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## **Globalization of Trade in Agriculture under the WTO Regime: Reflections on the Agreement on Agriculture and Food Security in West Africa**

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**Abstract:** *The study explores the link between the globalization of trade in agriculture and food security in West Africa. Specifically, it investigates why the WTO's Agreement on Agriculture, which is the tool for the globalization of trade in agriculture, has failed to improve food security in West Africa. This enquiry is in the light of the fact that the Agreement is meant to establish a fair and market-oriented agricultural trading system, in which developing countries will have a fairer deal, improve their agricultural production, and consequently improve food security in their countries. The study relied mainly on documentary evidence. Data were scooped from documents and annual publications of the WTO, UNCTAD, FAO, ECOWAS, the World Bank and the Economist's Intelligence Unit. Data were analysed using content analysis, rooted on logical deductions. The results of data analysis show that developed countries leverage on the loopholes in the Agreement to engage in unfair trade practices against developing countries. It also found that some neo-liberal policies inherent in the Agreement undermine developing countries' attempts at maximizing the benefits of international trade in agriculture to improve their food security status. These policies further limit the capacity of West African states to leverage on the liberalization policy to export to developed countries' markets. In all, the contention of the study is that the globalization of trade in agriculture, propagated through WTO's Agreement on Agriculture, has diminished West Africa's capacity to guarantee enough food for its rapidly growing population.*

**Key words:** *Globalization, trade, food security, Agreement on Agriculture, West Africa*

## **1. Introduction**

Trade relations between and amongst countries are not a recent phenomenon. They are as old as mankind. In West Africa, even before the creation of the Economic Community of West African States (ECOWAS) and the World Trade Organization (WTO) in 1975 and 1995 respectively, the countries that make up the sub-region have been engaging in international trade not only among themselves but also between them and other countries of the world. However, the wave of globalization that swept across the world at the turn of the 21st century impacted heavily on the nature and character of global trade. The tremendous growth of international trade over the past decades has been both a primary cause and effect of globalization (The Levin Institute, 2018). With the creation of the World Trade Organization (WTO) in 1995 to replace the General Agreements on Tariffs and Trade (GATT), internationalization of trade assumed tremendous proportions. New rules were introduced and new issues were brought into the global trading system. One of the new trade issues that came under the purview of the newly established WTO is agriculture, encapsulated in its Agreement on Agriculture. In West Africa, with the exception of Nigeria that its main trade commodity in the international market is crude oil, agriculture constitutes the major trade commodity between the sub-region and the rest of the world. Therefore, the importance of agriculture in West Africa cannot be overemphasized. In addition to being the biggest employer of labour in the West African sub-region, agricultural exports constitute an important element of West Africa's foreign trade, generating around six billion dollars, or 16.3 percent of all the products and services exported from the region (ECOWAS, 2008). It is also a vital factor in efforts to combat poverty and food insecurity.

For the most of the 20th century, food governance focused mainly on agricultural production, with states having uncontested prerogatives over its administration. But today, food has not only ceased to be in the sole hands of agricultural departments, but has turned into a matter of international and national security (Fernández-Wulff, 2013). It has also ceased to be a sole prerogative of national governments since national governments, to a large extent, have been substituted by the increasing presence and influence of international actors such as the United Nations and its agencies which include the Food and Agriculture Organization (FAO); the World Food Programme (WFP); and the International Fund for Agricultural Development (IFAD). Civil Society Organizations (CSOs) and the scientific community have also started playing increasing roles in food governance. Consequently, international food security governance has become a

complex system of often overlapping or contradictory policies and regulations, rules and practices such that even the FAO, WFP, and the IFAD do not have the monopoly of international agricultural and food policy making any longer. Other organizations have also taken interest in this. Thus, the World Trade Organization, since its formation in 1995, has equally been playing increasing role in global food security governance, especially in agricultural production, processing, distribution, and even consumption. This was made possible through its Agreement on Agriculture, which fell within the trade-related matters of the world trading body.

Since the creation of the FAO in 1945, there has been a global increase in both the quantity and quality of food consumed by a world population that is nearing 8 billion people. Despite this increase in food production, hundreds of millions of people are still suffering from chronic undernourishment, especially in the developing world. The implication of this is that the extra food has not led to equitable distribution. According to Fernández-Wulff (2013), in spite of the ‘productivist’ argument being still present in the international political debate, it is obvious that quantity is not the issue, but rather getting the existing food to where it is needed. The role of international trade in this redistribution process cannot, therefore, be overemphasized. This is where the WTO, being the international organization charged with the regulation of international trade, comes in. Through its Agreement on Agriculture, the WTO, therefore, has international legal authority for certain aspects of food security policy.

Meanwhile, Díaz-Bonilla and Ron (2010) have tried to establish a link between trade and trade policies and food security in five ways. Three of them are germane here. First, according to them, trade and trade policies influence global food availability as well as production and food imports (including food aid) at the national level. Second, trade and trade policies affect profits of food producers and the food costs to consumers, mainly, but not only, through their effect on world food prices and on prices for producers and consumers in the domestic market. Third, trade policies may lead to lower or higher volatility in production, stocks, and prices at the world and/or national levels for different commodities and markets. The implications of these trade policies on food security are varied. Food availability is influenced by the first and second channels (impacts), which determine the volume of domestic production, stocks, imports and food aid for a country. Food affordability is dependent on the relation between the cost of food (second channel/impact) and households’ incomes. Finally, the third channel (impact) considers the possibility that trade and trade policies may help or harm stability of food availability, food prices and households incomes.

This study, therefore, examines the link between the globalization of trade in agriculture through the instrumentality of the WTO’s Agreement on Agriculture

and food security in West Africa. Before proceeding to investigate why the Agreement failed to improve food security in West Africa, it is necessary to highlight the major provisions of the Agreement, as well as adduce empirical evidence to show that West Africa has been having food security challenges.

## **2. Overview of the WTO's Agreement on Agriculture**

Agricultural trade is one of the five new areas included in the agenda of the Uruguay Round of trade negotiations. Others include services, intellectual property rights, investment measures, and trade in textiles and clothing, which had hitherto been conducted within the framework of the Multi-Fibre Arrangement (MFA) (Gayi, 2006). To facilitate multilateral trade in agricultural products, a specific agreement – Agreement on Agriculture – was negotiated and signed by participating governments in Marrakesh in 1994, during the Uruguay Round. Establishing a fair and market-oriented agricultural trading system is the core objective of the Agreement. It was expected to initiate a process of greater liberalization in international agricultural trade. In other words, the primary objective of the Agreement is to progressively liberalize agricultural trade. It seeks to explicitly limit state intervention in the agricultural sector in order to bring agriculture and food under greater market discipline (de Schutter, 2011). It aims at attaining an . . . efficient agricultural trading system through specific commitments to reduce protection in the areas of domestic support, export subsidies, and market access and through the establishment of strengthened and more operationally effective WTO rules and disciplines. It also ensured, however, that non- or minimally trade-distortive support remained available—through what became known as the Green Box—and, more important, that for developing countries, certain agricultural and rural assistance measures that are integral to development strategies are exempt from commitments (Boonekamp, 2015, p.138).

Underpinning the Agreement on Agriculture is the issue of Special and Differential Treatment (SDT). The SDT refers to the set of provisions in trade agreements which have been negotiated to grant developing country exports preferential access to markets of developed countries (UNCTAD, 2003a). In principle, SDT provisions are meant to give developing countries an advantageous footing and special rights within the WTO, but in practice, however, developed countries device means of circumventing this important provision to ensure that developing countries do not reap the benefits accruing therefrom. Under the SDT measures, therefore, the Agreement on Agriculture provides longer timeframes and lower levels of obligations for developing countries for adherence to the rules. Thus, developing countries were given a longer period (ten years, 1995-2004) to implement various reduction provisions, while developed countries were given six years (1995-2000). Also, the cuts or reductions in export subsidies, domestic

support and import barriers on agricultural products set for developed countries are deeper than those set for developing countries, as will be shown in Table 5.1 below.

Meanwhile, the Agreement on Agriculture obligates WTO members to liberalize agricultural trade in three significant respects. First, the Agreement expands market access by requiring the conversion of all non-tariff barriers to tariffs (tariffication) and the binding and reduction of these tariffs. Second, the Agreement requires the reduction of both the volume of, and expenditures on subsidized exports. Third, the Agreement requires the reduction of trade-distorting domestic subsidies (Gonzalez, 2002). These three areas - market access, export subsidies and domestic support - constitute what is commonly referred to as the three pillars of the Agreement.

In the area of market access, WTO agreements, while discouraging trade-distorting measures and barriers to free flow of goods and services, also allow WTO members to have some measure of protection for their markets. This is to ensure that goods meet the minimum standards before being exchanged in the international market. Market access, therefore, refers to the ways in which this protection can be implemented, and indicates the government-imposed conditions under which a product may enter a country and be released for free circulation within that country under normal conditions (UNCTAD, 2003a). The Agreement requires the conversion of all non-tariff import restrictions (such as quotas, embargoes, variable import levies, minimum import prices, and non-tariff measures maintained by state enterprises) into tariff barriers that provide an equivalent level of protection. The tariff equivalents resulting from this conversion, plus existing duties, must then be bound and reduced over a period of several years. Developed countries are required to reduce these bound tariffs by an average of 36 percent over six years (1995-2000), with a minimum reduction rate of 15 percent for each product line. In accordance with the principle of special and differential treatment, developing countries are required to reduce these bound tariffs by an average of 24 percent over ten years (1995-2004), with a minimum reduction rate of 10 percent for each product line. Least developed countries are subject to tariffication and tariff binding, but are not subject to tariff reduction (Gonzalez, 2002). This is also shown in Table 1.

The second pillar of the Agreement centers on the reduction or elimination of domestic support to farmers. The fundamental consideration is to discipline and reduce trade-distorting support while leaving countries the scope to design and implement agricultural policies that meet their own needs. The key to achieving this goal is to divide support into two categories: that which distorts trade and hence impinges on the opportunities of others, that is, the Amber Box, and that with minimal or no trade-distortive effect or effects on production, that is, the

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Green Box, (Boonekamp, 2015). The Agreement requires WTO members to reduce domestic subsidies based on an Aggregate Measure of Support (AMS). The Agreement requires a 20 percent reduction in Base Total AMS over six years (1995-2000) for developed countries and a 13.3 percent reduction in Base Total AMS over ten years (1995-2004) for developing countries. Table 1 also depicts this.

The third pillar of the Agreement on Agriculture revolves around the reduction of export subsidies agricultural products enjoy. According to Boonekamp (2015), export subsidies, particularly by developed countries, had become prevalent in the run-up to the Uruguay Round, largely as a result of surplus production under support policies. These subsidies undermine the opportunities of more efficient producers, often in developing countries. The Agreement on Agriculture, therefore, requires developed countries to reduce expenditures for export subsidies by 36 percent and to reduce their volume of subsidized exports by 21 percent over six years (1995-2000). Again, in accordance with the principle of special and differential treatment, developing countries are required to reduce expenditures for export subsidies by 24 percent and to reduce their volume of subsidized exports by 14 percent over ten years (1995-2004). Least developed countries are exempted from the obligation to reduce export subsidies but are obligated not to increase subsidized exports (Gonzalez, 2002). All these are depicted in Table 1 below.

**Table 1: Reduction Rates (%) required in the Agreement on Agriculture**

| <b>Reform Areas/Regions</b>                                     | <b>Developed Countries.<br/>6 Years<br/>(1995-2000)</b> | <b>Developing Countries.<br/>10 Years<br/>(1995-2004)</b> | <b>Least Developed</b> |
|---|---|---|------------------------|
| <b>Market Access</b>  |   |   |                        |
| Simple average tariff/average cut for all agricultural products | 36%   | 24%   | 0                      |
| Minimum reduction per tariff line/minimum cut per product       | 15%   | 10%   | 0                      |
| <b>Domestic Support</b>   |   |   |                        |
| Total Aggregate Measurement of Support (AMS) cuts for sector    | 20%   | 13.3%   | 0                      |
| <b>Export Subsidy</b>   |   |   |                        |
| Value of expenditure on subsidies                               | 36%   | 24%   | 0                      |
| Quantity of subsidized exports                                  | 21%   | 14%   | 0                      |

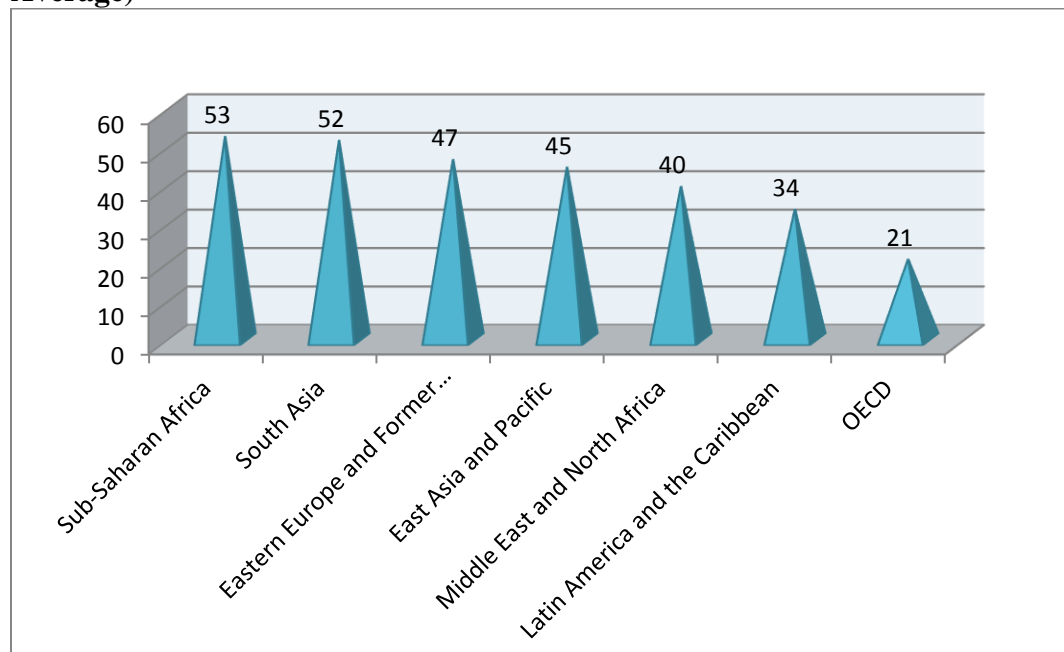
**Sources:** UNCTAD (2003a, p.78); Chishti and Malik (2002, p.3).

### **3. Level of Food Affordability in West Africa**

The affordability of food index explores the capacity of a country's people to pay for food, and the costs that they may face both under normal circumstances and at times of food-related shocks. Affordability is measured across six indicators: food consumption as a share of household expenditure; proportion of population under global poverty line; gross domestic product (GDP) per capita (at purchasing power parity, or PPP, exchange rates); agricultural import tariffs; presence of food safety-net programmes; and access to financing for farmers (EIU, 2015, p.13). The capacity to afford good quality food without undue stress is a crucial aspect of food security. It is determined by first calculating whether an average individual in a country has sufficient means to purchase food, and second, whether public structures have been put in place to respond to personal or societal shocks regarding food prices.

The Global Food Security Index (GFSI) uses three indicators to assess directly the capacity of the average individual to afford food. The first is food consumption as a share of household expenditure, which captures the relative importance of food in household budgets. The lower the share of household expenditure on food, the easier it is for a household to cope with price increases and shocks. Accordingly, the best performers in this indicator devote less (about 10%) of total household expenditure to food. By contrast, countries that receive the lowest scores in this indicator are those who have higher percentages (over 50%) of household expenditure devoted to food. Predictably, the top-performing countries in this indicator are generally in North America and Europe, while the lowest-ranked nations are in Sub-Saharan Africa (SSA), especially in West Africa. This is indicated in Figure 1 below.

**Figure 1: Spending on Food as a Share of Household Expenditure (Regional Average)**



**Source:** EIU (2012, p.12).

Figure 1 above shows that in Sub-Saharan Africa, which West Africa is part of, households spend about 53 percent of their income on food alone. Meanwhile, OECD countries spend about 21 percent of their income on food purchases. Specifically, while an average Nigerian spends 56.6 percent of his/her income on food purchases alone, an average American spends only 6.5 percent (Plumer, 2015). The implication of this is that when there are spikes in food prices, the shock is felt more among households in Nigeria than it is felt in the United States because in Nigeria, more than 50 percent of household budget is spent on food. The huge expenditure on food makes it increasingly difficult for households in West Africa to afford food. Specifically in West Africa, the percentage of household income that goes into the purchase of food is very high as well. Table 2 captures the food budget shares of selected West African countries.



**Table 2: Food Budget Shares for Selected West African Countries**

| Country       | Beverages, Tobacco | Breads, Cereals | Meat  | Fish  | Dairy | Fats, Oil | Fruits, Vegetables | Other Foods | Total Food Expenditure; % of Total Expenditures |
|---------------|--------------------|-----------------|-------|-------|-------|-----------|--------------------|-------------|---|
| Benin         | 9.45               | 23.57           | 14.27 | 7.56  | 4.13  | 4.48      | 33.24              | 3.29        | 55.4  |
| Cote d'Ivoire | 19.52              | 19.6            | 14.38 | 2.16  | 4.42  | 1.49      | 23.26              | 15.18       | 44.32   |
| Guinea        | 19.14              | 16.07           | 16.22 | 4.66  | 1.25  | 3.79      | 31.21              | 7.65        | 43.69   |
| Mali          | 6.76               | 34.39           | 14.1  | 3.01  | 3.81  | 8.11      | 9.89               | 19.93       | 53.27   |
| Nigeria       | 2.73               | 34.08           | 12.88 | 15.22 | 5.61  | 5.15      | 15.44              | 8.89        | 72.97   |
| Senegal       | 6.54               | 26.51           | 13.93 | 13.12 | 4.4   | 14        | 13.08              | 8.47        | 53.35   |
| Sierra Leone  | 5.29               | 34.94           | 4.38  | 12.73 | 1.13  | 12.2      | 16.47              | 12.82       | 62.09   |

**Source:** Extracted from FAO (2012, p. 24).

The message inherent in the table above is that an average household in West Africa lacks the capacity to afford food. This is because the share of budget allocated to food in the sub-region, as a share of household expenditure, is very high.

The second indicator examines the proportion of the population under the global poverty line, defined as those living on less than US\$2 per day (measured at PPP exchange rates). People living below the poverty line have very limited resources and face considerable difficulty purchasing food. In the 2015 rankings, 27 high-income countries (mostly in Europe and North America) that topped most in the ranking, had zero percent of their populations below the global poverty line. In contrast however, the bottom 20 countries, 18 of which are in SSA, had an average of 78.7 percent of their population living below the global poverty line (see EIU, 2015, p.14). Table 3 shows the percentage of population of West African countries living below the poverty line, according to World Bank estimates.

**Table 3: West African Countries Living Below the Poverty Line**

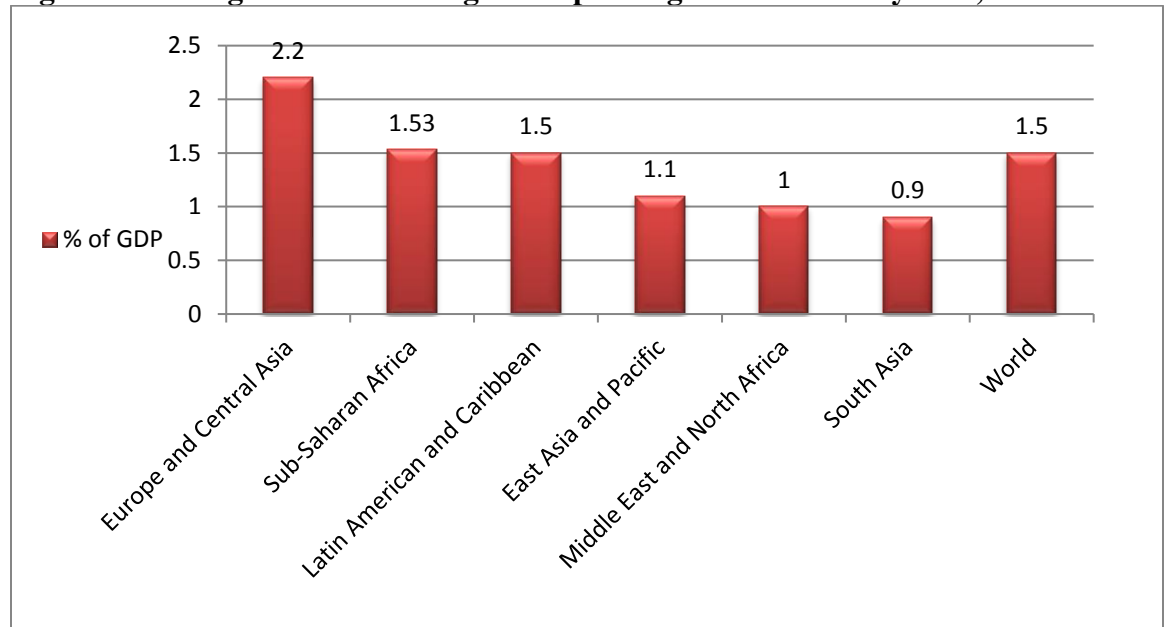
| S/N | Country          | Reference Year | % of Population |
|-----|------------------|----------------|-----------------|
| 1   | Benin            | 2011           | 53.1            |
| 2   | Burkina Faso     | 2014           | 43.7            |
| 3   | Cape Verde       | 2007           | 8.1             |
| 4   | Cote d'Ivoire    | 2008           | 29.0            |
| 5   | Gambia, The      | 2003           | 45.3            |
| 6   | Ghana            | 2005           | 25.2            |
| 7   | Guinea           | 2012           | 35.3            |
| 8   | Guinea Bissau    | 2010           | 67.1            |
| 9   | Liberia          | 2007           | 68.6            |
| 10  | Mali             | 2009           | 49.3            |
| 11  | Mauritania       | 2014           | 5.9             |
| 12  | Niger            | 2014           | 45.7            |
| 13  | Nigeria          | 2009           | 53.5            |
| 14  | Senegal          | 2011           | 38.0            |
| 15  | Sierra Leone     | 2011           | 52.3            |
| 16  | Togo             | 2011           | 54.2            |
|     | Regional Average |                | 42.1            |

**Source:** World Bank (2017, pp.22-24).

The implication of the data on Table 3 above is that about 42.1 percent of the population of West African countries have very limited resources and, therefore, face considerable difficulty purchasing food. Apart from Mauritania and Cape Verde with 5.9 percent and 8.1 percent respectively, the rest of the countries have more than 20 percent of their population living below the poverty line. Six of them have more than 50 percent of their population living below the poverty line with Guinea Bissau and Liberia having 67.1 percent and 68.6 percent respectively.

The third indicator in the affordability category is the presence of food safety-net programmes. This qualitatively scored indicator measures the presence and depth of programmes that protect individuals from food-related shocks and considers the nature of the organizing entity, for example, the government or Non-Governmental Organizations (NGOs). Such programmes include in-kind food transfers, food vouchers and school feeding programmes. The more robust these programmes are, the higher a country's score will be. If people have a safety net to fall back on during a crisis, their food security improves substantially. The World Bank (2018) ranked countries according to the percentage of their GDP they spend on social/food safety net programmes. West African and other Sub-Saharan African countries performed better than most other regions in this indicator, as shown in Figure 2 below.

**Figure 2: Average Global and Regional Spending on Social Safety Nets, 2017**



**Source:** Extracted from The World Bank (2018, p.3).

Figure 2 above shows that spending on Social Safety Net (SSN) programmes – which includes food safety net programmes – is higher than the global average in Europe and Central Asia, at 2.2 percent of GDP, and about at the global average in Sub-Saharan Africa (which includes West Africa), at 1.53 percent, and in Latin America and the Caribbean, at 1.5 percent. East Asia and Pacific, the Middle East and North Africa, and South Asia spend 1.1 percent, 1.0 percent, and 0.9 percent of GDP, respectively. However, the World Bank report notes that countries with very high SSN spending levels are often those that contend with fragility, conflict, and violence. Thus, it is not surprising why Sub-Saharan African countries make the list of top spenders. Table 4 below indicates the number of social/food safety-net programmes in West Africa.

**Table 4: Number of Social/Food Safety-Net Programmes in West Africa**

| S/N | Countries     | Number of SSNs |
|-----|---------------|----------------|
| 1   | Benin         | 0              |
| 2   | Burkina Faso  | 1              |
| 3   | Cape Verde    | 2              |
| 4   | Cote d'Ivoire | 1              |
| 5   | Gambia, The   | 1              |
| 6   | Ghana         | 4              |
| 7   | Guinea        | 2              |
| 8   | Guinea Bissau | 0              |
| 9   | Liberia       | 3              |
| 10  | Mali          | 3              |
| 11  | Mauritania    | 1              |
| 12  | Niger         | 1              |
| 13  | Nigeria       | 6              |
| 14  | Senegal       | 2              |
| 15  | Sierra Leone  | 2              |
| 16  | Togo          | 3              |
|     | <b>Total</b>  | <b>32</b>      |

**Source:** Extracted from Cirillo and Tebaldi (2016)

Generally, under the food affordability index, Sub-Saharan African countries have the lowest scores in both the 2014 and 2016 GFSI rankings. However, the region performed better in 2016 as it scored 37.5 as against 29.2 in 2014. Meanwhile, the second lowest region (Asia and Pacific) scored 53.9 and 56.4 in 2014 and 2016 respectively. North America and Europe topped the chat with 83.6 and 80.3 respectively in 2014, and 78.9 and 74.1 respectively in 2016. These are depicted in Table 5 below.

**Table 5: Regional Food Affordability Score 2014 and 2016 Compared**

| Overall Rank | Region                       | Food Affordability Score |      |
|--------------|------------------------------|--------------------------|------|
|              |                              | 2014                     | 2016 |
| 1            | North America                | 83.6                     | 78.9 |
| 2            | Europe                       | 80.3                     | 74.1 |
| 3            | Middle East and North Africa | 59.1                     | 62.1 |
| 4            | Central and South America    | 56.8                     | 57.5 |
| 5            | Asia and Pacific             | 53.9                     | 56.4 |
| 6            | Sub-Saharan Africa           | 29.2                     | 37.5 |

**Source:** EIU (2014, p.4; 2016, pp.22-25).

#### **4. Level of Food Availability in West Africa**

Food availability index assesses factors that influence the supply of food and the ease of access to food. It examines how structural aspects determine a country's capacity to produce and distribute food, and explores elements that might create bottlenecks or risks to robust availability. Economies with fewer structural restrictions on food availability (from both markets and governments) and more advanced agricultural markets (in terms of both infrastructure and support for the sector) tend to have environments that are more conducive to food security. Such environments are often less at risk of food supply shocks and can handle shocks better when they arise. Availability is measured across eight indicators. They include:

- Sufficiency of supply. This indicator examines average food supply and dependency on chronic food aid. While greater availability of food is generally preferable, reliance on external donors for regular food supplies reflects weaknesses in the system.
- Public expenditure on agricultural research and development (R&D). This serves as a proxy measure of the amount that a country invests in innovations that can increase market efficiency. Greater expenditure on R&D can improve agricultural yields and increase a country's capacity to produce sufficient food supplies.
- Agricultural infrastructure. This indicator examines some vital infrastructure components — the existence of adequate crop storage facilities and the extent and quality of port and road infrastructure. Crop storage facilities are necessary to minimize food loss, facilitate the movement of goods and provide a buffer in case of shocks to food supply.
- Volatility of agricultural production. Fluctuating output can have a detrimental impact on food security by making it difficult to manage food supply. High volatility can create unneeded surpluses or shortages that severely affect food availability.
- Political stability risk. High political stability risk can limit access to food, for example as a result of transport blockages or reduced international food aid commitments. It can also create interruptions in the supply chain, as political uncertainty or outright conflict diminishes the ability and willingness of individuals to supply food products.
- Corruption. This creates distortions and other inefficiencies in both the use of natural resources and food distribution, and thus poses similar difficulties for availability as political stability risk. Corruption can divert food supplies, limiting availability in certain areas or creating undesirable bottlenecks.

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- Urban absorption capacity. This compares a country's real GDP growth rate with its urban growth rate. This metric provides an indication of whether a country has sufficient resources to accommodate the costs of urbanisation. Rapid urbanisation has the potential to place strains on infrastructure and can lead to difficulties in feeding a growing urban population, particularly if a country's economy is not growing rapidly enough to accommodate the changes.
- Food loss. This examines the share of food that is lost between harvesting and distribution to the consumer. A large proportion of food lost during processing, production, transportation and storage often indicates deep-rooted structural problems in the supply chain (EIU, 2015, pp.16-18).

As expected also, countries in North America and Europe always have the greatest score on this index, whereas developing countries, especially those in West and Sub-Saharan Africa, occupy the bottom position. Table 6 indicates this.

**Table 6: Regional Food Availability Score 2014 and 2016 Compared**

| Region                       | Food Availability Score |       |              |       |
|------------------------------|-------------------------|-------|--------------|-------|
|                              | 2014                    |       | 2016         |       |
|                              | Overall Rank            | Score | Overall Rank | Score |
| North America                | 1                       | 76.7  | 1            | 78.2  |
| Europe                       | 2                       | 69.8  | 2            | 72.1  |
| Asia and Pacific             | 3                       | 55.6  | 5            | 56.8  |
| Middle East and North Africa | 4                       | 55.0  | 3            | 57.3  |
| Central and South America    | 5                       | 54.1  | 4            | 57.1  |
| Sub-Saharan Africa           | 6                       | 42.1  | 6            | 39.4  |

**Source:** EIU (2014, p.4; 2016, pp.22-25).

Food availability is an important element of food security. Table 6 above shows the extent to which food is available across the regions of the world between 2014 and 2016. Countries in West Africa and in other Sub-Saharan part of the continent had the lowest scores, indicating that among the regions of the world, food is least available in this region. It scored 42.1 in 2014, and slipped further down to 39.4, making SSA the only region which did not increase its food availability score in 2016.

## **5. Level of Food Quality and Safety in West Africa**

Food Quality and Safety index explores the nutritional quality of average diets and the food safety environment in each country. It equally explores the energy and nutrient intake by individuals, safe food preparation and diversity of the diet. In other words, food security requires access to nutritious food that meets (individuals') dietary needs. Quality and Safety is explored by examining the composition of the average diet and the structural and regulatory environment in each country. Understanding the average diet provides important insights into whether individuals in a given country are receiving sufficient nutrients. Food quality and safety is measured across five indicators. They are:

- **Diet diversification.** This measures the share of non-starchy foods in total dietary energy consumption. Diets that consist of higher percentages of non-starchy foods, which include everything but cereals, roots and tubers, tend to be more nutritious, owing to the prevalence of vegetables and dairy and meat products. Those with the highest levels of dietary diversification tend to be developed European countries, while low-income countries in the SSA, Asia and Pacific regions tend to score lower for diet diversification, as a result of the high proportions of starchy foods in their diets.
- **Micronutrient availability.** This composite indicator considers three distinct micronutrients — vitamin A, animal iron and vegetal iron. However, the relationship between countries' levels of development and micronutrient availability is not as strong as with other indicators. Factors other than income, such as culture, play a significant role in determining national diets and thus influence access to key micronutrients.
- **Protein quality.** This is the final nutrition-focused indicator. It measures the grams of high-quality protein consumed, based on the presence of some essential amino acids (EIU, 2015, pp.18-20).

The other two indicators within the Quality and Safety category assess the structural and regulatory environments in each country. These indicators address the safety component of the category by examining the presence of government oversight of the food sector and national nutrition. These are:

- **Nutritional standards.** These examine the presence of national dietary guidelines and a national nutrition plan or strategy in each country. It also considers whether a country has nutritional monitoring or surveillance. These components provide insight into whether a country's government is committed to improving nutritional standards. West Africa and other low

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income countries make up the majority of countries with lower nutritional standards.

- Food safety. Food safety is the final indicator in the Quality and Safety category. It examines whether a country has an agency to ensure the safety and health of food — a baseline regulatory function that helps to ensure food safety and, consequently, security. It also explores two structural elements of food safety: the percentage of the population with access to potable water and the presence of a formal grocery sector. Both of these indicators assess whether a country has reached the level of development necessary to provide safe food. (EIU, 2015, pp.20-21).

Like the other indices, countries in West Africa and other Sub-Saharan part of the continent also lag behind in this index, as the Global Food Security Index 2014 and 2016 show.

**Table 7: Regional Food Quality and Safety Score 2014 and 2016 Compared**

| Region                       | Food Quality and Safety Score |       |              |       |
|------------------------------|-------------------------------|-------|--------------|-------|
|                              | 2014                          |       | 2016         |       |
|                              | Overall Rank                  | Score | Overall Rank | Score |
| North America                | 1                             | 80.3  | 1            | 83.7  |
| Europe                       | 2                             | 78.9  | 2            | 80.5  |
| Central and South America    | 3                             | 59.5  | 4            | 61.3  |
| Middle East and North Africa | 4                             | 59.5  | 3            | 62.6  |
| Asia and Pacific             | 5                             | 56.4  | 5            | 58.4  |
| Sub-Saharan Africa           | 6                             | 36.8  | 6            | 39.1  |

**Source:** EIU (2014, p.5; 2016, pp.22-25).

From the table above, it could be deduced that countries in SSA (which includes West Africa) scored 36.8 points in 2014 and 39.1 points in 2016, making it the lowest region in food quality and safety index, one of the three indices of food security. This is even as Europe and North America scored 78.9 and 80.3 points respectively in 2014, and 80.5 and 83.7 points respectively in 2016, with each of them being more than twice the score recorded by SSA.

Meanwhile, the Global Food Security Index 2012 report found that while an average individual needs 2,300 calories per day to live a healthy and active life, among wealthy nations, there is enough food for each person to eat 1,100 calories



above that benchmark. However, in low-income countries, most of which are in West and other Sub-Saharan Africa, national food supplies fall, on average, 100 calories short of it (EIU, 2012). Of the 105 countries on the GFSI 2012 ranking, nine of the thirty lowest ranking countries are in West Africa, which comprises of sixteen countries. Of the 107 countries in the 2013 ranking, eight West African countries are among the least thirty. By 2017, the scores got worse as there were still eight West African countries among the least thirty in a ranking that comprised 113 countries. The consequent effect of low calories intake is undernourishment, which is very pervasive in West Africa. Despite being reduced from 33 percent in the 1990-92 period to 23 percent in the 2014-16 period, the percentage of undernourishment in West and other SSA countries remains the highest among developing regions (FAO, IFAD and WFP, 2015), as shown in the Table 8 below. Also, due to rapid population growth of 2.7 percent per annum over the same period, the absolute number of undernourished people has increased by 44 million to reach 218 million (OECD/ FAO, 2016).

**Table 8: Prevalence of Undernourishment in Different Regions, 1990-2016**

|                          | Number of People Undernourished (Millions) |         |         |         |         | Proportion of Undernourished in Total Population (%) |         |         |         |         |
|--------------------------|--|---------|---------|---------|---------|--|---------|---------|---------|---------|
|                          | 1990-92                                    | 2000-02 | 2005-07 | 2010-12 | 2014-16 | 1990-92  | 2000-02 | 2005-07 | 2010-12 | 2014-16 |
| All Developed Countries  | 20.0                                       | 21.2    | 15.4    | 15.7    | 14.7    | <5.0   | <5.0    | <5.0    | <5.0    | <5.0    |
| Europe and Central Asia  | 9.9  | 11.5    | 8.8     | 7.2     | 5.9     | 8.0  | 8.5     | 6.2     | <5.0    | <5.0    |
| Latin America            | 66.1                                       | 60.3    | 47.1    | 38.3    | 34.3    | 14.7   | 11.4    | 8.4     | 6.4     | 5.5     |
| Near East & North Africa | 16.5                                       | 23.1    | 27.3    | 33.9    | 33.0    | 6.6  | 7.5     | 8.1     | 8.3     | 7.5     |
| Sub-Saharan Africa       | 175.7                                      | 203.6   | 206.0   | 205.5   | 217.8   | 33.2   | 30.0    | 26.5    | 24.1    | 23.0    |

Source: FAO (2015, p.21).

From 1990, five years before the coming into existence of the WTO and its Agreement on Agriculture, the number of undernourished people in SSA has continued to increase consistently. The number increased from 175.7 million people between 1990 and 1992, to 206 million people between 2005 and 2007, and finally to 217.8 million in the 2014/2016 period. This is an indication that the Agreement on Agriculture that the SSA countries acceded to did not have any positive impact on this category of food security in the region. In the other regions,

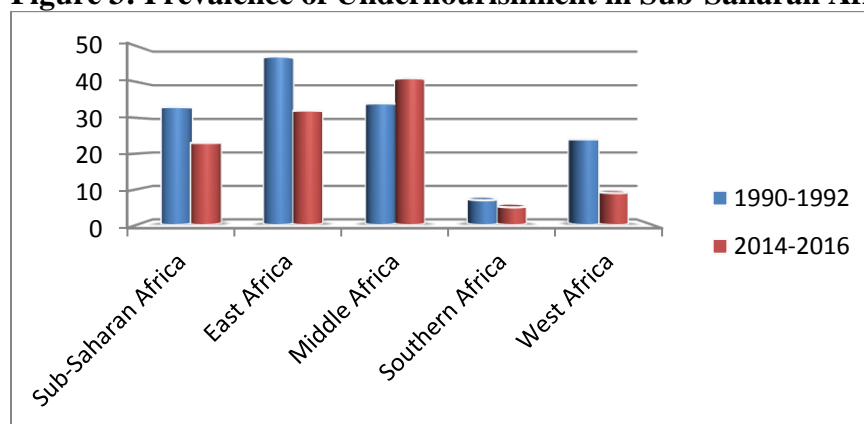
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the prevalence of undernourishment was far less than what was obtainable in SSA, and in some cases, they decreased as the years went by. Though there is no correlation between this and WTO's Agreement on Agriculture, at least, the situation did not worsen (as is the case with SSA) with the coming into effect of the Agreement.

However, as the number of undernourished people in SSA continued to rise, the percentage of the population undernourished took a downward trend. It decreased from 33.2 percent in the 1990/1992 period, to 26.5 percent between 2005 and 2007, and finally went further down to 23 percent in the 2014/2016 period. Nevertheless, these figures still represented the highest when compared with other regions. For instance, while all countries that fall within the category of developed countries had less than 5 percent of their population undernourished all through the period, SSA never had less than 20 percent all through the same period.

However, among the sub-regions that make up Sub-Saharan Africa, West Africa only comes behind Southern Africa in the best performing category. East Africa had the highest undernourished population in the 1990/1992 period (47 percent). This was followed by Middle Africa with 34 percent, West Africa with 24 percent, and Southern Africa with a mere 7 percent. In the same vein, in the period between 2014 and 2016, Middle Africa had the highest number of undernourished people with 41 percent. East Africa followed with 32 percent, West Africa with 9 percent, and Southern Africa with 5 percent. While the rest of the sub-regions reduced the prevalence of undernourished people in their areas, the prevalence of undernourishment increased from 34 percent in the 1990/1992 period to 41 percent in the 2014/2016 period in Middle Africa. These are represented in the figure below.

**Figure 3: Prevalence of Undernourishment in Sub-Saharan Africa (%)**



Source: FAO (2015b, p.1).

Table 9 shows this in absolute numbers. The table indicates that West Africa, though behind Southern Africa, is the only region in Africa whose number of undernourished population is decreasing. In fact, within the period in question, it decreased by about 24 percent.

**Table 9: Number of Undernourished People in SSA (Millions), 1990–1992 and 2014–2016**

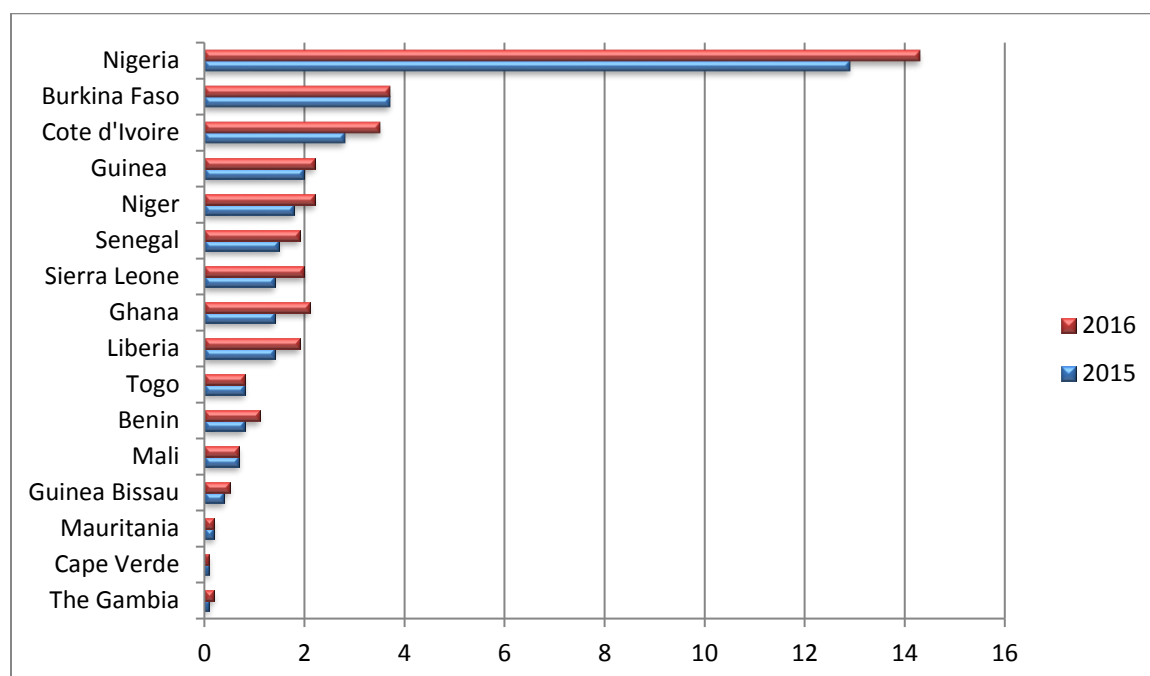
| Sub-Region      | Number of Undernourished (Millions) |           | Change so Far (%) |
|-----------------|-------------------------------------|-----------|-------------------|
|                 | 1990-1992                           | 2014-2016 |                   |
| Eastern Africa  | 103.9                               | 124.2     | 19.6              |
| Middle Africa   | 24.2                                | 58.9      | 147.7             |
| Western Africa  | 44.6                                | 31.8      | -29.4             |
| Southern Africa | 3.1                                 | 3.2       | 2.3               |
| SSA             | 175.7                               | 217.8     | 23.9              |

**Source:** Madzivhandila *et.al* (2016, p.237)

FAO (2015b) notes that the progress West Africa has made in relation to East and Middle Africa could be traced to advances in implementing the Comprehensive Africa Agriculture Development Programme (CAADP) with the Regional Agricultural Policy, Environmental Policy, Water Resource Policy, and Regional Investment Plan through several regional and national programmes and projects. In addition, since their establishment, West African regional organizations: the Economic Community of West African States (ECOWAS), the West African Economic and Monetary Union (WAEMU), and the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) have invested extensively in building regional institutions and human capacities for agricultural development in the sub-region, particularly with respect to food security monitoring and risk mitigation.

Figure 4 below shows number and percentage of the population in each West African country that are undernourished.

**Figure 4: Number of Undernourished People in West Africa, 2015 and 2016 Compared (in millions)**



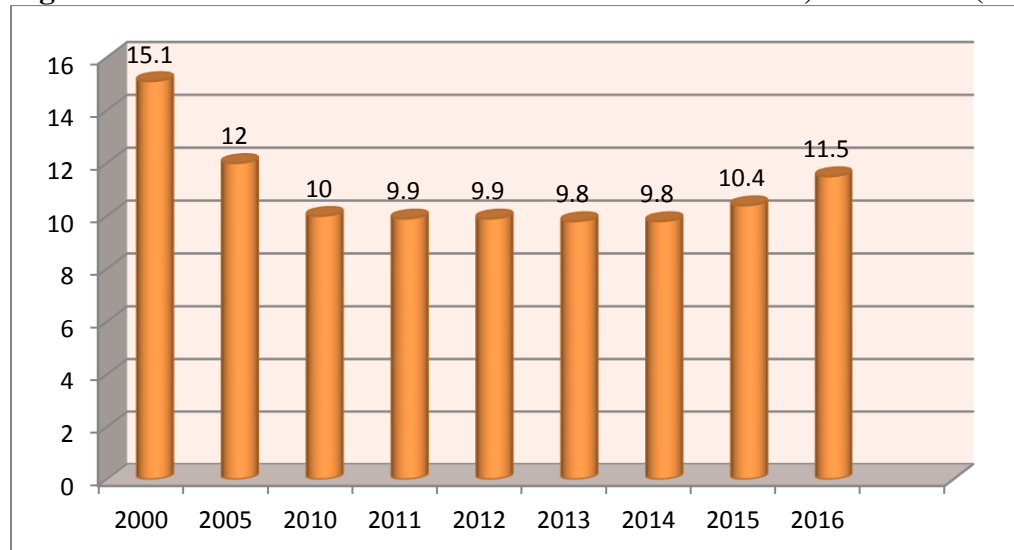
**Source:** FAO Statistics (2015); World Data Atlas (2018).

Figure 4 above indicates that in 2015, The Gambia has a population of 0.1 million that are undernourished. This represents 5.3 percent of its total population. In the same vein, Cape Verde also has a population of 0.1 million that are undernourished, representing 9.4 percent of its total population. Mauritania's 0.2 million people are undernourished, which represents 5.6 percent of its total population. For Guinea Bissau, 0.4 million people representing 20.7 percent are undernourished while in Mali, the figure is 0.7 million or 5.3 percent of the population. In Benin, 0.8 million people representing 7.5 of the total population are undernourished. The same number of people is undernourished in Togo representing 11.4 percent of the entire population of the country. 1.4 million people are undernourished each in Liberia, Ghana and Sierra Leone, representing 31.9 percent, 5.6 percent and 22.3 percent of the populations of these countries respectively. In Senegal, 1.5 million people representing 10 percent of the total population are undernourished while in Niger, a total of 1.8 million representing 9.5 percent of the population are undernourished. Two million or 16.4 percent of Guineans live in undernourishment while in Cote d'Ivoire, the numbers are 2.8 million and 13.3 percent. Burkina Faso has an undernourished population of 3.7

million representing 20.7 percent of the total population, while in Nigeria, 12.9 million people are undernourished, representing 7 percent of the population.

In 2016 however, apart from Cape Verde, Mauritania, Mali and Togo that had the same number of people undernourished as in 2015, the rest of the countries increased the number of their undernourished population in 2016. Thus, The Gambia's undernourished population increased to 2.1 million in 2016; Guinea Bissau's undernourished population increased to 0.5 million; Benin to 1.1 million; Liberia to 1.9 million; Ghana to 2.1 million; Sierra Leone to two million; Senegal to 1.9 million; Niger and Guinea to 2.2 million respectively; Cote d'Ivoire to 3.5 million; Burkina Faso to 3.7 million; and Nigeria to 14.3 million. Figure 5 shows prevalence of undernourishment in West Africa from 2000 to 2016.

**Figure 5: Prevalence of Undernourishment in West Africa, 2000–2016 (%)**



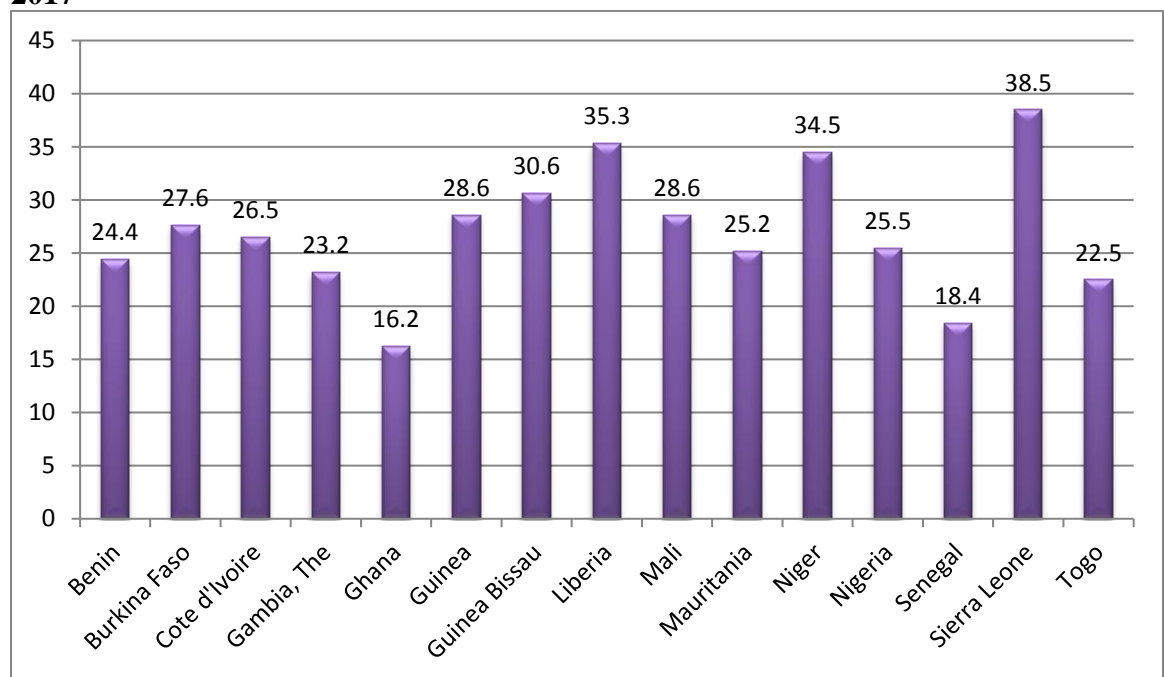
**Source:** Developed by the researchers with data from FAO, IFAD, UNICEF, WFP and WHO (2017, p.6).

The prevalence of undernourishment in West Africa, as shown in Figure 5 above indicates that as at 2000, 15.1 percent of West Africa's population were undernourished. This figure, though high, was better than the SSA average of 28.1 percent and Africa's average of 24.3 percent. However, it was higher than the world average of 14.7 percent. The situation continued to improve up to 2014 when the percentage of undernourished people in West Africa was 9.8. In 2015, it went up to 10.4 percent, and in 2016, went further up to 11.5 percent. Meanwhile, SSA, Africa and world average in 2016 were 22.7 percent, 20 percent and 11 percent respectively.

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The level of undernourishment in West Africa also reflects in the Global Hunger Index (GHI). The GHI is a set of indicators used in measuring the prevalence of hunger across the globe. The GHI was designed to capture several dimensions of hunger, which were defined as follows: insufficient availability of food (as compared to requirements); shortfalls in nutritional status; and premature mortality caused directly or indirectly by undernutrition (Wiesman, 2006). GHI scores are used for a ranking of countries in the global hunger map. The index takes scores from 0 (best case) to 100 (worst case), where scores between 0 and 9.9 are regarded as low; between 10 and 19.9 is moderate; between 20 and 34.9 is serious; between 35 and 49.9 is alarming; and from 50 upwards is extremely alarming (IFPRI, 2016). Figure 6 shows the scores of fifteen West African countries in the 2017 Global Hunger Index (there was no data for Cape Verde).

**Figure 6: Scores of West African Countries in the Global Hunger Index, 2017**

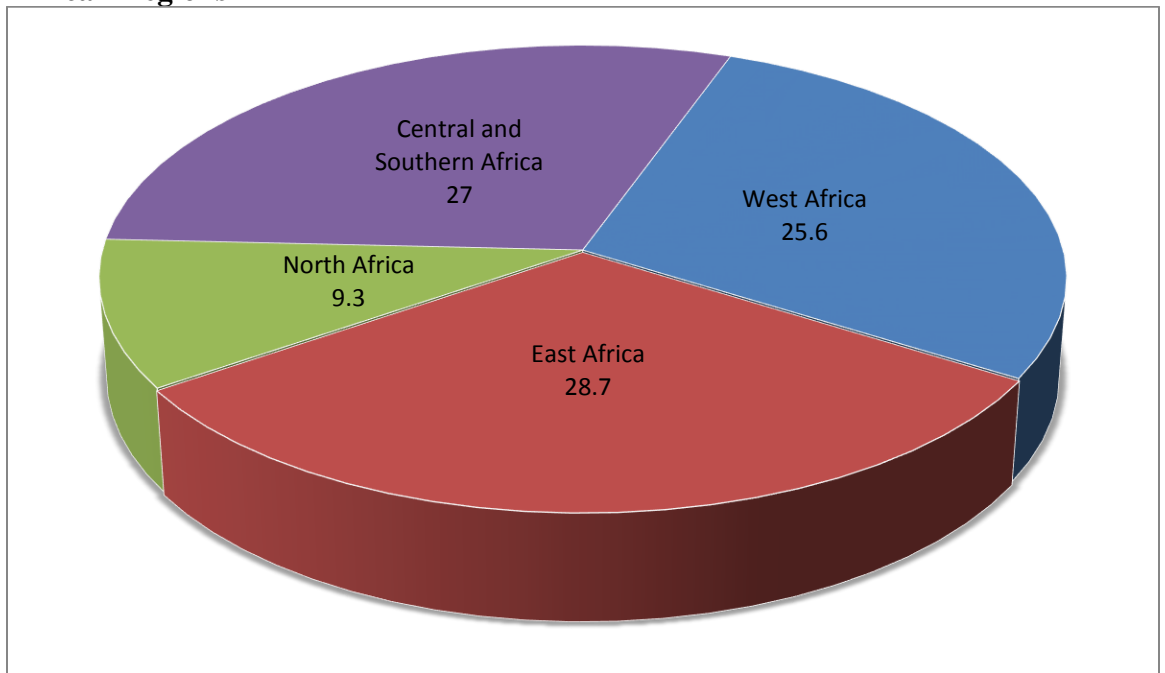


**Source:** Extracted from IFPRI et al. (2017, p.13).

From the information in Figure 6 above, the level of hunger in West Africa could be categorized as serious, as the average score in 2017 was 27.04. Apart from Ghana (with 16.2 points) and Senegal (with 18.4 points) that their level of hunger is 'moderate,' eleven West African countries fall into the category of 'serious' hunger crisis in the 2017 Global Hunger Index. These countries and their scores are: Benin (24.4), Burkina Faso (27.6), Cote d'Ivoire (26.5), The Gambia (23.2),

Guinea (28.6), Guinea Bissau (30.6), Mali (28.6), Mauritania (25.2), Niger (34.5), Nigeria (25.5), and Togo (22.5). Of these eleven countries, only Burkina Faso made an improvement from the scores of 2016. Nigeria maintained the same score. Liberia (35.3) left the 'serious' category in 2016 to join Sierra Leone, with a score of 38.5, in the category of counties with 'alarming' hunger crisis. The average score for West Africa in 2016 was 25.6 points. The implication of this is that hunger level in West Africa is not only serious but worsening. However, West Africa, like in the case of level of undernourishment, performed better than some other regions in Africa as Figure 7 indicates.

**Figure 7: Global Hunger Index 2016: West Africa compared with other African Regions**



**Source:** Developed by the researchers with data from IFPRI (2016)

Figure 7 above shows that in terms of prevalence of hunger in Africa, West Africa performed better than Central and Southern Africa, which scored 27, and East Africa, which scored 28.7, indicating that the prevalence of hunger is higher in those two regions than in West Africa. North Africa has the least prevalence of hunger with a score of 9.3. This also indicates that while the prevalence of hunger in the other regions in Africa is serious, it is low in North Africa.

## **6. Agreement on Agriculture and Food Security in West Africa**

The analysis so far points to the fact that there is food security crisis in West Africa. The question then is: why has the WTO's Agreement on Agriculture failed to improve food security in this region of Africa? This question is in the light of the fact that the Agreement on Agriculture is meant to establish a fair and market-oriented agricultural trading system, in which developing countries will have a fairer deal, improve their agricultural production, and consequently improve food security in their countries. Boonekamp (2015) has argued that the WTO's Agreement on Agriculture (AoA) seeks a more level playing ground for trade in agriculture, ensuring that governments retain policy choices to support their agricultural sectors. More important, that the Agreement plays a notable role in lessening food price volatility, thereby contributing to food security. However, available evidence disputes this assertion. Before the conclusion of Uruguay Round of multilateral trade negotiations, there have been concerns about the possible impacts of the emerging Agreement on Agriculture on poverty and food security in LDCs and net food-importing countries (Husain, 1993). These same fears were also expressed after the Agreement has become effective (Michalopoulos, 1999). Indeed, much of the pre- and immediate post-Uruguay Round literature suggests that the WTO's Agreement on Agriculture would impact negatively on food security in much of Africa through higher and more volatile food prices and declining levels of food aid. West and other Sub-Saharan African countries are highly dependent on the agricultural sector, not only for the livelihood of its population, but also for its export earnings. However, low productivity and output, stemming from a lack of investment in the sector, (e.g., irrigation facilities, high-yielding seed varieties and improving soil quality) mean that the region has been relying on food imports and food aid to close the gap between demand and supply (Gayi, 2006). More importantly, the neo-liberal policies contained in the AoA have also diminished the region's capacity to guarantee enough food for its rapidly growing population. One such neo-liberal policy is the Sanitary and Phyto-Sanitary Standards (SPS).

The SPS policy is an effective way of ensuring that goods that are exchanged across borders meet international standards. This is to ensure that human, animal and plant lives and health are safeguarded. Though these standards were not expressly provided for in the AoA, they nevertheless form the bedrock of the Agreement, especially with regards to agricultural trade across borders. Foss (2004) has noted that requirements for conformity assessment such as testing, certification etc. were originally introduced to protect the public from hazardous or substandard products and practices in each country, and the requirements are one of the most important tools to this effect. However, as the systems developed



according to national preferences, they gradually became effective barriers to trade. Certain countries, according to Foss (2004), have even used such requirements to establish new barriers to trade. The WTO (like its predecessor, GATT) has, therefore, developed rules for the handling of such requirements.

The SPS was designed to provide uniform rules for all laws, regulations and requirements regarding how a product is produced, processed, stored or transported, to ensure that its import does not pose a risk to human, animal or plant health. Sanitary measures are aimed at safeguarding human and animal health, while phytosanitary measures are intended to protect plants. The SPS agreement requires, for instance, that goods be imported from disease-free areas, inspected prior to export and not exceed maximum levels of pesticide or insecticide use. Health risks posed by fresh foods and agricultural goods include salmonella poisoning, foot and mouth disease and sugar plant pests (Mutume, 2006).

The policy is also meant to prevent countries from using SPS measures simply to block trade, stating explicitly that the measures cannot be employed in a manner which would constitute a disguised restriction on international trade. But although importing countries are encouraged to use existing international standards, they are nevertheless allowed to adopt stricter regulations if they can provide scientific justification for their actions. Thus, while recognizing member states' rights to adopt SPS measures to restrict international trade when necessary to protect human, animal or plant life or health, it also stipulates that they should not create unnecessary obstacles to trade, and should not arbitrarily or unjustifiably discriminate between members where identical or similar conditions prevail. In other words, the policy aims to ensure that unnecessary health and safety regulations are not used as an excuse for protecting domestic producers from trade competition. Where relevant scientific information is insufficient, Article 5.7 of the Agreement allows countries to adopt provisional measures under strict conditions including an obligation to seek to complete the information within a reasonable period of time (Tothova, 2009).

In order to ensure that member states do not arbitrarily use the SPS as a technical barrier to trade, the policy further stipulates that the measures must be based on international standards and explicitly recognized three intergovernmental organizations which specialize on different areas of the subject matter. They are:

- a) The FAO/WHO Codex Alimentarius Commission (Codex) for food safety,
- b) The Office International des Epizooties (OIE) for animal health,  
and

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- c) The FAO International Plant Protection Convention (IPPC) for plant health (Foss, 2004, p.46).

Measures based on these organizations' standards are deemed to comply with the SPS agreement.

Though the Agreement states that member countries should not arbitrarily use the measure as a technical barrier to trade, fact is that developed member countries of the WTO have always resorted to it to restrict imports from developing countries. Thus, these measures not only work against the trade/economic interests of African and other developing countries but also have become a trade-distorting mechanism, a non-tariff barrier to trade being used by developed countries to restrict developing countries' products from gaining access to their markets. Ngwenya (2015) posits that SPS is one of the several reasons for poor market access and that it has been shown to be a significant barrier to trade in Africa, affecting mainly agricultural commodities.

A major problem West African countries face regarding the SPS policy, and which in the long run undermines food security in the region, is that they lack both the capital and the personnel needed to institute an SPS framework that is acceptable internationally. Thus, they have difficulty meeting developed countries' quality and safety standards because of lack of sufficient funds to invest in quality control measures, more adequately trained staff, and expensive equipment (Rahman, 2001). Therefore, they depend on the analysis done by their developed trading partners in their own laboratories back home. In other words, West African countries can only export products developed countries have certified to have met SPS standards. SPS diagnostics and food safety laboratories are rare in West Africa. The many ministries, agencies and institutions sharing responsibilities in the SPS area all have their own laboratory systems, which suffer from limitations in funding, equipment and trained personnel, resulting in limited capacity to perform even the most basic analyses. Due to this, there is very limited capacity to analyze important parameters such as pesticide residues, veterinary drug residues, chemical contaminants, dioxins and heavy metals as well as mycotoxins, which are all essential to a number of potential export commodities and emerging food-borne pathogens (Foss, 2004).

Furthermore, West African countries lack an SPS policy that takes into account the risk-based and multi-disciplinary aspects of food safety and other SPS issues. Co-operation and co-ordination between the many ministries, agencies and other stakeholders involved in this area are absent, with no holistic and integrated approach of their services along the entire food chain. In the food safety area alone, the responsibilities may be shared among up to six ministries and many more

agencies and institutions, resulting in duplication or triplication of effort, the waste of scarce public funds, conflicting interests and disorientation of the many stakeholders (Foss, 2004). Also a majority of the countries lack a system for early warning/rapid alert in the whole SPS area when pests, diseases or unsafe food are detected. Inadequate information infrastructures in the form of computers and telecom equipment are the main reasons for the weak information flows. Border inspections and quarantine services are often non-existent, mainly due to the fact that border stations lack the tools and skills to apply effective SPS measures.

As a result of the above constraints, West African participation in the SPS standardization process is very limited, both in terms of numbers and effectiveness. As mentioned earlier, this is partly due to the high cost of participation, as well as the shortage of experts in relevant areas who are qualified to take part in scientific arguments. Consequently, the industrial countries and their needs dominate the standardization organizations. However, as Zepp, Kuchler and Lucier, (1998) have argued, there is no evidence that imported food, as a whole, poses higher food safety risks than domestically produced food. According to them, there is no clear evidence that health risk due to pesticide residues or microbial bacterial contamination is greater with imported produce than with domestically grown. Still, developed countries continue to use the mechanism to restrict and limit access of developing countries' products to their markets, with very serious implications for foreign exchange earnings of West African countries, which is used to pay for food imports, in situations of shortfall in domestic food production.

Empirical evidence abounds to show how developed countries have hidden under the SPS policy to restrict access of West African countries' agricultural products to their markets. For instance, Foss (2004) reported that in Burkina Faso, exports of sesame, dried mango fruits, cashew nuts, karité nuts and butter face market entry challenges. In order to sell the above products in the EU, EU customers require product certification by a third party known as ECOCERT, a French certification body. The results of samples analyzed in Burkina Faso laboratories are not recognized. The results of ECOCERT subcontracted laboratories are sometimes contradicted by results from customer-related laboratories. This creates suspicion and losses by declassification. A delay of two months to get results from EU laboratories, the time for transportation of those products found in conformity at the time of shipping, affects the quality of products upon arrival. Furthermore, the certification costs are very high. Certification and bank fees related to payments consume nearly all the profits made (Foss, 2004).

Also, Ogah (2015) reports that non-oil exports from Nigeria continue to face mass rejection at entry points in many countries in Europe for failure of exporters to comply with standards specified by the countries. The rejected exports are

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mainly in the food and beverage segment. Top on the list of food items banned from entering Europe till June 2016 are beans, sesame seeds, melon seeds, fried fish, meat, peanut chips and palm oil. Citing the European Food Safety Authority, Ogah (2015) noted that beans are expected to have maximum residue limit of 0.01mg/kg, but the commodity from Nigeria contains between 0.03mg and 4.6mg/kg of dichlorvos pesticide. This is why the European Commission considered that the import of this specific product would present a serious risk for human health. As a result, there has been a rate of rejections of more than 70 percent of dried beans coming from Nigeria since 2012.

Another neo-liberal policy in the Agreement that undermines food security in West Africa and other developing countries is the issue of domestic support and export subsidy. The fact that the Agreement allows governments to retain policy choices to support their agricultural sectors has emboldened developed countries to use domestic support, export subsidies as well as restricted market access to support their agricultural sector. This undermines the competitiveness of West African and other developing countries in the international market, and in the process causes food security challenges in developing countries. Domestic support, Boonekamp (2015, p.136) has argued, 'can lead to subsidized exports and/or to price volatility if large food importers or exporters impose trade restrictions or if countries act simultaneously'.

According to Díaz-Bonilla and Ron (2010), the use of agricultural export subsidies is not only unfair but is also disruptive of international trade. Those export subsidies have negatively affected both developing countries that are net agricultural exporters and agricultural producers in net importing developing countries, whose production is displaced by external unfair competition. Continuing, they argue that the Agreement on Agriculture is heavily tilted in favour of industrialized countries, which have the legal room under the WTO and the economic resources to distort production and trade in their favour. Meanwhile, while developed countries use both domestic support and export subsidies to support agriculture and farmers in their home countries, they use the instrumentality of the WTO to discourage government's support and incentives to food producers in developing countries, including in West African countries. Consequently, food production in West Africa has been declining relative to population growth. This has intensified food security challenges in the region, not only because of the declining level of food production, but also because of rising cost of food staples occasioned by the disincentive to continue production on the part of farmers.

There is, therefore, a strong link between the globalization of trade in agriculture through the WTO's Agreement on Agriculture (AoA) and food security

challenges in West Africa, and the inability of the Agreement to address these challenges tends to reinforce the argument that the neo-liberal policies embodied in the Agreement favour developed member countries of the WTO more than developing countries. As Gonzalez (2002) has argued:

...the rules governing agricultural trade, as embodied in the WTO Agreement on Agriculture, are perceived as allowing the United States and the European Union to continue to subsidize agricultural production and to dump surpluses on world markets at artificially depressed prices while requiring developing countries to open up their markets to ruinous and unfair competition from industrialized country producers. This results in the displacement of local food production in developing countries by cheap imported food, increases dependence on food imports, and produces a decline in food self-reliance (Gonzalez, 2002, p.438)

In fact, as a result of these neo-liberal policies, the AoA tends to intensify food insecurity in West Africa. Gayi (2006) has argued that full implementation of the Agreement by the developed countries was expected to lead to increased variability in global food prices and global food price increases, and that Africa, for example, was expected to increase its dependence on food imports. For these developing countries, changes in trade policy orientation (that is, switching to trade liberalization) could have a significant impact on their foreign exchange earnings, and therefore have critical implications for their food security situation. This is because most countries in West Africa rely heavily on taxes levied on imports and exports. This makes total revenues highly vulnerable to changes in the value of export earnings (stemming from changes in trade policy orientations), and as Gonzalez (2002) has warned, countries that rely on export revenues to finance the importation of food could face severe dislocation when a drop in the world market price of key exports makes it difficult to purchase imported food. This has grave consequences for food importation. As food prices continue to rise, its macroeconomic effects continue to be severe on many countries in West Africa (being net food importers) leading to worsening balance of trade. In situations where these countries' foreign exchange earnings or purchasing power are reduced as a result of unfavourable terms of trade, dependence on food importation could increase variability in food supplies, thereby creating conditions that threaten food security in the region. West and other Sub-Saharan African countries have been particularly badly hit by declines in terms of trade, made worse by price fluctuations in its major exports (UNCTAD, 2003b; FAO, 2003).

In a study done by the FAO in 1999 (cited in Gonzalez, 2002), it was found that the Agreement on Agriculture, like the market-liberalizing structural adjustment programmes that preceded it, adversely affected food security in developing countries (West Africa inclusive) by exacerbating rural poverty and

inequality. The study further found that the Agreement resulted in an increase in food imports and an accompanying decline in food production. These increases in food imports threatened key agricultural sectors in developing countries that were important for economic development, employment, food supply and poverty alleviation. In the final analysis, food security in West Africa is threatened.

## **7. Conclusion**

This study demonstrated that the WTO's Agreement on Agriculture failed to improve food security in West Africa because of the neo-liberal policies inherent in the Agreement. With the aid of tables and figures, it established that West Africa has been facing food security challenges because while the region always ranks low in the several Global Food Security Index rankings across the years, it ranks high in the Global Hunger Index. The study also found that food production has been dwindling in West Africa, because of disincentive to continue production. This is linked to the WTO's policy of discouraging government's supports and incentives to food producers in developing countries. The resultant effect is high food prices in the region with serious implication for food security. The study further demonstrated that as a result of the above reason, food availability in West Africa has remained low as the percentage of the population that has access to food in the region has been on the downward trend as a result of the policies inherent in the Agreement. Finally, the study also demonstrated that the standardization rules of the WTO (the SPS policy) have further limited the capacity of West African states to leverage on the liberalization policy to export to developed countries' markets. This further intensifies food security challenges in the region. It is, therefore, the contention of this study that the globalization of trade in agriculture through the WTO's Agreement on Agriculture has not only failed to improve food security in West Africa, but has in fact, intensified the food security challenges West African countries have been facing. This is as a result of the neo-liberal policies inherent in the Agreement.

## **8. Recommendations**

On the basis of the findings of this study, we put forward the following recommendation:

1. West African countries should aim at food self-sufficiency instead of food self-reliance. A key advantage of a national food self-sufficiency strategy is that it makes the country less dependent on the vagaries of other countries' export policies for important basic staples. Such a strategy also focuses attention on the agricultural sector and may reverse the historical underinvestment in agricultural production in most West African countries.

In addition, if agriculture is the main provider of employment and source of income for the majority of people, then such policies can promote overall development if they spur increased productive investment in agriculture.

2. As a corollary to the above, investments in the agricultural sector that will increase food availability and strengthen the food production system in West Africa should be given immediate priority by governments of West African countries, especially the innovation of family/smallholder farming. Reliance on international trade that is obviously biased against their food needs is not a strategy that can be sustained.
3. West African countries, and indeed, all developing countries should move for the reform of the WTO agreements in general and the Agreement on Agriculture in particular, especially market access of West African commodities into developed countries' markets. Greater market access can be achieved through further reduction of developed country tariffs in order to address the issue of dirty tariffication. It can also be improved by applying tariff reductions on a product-by-product basis rather than industry-wide averages in place currently. A review of the Agreement should also be such that affords developing countries with a policy space that gives governments allowance to pursue independent policies such that food security objectives are given precedent over WTO trade obligations.
4. West African and other developing countries should insist on the removal of export subsidies and domestic supports enjoyed by agricultural producers of developed countries from their governments. It is these subsidies and supports that bring down the prices of foreign goods which leads to dumping of the products in African markets, thereby, undermining domestic industries.
5. ECOWAS should fast-track efforts to becoming a customs union, which is a prerequisite for a regional economic bloc to become a member of the WTO. Once a full member, ECOWAS can negotiate on behalf of all of its member states as the EU does. Being a full member would be particularly helpful in renegotiation of bound tariff rates for the entire Community in the context of the Common External Tariff (CET). In the meantime, ECOWAS could, however, consult more systematically with its member states to work out a common position on key issues of interest to the entire Community, which the countries would then use to defend their common interests in the negotiations of the WTO.

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