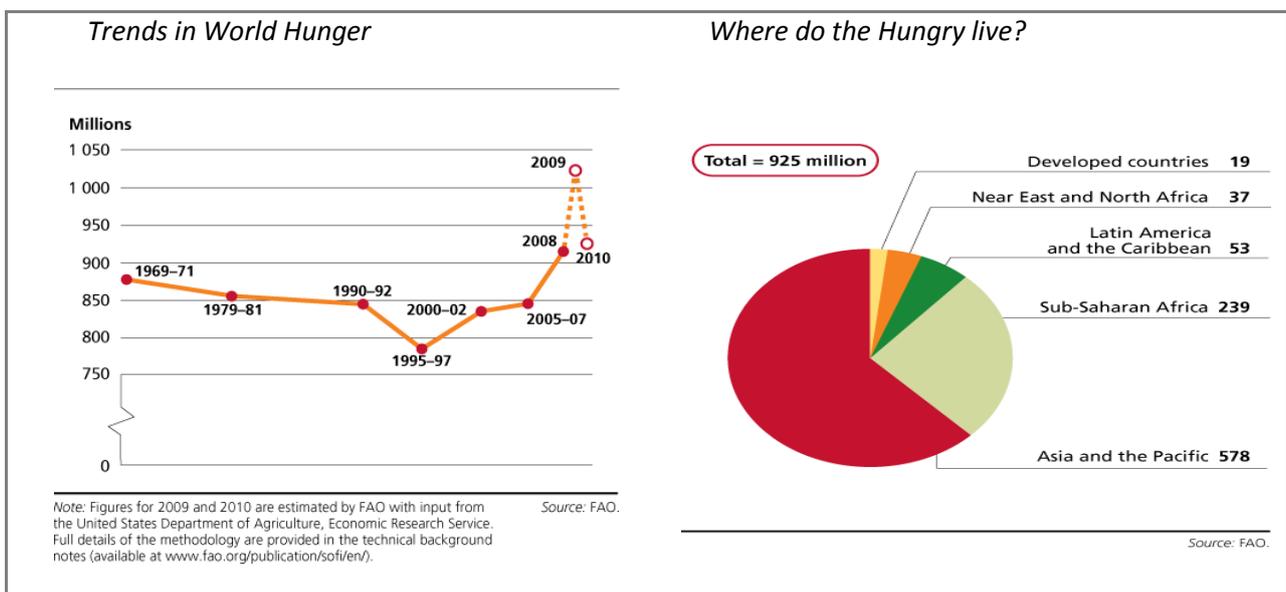


Figure 1: Trends in World Hunger and Where do the Hungry live? Source: (UN E. a., 2010).

2. Factors that lead to food insecurity

Poverty is now generally regarded as the root cause of hunger and malnutrition. However, hunger and malnutrition likewise affect the capabilities and capacities of individuals, which make it difficult to find a way out of poverty. We identified four main, mutually reinforcing factors that influence the state of food insecurity in a country: climate, social, political and economic factors.

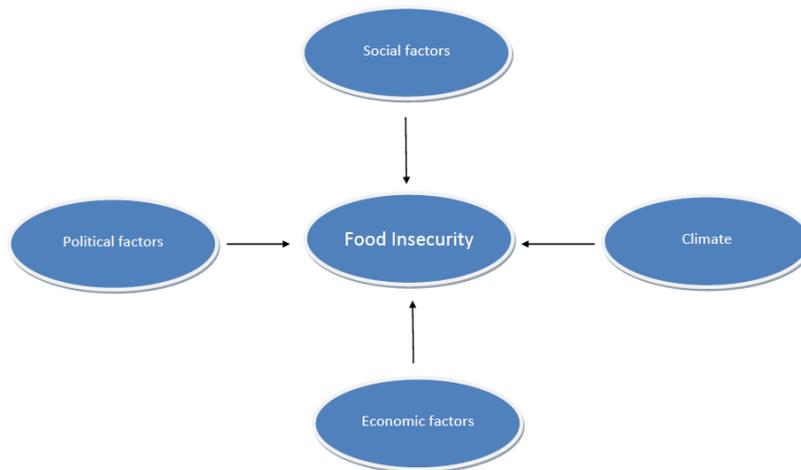


Figure 2: State of food insecurity. Source: Own construction.

Difficult climate conditions influence the quantity and quality of the crop, therefore playing a crucial role for a household's or a whole country's food security. Natural disasters, such as typhoons, floods, droughts and desertification, but also a chronic lack of access to drinking water have put a lot of people into a situation of extreme poverty and of insufficient food intake.

Another factor that influences the state of food security is the high demographic growth in developing countries. Rapid population growth is intensifying food insecurity in the developing world, particularly in Sub-Saharan Africa. Due to the poor productivity of their small-scale farmers, the supply of stable food in developing countries cannot keep pace with the rising demand of their growing population.

Since the middle of the 20th century, trade has become more and more liberalized. In the agricultural sector, the opening of the markets has had profound implications for the domestic industries of developing countries. In fact, since the Uruguay Round the agricultural activities in developing countries have been more liberalized than in industrial countries. This and other trade distorting measures of the industrialized states, such as dumping or export subsidies, have led to import surges in various countries. Developing countries' share of imports rose from 28 percent in 1974 to 37 percent in 1997, but their share of exports increased from 30 percent to just 34 percent. Thus the trade balance of developing countries in food commodities has turned negative. Various countries that had previously been self-sufficient producers or net-exporters of food became net food importers, which led to a growing trade deficit (UNDP, 2003, p. 126). These so-called import surges

are of increasing concern to developing countries, since it damages otherwise viable domestic industries and their limited national self-reliance for food has serious repercussions for food security¹. During the Uruguay Round, the international community has come up with an idea that could contain the problem. In the following part, we will discuss the proposed instrument and evaluate its efficiency.

3. Special Agricultural Safeguard – SSG

In 1995, WTO members agreed on a framework, which should accelerate the liberalization of the world agricultural market: The Agreement on Agriculture (AoA). It consists of three main pillars: domestic support, export subsidies and market access (WTO, 2004b).

One core objective agreed upon in the area of market access is tariffication. All countries should convert quotas into non-quota measurements because those, in the form of tariffs, are generally perceived to be less harmful. They are more transparent and easier to compare among countries. Furthermore, they do not keep a country from exporting its goods into another as long as it is willing to pay tariffs, although they might be inappropriately high (WTO, 2004b).

Some of the tariffs resulting from this tariffication process were considered too high to allow an acceptable amount of import. However, the tariffication package guarantees that countries still have appropriate access to other markets by the following rule: Developed countries should reduce tariffs by 36 percent and developing countries by 24 percent. Only the Least Developed Countries were granted an exception. They did not have to reduce tariffs (WTO, 2004b). In order to make sure that foreign companies have minimum access, countries can apply a tariff quota system. This means that imports below a certain quota face reduced tariffs whereas imports above the quota face higher tariffs (WTO, 2004b).

Opponents of liberalization fear that these measurements would harm domestic industries. Safeguard mechanisms are a possible instrument to protect industries from serious injury caused by high rises in imports. They are foreseen in The Final Act Agreement of the 1995 Uruguay Round. Conditions and regulation of issues such as duration of appliance periods or compensation can be found in the Agreement on Safeguards (WTO, 2004b).

But in the field of agriculture, these general safeguard provisions are not considered to be adequate. Therefore, the AoA allows the appliance of Special Agricultural Safeguards, referred to as SSGs in the following. Their main difference compared to conventional Special Safeguards is that authorities of countries do not have to prove that serious injury of the industry might be caused by increased imports. By contrast, SSGs are triggered automatically, either by price or volume (WTO, 2004).

In the case of price triggers, countries are allowed to apply SSGs as soon as the price falls below 90 percent of the reference level. The reference price is the average price from 1986 to 1988. The more the price decreases, the higher is the remedy. Price SSGs are applied on shipment per shipment basis (WTO, 2004c).

¹ Please consult Box 1 in appendix 1 for an illustration on the basis of a specific country.

SSGs triggered by volume can be used as soon as imports rise above a certain level, which relates to the existing market access opportunity. Remedies are the same for all levels of the volume trigger: they are not allowed to be higher than a third of the level of the ordinary customs duty in effect of the year in which the measurement is taken. Volume triggers are applied until the end of the year of application (WTO, 2004c).

3.1. Who has applied the SSG-mechanism?

Only a total of 39 WTO member states currently have reserved the right to use the SSG. Of the 39 members, 22 were developing countries. The SSG, however, was not applied much by these countries. Only six developing countries² have invoked the SSG-clause for a total of 163 triggers. In comparison, Switzerland is the number one user of the SSG clause with 961 reserved products. A rough calculation shows that the overall SSG utilization rate by developing countries was only about 1 percent. That is, only 1 percent of the SSG's full potential was used by developing countries (Olsson, 2006, p. 46).

3.2. Problems encountered with the implementation of the SSG

The small number of countries having applied the SSG-mechanism indicates that its implementation is linked to a number of problems. First of all, to be able to use the SSG provisions, countries must have undertaken tariffication during the Uruguay Round. This means, countries that didn't designate any products at that time have lost the opportunity to use the SSG-clause. This is the case for most of the developing countries (WTO, 2004a). Furthermore, the recourse to Special Agricultural Safeguard does involve certain costs, especially administrative. Therefore, the mechanism is often not applied, even if the circumstances (trigger conditions) would allow it. The Least Developed Countries are the worst placed to make the adjustments because of lack of human and physical capital, poorly developed infrastructures, institutions that don't function very well, and in some cases, political instability. The SSG experience indicates, that developing countries require a new simple and effective trade remedy instrument in order to reduce import surges. The Special Safeguard Mechanism (SSM), such as discussed in the Doha Round might be a step into the right direction.

II) The WTO Doha-Round Negotiations

In 2001 the current trade-negotiation round of the WTO has been initiated: The Doha Development Round. Today, even after ten years of intense negotiations, the member states still have not been able to reach an agreement. There are highly controversial issues on the agenda, such as agriculture, services, trade and environment, Special and Differential Treatment for developing countries and intellectual property.

During the current WTO trade negotiations, two new instruments have been proposed by developing countries: The "Special Products" and the "Special Safeguard Mechanism". Both instruments arose from the

² They are: Barbados, Taiwan, South Korea, Nicaragua, Costa Rica, and the Philippines.

concern that increased imports and import surges are affecting the livelihoods of local farmers, since many of their products have been crowded-out from the market by cheaper imports (Kohr, 2008).

It follows a brief summary of the two proposed trade instruments, highlighting their advantages and disadvantages and the different positions of some WTO members.

4. Special Products – SP

The idea of Special Products has “its origins in the quest of developing countries for mechanisms of flexibility in applying trade policy instruments to agriculture” (Hoda, 2005). A country’s SPs are those relevant from the point of view of food and livelihood security and rural development needs (Hoda, 2005). Several guidelines have been identified for applying these three criteria, among others: “Importance of the product in the traditional diet of the population; level of self-sufficiency; import capacity as measured by food imports as a percentage of total exports of goods and services minus debt service; agricultural labor as a percentage of the total work force; percentage of agricultural workers employed in the production of particular products; and the contribution of agriculture to the GDP” (Hoda, 2005, p. 20). These guidelines are not easily applied though. Agreement on some benchmarks would be necessary in order to draw clear lines and highlight differences among countries (Hoda, 2005). What, for example, should be the level of self-sufficiency? “Benchmarks might have to be different for different countries to take into account their respective agricultural situations” (Hoda, 2005). This allows a large measure of discretion to each developing country in the application of the guidelines. Each country would be free to fix its own benchmark and employ it.

It is a complex issue and there clearly is no concrete and narrow definition of which products fall into the category of “Special Products”. The advantages of the country’s designated SPs are: Exemption from tariff cuts and more flexible treatment. However, the member states still have not agreed upon a general tariff reduction formula, which makes it even more difficult to explain the exact functioning of the SP-instrument.

In the following, the focus of our research is on the Special Safeguard Mechanism, analyzed in the next chapter. We chose this mechanism because it is based on the current SSG and therefore it better shows the shortcomings of the latter.

5. Special Safeguard Mechanism – SSM

The Special Safeguard Mechanism for developing countries is one of the key issues at the current WTO negotiations on agriculture. “The idea behind the SSM begins in a belief that the Uruguay Round Agreement on Agriculture (AoA) was a bad deal for developing countries” (Wolfe, 2009, p. 521). The proponent group behind the SSM is the Group of 33 (G33), supported by the African Group, African, Caribbean and Pacific (ACP) group, and the Least Developed Countries (LDCs) (Kohr, 2009). The G33 was formed by 23 developing countries on the eve of the Fifth WTO Ministerial meeting in Cancun (September 2003) and they constituted an “Alliance for Strategic Products and Special Safeguard Mechanisms” (Sharma, 2007, p. 162). The group made substantive technical proposals, which served as a starting point of the discussion on SSM in the WTO

negotiations. Nowadays the G33 group has over 40 Members from all regions, including larger countries like India and China as well as LDCs like Benin and Zambia. The G33 members want an instrument that is simple, effective, easy to implement and available to all developing countries (Sharma, 2007). Such a mechanism could be important for developing countries given the problems encountered in accessing and implementing the current safeguards, which are, as earlier described, very selective and linked to high costs.

5.1. Key Elements of the SSM

A short overview of the SSMs key elements allows a better understanding of the objectives of this instrument and it serves as a basis for a comparison with the present mechanism in force, the SSG. We keep in mind that the aim of this paper is to analyze food security opportunities within the WTO framework and we emphasize therefore the developing countries' point of view.

Country eligibility

The G33 group wants the SSM to be accessible to all developing countries without exception (Sharma, 2007, p. 162).

Product eligibility

It is very important that it is clearly defined which products the Safeguard will cover. Coverage of all agricultural products would be preferable and more practical, taking into account the changing domestic production patterns and the possibility of new products (ActionAid, 2008).

Triggers

There are two types of triggers: The price-based safeguard (dependent on the per unit price of the import product) and the volume-based safeguard (dependent on the cumulative level of import quantities) (ActionAid, 2008).

Appropriate references for triggering price and volume safeguards

The G33 propose a moving reference period for both volume and price trigger (Sharma, 2007, p. 163). A historical three-year average reference period is the most common base used in most of the AoA pillars, including the SSG. The problem is that the period chosen often has no relation to the current price level. This could impede the safeguard to trigger when actually necessary. The G33 want to avoid this and make the SSM more effective. "To be effective in addressing import surges or price declines, the base must bear some relation to the current domestic situation" (ActionAid, 2008). Therefore, a moving reference period is more appropriate.

Import surges

To date the WTO does not have a unique definition of an import surge. ActionAid International (2008) found out that not all import surges are problematic, as for example in the case of domestic production failure. However, a single threshold cannot be applied to all the countries and for all the products, because of the huge differences among them. "The determination of a problematic import surge is a national decision that

should result from signals from all agricultural stakeholders – policy makers, farmers and consumers” (ActionAid, 2008). The G33 took into account this diversity and set the surge threshold at 5% (ActionAid, 2008).

Remedies

“The word remedy refers to the type of measure taken – and its scale, duration and other characteristics – once a safeguard has been triggered. Examples of measures that might be taken include additional tariffs and quantitative restrictions. The important question is the scale of the remedy (for example, how much additional tariff)” (Sharma, 2007, p. 169). This is a particular sensitive issue, since it concerns both, the import and the export countries. All the WTO countries agreed on the proposal that the price remedy should be determined by the extent of the price depression (Sharma, 2007, S. 170). For what concerns the volume remedy: The G33 is willing to keep the maximum level of one third determined by the SSG, but at the same time the level of the volume remedy varies with the depth of the problem considered (Sharma, 2007).

A controversial point of the SSM is whether the pre-Doha bound tariffs can be exceeded or not. The G33 proposed to divide developing countries in three more homogeneous groups: LDC, Small and Vulnerable Economies (SVE) and other developing countries. Limits have been suggested on which SSM can be invoked above the pre-Doha bound tariff rates: 40% of tariff lines for LDC and 10-15% of tariff lines for SVE. For the remaining developing countries, at any given period a maximum of 6 products are allowed to exceed pre-Doha bound tariffs (G33, 2010).

5.2. Comparison SSM and SSG

One of the most important differences between the SSG and the SSM is the country and product eligibility. As earlier mentioned, the SSG was provided to only 16 developed and 22 developing countries, and just for a selected range of agricultural products. So far it has mainly been the developed countries that applied the SSG. Furthermore, a great number of the SSM conditionalities do not even exist for the SSG. This considerably reduced the instrument’s effectiveness; hence, its utility for developing countries is questionable. In general, “there are many aspects of the SSG which are clearly more favorable for developed countries than the clauses in the SSM for developing countries” (South Centre, 2009, p. 1).

Another important change proposed for the SSM is the price and volume reference. The G33 suggests a “moving average” for both safeguard types. Obviously, data of the average of imports of the preceding three-year period need to be available. Anyhow, this method should be more effective and realistic than the SSGs, which relates on a fixed historic average price of the years 1986-1988.

Since the SSM is still a draft and has not yet been fully agreed upon, it is not an easy task to understand the whole mechanism. Later on we will analyze the different positions of the most relevant country groups. This underlines the complexity of the issue.

To gain a better overview of how SSM differs from SSG we draw a table summarizing the most important points. The position paper handed in by the G33 to the WTO Committee on Agriculture on the 28th of January 2010, as well as our own research served as sources.

Concept being compared	Article 5, AoA: SSG	Doha Round Modalities on SSM
Country eligibility	Only applicable by the countries that tariffed during the Uruguay Round.	Applicable by all developing countries.
Product eligibility	Only applicable to the products that were tariffed during the Uruguay Round.	Applicable to all agricultural products.
Volume-based safeguard		
Trigger	Pegged to both, domestic consumption and average imports. i) Imports make up more than 30% of consumption: Trigger is 105% of average last three years plus difference in consumption in last year. ii) Imports make up between 10%-30%: Trigger of 110%. iii) Imports make up less than 125%: Trigger of 125%.	The reference volume is a "moving average". Data of the average of imports of the preceding three-year period need to be available. Imports must reach at least 110% over the preceding 3-year average in order to trigger the safeguard.
Remedy	Same for all triggers: 33.33% of ordinary customs duty in effect.	Remedies also have a maximum of one third; the level varies with the depth of the problem.
Period of application	Until the end of the year.	Limited to two consecutive time periods. Where this has occurred, consecutive application can be resorted to only after a further 2 consecutive periods.
Price-based safeguard		
Trigger	Reference price: 1986 – 1988. Price drops at least below 90%.	The reference price is a "moving average" based on CIF ³ import price relative to data on "MFN-sourced price" for the most recent preceding three-year period preceding year of importation, for which data is available. Trigger & Remedy: When CIF Import Price falls below 85% of "Reference Price", then remedy will be 85% of the difference between import price and trigger price. The G33 advocates for a 100% price adjustment.
Remedy	Staggered: i) Prices fall to 60% -90% of the reference price: 30% of the price gap between new price and 90% level. ii) Prices fall to 40% - 60% of the reference price: 50% of the price gap between new price and 60% level plus i). iii) Prices fall to 25% - 40% of the reference price: 70% of the price gap between new price and 40% level plus ii) and i). iv) Prices fall to less than 25% of the reference price: 90% of the price gap between new price and 25% level plus iii) and ii) and i).	The level of the remedy should depend on the extent of the price depression. When the CIF import price falls below 85% of the "reference price", then the remedy will be 85% of the difference between import price and trigger price. But the G33 seeks 100% price compensation.
Period of application	Shipment-per-shipment based	Limited to two consecutive time periods. Where this has occurred, consecutive application can be resorted to only after a further 2 consecutive periods.

Table 1: Comparison SSG and SSM. Source: (G33, 2010).

³ CIF: Cost, insurance and freight price. Source: OECD.

5.3. Critics of the SSM

Volume trigger – Too high and too late.

In order for the volume-based safeguard to be triggered, the imports level must reach at least 110% over the preceding 3-year average, but these trigger levels are too high and too late. The reason is well explained by the following example of Indonesia, a country that experienced an import surge in 2007, as shown in Figure 4 (Kohr, 2009).

As we can see in figure 5, the 110% trigger is breached in April. Yet, the authorities will comprehend this only two months later and, consequently, invoke the SSM (Kohr, 2009, p. 4). For some lower-income countries, this process could take even up to the rest of the year (Kohr, 2009, p. 4).

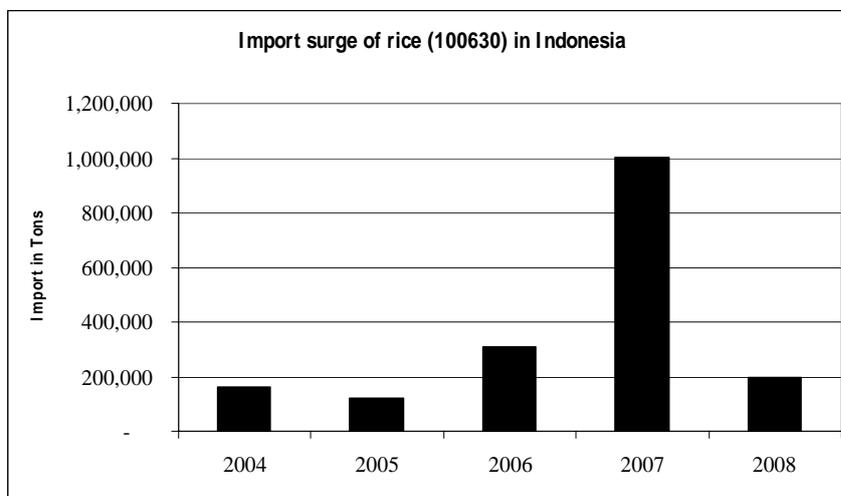


Figure 3: Import surge of rice in Indonesia. Source: (Kohr, 2009, S. 4).

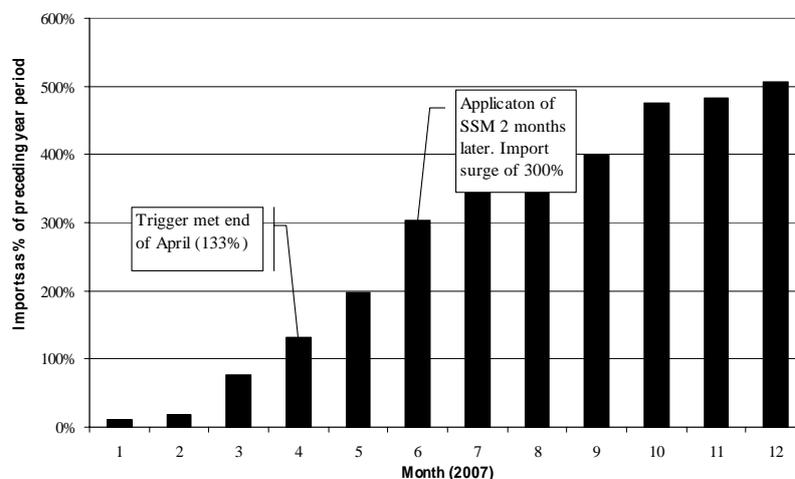


Figure 4: Indonesia's cumulative rice imports in 2007. Source: (Kohr, 2009, S. 5).

In the best-case scenario then, the SSM would be activated in June. But by this date, the import level has already reached 300% of the preceding 3-year period. If we consider a more realistic situation, then it would take at least 3-4 months to implement the SSM. However, by this date the actual imports would already surmount by 400% the preceding 3-year period.

This is the reason why it is important that the trigger is set at the lowest level possible – even at 100% (Kohr, 2009). Countries will not invoke the SSM at this low level, but the trigger could be an early warning signal, and countries could already activate the process of putting an SSM in place. By the time the SSM is actually implemented, import volumes would have exceeded these trigger levels (Kohr, 2009).

It is important that the SSM remedies are sufficient to stop the import surge and limit the damage the imports are causing to the domestic producers.

Price-based Safeguard – Too difficult and insufficient protection.

The WTO’s Chair for agricultural negotiations proposes a remedy that will only partially address the price decline, meaning that even after the SSM is in place domestic products can be out-competed by the cheaper imports (Kohr, 2009). The Chair proposes that the trigger price should be 85% of the reference price, which corresponds to the average price of the last 3 years (Kohr, 2009, p. 11). The remedy would therefore make up 85% of the difference between the new import price and the trigger price.

The G33 does not agree with the method proposed by the Chair, since it would result in a shortcoming. The following example demonstrates the problem: A product that usually is imported at 100 USD would have a trigger price of 85 USD. If the new import price drops down to 50 USD, then the SSM remedy would equal to 85% of the difference between 85 USD (the trigger price) and 50 USD (the new import price). In this case, the remedy would be 29.75 USD, bringing the import price and SSM remedy up to 79.75 USD. This is 20.25 USD less than the original price. If the domestic product were sold at 100 USD or below, the SSM would do little to protect the country from import injury (Kohr, 2009).

The G33 proposes a remedy that should make up 100% of the difference between the import price and the reference price (Kohr, 2009). In the case above this would mean bringing the price back to 100 USD. Figure 6 illustrates these two positions.

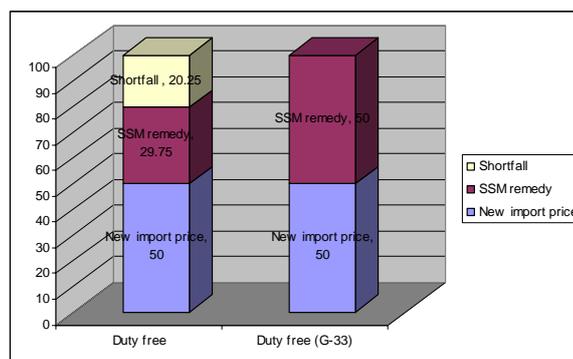


Figure 5: The Price-based SSM Remedy: Comparing the Chair’s Text and the G33 Position. Source: (Kohr, 2009, p. 11).

On the one hand, the Agriculture Chair wants the ceiling of the SSM remedy to be set at the same level as the pre-Doha tariff. On the other hand, the G33 disagrees and proposes a number of products on which SSM can be invoked in any given period above the pre-Doha bound tariff rates (G33, 2010). As earlier mentioned, they suggest a division of the developing countries into three smaller, more homogeneous groups: LDC, SVE and other developing countries. The G33 group emphasizes that the LDC and the SVE deserve the most flexible treatment on all the elements of the SSM, including unlimited product coverage and remedies exceeding the pre-Doha bound rate (G33, 2010, p. 8).

This last issue is another important obstacle to the full acceptance of the SSM: The heterogeneity of the developing countries group, which hinders them to share the same interests. In the following chapter this problem is discussed in more detail.

6. Power distribution in the WTO negotiations

Not all the WTO member states share the same view about the SSM. "Opinions on the SSM are divided between those seeking to use the mechanism, and exporters concerned about market access in developing countries. However, these differences are not simply a North-South divide since a few developing countries have also expressed concerns about the measure" (ActionAid, 2008). It seems that not even developing countries hold together on this matter. We will now describe which are the most important and influent country groups and which position they defend or oppose to.

6.1. The US and the EU

The United States and The European Union are still considered the most influential countries in the Doha Round negotiations. Discussions between these two countries are especially intense. The EU and the developing countries, led by Brazil and India, are asking the US to make a more generous offer for reducing trade-distorting domestic support. However, the US wants the EU and the developing countries to accept more substantial reductions in tariffs and limitations of the number of import-sensitive and Special Products. No clear idea has yet emerged how much tariff reduction would be needed to match domestic subsidy cuts. The bargaining power of the US and the EU in WTO negotiations might seem high compared to others'. However, their flexibility in negotiations is highly constrained by domestic agricultural politics since neither American nor European farmers are willing to accept further concessions on subsidies or tariffs (Hanrahan & Schnepf, 2007, p. 2).

6.2. Developing Countries

A US and EU agreement is a necessary condition for concluding a Doha agreement, but it is not a sufficient one. When comparing the Uruguay Round to the Doha Round, a striking difference can be observed: Developing countries are actively participating in negotiations, playing a major, maybe even decisive role (Hanrahan & Schnepf, 2007, p. 2). But not all of them share the same interest. Their claims depend on the

countries' economic power, agricultural capacity and position in international trade. Roughly, they can be divided into two main groups: net-importing and net-exporting developing countries.

Net-importing countries have an interest in defending the maximum policy space to take account of vulnerabilities and address food security, livelihood security and rural development. They stress the importance of Special and Differential Treatment, the need for Special Products and a SSM. A country example would be Indonesia; the G33 group represents this point of view.

This position is contested by net-exporting developing countries. They argue that other developing countries should not have the right to protect their industry and therefore hamper South-South trade. These countries usually have offensive demands for high ambitions in all three pillars of negotiation, namely market access, export competition and domestic subsidies. They pursue liberalization as the ultimate goal (Matthews, 2005 , p. 564). An example for a country holding this position in negotiations would be Brazil. The Cairns Group is a forum representing those interests.

6.3. Coalition building

Generally, during the Doha Round there has been a shift away from an inclusive multilateral process towards the formation of small groups, which became the forum for decision-making (Vickers, 2010, p. 1). When developing countries negotiate with developed countries they face a problem of unequal bargaining power. A coalition helps to increase their negotiating power. Therefore, they often form groups in order to better represent their interests. Obviously, industrialized countries apply the same strategy.

The following illustration maps the interests and positions of the groups:

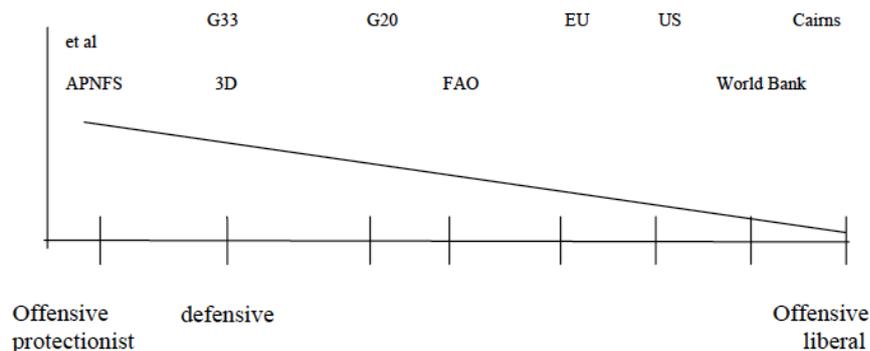


Figure 6: Interest groups. Source: (Cainglet & Stemmler, 2005, p. 35).

The graph groups the actors on the horizontal axis according to their policy orientation. Those in favor of market liberalization can be found on the right and those encouraging protectionist policies are positioned on the left. The vertical axis shows the scope of protection that a group advocates, which since linked to policy orientation, decreases from protectionists on the left to liberals on the right.

However, a country might share one group’s point of view in one area and favor the position of another group in other issue areas. As a result, countries are often members of more than one coalition. The complexity and interdependencies of all these groups are very well depicted in the following map.

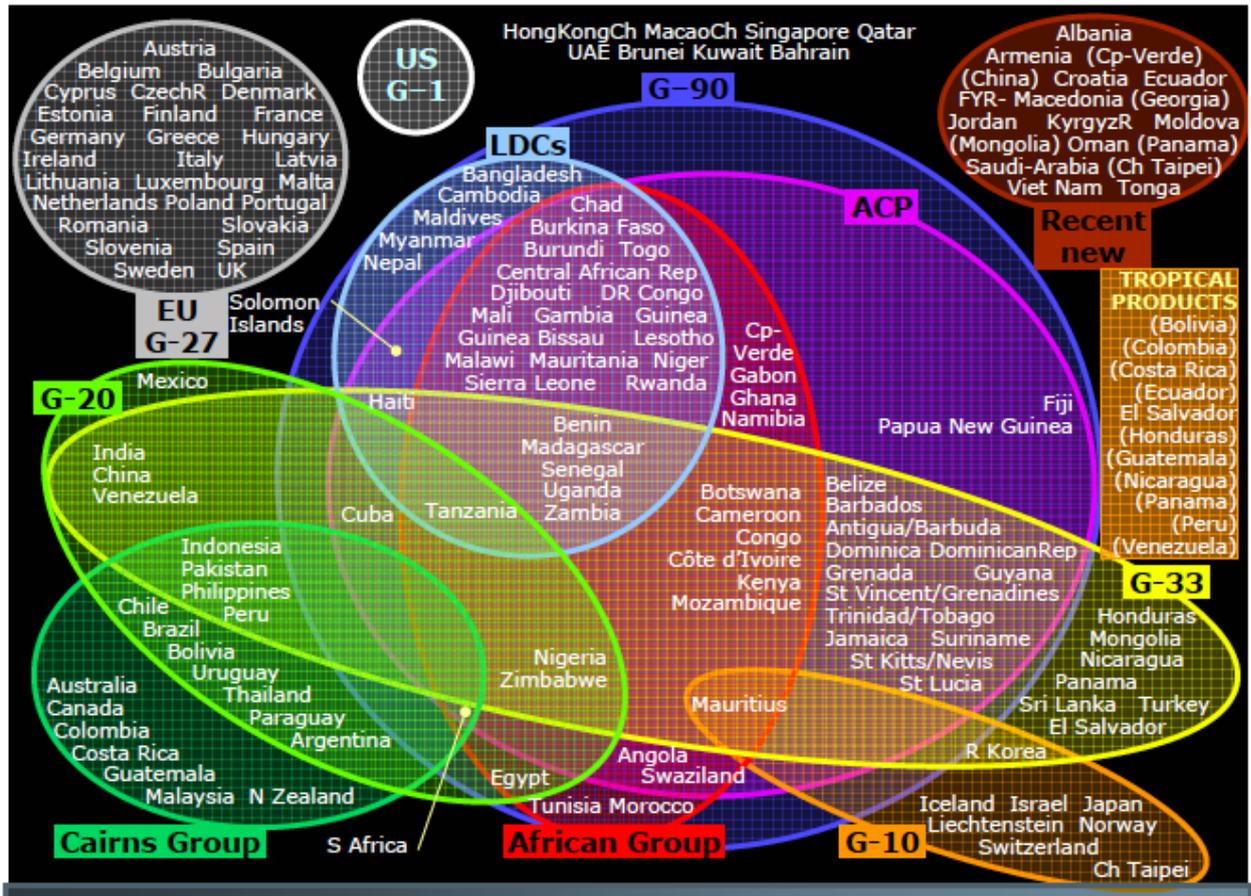


Figure 7: Overlapping group membership. Source: (WTO, 2011).

Although cross-participation facilitates communication between the groups, this phenomenon increases the complexity of Doha Round negotiations.

Two of these interest groups and their positions in negotiations are now examined in greater detail: The G33 and the Cairns Group.

6.4. The G33 Group

The G33 was formed to support the concept of Special Products and the introduction of Special Safeguard Mechanisms. The group currently consists of 44 nations (Kohr, 2008). These countries have a high concentration of households relying on small-scale agriculture. They fear that if they are forced to open their agricultural markets too quickly, a large amount of farmers might be displaced before other jobs could be created for them. Additionally, they believe that they could not deal with the volatility of world agricultural prices they would be exposed to if fully opening their economies, because they lack the financial resources to

handle price swings. Furthermore, they perceive their households too weak to bear the resulting price shocks (Polaski, 2007, p. 4).

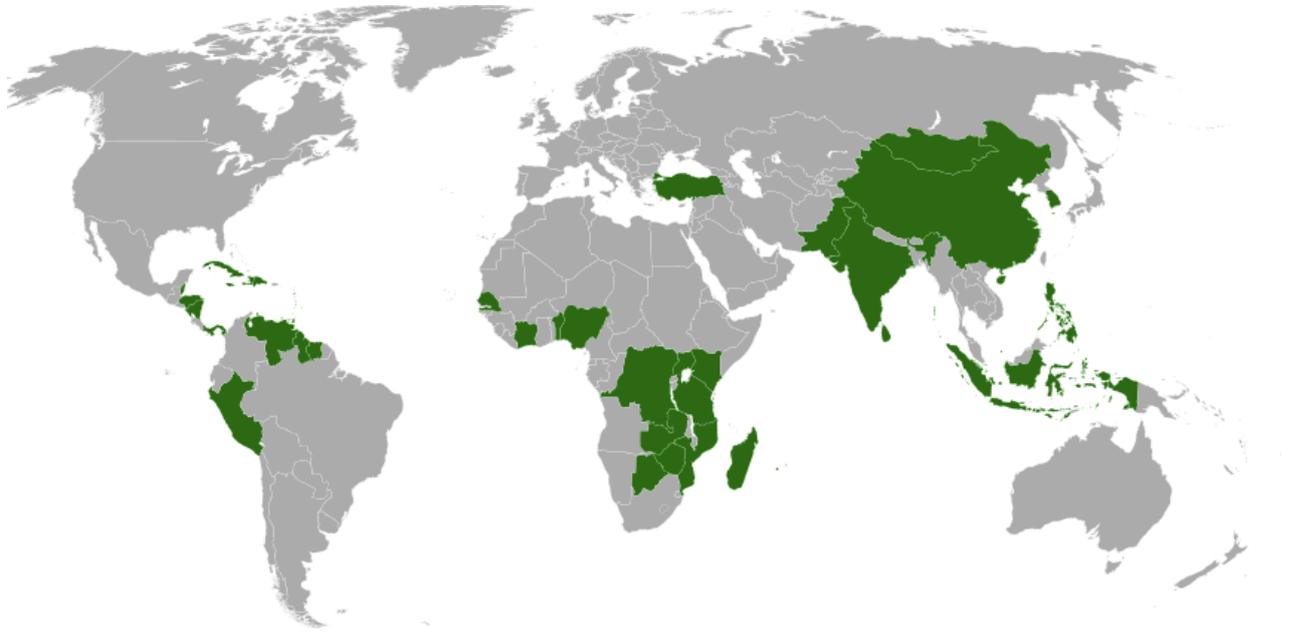


Figure 8: G33 member countries. Source: www.wikipedia.org.

The G33 group might have played a role in the blockage of the SSM issue in the July 2008 talks in Geneva. The WTO Member states already agreed upon the fact that developing countries should have a SSM, but they could not agree on every single point. The most contentious point was and still is the level of remedies: Are they allowed to exceed pre-Doha Round bound rates? If so, by how much and for how long?

The G33 recognized the need to unify all developing and Least Developed Countries in order to promote their interests in the agricultural negotiations. The coalition called for closer cooperation and better internal coordination (Cainglet & Stemmler, 2005, p. 13). In the meanwhile a group of seven delegations – Australia, Brazil, China, the EU, India, Japan and the US – tried to reach consensus before the issue was discussed by the entire WTO assembly. The blockage of the SSM issue was mainly caused within this group by the following parties: the US, India and China (WTO, 2008). The G33 group was not even involved in the discussions of this group and therefore, its bargaining power seems limited.

6.5. The Cairns Group

The Cairns Group is not sharing the G33's point of view to use the SSM to protect poor and vulnerable farmers. The group does not support the G33's demand that SSM should be easier to use, with low triggers and big tariff increases. It rather interprets the SSM as a time-bound mean for the liberalization of the agricultural market. Therefore, the Cairns Group fights for a stricter use of SSMs and for cutting tariffs from

pre-Doha Round levels. To a certain extent, it shares the view of some Latin American and Southeast Asian countries (mostly engaged in the Cairns Group) and the US.

This coalition currently consists of 19 countries, of which all are agricultural net-exporters. Except for Australia, Canada and New Zealand, all members of the Cairns Group are developing countries (McCalla & Nash, 2007, p. 134).



Figure 9: Cairns Group member countries. Source: www.wikipedia.org.

The position of the group is ambiguous to a certain extent. With regards to market access, the Cairns Group position certainly is close to that of the US (Anania, 2004, p. 94). At the same time, the group argues that the major causes of the distorted world market conditions are government policies as pursued by the US or the EU. Furthermore, Special Safeguards and high tariffs are perceived as restricting exports and therefore counter-productive to market liberalization. The group claims that precisely these restricted exports could satisfy the increasing demand for food in fast-growing developing countries (Nair et al., 2006, p. 8). However, improved disciplines on domestic support and elimination of export subsidies are the areas of discussion where the interests of the Cairns Group meet those of most developing countries.

The Cairns Group has the highest ambitions in WTO negotiations. One of the key goals of the Cairns Group is to ensure that the US will not force their interests on the rest of the world, again. In order to find consensus, which meets the groups' interest, the US and the EU have to be convinced to move towards the group's liberal position rather than towards the more protectionist of other countries such as Japan, Korea, Norway and Switzerland (Anania, 2004, p. 93). Facing this challenging task, it has never been more in need of bargaining power than in current discussions (Anania, 2004, p. 94).

The recent formation of the G20 could be considered a threat to the bargaining power of the Cairns Group. Recently, some developing countries have been observed to attach more importance to their G20-membership than to the Cairns Group. The decision of some influential developing countries as Brazil, India,

China, Indonesia or Egypt to form a group in order to encourage closer cooperation was not unexpected and the G20 is perceived by many to have replaced the Cairns Group as the third force in negotiations (Anania, 2004, p. 97). The G20 is very important as a bloc, as it is present in all negotiations. Furthermore, India and Brazil, which are the leaders of the G20, are also participating in the Group of Five (together with the US, the EU and Australia) and the QUAD (together with the EU and the US), both exclusive and informal groups, which assumed themselves the task of moving forward the negotiations (Cainglet & Stemmler, 2005, p. 14).

Nevertheless, the strength of the Cairns Group is considered to be the result of its developed/developing country memberships, a feature that distinguishes it from other formations. Compared to the Uruguay Round the group enjoys higher credibility with developing countries outside the group. This is mainly due to the participation of South Africa. In enduring discussions the Cairns Group managed to convince India, China and Egypt that their interests match more with the Cairns Group than with other smaller formations (Anania, 2004, p. 93).

Under the condition that the Cairns Group manages to unify the differing interests of its member countries, its diversity is certainly contributing to its bargaining power and enhancing the group's credibility. Thus, it is expected to keep playing an important role in future Doha Round negotiations.

7. The Doha-Round Impasse

In July 2008 a group of ministers attempted to agree on modalities for the WTO's Doha Round, but it broke down in part because they could not agree on the SSM for developing countries (Wolfe, 2009). As earlier mentioned, the term SSM was first used in a Doha Round text in 2004. But actually before July 2008, it was never properly discussed by ministers, apart from a limited way at the 2005 ministerial meeting in Hong Kong (Wolfe, 2009). Neither had it been accurately explored by the various country forums, like the G4 (US, EC, India and Brazil), the Cairns Group and ASEAN.

The reason why the SSM issue was never set on the discussion agenda was mainly because their members had strongly opposing views, which appears clear from the previous chapter. "On this issue, unlike other thorny problems in the agriculture negotiations, the G33 and its adversaries had barely tried to talk to each other. In short, many ministers may as well have been surprised when the SSM blew up in July" (Wolfe, 2009). Ministers were not aware of the importance of the SSM issue; they thought the tough issue was the Special Products (Wolfe, 2009).

The conclusion of the Doha Round was overshadowed by the global financial crisis, which saw many WTO members adopt protectionist measures, including providing subsidies to loss-making manufacturing and service companies, rising tariffs up to the maximum level allowed and imposing anti-dumping to protect local companies and jobs. Moreover, it is generally acknowledged that a Doha settlement would have no short-term impact on food prices. The provisions agreed on will not begin to take effect until after the agreement is concluded and ratified by all the countries and this can take several years (Polanski, 2008).

Considering all the limitations, which developed countries want to impose on a new Special Safeguard Mechanism provision, it's legitimate to ask if a conclusion of the Doha Round actually generates benefits for developing countries. In the next part of this paper, this question will be analyzed more detailed. Further, we assess the adequacy of the proposed SSM with the current circumstances and explore other measures and alternatives beyond the WTO framework, which can improve food security.

III) Options beyond the Doha Agenda

8. Gains for developing countries from the Doha-Round

Conventionally, it is assumed that the Doha Round, also called „the development round“, will produce potential benefits for developing countries. In consideration of the plausible outcomes of the Doha Round, we analyze if the conclusion of the talks is eligible from a development policy perspective and if there are potential gains for developing countries.

8.1. Findings from different trade models

Several Applied General Equilibrium (AGE) models, which are based on computer simulations, tried to analyze and project the impacts and benefits of a range of different trade policy outcomes from the Doha Round on developing countries. Most results of these models are consistent with each other and conclude that overall „any of the plausible trade scenarios will produce only modest gains“ (Polaski, 2006, p. viii). In general, the gains from the Doha Round are expected to be an increase of less than 0.2 percent of current global gross domestic product (GDP) (Polaski, 2006, p. viii). While some countries will benefit from the minor gains, findings from the Carnegie Model of Global Trade for example conclude that „the poorest countries are among the net losers under all likely Doha scenarios“, including Bangladesh, East-African and Sub-Saharan African countries (Polaski, 2006, p. viii). This result is congruent with the CEPII (Centre d'Etudes Prospectives et d'Informations Internationales) model simulation findings (Bouet et al., 2004, p. 14), showing that especially the poorest countries will experience a loss in welfare from agricultural trade liberalization, which is contradictory to the original aim of the Doha Developing Round. This is mainly due to the protection of agricultural sectors through distorting measures by developed countries, which is inefficient for economies altogether (Polaski, 2006, p. 24). Developed countries and a small group of developing countries will benefit from the gains from agricultural liberalization. Sub-Saharan African countries are perceived as the „biggest losers“ in terms of real income (Polaski, 2006, p. viii), as a result of the likely erosion of existing preferential access to the US and the EU after agricultural trade liberalization and competition of Cairns Group countries (Bouet et al., 2004, p. 14).

In addition, the CEPII model predicts an increase, only limited though, of world prices for agricultural products, which will have a negative impact on some net food importers (Bouet et al., 2004, p. 14).

8.2. Need for adequate SDT and further options within the Doha negotiations

On this account, there is generally no doubt that developing countries should dispose of special measures in order to protect their agricultural sectors and vulnerable livelihoods of poor farmers from temporary external shocks. The poorest countries, especially Bangladesh, East-African and Sub-Saharan African countries would have the possibility to counter welfare losses. According to the Carnegie Model, Special and Differential treatment for developing countries allowing them exceptions from agricultural liberalization has „only a small negative impact on other countries' income gains from the Doha Round“ (Polaski, 2006, p. 25). Therefore, developed countries have no reason to grant less extended Special and Differential Treatment to less developed countries.

To ensure that the Doha Round will generate improvements for developing countries with high concentrations of employment in the agricultural sector, the final agreement on Special and Differential Treatment provisions should be adequate and consider the heterogeneity of developing countries (Bouet et al., 2004, p. 15). Even if developed countries already agreed to allow developing countries exceptions from agricultural liberalization on certain products and the use of Special Safeguard Mechanisms in order to enhance food security, further extensions and differentiation are necessary. To date, no agreement has been reached on the rules of designation and the number of Special Products, which can be defined by a country, nor the detailed provisions on Special Safeguard Mechanisms. While most developed countries want to restrict the number of Special Products, it is recommended that the designation of Special Products should be open-ended and without restrictive rules in order to allow developing countries to rise their productivity levels and develop new skills among small farmers (Polaski, 2006, p.71).

Furthermore, the Special Product and Special Safeguard Mechanisms provisions have to be completed by additional measures. Especially Least Developed Countries and those just above the threshold of LDC status need more extensive commitments by developed countries to ensure that they will not be the net losers of the Doha Round.

Duty-free, Quota-free Market Access and Harmonization of Rules of Origin

Even if market access improved since most tariffs were bound at a lower level after the Uruguay Round, developing countries are still suffering from the high tariffs imposed by industrialized countries on competitive products they export. To ensure that developing countries benefit from the outcome of the Doha Round, the issue of market access needs to be tackled (Brown, Deardorff, & Stern, 2003, p. 6). The systematic high tariffs on the most competitive export products of developing countries should be largely reduced or even eliminated. Developed countries should, especially for Least Developed Countries, extend duty-free and quota-free market access for all products in order to allow these countries to achieve economies of scale (Polaski, 2006, p.72). In addition, they should eliminate restrictive Rules of Origin (RoO), which are necessary to identify the country of origin of a product. Even if Least Developed Countries have quota-free and duty-free access to

developed countries for virtually all products, restrictive and inflexible Rules of Origin still remain a substantial barrier (Naumann, 2011, p. 1). To ensure that Least Developed Countries can fully benefit from market access, these Rules of Origin should be harmonized at an international and multilateral level (Naumann, 2011, p. 8). A binding WTO-agreement on preferential RoO for example may be conducive.

Need for reduction or elimination of subsidies

Export subsidies on agricultural products and domestic support programs of the main developed countries, like the United States or the European Union, remain a major factor for distorting agricultural trade in favor of developed countries, leading to unfair competition. These practices have adverse effects on food security, livelihood and employment and can generate possible grave long-term impacts for agricultural production (UNDP, 2003, p. 120). Since industrial countries export their agricultural surplus products at prices below the production cost, they depress world prices, undermine incentives for subsistence farmers in developing countries and cause import surges in lower income countries (UNDP, 2003, p. 120). These trade distorting domestic support measures need to be substantially reduced or phased-out and negotiated within the framework of the Doha Round to set-up a fair and market-oriented trade order. Even if some major countries already promised to phase-out all their direct subsidies on food exports, it will not be an easy path to find an agreement (Shaw D. J., 2009, p. 28).

Provision of Technical Assistance

Developing countries need, due to their restricted resources, adequate technical assistance in order to comply with the WTO obligations and facilitate the integration. But even if the necessity of assisting developing countries has been recognized, it remains still unclear if the negotiators are able to implement this assistance in an efficient way (Brown et al., 2003, p. 7). It should be avoided to leave the responsibility of providing technical assistance to the individual countries. Therefore, the negotiators should, with regard to the ill-equipped and relatively small World Trade Organization, set up an additional institutional facility, which fulfills the above-mentioned functions (Brown et al., 2003, pp. 7-8).

Additional Development assistance for agriculture

To ensure that subsistence farmers will not remain in low-income and low-productivity occupations, the final Doha agreement should include additional development assistance for agriculture. Special and Differential Treatment should mainly provide enough time to help farmers to become more productive, find other occupations and adjust to changes in the world trade of agriculture. As developing countries do not dispose of sufficient resources to improve their techniques and enhance market access, they have to rely on additional development assistance from developed countries. (Polaski, 2006, p. 72)

The 'Development box'

Another idea to ensure agricultural development and support low-income farmers is the so-called 'development box', which has been proposed for a revised Agreement on Agriculture by several developing countries. From a human development perspective, it appears to be the most comprehensive of the several proposals, because it grants development policy flexibility to developing countries and goes beyond food security. In order to achieve human development and reduce poverty, developing countries would have the possibility to pursue policies, which increase agricultural productivity and reduce their vulnerability to price fluctuations. (UNDP, 2003, pp. 138-139)

The development box should only apply to developing countries and include measures such as enhanced tariff rate quotas, exemption of food security crops from tariff reductions and a simple and transparent Special Safeguard Mechanism (UNDP, 2003, pp. 138-139). These measures should also allow a rise of bound tariffs on food security crops and input and investment subsidies for developing countries in order that they are able to increase agricultural production. Therefore, a positive product-list of such food security crops and other crops, which are important to the livelihood of low-income farmers, needs to be developed on the basis of clear, enforceable criteria. (UNDP, 2003, pp. 138-140)

Nevertheless, there are some critics of the development box. According to them, it will generate benefits for small farmers on the burden of poor urban consumers in developing countries, which will be exposed to higher food prices (UNDP, 2003, p. 140). In addition, some countries oppose the idea to grant developing countries further exceptions as it could increase trade distortion (WTO, 2002).

In any case, with an inclusion of the development box in the revised AoA, the claim of a "development round" can certainly be realized. This proposal constitutes a broader approach to the needs of the agricultural sector in developing countries and connects trade with human development.

Interim Conclusion

If developed countries are not willing or able to grant a combination of measures to developing countries, including Special and Differential Treatment, market access commitments, reduction of subsidies and technical assistance, or even a development box, the agricultural liberalization of the Doha Round will generate, in contradiction to conventional wisdom, a loss in welfare for most developing countries and negatively affect the poorest of the poor. The Round would cause adverse effects on poverty and would not meet the imperative of a balance between interests of developing and developed countries. In this case, there would be no reason from a development policy perspective that the so-called Doha „Development“ Round should be concluded.

In addition, there is a doubt if Special and Differential Treatment within the WTO is enough to alleviate food insecurity and if it is an adequate instrument to solve current problems in the world agricultural market. Since 2008, the situation of this market has dramatically changed, when prices were abruptly rising from a

record low to a record high. This change of circumstances constitutes a new reality. The following chapter provides a brief synopsis of the 2008 food price crisis, since this new situation constitutes a major new factor in the context of food security.

9. The 2008 Food Price Crisis

In the course of the 2008 financial crisis, the world experienced an abrupt and strong increase of food prices. The crisis didn't only take place within the financially integrated markets of industrial states, but has spread all over the world. A crisis is characterized as a "striking change of circumstances", "a decisive moment" or "a turning point" (<http://machaut.uchicago.edu>). The 2008 food crisis is a short-term occurrence and should therefore not be confused with the structural deficiencies of food insecurity. For that reason we will use the term "food price crisis", instead of "food crisis", since the 2008-crisis consists of a short-term emergency concerning the global food prices. Food insecurity in general refers to the long-term malfunction of the global food system, which is a structural and long-term failure and can therefore not be qualified as a crisis (Karrer, 2009, pp. 8-10).

In 2008, millions of people were exposed to increased food insecurity due to the huge rise in global food and fuel prices. According to the World Bank, there has been an increase in the average world price for maize of 300 percent, "the price of wheat has increased by 127 percent, and the price of rice has gone up by 170 percent" between 2005 and 2008 (Mitchell, 2008, p. 3).

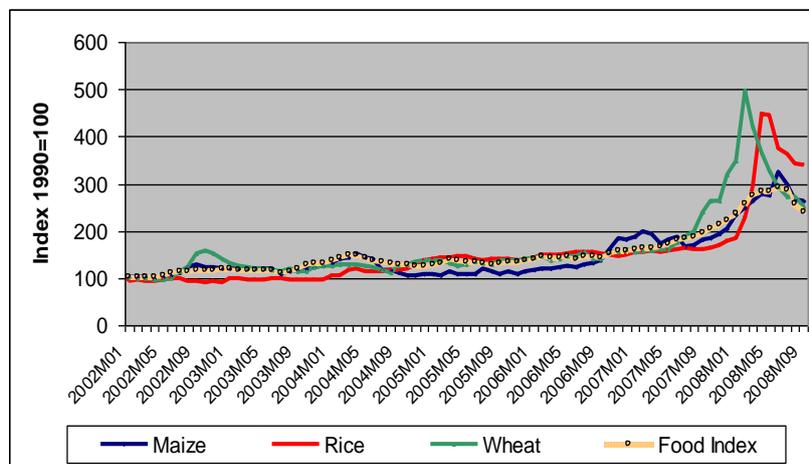


Figure 10: Rising Food Prices. Source: (UN, www.un.org).

The global food price crisis is estimated to have caused a 3-5 percent increase in global poverty, equivalent to a total of 100 million more impoverished people (Karrer, 2009, p. 12). By the end of 2008, the food prices dropped but stayed at a significantly higher level compared to the year 2005. The FAO expects a high volatility in food prices for the future (www.fao.org), which is reflected by the current peak of food prices that reach the same level as in the year 2008⁴.

⁴ For more information, please consult the figure in appendix 2.

The world food price crisis has been caused by a combination of circumstances and factors. There has been heavy pressure on the demand side, caused by the combination of population growth and higher income. Demographic changes have led to changes in eating habits. For instance, urbanization entails a shift from the consumption of local food to a more internationally influenced diet and therefore, increased dependence on imported staple food. Higher income has led to an increased demand for meat, which in turn increased the demand for feed grains for animals. According to the World Bank, “the projected increase of the world’s population from the current 6 billion to 9-10 billion at the end of the century will be attributable almost entirely to population growth in developing countries” (Soubbotina & Shera, 2000, p. 22). This poses many challenges to developing countries, insofar as agricultural productivity and global food stocks are declining.

The surge in food prices has been anticipated by a rise in oil prices, which increases production and transportation costs, hence, affects the supply side of food. The depreciation of the US dollar, crop failure due to difficult climatic conditions, financial market speculations as well as protective measures in form of export restrictions are other factors recognized to have caused the food prices to go up (Headey & Fan, Anatomy of a crisis: the causes and consequences of surging food prices, 2008, p. 378).

Finally, a strong explanation for the rapid rise in food prices is the increased production and use of biofuels, especially in the U.S and the EU (Headey & Fan, Anatomy of a crisis: the causes and consequences of surging food prices, 2008, p. 8). In his research paper for the World Bank, Donald Mitchell estimates that “70-75 percent of the increase in food prices is due to biofuels” (Mitchell, 2008, p. 17). The production of bio-ethanol requires extensive factor input. Experts claim “filling the gas tank of a sports utility vehicle (SUV) with ethanol requires more than 450 pounds of corn – enough calories to feed one person for a year” (Karrer, 2009, p. 20). Therefore, only few of the current biofuel programs are economically and ecologically viable. The surge in oil prices is strongly linked to the demand in biofuel (substitution effect) and the increased production costs. Since most of the mentioned factors are interdependent, it is difficult to give an accurate number about which aspect is responsible for how much of the food price crisis⁵.

The poor in developing countries are the most exposed to and suffered the greatest setback from the rise in food prices. According to the German economist Ernst Engel, there is an inverse relationship between income per capita and the weight of food expenditure: as income rises, the *proportion* of income spent on food falls, even if *actual* expenditure on food rises (Ogaki, 1992, p. 1027). People with low income are extremely vulnerable to changes in food prices, since they spend, on average, half of their household revenues on food (Mitchell, 2008, p. 1).

⁵ For more detailed information, please consult the table of appendix 2.

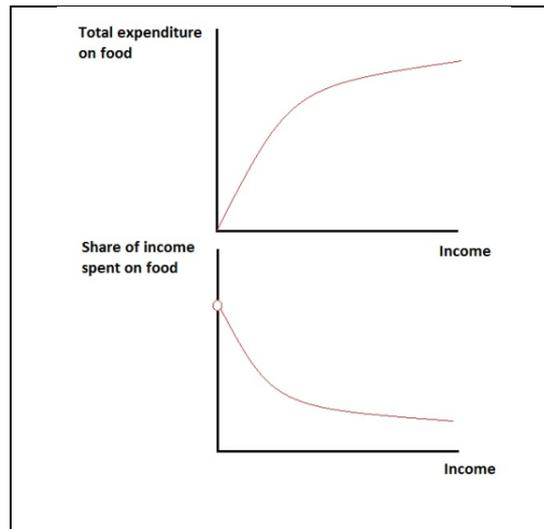


Figure 11: Engel's law: the inverse relationship between income and food expenditure. Source: www.wikipedia.org.

Urban populations are the most vulnerable, because they rely 100% on the market price, especially for traded products, not having access to own land resources. The rural population, on the other hand, rather relies on local products and can avoid this heavy burden by producing its own food.

From an economic perspective, a rise in prices always affects both, the consumer- and the producer side. We have seen that consumers, especially the ones to whom food constitutes a large part of consumption expenditure, suffered heavily from this situation. Hence, some producers must have benefited from the rise in prices. Small-scale farmers in developing countries, however, have not been able to take advantage of higher food prices, since they face too many constraints to provide a quick supply response. In contrast, large international corporations have benefited considerably from higher food prices.

Rising agricultural commodity prices caused food riots and social unrest in several countries, since political stability is closely interconnected with food security (Shaw J. D., 2009, p. 213). The 2008 food price crisis constitutes a new situation in the struggle against food insecurity and policies need to be reconsidered in the light of this new reality. In the following chapter, several instruments and measures, which are more adequate to respond to the current circumstances and improve food security in a sustainable way, are outlined.

10. Instruments beyond the WTO-framework to improve food security

As already mentioned in the first part of this paper, a combination of several key factors generates structural food insecurity in low-income countries. Although better trade conditions and Special and Differential Treatment within the WTO framework may be important instruments to enhance food security, they are not the only ways to solve the problem. We identified other components that can contribute to sustainable food security. Those are increased productivity of low-income farmers, targeted national policies in developing countries and a reduction of commodity price volatility. It is necessary to provide targeted measures in these sectors in order to achieve that more people are able to meet their nutritional requirements.

In the following, several instruments are proposed and outlined more precisely.

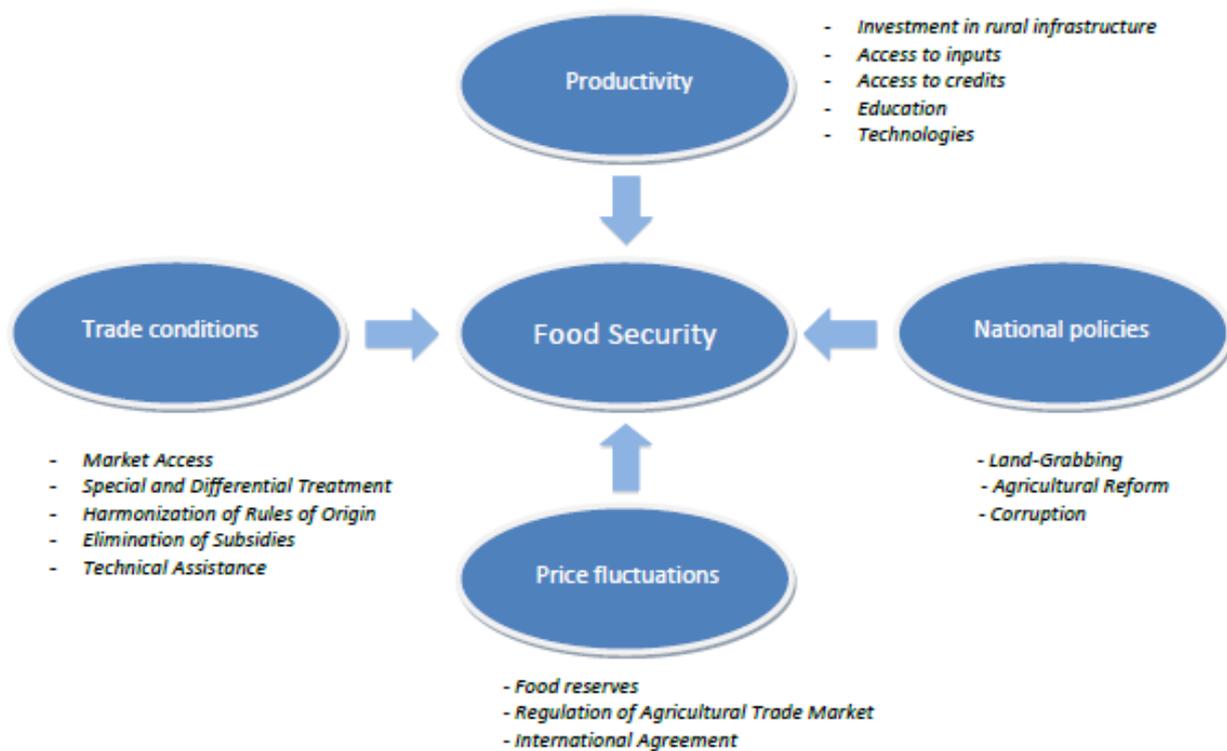


Figure 12: Factors that affect food security. Source: Own construction

10.1. Agricultural Investment and Increasing Production

Most developing countries have to significantly raise their agricultural production to meet their food security needs, also with regard to their rapid population growth, which puts additional pressure on food demand. Domestic agricultural productivity has been identified as a key factor to improve food security given that more than 90 percent of consumption in low-income and food-insecure countries depends on domestic food production (Shapouri & Rosen, 1999, pp. iii-iv). Developing countries and especially Least Developed Countries meet several constraints to boost their agricultural productivity such as inadequate inputs, scarce land, lack of infrastructure, unavailable education of farmers and deficient technologies. In addition, they are confronted with drought or floods caused by changing climate conditions. To achieve a better performance of the food production sector, these constraints need to be recognized and included in future country-specific policies and programs (CSIS, 2010, p. 7).

Several factors, which are enumerated in the following, have been identified to contribute to growth of agricultural productivity in food-insecure countries (CSIS, 2010, pp. 7-10).

Increase crop yields. Smallholder farmers should be supported to achieve better access to fertilizers, improved varieties of seeds, small irrigation systems and to information on how to use them. Most of them are

constrained to obtain them because of a lack of access to credit. This problem could be tackled by implementing financial services, for example extensive micro financing.

Investment in rural infrastructure. Investments in rural infrastructure, such as storage and processing facilities, packing systems and roads are crucial. Developed countries should engage in public-private partnerships or multilateral institutions like the World Bank to support rural infrastructure projects.

Improve Cultivation Practices. Another constraint to increased agricultural productivity, especially in Sub-Saharan African countries, is continuing soil degradation as a result of drought and overuse. It is necessary to teach farmers sustainable soil cultivation methods in order to increase food output.

Techniques to reduce post-harvest losses. Most food-insecure developing countries suffer from significant losses of crops after they were harvested due to several factors like pests and spoilage. Providing innovative and simple techniques, such as small-scale silos, would directly increase the income of subsistence farmers.

It should also be considered that a comprehensive approach, which wants to achieve a beneficial outcome for smallholder farmers, should be in accordance with the national strategies of the developing countries and include the inputs of farmers or their representatives, the private sector and key stakeholders (CSIS, 2010).

10.2. Price Volatility in International Markets

Unpredictable fluctuations of world food prices have a significant negative impact on low-income farmers and are a threat to global food security. High volatility of food prices still prevails after the food price crisis in 2008, which has been caused by inadequate national policy response, speculation and crop export shortfalls (Peterson, 2010). In addition, structural factors of the world food economy contributed to recent price movements, such as an increased demand of biofuels and animal feeds (Falcon & Naylor, 2010, S. 698).

Especially speculation within the commodities exchanges, which mainly determine international prices, is a common practice and has been identified as a major root cause for sharp price increases and price variations of agricultural products during the last years (Cooke, 2009, S. 30). To date, no intergovernmental agreement has been reached on speculation in agricultural futures markets, although most G20 ministers agree that something needs to be done to mitigate the negative effects of price instability for food security (Ruitenbergh, 2011). It is necessary that policymakers develop instruments to reduce agricultural food price risks and improve agricultural market transparency. Apart from international regulation of the commodities exchange market, other interesting measures have been proposed. For example, the creation of a global food grain reserve by international institutions, which can be purchased during a crisis (Ruitenbergh, 2011).

10.3. National Policies

We identified three essential issues on the domestic level that influence the food sovereignty of a country: the issue of land-grabbing, the need for agricultural reforms and the fight against corruption. In the following, we will briefly discuss each of these topics.

Land-Grabbing

Land-grabbing is defined as a “large scale land acquisition – be it purchase or lease – for agricultural production by foreign investors” (FIAN, 2010, p. 8). The land is generally acquired by transnational corporations (TNC’s) or by foreign governments. The scale of the land is disproportionate in size compared to the average land holding in the region. By purchasing land in developing countries, the resource-poor industrialized states secure their sustained, long-term supply of food and bio-energy (Borras & Francott, 2000, pp. 514-515). Various estimates place the total lands already transacted at twenty to thirty million hectares between 2005 and mid-2009 (Borras & Francott, 2000, p. 508), this corresponds to a landmass approximately seven times the size of Switzerland. The rapid expansion and extent of such land-deals, however, raise important concerns in the developing world.

Usually, the transactions involve close partnerships between foreign investors and the national governments. The latter is often playing a key facilitative role in such deals (Borras & Francott, 2000, p. 309). These arrangements often lack transparency and foster political patronage and corruption. They often result in the displacement of people, thus constituting a major cause of urban poverty. The lack of security of possession and property has serious social and psychological consequences for the peasants and discourages long-term investment in their communities.

Since it is still widely believed, that land deals produce a win-win situation, it is important to raise awareness that such agreements constitute a real threat to rural communities in developing countries. There have been attempts to set up international frameworks, which monitor these bilateral transactions; the most memorable is the “Code of Conduct” (CoC). However, this Code still contains strong weaknesses. After thorough research on the topic, Borras and Francott concluded that “a CoC-framed response to land-grabbing is likely to facilitate, not block, further land-grabbing and thus should not be considered, even as a second-best approach” (Borras & Francott, 2000, p. 521). Land-acquisitions only make sense if the land is “unutilized”, which almost never is the case. In our opinion, efforts should be concentrated on outlawing land deals altogether, rather than creating international frameworks that support them.

The main task is to change policies on a domestic level. This could also take place through offering legal advice and representation to the poor in order to enhance their negotiation skills (for example take eviction cases to court). However, a development-based response to global land-grabbing can gain traction only through a concerted effort by state and non-state actors operating at international, national, and local levels (Borras & Francott, 2000, p. 523).

Agricultural reform

As already mentioned above, it is crucial for developing countries to raise their productivity in the agricultural sector. This, in turn, requires long-term investments, thus, financial resources that most of the poor countries are not able to devote. Gross inequality in the control of land constitutes a principal obstacle to broad-based rural development in many developing countries. An agrarian reform, which provides secure and equitable land rights by legalizing informal settlements, would clearly improve the investment climate. A beneficial policy environment with an emphasis on a private property rights system, transparency through the rule of law and contract security, would encourage potential investors to provide financial and technical support to rural communities. More investments in this sector would create new farm jobs, raise smallholder incomes, facilitate transfers of new technologies in production and processing, increase production of food crops, build up infrastructure and improve access to basic services (e.g., health and education) in rural areas. It could also open up new export opportunities to earn foreign exchange and improve food sovereignty (Borras & Francott, 2000, p. 511).

Corruption

“No initiative whether on food security or poverty alleviation or anything else for that matter will work in the absence of ethical public behavior as a result of poor governance culture” (Aziz, 2001, p. 2). Corruption discourages investments, distorts market operations and has a negative impact on the development process and food security. Hence, it must be qualified as a key weakness on the domestic level. It is crucial for these governments to ensure more transparency. They need help in restructuring their governance system, policies that develop and strengthen institutions and efficient anti-corruption laws in order to strengthen their competencies in political governance (Aziz, 2001, p. 4).

Most of the factors described above are co-dependent and mutually reinforcing each other. Let's take the production of biofuel as an illustrative example: Biofuel is responsible for higher crop prices and the increase of land-deals. The latter encourages political patronage and corruption and decreases biodiversity. Corruption, on the other hand, discourages investments, leading to a stagnation of productivity, which in turn renders small-scale farmers in developing countries vulnerable to price fluctuation. This line of correlations is almost infinite and constitutes just one example of social, economic, ecological and political factors interacting with each other. Thus, looking at food security only from a purely economic point of view is inaccurate. The WTO-framework certainly is and will remain a very important multilateral forum for trade related issues. However, this chapter illustrated that food security is a multi-faceted and very complex issue, thus asking for a more comprehensive approach. In the following, we will present institutions and development programs that try to give a more flexible and interdisciplinary response to the problem of food security.

11. Alternative organizations

There are numerous international and non-governmental organizations that dedicated their work to enhancing food security and alleviate poverty in the world. In the following section, we will present some of the most important institutions and discuss their impact on food security.

The **Food and Agriculture Organization of the United Nations (FAO)** leads international efforts to defeat hunger. Serving both developed and developing countries, FAO acts as a neutral forum where all nations meet as equals to negotiate agreements and debate policy. FAO is also a source of knowledge and information. They help developing countries and countries in transition to modernize and improve agriculture, forestry and fisheries practices and ensure good nutrition for all.

The **IFAD** is a specialized agency of the United Nations that was established as an international financial institution in 1977 as one of the major outcomes of the 1974 World Food Conference. In the Conference, which was organized in response to the food crises of the early 1970s, it was determined that IFAD's primary purpose was to finance agricultural development projects in developing countries.

The **World Food Programme (WFP)** is the world's largest humanitarian agency fighting against food insecurity worldwide. WFP strives to eradicate hunger and malnutrition, with the ultimate goal in mind of eliminating the need for food aid itself.

The **Committee for World Food Security (CFS)** is the United Nations' forum for reviewing and following up on policies concerning world food security. It also examines issues which affect the world food situation. It was established as a sub-committee of the FAO, as a result of the food crisis of the 1970s, upon recommendation from the 1974 World Food Conference (www.fao.org, 2011).

FAO, IFAD, WFP and CFS are four institutions which are headquartered in Rome. They basically share the same vision and pursue the same goals, which constitute a solid basis for enhanced collaboration. They could for example strengthen their cooperation by declaring a "common initiative on world hunger, a Global Partnership Program in order to pool their resources (financial, technical, staff and skills) towards achieving agreed objectives with a common management structure" (Shaw J. D., 2009, p. 215).

	IFAD	WFP	FAO	CFS
Vision	IFAD's goal is to empower poor rural women and men in developing countries to achieve higher incomes and improved food security.	The vision of WFP is a world in which every man, woman and child has access at all times to the food needed for an active and healthy life.	A world free of hunger and malnutrition where food and agriculture contributes to improving the living standards of all, esp. the poorest, in an economically, socially and environmentally sustainable manner.	The vision of the reformed CFS is to be the most inclusive int. and intergovernmental platform for all stakeholders to work together to ensure food security and nutrition for all.
Objectives	<ol style="list-style-type: none"> 1. secure access to land and water, and improved natural resource management and conservation practices 2. Improve agricultural technologies and effective production services 3. Offer a broad range of financial services 4. Transparent and competitive markets for agricultural inputs and produce 5. Opportunities for rural off-farm employment and enterprise development 6. Local and national policy and programming processes 	<ol style="list-style-type: none"> 1. Save lives and protect livelihoods in emergencies 2. Prevent acute hunger and invest in disaster preparedness and mitigation measures 3. Restore and rebuild lives and livelihoods in post-conflict, post-disaster or transition situations 4. Reduce chronic hunger and undernutrition 5. Strengthen the capacities of countries to reduce hunger, including through hand-over strategies and local purchases 	<ol style="list-style-type: none"> A. Sustainable intensification of crop- and sustainable livestock production. B. Sustainable management and use of fisheries and aquaculture resources. C. Improved quality and safety of food at all stages of the food chain. D. Sustainable management of forests and trees. E. Sustainable management of land, water and genetic resources and improved responses to global environmental challenges affecting food and agriculture. F. Enabling environment for markets to improve livelihoods and rural development. Improved food security and better nutrition. G. Improve preparedness for, and effective response to, food and agricultural threats and emergencies. H. Gender equity in access to resources, goods, services and decision-making in the rural areas. I. Increase and more effective public and private investment in agriculture and rural development. 	<ol style="list-style-type: none"> 1. Coordinate a global approach to food security 2. Promote policy convergence 3. Support and advise countries and regions 4. Coordinate at national and regional levels 5. Promote accountability and share best practices 6. Develop a global strategic framework for food security and nutrition

Table 2: IFAD, WFP, FAO and CFS; a comparison. Source: own construction; IFAD (2007), FAO (2010), CFS (2010), www.wpf.org.

In our view, it is crucial that these organizations work more closely together, but most importantly, we believe that they should not only combine their efforts in fighting world hunger, but focus on their core competencies. In Table 2 we highlighted the core objectives and strategies of each of the organizations, such as declared in their respective strategic frameworks. A possible division of work could be the following: The IFAD would be responsible for improving the investment climate in developing countries; the CFS, which is a negotiation platform, would increase the negotiation skills of developing countries; the FAO would try to increase productivity of the agricultural sector; finally, the WFP would install safety nets for crisis situations. This way, the core factors that we identified as leading to food insecurity, are covered.

Conclusion

The current trade regime has generated a situation wherein many developing countries have become net food importing countries. They fell victim to various import surges, which endanger their domestic industries and food sovereignty. Thus, developing countries appear to be the net losers of agricultural sector liberalization.

The Uruguay Round established the Special Agricultural Safeguard mechanism, which allows imposing additional tariffs on agricultural products in case of an import surge or a price depression. Its purpose is the protection of domestic market and farmers. The weakness of this instrument is on the one hand, its high costs and on the other hand, the fact that only a selection of countries is allowed to implement it. In order to counterbalance this injustice, a group of developing countries drafted a new instrument: The Special Safeguard Mechanism. This mechanism is a central issue on the current Doha Round agenda. The WTO Members do not agree upon several crucial points of the SSM and it seems developed countries try to impose more and more conditions, which could undermine the instrument's efficiency.

The analysis of the countries' positions in regard to this new mechanism showed that there is not a classical division between North and South. Instead, the picture is more complex. The disagreement among developing countries is due to this group's heterogeneity: China's development degree is hardly comparable to Zambia's. In our opinion this reality must be taken into account in the WTO negotiations in order to build a fair and efficient Safeguard.

The 2008 food price crisis and the current high level of prices revealed the weaknesses of the global food system. However, a crisis also presents opportunities for positive change. The recent crisis has certainly attracted renewed attention to agricultural development issues. It is widely recognized that special treatment for developing countries' agricultural sector will be needed. Yet, the food price crisis has confronted the world with a new reality, to which the SSM and other proposed instruments within the WTO-framework did not find an accurate response. The concerns of many low-income developing countries about the Doha Round outcome thus appear to be justified.

Food security is a multi-faceted and complex issue and only one of the many factors that influence this field is trade-related. Searching for approaches in purely economic terms will not bring about a satisfactory solution. It is thus important to realize that there is no "cure all" for this matter. There are various organizations that implement a comprehensive and interdisciplinary approach, however, during our research, we realized that there are far too many institutions, sub-institutions, agencies and bureaus. These institutions all share similar visions, objectives and strategies. The proliferation of institutions has led to such a dense web of arrangements, that it is highly probable that the efficiency of their work is compromised. The numerous propositions stay very vague and general, nothing substantial materializes. Efforts should therefore be made

to bring clarity into the strategic objectives of each organization and to ensure a clear well-defined division of labor between the agencies.

The international policy-making community has an obligation to redress its approach. After all, for almost one billion people, hunger constitutes a daily reality. However, finding a balance of measures that benefits all developing countries will be a major challenge.

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Appendix

Appendix 1: Import Surges in the Philippines

BOX 1

Import Surges in the Philippines

Since the year of 2000, the Philippines are one of 22 developing countries, which have the right to implement SSG measures under the Agreement of Agriculture to prevent import surges. Like many developing countries, the Philippines belong to the group of Net Food Importing Countries (NFIC) and they have to deal with the displacement of domestic production by imports. Between 1999 and 2004, the Philippines experienced various surges of commodity products, mainly onions from China, which were priced at a lower level than those domestically produced. Consequently, most Special Safeguard duties have been applied on these low-price onion imports surges. In addition, import surges of tobacco constitute another concern. The Philippines rely heavily on these two products as they contribute an important part to the rural livelihoods. Import surges, which put pressure on domestic prices have therefore a negative impact on smallholder farmers.

Nevertheless, high levels of imports are not only caused by the low prices of imports, but as well by unilateral tariff reduction, exchange rate variations and unfavorable weather conditions. Furthermore, it was difficult to prove evidence of injury and the causality of import surges and lower domestic production and sales. Increased imports might have been one reason for injuries. Other factors constitute quality difficulties of the local products, lack of infrastructure, inadequate storage facilities, outdated technologies and increasing costs of inputs for production like seeds and fertilizers.

Source: (FAO, 2006)

Appendix 2: The World Food Situation



Source: www.fao.org.

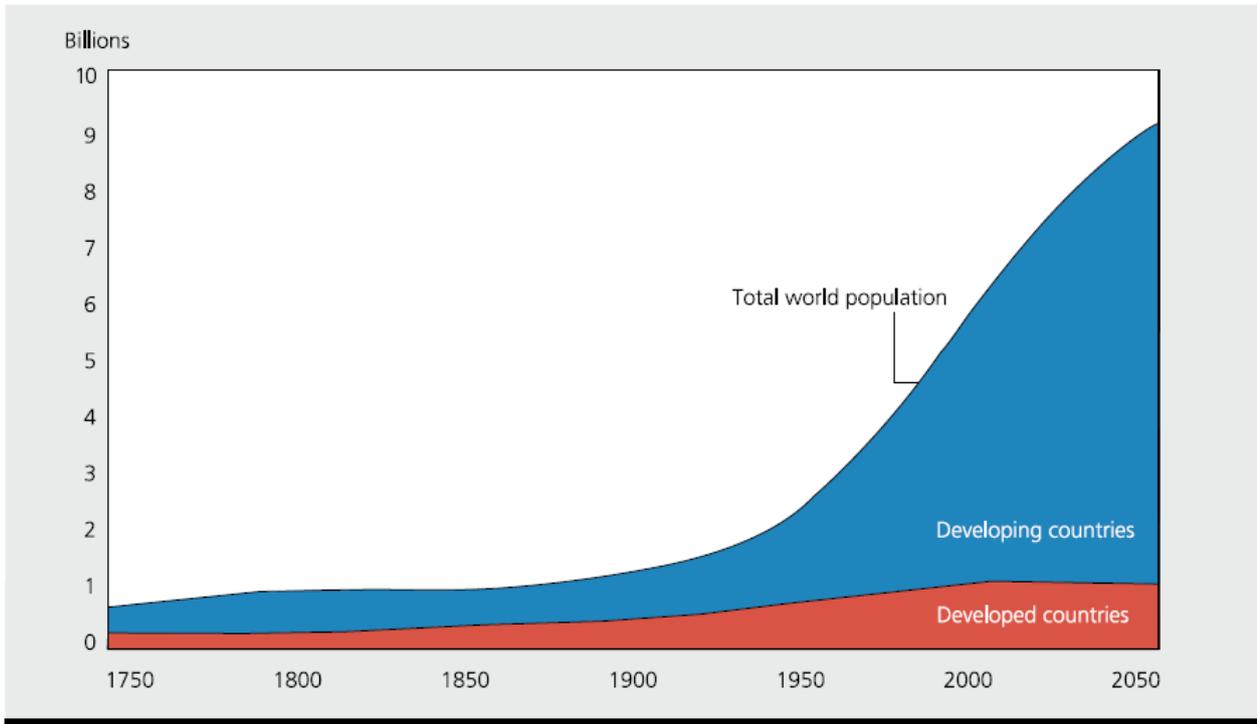
Appendix 3: Possible Explanations for the 2005-2008 food price crisis

Table 2. Proposed explanations for the 2005-2008 global food crisis, and their strengths and weaknesses

Explanation	Strengths	Weaknesses
Growth in demand from China and India	Partly explains rising oil prices, partly explains demand for oilseeds.	China and India are self-sufficient in most major grains, but have not increased imports of any staple foods.
Financial market speculation	Increased financial market activity coincides with the rise in prices.	Higher prices induce speculation, so the causality argument is weak. There is not yet clear evidence of a causal link.
Hoarding; export restrictions	Price rises for rice were preceded by export restrictions in countries that account for 40% of global rice exports.	Wheat, maize and soybean price rises generally preceded restrictions, and the biggest players did not impose restrictions.
Weather shocks	Australian wheat production was 50-60% below trend growth rates in 2005 and 2006; there were also moderately poor harvests in US, Russia and Ukraine.	Only explains wheat prices. Also, production shocks of this magnitude are common in international wheat markets, and in Australia over the last 15-20 years.
Productivity slowdown	Production and yield growth of rice, wheat and maize has slowed down over the last 20 years or so.	Productivity has slowed, but it is not clear that demand outpaced supply over this time period.
Low interest rates	Low interest rates ought to increase demand for storable commodities, increase stocks, and shift investors from treasury bills to commodity contracts.	Stocks/inventories of gold and oil are reasonably high, but stocks of staples are low; there is no clear evidence that futures markets are affecting spot prices (see above).
Depreciation of the US dollar (USD)	Real agricultural trade-weighted index for US depreciated 22% over 2002-07; USD and commodity prices are covariate.	No critical weaknesses; Mitchell (2008) calculates that this factor probably increased dollar-denominated prices by 20%.
Rising oil prices	Have risen sharply, somewhat preceding food prices; large component of food production and transport costs, especially in wheat and corn production.	No critical weaknesses, although some authors expect the effects of rising oil prices on food prices to be more delayed and to have a larger impact via biofuel demand.
Biofuel demand	Has surged since 2003 and consumed 25% of US corn crop in 2007; two-thirds of global maize exports are from US.	Strong for corn, less so for wheat, although substitution effects could account for rises in other products.
Decline of stocks	Low stocks are traditionally associated with increased sensitivity to shocks; stocks of all major cereals declined prior to the price surge.	Netting out China makes the decline in stocks less dramatic. Unless stock declines result from policies, declines only represent the effects of other factors.

Source: (Headey & Fan, Anatomy of a crisis: the causes and consequences of surging food prices, 2008, p. 378).

Appendix 4: Expected world population growth



Source: (Soubbotina & Sheram, 2000, p. 16).