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# Food Security and International Trade in Agriculture: Short and Long Term Evidence from Low Income and Food-Deficit Countries (DCs)

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## Abstract

In this article, we study the correlation between food security and international trade. According to the Food and Agriculture Organization of the United Nations (FAO), we speak of food security "when all people, at all times, have economic, social and physical access to sufficient, safe and nutritious food that satisfies their nutritional needs and dietary preferences to enable them to live active and healthy lives". Since 1980, as a result of the structural adjustment programs (SAPs), low-income and food-deficit countries (DCs) have been liberalizing agriculture and opening up trade, which has sometimes resulted in the deterioration of their balance sheets, while developed countries have always maintained their agricultural protectionism to the detriment of these developing states, where their returns have been increased (domestic support and export subsidies). In addition to this trade imbalance, persistent instability in conflict-ridden regions, adverse climatic events in many parts of the world, and economic slowdowns that have affected the most peaceful regions and worsened food security explain the ongoing crises in food industry in many developing countries. Indeed, food security is a goal displayed by all countries but can it be achieved? For this research, we attempted to show some of the weaknesses of international trade in agricultural, as well as some improvements that can be made. Also, agricultural support infrastructure in developing countries needs to be set up to unable the processing of raw materials and therefore achieving value addition. Developing countries should be allowed to impose duties when their balance of payments is extremely deficient.

Keywords: Food security, Agricultural liberalization, International trade in agriculture, Developing countries

## INTRODUCTION

This paper evaluates the impact of international trade in agribusiness on food security. The question of food security is one that only few countries seems to have found an answer to. And the method for resolving the issue of food security often times involve some level of trade with other countries. With an increase in population of more than 35% (Foley, 2014) in 2050, world governments will be faced with the need to feed nine billion people. For this to be achievable, agricultural production should double, significantly surpassing population growth. However, with around 821 million in 2017, compared to around 804 million people hungry in 2016 (UN, 2017) in the world, global food security does not seem to be achievable. We can observe that very often trade agreements benefits one set of countries more than others.

#### LITERATURE REVIEW

So far there is no empirical theory that can systematically show the effect of international trade and food security. Therefore, we rely on previous research and books in the area of food security and international trade and make a qualitative analysis to deduce the relation between them.

According to studies conducted by UNDP (1997) and Madeley and Solagral (2001), free trade and food security has a correlation. A recent study by Matthews (2014) has highlighted the close link between international trade and food security. International trade directly affects food security through impact on food availability and indirectly through the impact on food accessibility and stability (Diaz-Bonilla et al., 2003; Smith, 1998:). Huchet Bourdon & Laroche Dupraz (2014) analyzed the impact of international trade on the determinants of food security. Trade influences food security through its impact on food availability, employment, income distribution, poverty and trade policy directly affect government revenue through trade taxes and indirectly by its impact on and variability of growth (Diaz-Bonilla & Ron, 2010). Matthews (2014) highlights the role of an open and predictable trading system in the governance of global food security. With economic liberalization, pressure for the liberalization of agricultural trade has also increased. Overall, the impact of trade liberalization on food security is uncertain and complex. More than 30% of the global workforce works in agriculture and about 70% of them are most vulnerable to food insecurity. One-tenth of global cereal production goes into international trade (World Bank, 2012). The contribution of agriculture to total merchandise trade was 9.2% (WTO, 2013). The share of developing countries in agricultural trade is very low and least developed countries (LDCs) account for only 1% of agricultural trade (World Bank, 2012). As a result, the structure of world trade is severely affecting the livelihoods and food security of small farmers. Proponents of

liberalization argue that open trade advocates promote more efficient agricultural production, increase food availability, lower food prices and enhance food security. Agricultural trade is only beneficial if it provides protection for farmers, food security and the environment. According to the theory of comparative advantage, if countries specialize in goods for which they have the lowest opportunity costs and then engage in trade, they will be better off than if they do not. had not done without the exchanges. Each country faces different opportunity costs for the production of different goods and has a comparative advantage in. According to FAO (2003) and the World Bank (2007,2012), more open trade policies contribute to food security through competition, specialization and efficiency, and will result in increased food production, worldwide. An increased food supply is expected to result in lower food prices, better access to food and improved food security. Efficiency gains should contribute to economic growth and the creation of more jobs, higher incomes and improved access to food for non-farm populations. As a result, trade allows less well-endowed countries to rely on others to provide food for import when their own production is insufficient (World Bank, 2012). As a result, trade allows less affluent countries to rely on other countries to provide food by importing when their own production is insufficient (World Bank, 2012). For example, international trade in food is more than a moral obligation, particularly in the context of climate change, which threatens agricultural production and makes food security less and less sustainable. (World Bank, 2012). Agricultural protection measures such as export taxes, export restrictions, tariffs, government-run marketing boards and public stockholding are extremely inefficient policies, these policies generate distorted prices resulting in lower levels of production and higher food prices, thus hurting the poor and increasing food insecurity (Martin & Anderson, 2011, World Bank, 2012). In addition, they also make agricultural producers in developing countries more vulnerable by denying them market opportunities. Export restrictions have been a major factor in the recent outbreak of prices of food products (Headey & Fan, 2008). There are disagreements about the role of trade in food security in international policy circles (FAO, 2003). Therefore, it has been asked to limit the use of trade to ensure food security (De Schutter, 2011). At the same time, there are criticisms of the theory of comparative advantage (Prasch, 1996), particularly with respect to inappropriate assumptions applied to trade with developing countries and their implications for food security. Thus, the link between the liberalization of agricultural trade and food security is not simple. Trade policy reform creates both winners and losers (Winters et al., 2004, Harrison, 2007), as well as no net effect on food security (Greenfield et al., 1996). Chowdhury et al. (2006) revealed the impact on food security of the urban poor and landless. Dietary nutrient intake has increased despite decreasing staple diet. Self-sufficiency increases for some products but not for others. However, Greenfield et al. (1996) noted that trade had no net effect on the food security of developing countries. According to Bamou et al. (2006), household food security has decreased even though national food security has improved.

# Hunger and food security

The MDGs (Millennium Development Goals) for 2017 aimed at eradicating extreme poverty and hunger. There is a close correlation between these two scourges, because the main cause of hunger is poverty and vice versa. In other words, to reduce hunger, we must also eliminate poverty. According to UN data, the number of poor in 2010 has been halved compared to 1990. According to the definition, poor are all people living with less than 1.25 USD a day. It is clear that nearly 1.2 billion people still live in extreme poverty. Today, it is estimated that about one billion people are undernourished and more than a hundred million children under the age of five are still underweight and undernourished.

Food security is an important concept in the fight against /hunger. To do so, it must have four dimensions: availability, accessibility, use and stability (1 figure 1). The World Food Summit held in Rome Italy from 13 to 17 November 1996 propose this concept of food security when "every person, at all times, has physical and economic access to sufficient, healthy and nutrient that meets their dietary needs and dietary preferences for an active and healthy life "(FAO, 1996). But it would be difficult to provide a simple explanation for the food insecurity of a country or community. The causes are often complex and multiple According to Amartya Sen (1981, pp.1-8) people lost their lives simply because they did not have enough food. This is illustrated by the empirical example of South Sudan where food security is insufficient because of conflict. Although, the land of southern Sudan has a very fertile soil at over 70% suitable for agriculture, only 4% have been used (Diao et al, 2012). On the other hand, one of the contrasts is that some countries are well ranked in the Global Food Security Index (GSI) not because of their national economic sector for agriculture, but because of infrastructure and a good trading system and good purchasing power (EIU, 2014).



Figure 1 TRADE AND THE FOUR PILLARS OF FOOD SECURITY : CHANNELS OF INTERACTION

# *Table 1 POSSIBLE SHORT – MEDIUM TO LONG TERM EFFECTS OF TRADE ON FOUR DIMENSIONS OF FOOD SECURITY*

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		SHORT TERM	MEDIUM TO LONG TERM
Availability	•	Trade boost import and increases the quantity and variety of crops available	<ul> <li>Food production may increase due to greater specialization and productivity improvements may be triggered by greater competition.</li> </ul>
	•	Trade may decrease the domestic availability of crops in net exporting countries	<ul> <li>In net food-exporting countries, domestic, availability of staples may decline, as production is diverted toward export, while in net food importing countries, some producers are likely to curtail production, forgoing the multiplier effects of agricultural activities in rurals areas.</li> </ul>
Access	•	Food and imputing price are likely to decrease for net food importing countries	<ul> <li>Incomes would rise in competitive sectors, due to greater market access, and growth and employment would be supported by export growth and inflow of FDI</li> </ul>
	•	Domestic price of exportable products may increase for net food exporting countries	<ul> <li>Incomes may decline in import-competing sectors, with some producers transitioning out of agriculture. Also, unequal distribution of grain may occur due to enclave developments in export crops to the detriment of broad-based smallholder food crop production.</li> </ul>
ation	•	Greater availability of food may promote a more balance diet	<ul> <li>Food safety and quality may import if international students are applied more rigorously</li> </ul>
Utilization	•	There may be greater consumption that is cheaper, high in calories and low in nutritional value	<ul> <li>Prioritization of commodity exports may divert land and resources from traditional and indigenous foods, which are often superior from a multinational perpective</li> </ul>
Stability	•	Imports mitigate likelihood of shortages resulting from local production risks	<ul> <li>Global markets are less prone to policy - or weather - induced shocks</li> </ul>
	•	Countries may be more vulnerable to changes in trade policy by exporters, such as export bans	<ul> <li>Sectors at earlier stages of development may become more succeptible to price shocks and import surges</li> </ul>

# **RESEARCH METHODOLOGY**

In order to conduct this study, the main method of research employed was a comprehensive literature review. This data was based on the theoretical framework of existing accredited agencies research and scholars work.

The study proposes statement is to determine how free trade effect on food security and analyze and find answers to this statement.

According to the results, the work conducts discussions, mainly including how the following aspect of free trade in agriculture limit the achievement of food security.

#### PURPOSE OF THE STUDY

This current research is to investigate and develop a clear understanding on how international trade can enhance food security in Developing countries. This study will be guided by three other objectives which include:

To examine the recent, food security trends in Africa as well as the international trade trends in Africa

To analyze the linkages between international trade and food security in Africa as well as the scale and structure of agricultural trade and implications on food security in this part of the world.

• To explore and propose the policy implications and framework regarding; roles of different stakeholders, safe policies related to trade and food security.

# **RESEARCH FINDINGS**

## Why is there food insecurity?

For many reasons that are political, economic, social and environmental includes plagues such as poverty, conflict, corruption, national policies, environmental degradation, trade barriers, insufficient agricultural development, population growth, health Low levels of education, social and gender inequalities, insalubrity, cultural insensitivity and natural disasters can all contribute to a country's food insecurity.

# Poverty & Health

The poor do not have access to sufficient resources to produce or buy quality food. Poor farmers may have very small farms, use less efficient farming techniques and / or be unable to pay for fertilizers and time-saving equipment, which limits food production. Often, they cannot produce enough food for themselves, let alone generate income by selling their surplus to others. Without economic resources and without a political voice, poor farmers may be forced to move to less productive land, which could lead to a further deterioration of the environment. Tackling poverty is essential to ensure everyone has enough food. Without enough calories and nutrients, the body slows down, making it difficult to produce food. Without good health, the body is also less able to use the available food. A starving mother will give birth to an underweight baby, who will then face a future characterized by stunted growth, frequent illnesses, learning disabilities and reduced resistance to the disease. Contaminated food and water can cause illness, loss of nutrients and often death of children. The HIV / AIDS pandemic has reduced food production in many countries affected by the disease or death of productive adults. Lacking manpower, resources and know-how for growing staple crops and cash crops, many households have turned to growing survival foods or even leaving their fields, reducing more food supply. The treatment of health problems will improve the use and availability of food. Without enough calories and nutrients, the body slows down, making it difficult to produce food. Without good health, the body is also less able to use the available food. A starving mother will give birth to an underweight baby, who will then face a future characterized by stunted growth, frequent illnesses, learning disabilities and reduced resistance to the disease. Contaminated food and water can cause illness, loss of nutrients and often death of children. The HIV / AIDS pandemic has reduced food production in many countries affected by the disease or death of productive adults. Lacking manpower, resources and know-how for growing staple crops and cash crops, many households have turned to growing survival foods or even leaving their fields, reducing more food supply. The treatment of health problems will improve the use and availability of food.

#### Water and the environment

Food production requires massive amounts of water. It takes one cubic meter (1000 liters) of water to produce one kilogram of wheat and 3,000 liters of water to produce one kilogram of rice. Producing enough food is directly related to the amount of water needed. Irrigation can ensure an adequate and reliable water supply, which increases the yields of most crops from 100% to 400%. Although only 17% of the world's cultivated land is irrigated, this 17% produces 40% of the world's food. Increasing the efficiency of irrigation and limiting environmental damage by salinization or reduction of soil fertility are essential to the continued availability of food. In areas where water is scarce and the environment fragile, food security may depend on what has been called "virtual water" - that is, importing food from rich countries. This can be a more efficient use of a scarce resource.

#### **Gender inequality**

Women play a vital role in the food and nutrition of their families as food producers, processors, traders and sources of income. However, the lower social and economic status of women limits their access to education,

training, land ownership, decision-making and credit, and consequently their ability to improve their access to food and education. its use. Food utilization can be improved by improving women's knowledge of nutrition and food safety and disease prevention. Increased participation of women in decision-making and access to land and credit will in turn improve food security by investing in fertilizers and better seeds, labor-saving tools, irrigation and care of the land.

#### **Catastrophes and conflicts**

Droughts, floods, cyclones and pests can quickly remove large amounts of food as they grow or store for later use. Similarly, seeds can be destroyed by such environmental hazards. Conflicts can also reduce or destroy food produced or stored when farmers take refuge in security or participate in fighting. Previously productive land may be contaminated with explosive debris and must be cleared before it can be used again for food production. Stored food, seeds and breeding stock can be eaten or destroyed by soldiers, leading to long-term food shortages. Public spending must give priority to food security in the aftermath of conflict.

#### Population and urbanization

Population growth is increasing the demand for food. With most productive land already in use, there is pressure to make these lands more productive. Poor harvests and high costs are driving many poor farmers to migrate to the cities to look for work. Expanding cities, spread over productive lands, are increasingly moving food production away from consumers. This increases the cost of all activities related to food production and transportation and decreases the food security of the urban poor. **Trade** 

Many poor countries can produce staple foods at lower prices than rich ones, but trade barriers such as remoteness of markets, quarantine regulations and tariffs make it difficult for them to compete on the markets with farmers from rich countries who receive subsidize from t. This deprives poor farmers of income and whole countries of the agricultural base they need to develop other sectors of the economy. In addition, trade imbalances prevent poor countries from importing agricultural products that can improve their food security.

# The weaknesses of agricultural international trade (free trade)

Following the 1996 World Food Summit, FAO approved free trade. This declaration aimed to reduce the number of people suffering from hunger and to halve their current level by 2015. Unfortunately, based on data from the World Hunger Index from 1990 to 2014, only 26 countries reduced their numbers. hunger index of 50% or more, such as Kuwait and Thailand and Vietnam. Some countries, such as Sudan and Zambia, have stagnated. In addition, four countries (Swaziland, Iraq, Comoros and Burundi) were even worse off than in 1990 (IFRI, 2014). The Gambia is one of the countries with the highest index of hunger. Rice is the main food of the Gambian people. Most farmers are women, but their farming activities have not brought them much. This is because the transport, marketing, infrastructure and related subsidies are inadequate. Between 1966 and 1984, the Gambian government received assistance from foreign governments and international aid agencies, but The Gambia became dependent on this assistance. Starting in 1986, the government eliminated subsidies, price controls and import duties, and adopted several deregulation policies. This is a series of requirements imposed by the IMF for loans. As the frequency of imports of cheap imported rice has increased, people prefer to buy cheaper rice (Moseley et al., 2010). Many countries participate in free trade agreements. These agreements may be bilateral or multilateral, such as NAFTA (North American Free Trade Agreement), AFTA (ASEAN Free Trade Area) and GAFTA (Large Free Trade Area). Arab). Mexico has been a member of NAFTA since 1994, after 20 years of signing a trilateral free trade agreement with the United States and Canada, the volume of trade has increased significantly. However, many problems also emerge, such as environmental problems, wages and Mexico's economic growth. The increase in Mexican GDP from 1960 to 1980 almost doubled. It raises the standard of living of Mexicans. In the early 1980s, Mexico experienced a crisis and was treated neoliberal. To some extent, fiscal and monetary policy was tight and provided a space for deregulation of international trade and investment areas. Unfortunately, this policy hampers the growth and development of the Mexican economy. Since 2000, Latin American countries have experienced a 1.9% increase in per capita income per year. As a result, the poverty rate fell from 43.9 percent in 2002 to 27.9 percent in 2013. However, as Mexico's economic growth is 1 percent below the average for the countries in the region, these results are not significant for the reduction of poverty. % in 2012 and 52.4% in 1994. Without economic growth, it would be difficult to reduce poverty in a developing country like Mexico (Weisbrot, 2014).

# Disparity in the liberalization in international trade in agriculture

One of the widely held arguments about liberalization is the Washington Consensus. John Williamson (2000, p.255) has once again emphasized and clarified his concept about the Washington Consensus. The Washington Consensus focuses on policy reforms that diminish the role of the government in a number of ways: subsidy limitation, privatization, deregulation, and liberalization of finance and trade. He said Washington's consensus was not the same with neoliberalism and market fundamentalism. This does not mean liberalizing as much as possible or privatizing as quickly as possible. For example, to stimulate economic growth, subsidies are usually granted with the aim of also having a major impact on reducing the level of poverty. These grants are awarded

strategically. Targeted food subsidies and the medical and education program can reduce the number of poor. In the wake of the 1994 WTO Agreement on Agriculture, member countries unanimously committed to facilitating market access and reducing or eliminating tariffs. Developing countries are starting to open their markets and remove tariffs, as many developed countries have done. Unlike developed countries, however, developed countries had a much larger subsidy program. So, give them a great advantage. The industrialized countries of the OECD (Organization for Economic Co-operation and Development) have always allocated huge subsidies to their own farmers at much higher levels than developing countries would be able to do for their own farmers (often because of the obligation to liberalize their economies through structural adjustment programs) (Clapp, 2014, p.16). In fact, the unfairly industrialized countries have always maintained a high level of protection for their agriculture through very high tariffs, exceeding 15%. On the other hand, industrialized countries also struggle to access small farmers in developing countries who, unfortunately, are given low subsidies and sometimes no subsidies (IMF, 2001).

#### DISCUSSIONS

#### What must be done to remedy food insecurity? Global governance in food security

In the past, men consumed what they produced, but today more and more people are no longer directly involved in producing their own food. Instead, they are linked by an extensive and complex mechanism of distribution of the food chain (Smith, 1998, p.208). Innovation in the areas of transportation, food preservation technology and logistics are contributing factors to the emergence of long-distance business relationships. Today, international trade has become so easy that it has created an interdependent relationship between food producers around the world and consumers around the world on the other side of the world. But it is clear that Global Food Governance is now receiving more than a special attention since the 2007-2008 food crisis. In fact, the observation of the devastating effects of the hyper volatility of agricultural commodity prices has led to a series of new reforms and initiatives in this area since 2008. To reduce price hyper volatility and to remedy food insecurity, have thus become so many priorities for the international community. The need to strengthen the coherence and transparency of international governance has become even more essential. However, according to the explanations of the rural specialist at the University of Wageningen in the Netherlands, Prof. Jessica Duncan in her thesis, stresses that this task will prove difficult, especially because of a growing disconnect between the policies initiated and the actions actually carried out. Because to date, global food security continues to exist as a policy framework that claims to eradicate a structural problem without addressing the real issues at stake. It urgently calls for structural reforms to put in place global governance for food security where changes must extend well beyond food security, at the heart of global governance systems. Imperfect as it may be, food security provides a common language on which governments, policymakers, experts, NGOs, the private sector and social movements partially agree. Even if they do not agree on the relevance of the definition and the way forward for food security, there is some clarity on what food security is at the international level. And this agreement is precious. That is why a reform of the "universal, rules-based, open, non-discriminatory, inclusive and equitable" multilateral trading system must be put in place, as the 13th UNCTAD presidency put it (UNCTAD XIII). at the WTO Doha Conference of 22 October 2014. It is clear that international trade today is governed by a series of laws, norms, customs and contracts that affect the availability and food safety in many countries. It is not surprising to see international actors promote food security for trade or financial markets to control the impact of soaring food prices such as the Food and Agriculture Organization of the United Nations (FAO) which aims to raise levels of nutrition and life, increase the production, processing, marketing and distribution of food and agricultural products, while promoting rural development which aims to eradicate hunger. Institutions such as the World Bank, the International Monetary Fund and UNDP (United Nations Development Program) also contribute to strengthening governments' capacity for food security programs (Holt Giménez and Shattuck 2011). Beyond these organizations, there are international NGOs such as the Center for Food Security and the One Acre Fund (OAF). On the whole, States are important actors in the management of their country and the satisfaction of the food needs of their citizens. The relationship between food trade and agricultural products provides insight into the mechanisms of globalization. Food is also associated with many other sectors such as the environment, biology, ecology, human well-being and the globalization of the world order. Any conflict in this sector could threaten these values (Cooke et al., 2008).

# Promote food security through free trade

Trade between nations could have a positive impact. According to the WTO, trade has many benefits, including the promotion of peace, the reduction of the cost of living, and the adoption of the practice of good governance. In other words, perceiving food security as a policy framework is an example of what James Ferguson (1994) calls "an anti-political device". Transforming the symptom of poverty, it puts an end to politics. Instead, hunger and poverty by extension must be integrated into the specific economic systems of production, according to the modes of representation and powers in place (George, 1984). In 1996, the World Food Summit made a statement

in Rome. Commitment Four states "we will strive to ensure that food and agricultural policies and trade as a whole promote food security for all through a fair and market-oriented global trading system" (ibid.). FAO, 1996). This paper explains that the free trade market can help many countries that are hungry at this time. The concept of a free trade system has existed since the 18th century, when Adam Smith launched his book in 1776 entitled "An Inquiry into the Nature and Causes of the Wealth of Nations". One of the concepts of this book is the "invisible hand". Smith said that giving people the freedom to produce and trade products (free trade) and open markets to competition would bring opulence to nations. Following Smith's theory, David Ricardo introduced in 1817 his theory called "comparative advantage". If some countries do not have products offering an absolute advantage, they still have the opportunity to trade with specialized products. At least free trade has at least five advantages: good quality products and prices, economic growth, efficiency and innovation, competitiveness and equity (Boudreaux, 2013). The logic of the free trade system assumes that the competitive situation would bring many benefits, including the availability of good quality product variants at affordable prices. Each party (a person, a company or a country) will compete to produce competitive products. One way to do this is to create an efficient and effective goods production process. Besides external factors such as infrastructure and political stability also have an influence.

#### Reforms needed to advance free trade

"Free trade agreements among WTO members are a useful complement and a positive driver of the multilateral trading system," said Xue. The necessary reforms of the World Trade Organization should leave unchanged the fundamental principles of free trade and take into account the reasonable requirements of developing countries, said Thursday the Chinese Ministry of Commerce. This process, which will have to be implemented step by step, should be based on respect and mutual benefit, said ministry spokesman Gao Feng during a press conference. Because the WTO has always played an irreplaceable role in opposing protectionism. "The WTO is not a perfect organization," said Gao, noting that the authority and effectiveness of the organization are threatened by the predominance of protectionism and unilateralism, visible by some major corporations. nations like the United States, which for several months have been imposing customs sanctions against the European Union, Canada, China and other economies by withdrawing tariffs under Section 301 of the US Trade Act of 1974 contraveness the principle of most favored nation status. As a result, the reform of the WTO should strengthen the authority and leadership of the organization, as well as consolidate the fundamental functions and principles of free trade and the multilateral trading system, in order to better promote free trade and economic globalization, noted Xue Rongjiu, deputy director of the China Society for the Study of the WTO.

# What new architecture for international trade and investment?

President Emmanuel Macron has also called for a first roadmap for the G20 Summit in Buenos Aires, Argentina, which will take place on November 30 and December 1, 2018. It seems indeed necessary to think about a new architecture of the WTO. It is therefore necessary to think simultaneously of moving out of a silo governance that maintains investment, competition and finance outside the WTO.

# a) Review the provisions of the agreements

• First, a reform of derogations and exemption rules. Articles XX of GATT and XXI of the GATS, which deal respectively with tariffs and trade in services, should open up to the new issues that are putting free trade at risk. So is the sustainability of the system. Therefore, explicit reference to decent work, climate change, and biodiversity loss should be included in all WTO agreements. An experimental waiver could be considered to allow members who so wish to experiment with trade policies compatible with climate imperatives. What the WTO language means by adopting a climate waiver, with a sunset clause to prevent the establishment of climate protectionism.

• Next, reform the agreement on subsidies and countervailing measures. Objective: to make subsidies on renewable energies, those relating to decarbonization, or those related to the treatment of environmental externalities that cannot be operated.

# b) *Renew economic multilateralism*

This option must be considered all the more since the negotiations are less and less concerned with reciprocal access to markets, and increasingly with the conditions of operation and regulation of the markets. This type of negotiation is more likely to succeed when discussions involve a limited number of countries with convergent preferences and, but this is not a condition at the comparable level of development. The interest of "critical mass" (or minilateral) agreements is their inclusion in the multilateral norm but also their evolutionary dimension since they remain open to new members. The institutionalization of a minilateralism could therefore be a response to the proliferation of regional and bilateral trade agreements as well as a way forward on the so-called WTO + and WTO-extra issues. Of course, if this option were to materialize, compensation procedures in case of marginalization of certain countries would be expected.

#### Research in the concept of food security

Scientific research and development organizations play a vital role in the issue of food security. Global partnerships such as the CGIAR are moving towards research for agricultural production in developing countries.

Their purpose is "to identify the important global development issues that science can help solve, to gather and organize knowledge related to these development issues, to develop research programs to fill knowledge gaps to address these issues. development issues; catalyze and direct the implementation of existing institutions to address these development challenges, direct monitoring and evaluation, share lessons learned and best practices, discover, preserve, assess and share genetic diversity and to strengthen the skills and knowledge of agricultural research for development around the world "(CGIAR, nd) They have been successful in achieving their goals throughout their goals: reducing rural poverty, improving food security, improving nutrition and health and sustainably manage resources The CGIAR believes that science can make radical changes to the current problem of food security and that it has been quoted as follows: "A dollar invested in CGIAR research in dollars (CGIAR, nd). Partnerships and organizations such as the CGIAR want the current situation the eyes of food security must change, they cannot be easily resolved, scientific breakthroughs make sure that the issue of food security seems to be an issue that can to be resolved. Farmers make up 60% of the world's population (apcentral.collegeboard.com, n.d.), but they are constantly threatened by the big companies buying their land. Foley (2014), the world's most popular food and beverage company. Produce livestock, soybeans for livestock, lumber and palm oil. Avoiding further deforestation must be a top priority. "There are currently "yield gaps" between existing and potential levels of production in Africa, Latin America and Eastern Europe. "Use high-tech and precision farming systems" "(Foley, 2014), which is important for providing more food to the world, while taking into account the size of the agricultural footprint. If farmers could invest in these technologies, such as subsoil drip irrigation, crops and mulches may have a high upfront cost, but they would produce more, which would increase their profits. With a higher profit, these small farmers can be better. These methods of organic farming are: also more environmentally friendly, which are important because they have a significant impact on agriculture. Although it is often thought that they are more important, agribusiness multinationals still have a role to play in the path of food security. Many of these companies, such as Monsanto, are developing products and methods to help farmers grow more on their land. Although it is often thought that small farmers are better and that they put more heart and soul into their work, agribusiness multinationals still have a role to play in the path of food security. Many of these companies, such as Monsanto, are developing products and methods to help farmers grow more on their land. Agri-food companies work in close collaboration with scientific research and development organizations, which are often the largest investors. Companies like Monsanto have spent millions of dollars developing agricultural innovations in key areas, such as breeding, where they select the most desirable traits from existing plants; biotechnology, where they add these beneficial traits to the DNA of another plant; Integrated Farming Systems (IFS), which help farmers use the resources they have to achieve maximum yield while reducing wasted resources; and chemistry, where studies are conducted to minimize the impact of herbicides on the environment, while protecting crops from pests (Monsanto.com, n.d.). Companies such as Monsanto recognize that they need to invest more in agriculture because lack of food security means they are badly perceived and widely blamed for their lucrative nature and the use of termination genes in their seeds, leaving a heavy financial burden for farmers as they can no longer use the seeds for next year. Many foods are already genetically modified, but Monsanto's lack of ethical boundaries (such as the Terminator gene to increase their profits, and crops that will only work together with their other products to gain and capture a captive market), has caused a public outcry against society around the world. The protest against society has come from all over the world, not just from the United States and Australia, because it is farmers in the developing world who are the most affected. These kinds of problems must be solved if we want to produce enough food for the growing population because all farmland must be used efficiently, not just farmers who can afford it.

# CONCLUSION

In sum, following the above, it is imperative to show caution regarding the liberalization of certain agricultural products, as evidenced by Mr. Yayah Jammeh President of the Republic of The Gambia "In 2016, we will ban the import of rice into this country in order to strengthen local food industries and promote food self-sufficiency ". International organizations and governments must anticipate the harmful consequences of their policies and ensure the protection of the lives of local farmers. The rather common problems encountered in some developing countries are weak support infrastructure and political instability. These fundamental problems must first be solved before some countries decide to enter the free market. Jointly, governments in developing countries should invest in providing more subsidies to basic sectors such as education, food and health. There must be monitoring and control during and after the granting of loans by international agencies such as the IMF, the World Bank so that the prerequisite for lending does not deteriorate the country's economy beneficiary. In addition, developing countries that have engaged in free trade but have experienced an extreme balance of payments deficit due to the large number of imported products may undertake this review in order to impose tariffs.

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