Nutrition and Trade Liberalization in Africa

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Abstract
Trade openness and nutrition are concepts that are closely related. Openness could contribute to an improvement in nutrition under only certain conditions. These include improved export earnings, ultimately the import capacity of the countries participating in the exchange, and maintenance at a sufficient level of agricultural production. The objective of this article is to analyze the link between trade liberalization and nutrition in Africa.

Keywords: nutrition, trade liberalization, Africa.

Introduction
In theory, liberalization can influence nutrition in different ways. In fact, trade liberalization contributes to increased food availability. Due to trade openness, supplies would increase through imports. In other words, in a commercial opening situation, imports would complement the potential domestic production deficit. This reasoning is based on liberal theories. According to Ricardo (1970), international trade is beneficial for all the countries provided they specialize in the production of the good for which they have a comparative advantage (Diagne, 2013). That is, a country should specialize in the production of the commodity, which will cost it relatively less, and import the goods with the highest production costs. In addition to the theoretical contributions of Ricardo, Heckscher, Ohlin and Samuelson (Danby, 1998) developed the theory of factor endowments which would require specializations to be dictated by the presence of factors of production. Thus, "A country has a comparative advantage in the product that intensively uses the factor for which it has a relative factor abundance compared to its trading partner" (Mucchielli, 2001). For instance, African countries naturally have sunshine and vast tracts of land, so they would gain to specialize in the production of tropical agricultural products. Nevertheless, since they have little capital and more labor, they would gain by specializing in the production of agricultural raw materials.

In return, some countries would benefit from importing processed agricultural products. The result would be a large profit from exchange. Consequently, trade liberalization would lead, through specialization, to an increased profit from exchange, and hence, an increase in the incomes of the various countries participating in international trade. On this basis, as early as 1947, international exchange of agricultural products was created under the auspices of the General Agreement on Tariffs and Trade (GATT). Later in 1995, despite the inclusion of special and differential treatment for developing countries, the World Trade Organization (WTO), like the GATT, considered that if each of the members specialized in the production of a particular product, the result would be an increase in their incomes (Jourdain-Fortier & Loquin, 2012). It is through
increasing their trade gains that African countries could probably ensure the food and nutritional security of their populations.

In times of growth, there is job creation, and thus, an increase in the economic accessibility of the population. Moreover, the benefits from openness could enable the public authorities to invest in the development of certain infrastructures necessary to promote the physical accessibility of the population to food through roads, storage and marketing of foodstuffs, and so on. However, not all specializations are equal. Due to the existence of the terms of trade, it is not always certain that the prices of agricultural raw materials exported by African countries are equivalent to the prices of imported foodstuffs. Similarly, poorly controlled open trade could destroy more jobs than it creates. As agriculture is a sector that employs a large share of the labor force in Africa, openness may contribute to the destruction of jobs in food production. Openness should therefore not lead to substitution of food production for imports. On the contrary, it should be used to solve the food deficit of production in Africa. Poorly controlled open trade could threaten the nutritional security of populations. Particularly, this would be the case in situations of food dependence. In the event of a significant dependence on imports, the stability of supplies may be broken as a result of external shocks. Moreover, liberalization does not necessarily guarantee that economic growth benefits everyone. Hence, the goal of the State should be to ensure that the fruits of growth are redistributed, so that the population can have access to a healthy and nutritious diet. Since nutrition is a particular area of importance for the good health of different populations, the trade liberalization processes that have been implemented in poor countries should have taken into account the different interactions between trade and nutrition. The objective should be to highlight the benefits of openness and reduce the risks it could entail. In Africa, this has not been the case. On the contrary, openness has been envisaged as a global solution to the economic and social problems of African countries since the 1980s.

In January 1995, with the accession of many African countries formerly under structural adjustment to the World Trade Organization (WTO), these countries desired to strengthen their interests for trade liberalization. But, what effect has trade liberalization of agricultural products produced on nutrition in Africa? Are nutrition and trade liberalization antagonistic in Africa? The aim of this article is to demonstrate that nutrition can only be reconciled with commercial openness under certain conditions. To do this, it will be necessary to present, on a historical plan, the food policies that have been carried out in the majority of African countries, then to draw the main implications of the accession of these countries to the WTO, while demonstrating the potential effects of openness on nutrition in Africa. This work cannot be finished without making proposals on the conditions for a possible reconciliation between trade liberalization and nutrition in Africa.

**Trade Liberalization and Nutrition in Africa: Background**

To ensure adequate nutrition for their population, most African countries have opted for a food extraversion policy. That is, they have had to rely on international trade to finance the food imports necessary to ensure adequate nutrition for their populations. In order to extract the foreign exchange needed to finance these imports, African countries have increased their specialization in
the production and thus, the sale of agricultural raw materials abroad. To understand the impact of extraversion policies on nutrition in Africa, it is important to review the evolution of these policies.

As soon as a country’s independence was achieved, trade liberalization was conceived as a means of solving food insecurity on the African continent. As a legacy of colonization, African countries were among the first to explore the pathways offered by food extraversion. Originally, agriculture was seen as a source of currency rather than as a means of ensuring food security (Sawadogo, 1977). The sale of agricultural raw materials at international level was to be used to finance food imports in order to feed African populations (Chaleard, 1996). Nevertheless, in the 1970s, this strategy showed its limitations. While prices of agricultural commodities fell on the international market, prices of food products increased significantly. This resulted in the inability of African countries to finance the importation of food products (Chonchol, 1975). During this period, exporting countries preferred to sell their surpluses rather than to allocate them for food aid. It is during this period that African countries officially questioned the policies of extraversion food, as well as the rules that regulate international commerce (United Nations, 1974). African policy-makers officially took pride in abandoning policies of food extraversion.

Henceforth, they advocated for food self-sufficiency. In other words, as far as food is concerned, African policy-makers considered that imports posed risks to the stability of the food supply. Officially, they preferred to focus solely on the development of domestic production. Nevertheless, in practice, the fact was far from political discourse, as African countries continued essentially to prefer food imports over domestic production. Moreover, in the 70-80’s, some authors wondered about the consequences of an exacerbated use of food imports to feed the populations of African. In Dakar, a gradual change in eating habits occurred. People gradually lost interest in traditional foodstuffs to adopt a western pattern of consumption (Charvet, 1987). The consumption of millet and sorghum was gradually replaced by rice (Charvet, 1987). From then on, rice was considered by some African populations as a noble cereal.

During this period, the favoring of African leaders was increasing for the cities to the detriment of the rural areas. The decline in the consumption of traditional foodstuffs for the benefit of cheap commodities from abroad strengthened peasant poverty and accelerated the process of rural exodus (Owusu, 1998). In 1965, a non-published nutrition survey in Morocco showed that one tenth of the poorest populations often consumed fewer than 1600 calories per day (Dumont & Rosier, 1966). It was only at the end of the 1970s that African leaders gathered in Lagos and made the sad assessment of the policies pursued so far. The food extraversion policy that had been carried out in Africa had resulted not only in laying the foundation for food dependency but also in increasing rural poverty, and hence the inability of part of the population to access a healthy and nutritious diet.

Therefore, the African leaders decided within the framework of the Lagos plan to devote themselves to the development of food agriculture and to put an end to policies aimed at the exclusive development of raw materials. However, the period in which the Lagos plan was adopted was also that of the debt crisis in Africa. That is why most African countries turned to international financial institutions. Nevertheless, for these institutions the period of the "interventionist whole"
had to be completed. It was the time of the withdrawal of the State, so only the market would be able to solve the difficulties that African countries faced (Cousy, 2006). Liberalization as envisaged by structural adjustment advocated by the International Monetary Fund and the World Bank were expected to solve the problems linked to undernourishment in Africa and, more generally, to food insecurity (Padilla, 1997). In practice, African countries had to be completely disengaged from the agricultural sector. They therefore had to strengthen their specializations by exporting more and more agricultural raw materials (or not) to the international market, thus ensuring supplies to African populations through increased imports. This situation resulted in a strengthening of the African leaders' bias towards the urban population and an impoverishment of the rural population (Madeley, 2002). In many cases, rural people had borne the cost of food reallocation for urban residents. The findings of the Ghana study by Non-Governmental Organizations (NGOs) affiliated with Association of the World Council of Churches Related Development Organizations (APRODEV) are unequivocal. They found that imports of agricultural products was having a detrimental effect on the incomes of small farmers. The difficulty was for farmers to obtain adequate prices for their rice, soybeans, rabbit meat or mutton, due to competition with imports, and this had resulted in "discouraging" many farmers. As a result, "their incomes have fallen and the problem of undernourishment has worsened in the rural areas" (Madeley, 2002).

Therefore, rural populations had seen their economic ability to access a healthy and nutritious diet deteriorate. Beyond the rural population, what effect has the food extraversion had on the state’s ability to finance food imports from African populations?

**Accession to the WTO**

Unlike the Structural Adjustment Program (SAP), the WTO Agreement on Agriculture (SAA) admits African countries for an indefinite period. Thus, the rules of the SAA determine the future of food policies in Africa, and therefore, the ability of African populations to access a healthy and nutritious diet. Accordingly, in line with the Uruguay Round Declaration, the new provisions on agriculture should enable African countries to increase their export earnings in order to finance food imports on the continent (Uruguay Round, 1986). Similarly, the effect of run-off, according to the increase of national wealth, should have positive effects on the populations and should also allow them to access healthy and nutritious food.

Therefore, during the Uruguay Round (RU), one of the concerns of African countries was the impact of agricultural liberalization on their ability to import food. Indeed, in a joint declaration, these countries expressed the "cornelian" choice they were facing was namely either to produce more food to feed their populations or to produce more export crops in order to generate foreign exchange (GATT, 1990). It would appear that under the Structural Adjustment Program (SAPs), African countries opted for the development of export crops. However, as early as 1990, these countries were aware that even in the event of an increase in their export earnings following the Uruguay Round (U.R.), it was not certain that they could sufficiently finance their imports (GATT, 1990). They insisted that special attention be given to food.
In addition to the preamble to the Agreement on Agriculture (SAA), which refers to the need to consider non-trade aspects such as food security, the WTO Members adopted a “Decision on measures concerning the possible negative effects of the reform on least developed countries and net food-importing from developing countries.” Specifically, the decision referred to the 1986 Food Aid Convention to:

- “raise the level of food aid;
- adopt guidelines to ensure that an increasing share of basic foodstuffs is provided to net food-importing or net food-importing developing-least-developed countries, in full as a gift and on favorable conditions;
- consider in the context of their aid programs requests for technical and financial assistance from the least developed countries and net food-importing in developing countries to improve their productivity and their agricultural infrastructure” (FAO/WTO, 2003).

By incorporating this last paragraph, members indirectly recognized that the goal of agricultural liberalization was not to substitute food imports for domestic production. On the contrary, it was to contribute to the food security of the populations of the undeveloped countries by allowing them access to imports to fill the deficit of their domestic production. Export earnings from international trade, on the other hand, must help them finance their imports. However, in practice, it seemed difficult for the WTO to force its members to consider the needs of the poorest countries. Similarly, one of the lessons learned from the crisis of the 1970s was that food aid worked well when food prices were low. Whereas, it was difficult to deploy when prices reached higher levels (Binswanger & Lutz, 2004). In 2008, as agricultural commodity prices reached historically high levels, despite the call for donations, aid became scarcer. Members preferred to sell their surpluses rather than directing them to food aid. Yet, even if this was not the primary goal of the Marrakech decision, if it had worked, under-nourishment would have less importantly affected African populations. Indeed, the degree of exposure of African countries was exacerbated by the large deficit in their food balance. Between 2007 and 2008, food prices in these countries increased by 74% (Golay, 2010). This resulted in the inability of African leaders to finance food imports, and thus, the inability of households to feed themselves adequately.

These decisions resulted in a significant increase in the number of undernourished people in Africa. During the crisis, the poorest households (those who spent 60-80% of their income on food) began to consume less nutritious food products (Golay, 2010). It was not surprising that hunger riots erupted throughout the continent: Burkina Faso, Senegal, Côte d'Ivoire, Egypt, Ethiopia, Algeria, and others (Janin, 2009). It is therefore unnecessary to state that the Marrakech decision would not be implemented during the 2007-2008 food crisis.

Beyond this, the SAA normalized prohibitions and restrictions on the export of food products. Article 12 only requires "members instituting export prohibition or restriction" to give due consideration to the effects of their measures on food security in net importing countries (FAO/WTO, 2003). The obligation to notify the Committee on Agriculture as soon as possible before implementing a measure to prohibit or restrict the export of a food product could only work in the context of a remedial action taken by exporting members of like products. Again, as with
food aid, the problem was that export restrictions or prohibitions are most often implemented during food crisis situations. Due to the difficulty to speed up food aid in times of crisis, it was difficult to prevent a deterioration in the food situation in the net importing countries.

One of the factors that exacerbated the increase in agricultural prices in 2007 was the decision by some WTO members to restrict their exports in order to preserve the food supply of their populations. No fewer than 15 countries (China, India, Vietnam, and others.) restricted or even prohibited exports of certain commodities in order to prevent a possible national food crisis (Golay, 2010).

Beyond these aspects, the liberalization of agricultural products could undoubtedly have improved the food situation in Africa through improved export earnings of African countries, and ultimately their import capacity. The WTO Agreement on Agriculture through market access, domestic support disciplines and export subsidies could undoubtedly have contributed to an improvement in the import capacity of African countries. But, what were the results?

**Mixed Results**

Beyond the aspects that have just been examined, there are other areas of the SAA that could have improved the nutritional situation on the African continent. In fact, improved market access for African countries would have allowed them to increase their export earnings and hence their import capacity (Eba Nguema, 2016; FAO, 2001; GATT, 1986). However, it would appear that the share of exports from Africa has declined since the 1990s (WTO, 2015). This may be partly explained by the fact that the markets of their main trading partners (Western countries) continue to be among the most heterogeneous in the world (Chinotti, 2004). According to Olarreaga and Ng (2004), the tariffs of the OECD countries have increased 100%, especially for agricultural products. Paradoxically, it is precisely for these products that many African countries in principle have a comparative advantage.

The high tariffs of the OECD members resulted in tariff peaks. Tariff peaks refer to the difference between the average bound tariffs and the tariffs applied to certain products. In the quadrilateral of Canada, European Union, Japan and the United States, the average bound tariff on agricultural products remains very high, depending on the degree of processing products (Olarreaga & Ng, 2004).

The consequence of such a situation has been to increase the specialization of many Africans in the production of cash crops and agricultural raw materials, to the detriment of food crops. Under these conditions, it is not surprising that the food dependency threshold has increased in many African countries (WTO, 2012). This is particularly the case in Lesotho (84.8%), Comoros (69.8%), Botswana (90.1%), Eritrea (58.6%), Algeria (70.7 per cent), Libya (91.8 per cent), Tunisia (60.2 per cent) and Morocco (53.6 per cent) (FAO, 2013). Despite the importance of foods imports in Africa, the production deficit is estimated to be such that between 2014 and 2016, the number of people who were undernourished rose to 220 million, compared to 176 million between 1990 and 1992 (FAO, 2015).
Behind the weakness of the quantitative intake of the nutrients to which the African populations has access, there is another concern, the effects of which are just as serious for the people who are facing it. This is the low micronutrient content of the foods consumed. In fact, a significant proportion of the population of sub-Saharan Africa still faces certain diseases, including anemia, stunted growth of children, and others (FAO, 2015). Among the nutritional diseases affecting the African populations, malnutrition and obesity are easily co-existent as the most serious (WTO, 2016). Maire and Delpeuch (2010) explain this paradox by the fact that poor people consume the cheapest imports on local markets. The latter are certainly high in calories but poor in micronutrients. In addition, the foods with sugars and rich in lipids are the most attractive for the poorest households. “In Africa, the number of children who are overweight or obese has nearly doubled since 1990, increasing from 5.4 million to 10.3 million” (WTO, 2016).

Among these populations, nearly 75% of small farmers and peasants remain the most exposed to malnutrition (Maire & Delpeuch, 2010). This is primarily because they have been excluded from development programs and plans. Despite the fact that rural areas continue to be the breadbasket of Africa, the agricultural policy abandonment on the continent combined with the disengagement of the State has only exacerbated the under-nourishment. In general, since independence, agricultural production has tended to regress or even stagnate. In 2011, production was only 2.4% in Central Africa, 3.7% in East Africa, 4.6% in Southern Africa and 4.3% in West Africa (FAO, 2014). These figures are representative both of the production of cash crops like tea, coffee, and cocoa, and of food. The low level of agricultural production in sub-Saharan Africa (SSA) can be explained in part by liberalization undertaken and thus by the disengagement of the State. Since independence, investment in agriculture has declined. Similarly, since the adoption of SAPs, input distribution has declined significantly while public spending on agriculture remains among the lowest in the world (Barrett, Christiaensen, Sheahan, & Shimeles, 2017; FAO, 2014).

In addition to the State's disengagement from agricultural policies, African farmers are faced with massive subsidies from the rich countries (Hoekman, & Olarreaga, 2004). Food imports are more competitive than local products. In West Africa, milk produced by Fulani farmers has become less attractive than imported milk powder (Golay, 2007). Far from affecting only peasants or African farmers, the use of massive subsidies also threatens the nutrition situation of the whole population. Indeed, in order to finance imports, African governments must first have the means to pay their food bills. Yet subsidies also affect agricultural products for which African countries have comparative advantages. One of the best known examples is cotton. From 2002 onwards, the US Farm Bill raised the level of subsidies to US producers, which resulted in overproduction of cotton in the following months. This in turn led to lower world prices (Stiglitz & Charlton, 2005). Despite the call from Mali, Chad, Benin and Burkina Faso for an elimination of support, some agricultural powers continue to support massive cotton production (WTO, 2016).

However, the FAO consider in one of its reports entitled “The State of Food Insecurity in the World” that economic growth contributed to improving food and nutrition security in many countries around the world (FAO, 2015). African countries who have seen the nutritional situation of their population improve are precisely those countries that have taken advantage of international
trade. Conversely, African economies whose comparative advantage relies on agricultural commodities do not appear to have the ability to sustain economic growth. Hence, the need to reform the current rules governing international trade of agricultural products is evident. But, what reforms are likely to improve the long-term nutritional situation in Africa?

Trade as a Means of Combating Malnutrition in Africa?

The Rome Declaration on Nutrition recognizes that trade is an essential element in achieving food security and improving nutrition (WHO, 2014). Nevertheless, in order for trade to have a positive effect on the food situation in Africa, it would be necessary beforehand that the rules which dictate the insertion of the smallest economies should be adapted to the economic and social situation of these countries (Eba Nguema & Assoumou Ella, 2014). In other words, the multilateral trading system should strive towards greater equity in addition to greater openness.

As agriculture is a sector of vital importance to African countries, negotiations are expected to intensify in this sector. Agriculture should no longer be seen at the end of the Doha Round as only a source of currency for many African countries, but also as a means of achieving food security and ultimately improving nutrition (WHO, 2016). In concrete terms, the negotiations should aim at a revision of the rules, which apply to the three pillars of the current agreement on agriculture. Market access is a pillar of importance in achieving food security and improving nutrition. Better market access could enable African countries to increase their export earnings in addition to their import capacity. That is why it seems necessary that tariff peaks, tariff escalation and other similar measures should be eliminated, at least substantially, with a view to an effective opening of the markets.

Market access is a pillar of paramount importance for achieving food security and improving nutrition. Improved market access could enable African countries to increase their export earnings in addition to their import capacity. In accordance with what has been seen, import capacity is essential to the financing of food imports. Greater export earnings would enable African countries to provide their populations with more diversified imports, and therefore, food that is richer in micronutrients. Nevertheless, African populations may benefit indeed from economic growth through better integration into international markets. Therefore, it should be inclusive. Theoretically, according to the FAO (2015), stronger economic growth benefits the people in one way or another. At least because it creates jobs and contributes to increasing economic accessibility to food. The higher the income, the more likely people are to access better quality food. For international markets to be genuinely open to African countries, tariff peaks or tariff escalation and other similar measures need to be eliminated, or at least substantially reduced. All of these practices can be used for protection purposes. The tariff escalation, in addition to tariff peaks, discourages diversification and keeps African countries in the production of agricultural raw materials. Yet, diversification seems to be the cornerstone of sustainable economic growth on the African continent. Furthermore, in order for the opening up of the market to be truly advantageous for African countries, it is necessary that the decision on duty-free access to exports from the least
developed countries should be extended to all net importing developing countries of food products, because the latter depend directly on export sale of a few products to support their import capacity. However, better access to the market would not be enough to improve nutrition in Africa. For this reason, it would be wise for a substantial elimination of subsidies. Agricultural supports, when heavily used, create distortions in the flow of trade. Concretely, domestic support has a detrimental effect on African countries that increases supply and depresses international prices (Abdelmaliki & Sandretto, 2011).

In Africa, such a situation has the effect of further reducing farmers' incomes. Take the example of cotton. In West and Central Africa, 10 million people live directly on this crop (FAO/WTO, 2003). The cotton sector employs a large part of the rural population. This product enables farmers to have economic access to food and therefore to feed their families. For African producers, cotton is not a means of enrichment, but of survival. The decline in international cotton prices has resulted in a deterioration in the nutritional status of the populations directly dependent on it (Baden, 2004).

In addition, domestic support for food crops has effects similar to those described above. Imports are more competitive than locally produced commodities. Hence, the decline in the incomes of African farmers when they do not simply cease their activity. This situation does not threaten only the nutrition of the farmers, but also that of the whole population because supports have the effect of increasing food dependence on the international market. However, support also increases the vulnerability of these populations to external shocks. Indeed, from the disturbance of the international market, the prices of formerly cheaper imports increase considerably while the purchasing power of the population stagnates, hence, the development of food crises and the rise of malnutrition. The current draft reform of agricultural rules (known as modalities) is directed towards better regulation of domestic support (WTO, 2008). However, it is important to focus on prohibiting WTO supports because these are identified as having a greater trade distortion effect, or so-called orange box support. The modalities focus little on the blue and green category support. However, the blue box support should have been abolished in accordance with the provisions of the SAA due to their trade-distorting effects. In fact, only very few countries have the capacity to use it, because support of the blue box is mainly used by quadrilateral countries. In order to achieve a more equitable agreement, it would seem necessary to remove this category of support.

On the other hand, the measures of the green box are the subject of much criticism from some members, who consider that they are far from being neutral. These members argue that green box support can have as disruptive effects on the flow of trade as other categories of support. In the case of Cotton Upland, it has been shown that green box support can be used for subsidy purposes as well as supporters of the orange and blue category (WTO, 2005). Therefore, it seems necessary that these supports be better regulated. The green box should sort out the supports that are truly neutral and those that are not. The latter should be deleted.

Better regulation of subsidies would inevitably affect export support. This last category should be eliminated in accordance with the recent decision taken by the members. Nevertheless, it would be necessary that the elimination of export subsidies should not be partial, as it indicated
from the analysis of the recent decision, but that it be indeed total (WTO, 2015). In fact, today some countries continue to use these measures which create significant trade distortions and, in some cases, jeopardize the export earnings of African countries. This occurs when products subsidized by the major agricultural powers compete with products exported by African countries. The case of cotton illustrates once again this situation well.

It would therefore appear that the implementation of better regulation of agricultural trade at the multilateral level could have positive effects on nutrition in Africa. Trade liberalization and nutrition are not incompatible. More effective trade rules could, on the contrary, make trade liberalization a means of combating nutritional insecurity in Africa.

**Conclusion**

At the end of the Doha Round, the implementation of more efficient regulation of agricultural trade liberalization could to some extent have a positive effect on the nutrition of African populations. Nevertheless, such regulation should be accompanied by enhanced special and differential treatment to better support African countries in their trade liberalization efforts.

The effect is the condition of a readjustment of the commercial integration of the African economies at the international level. If trade liberalization could be a solution to improve nutrition in Africa, currently it isn't the case. Nevertheless, although trade liberalization has had to some extent a damaging effect on nutrition in Africa, African countries cannot hope to improve the nutritional status of their people without international trade. Indeed, international trade is the cornerstone of a possible agri-food policy on the continent. It is indeed through trade that governments can implement nutrition programs or development plans that are indirectly aimed at improving the nutritional status of populations.

The need to trade internationally requires African countries to become more involved in the process of liberalization. However, a multilateral environment conducive to sustainable economic growth could keep African countries free from the conclusion of bilateral free trade agreements. At the bilateral level, power relations are more prevalent and developmental asymmetries are more important. There is no coalition of countries hoping to weigh in on trade negotiations. Economic partnership agreements signed by some countries in West Africa or under negotiation between the European Union and sub-Saharan African countries could, according to some preliminary studies, have a serious negative impact on food security and indirectly on nutrition in Africa.

**References**


