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# Strengthening African Agricultural Trade: The Case For Domestic Support Entitlement Reforms

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## Abbreviations and Acronyms

<b>AARI</b>	Area, Animal numbers, Revenue, or Income
<b>AfCFTA</b>	African Continental Free Trade Agreement
<b>AGIMS</b>	Agriculture Information Management System
<b>AMS</b>	Aggregate Measurement of Support
<b>AoA</b>	Agreement on Agriculture
<b>COVID</b>	Coronavirus Disease
<b>DFAT</b>	Department of Foreign Affairs and Trade
<b>DP</b>	Direct Payments
<b>EU</b>	European Union
<b>FAO</b>	Food and Agriculture Organization
<b>FBTAMS</b>	Final Bound Total Aggregate Measurement of Support
<b>GDP</b>	Gross Domestic Product
<b>GSSE</b>	General Services Support Estimate
<b>HS</b>	Harmonised System
<b>IIT</b>	Institute for International Trade
<b>ITC</b>	International Trade Centre
<b>MPS</b>	Market Price Support
<b>MC12</b>	Twelfth Ministerial Conference (of the WTO)
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>PSE</b>	Producer Support Estimate
<b>RoW</b>	The Rest of the World
<b>TSE</b>	Total Support Estimate
<b>US</b>	United States of America
<b>USD</b>	United States Dollar
<b>VOP</b>	Value of Production
<b>WITS</b>	World Integrated Trade Solution
<b>WTO</b>	World Trade Organization

# Executive Summary

In the build up to the World Trade Organization's (WTO) twelfth Ministerial Conference at the end of 2021, WTO members are again considering how best to reform domestic support (subsidies) to agriculture.

This has long been a vexed issue in the organization, and its predecessor, the General Agreement on Tariffs and Trade. Since the successful, but partial, reforms introduced by the Agreement on Agriculture at the conclusion of the Uruguay Round of multilateral negotiations, there has been limited progress. Given the broader problems besetting the WTO now, ambitions for meaningful domestic support reform have to be tempered to prevailing political realities.

One relatively promising area for reform is to address WTO members' entitlements to deploy domestic support, rather than aiming to cut actual expenditures per se. Specifically, reducing entitlements would diminish members' rights to increase domestic support payments in future. Such reductions are best targeted at those subsidies that distort trading partners' production and trade incentives, rather than at subsidies generally regarded as either relatively benign, or minimally distorting to support domestic farmers and the agricultural economy.

Accordingly, the Australian government, together with some countries in the Cairns group of agricultural exporters, has advanced a proposal for reducing agriculture domestic support entitlements. The present report was commissioned to provide empirical grounding to this proposal, and to enable a wider discussion with a crucial group of countries substantially affected by provision of domestic support to agriculture: African WTO members.

In Sections 2 and 3 the report identifies African countries that are major traders and producers of agricultural commodities, respectively, and hence those with most at stake in the proposed reforms. These countries' major agricultural trading partners are also identified, as well as those countries that historically have provided the bulk of domestic support to commodities of most interest to these African countries are identified.

Overall, we find that African agricultural production and trade is concentrated in a few African countries: Egypt, Nigeria, and South Africa on the production side, whereas Egypt, South Africa, Morocco, Nigeria, and Ghana are the major agriculture commodities traders. Both production and trade have been stagnant in the last decade, with exports generally concentrated in low value-added commodities. The EU, the US, China, India, Japan, Russia, Brazil, Argentina, and Canada are either the major sources of African agricultural imports, the major African agricultural export destinations, or both. In Section 4 we show that, in varying combinations, these countries are also the major providers of domestic support to the ten commodities of most interest to the major African traders and producers. Those commodities are wheat, rice, sugar, tobacco, tomatoes, cotton, maize, beef, oranges, and milk.

As is well-known in the trade policy community, disciplines governing recourse to agriculture domestic support, particularly the most trade and production-distorting subsidies, are both problematic and unevenly allocated.

Specifically, payments under the blue box (linked to production limiting programmes), Article 6.2 (the 'development box') and green box (general support payments not linked to production or trade per se) are not capped. The most trade distorting supports are the Final Bound Total Measurement of Support (FBTAMS), which is capped in nominal terms and available only to 32 countries, and de minimis, which is capped as a % of the value of production and available to all countries. Together these Amber Box entitlements have grown from around 250 billion USD in 2001 to a trillion USD today and are expected to double, to 2 trillion USD, within a decade as countries' agriculture economies grow.

Six of Africa's major trading partners (three developed and three developing countries) account for over 50% of the total FBTAMS + de minimis entitlement. However, actual support levels provided are much lower, reinforcing the case for meaningful reform to entitlements, in order to 'squeeze the water' out of them, and thus limit the potential for damaging growth of domestic support to agriculture in the future.

**Importantly, reductions of domestic reform entitlements should not negatively impact African agricultural production and trade; rather the reverse is likely true.**

Robust economic modelling work would be required to properly establish the channels and directions of impact, but that was beyond the scope of this report. Nonetheless, a few observations drawing on the data analysed in this report are appropriate and are set out in Section 5.2.

While there is some risk that countries reliant on imports of agricultural commodities such as milk and rice may experience price increases should subsidies provided by their major trading partners diminish, this is likely concentrated on a few sub-Saharan and North African countries. Moreover, any price increases are likely to attract additional production and hence provision of imports from other suppliers. This includes African countries currently commencing implementation of the African Continental Free Trade Agreement — an Agreement explicitly intended to grow intra-African trade.

Furthermore, African agricultural exporters can be expected to respond to market opportunities in their major non-African trading partners arising from meaningful disciplines on agriculture domestic support. Currently, those market opportunities for African exporters are sharply constrained by trading partners' domestic support, which has the effect of favouring the subsidised domestic producers to the exclusion of imports. Increased market opportunities should have the added benefit of reviving stagnant African agricultural production and promoting value-addition, or diversification (see the commodities boxes in Section 5.2). In addition, African countries with their evident fiscal constraints and weak implementation capacities are arguably not well-placed to subsidise their own farmers, in other words to play the 'subsidies game', and so have much to gain through others' reforms.

Arguably most importantly, though, entitlements reform would not actually reduce payments made. It is difficult to see any downside to this proposal for African countries. Moreover, as we set out in Section 5.1 the Africa Group in Geneva has consistently argued in favour of meaningful reforms to domestic support. We cover the evolution and substance of those proposals there, but here would note that proposed reforms to entitlements are far less ambitious, both substantively and politically, than Africa Group domestic support reform proposals to date, but are broader in scope and have potential longer-term benefits.

In this light, meaningful entitlements reform should encompass the following principles:

1. Clearly delineate between trade-distorting and minimally trade-distorting support, with the objective being to cap and reduce the former over time while the latter should remain unlimited.
2. Simplify the 'boxes' categorising trade distorting domestic support.
3. Clarify green box support payments to ensure they are not trade-distorting, while maintaining unlimited access to it.
4. Develop product-specific caps, or concentration limits, to address the problem of support being concentrated on a few commodities.
5. Ensure greater transparency in measurement of domestic support, specifically by updating and improving procedures for WTO notifications.

In considering this set of reform principles, African WTO Members provide scant domestic support to their own farmers and should be wary of future rules that enable support, not only by the traditional developed country support providers, but also by the emerging subsidizers among the advancing developing nations outside of the African continent.



# 1. Introduction

Article 20 of the WTO Agreement on Agriculture (AoA) recognizes that WTO Members have a long-held objective of negotiating substantial and progressive reductions in agricultural support and protection in their quest for fundamental agricultural trade reform, and that this quest is an ongoing process.

The current WTO negotiations for domestic support reform leading into the twelfth Ministerial Conference (MC12) set to take place in Geneva 30 November to 3 December 2021 represent the latest effort in this ongoing process mandated under Article 20.

Towards that end, a group of agricultural exporting nations within the broader Cairns Group<sup>1</sup> configuration has proposed (WTO (2019a), WTO (2020)) negotiations to reduce trade-distorting domestic support entitlements of developed and large developing members. To assist with identifying the issues and options, the Australian Department of Foreign Affairs and Trade (DFAT) commissioned the University of Adelaide's Institute for International Trade (IIT) to investigate the implications of growing agriculture domestic support entitlements for African countries.

Our report is structured as follows. Section II identifies key African agricultural traded products and partners by empirically examining the evolution of African agricultural imports and exports over the past two decades.

In Section III we explore African agricultural production of the key traded products. The principal African agricultural commodities of interest to the major African traders and producers are then used to frame our examination of the details of agricultural domestic support provided by Africa's major agricultural trade partners that are also the major global agricultural producers and traders, in Section IV.

Section V draws together the empirical analysis of the preceding sections, drawing out key potential implications of growing domestic support entitlements for African agriculture production and trade, and relating these to stated Africa Group WTO positions on reforming domestic support. Section VI concludes with recommendations for African trade negotiators' consideration. We also provide a number of Annexes, both explanatory and substantively analytical, to serve as resources for those readers wishing further context on this important subject.



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1. The Cairns Group comprises 19 agricultural exporting countries: Argentina, Australia, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Indonesia, Malaysia, New Zealand, Pakistan, Paraguay, Peru, the Philippines, South Africa, Thailand, Uruguay, and Vietnam.



# 2. Empirical Examination of African Agricultural Trade

Increased trade can create sustainable jobs, incomes and livelihoods, as well as improve food security and long-term agricultural productivity in Africa.

Although agriculture is the source of livelihood for more than half of the African population, its trade performance is constrained owing to supply-side and demand factors. While the major supply side factors are low productivity, very low public spending on the sector, and insufficient use of modern technologies, the key demand-side factors are (i) African exporters face several trade barriers (both tariffs and nontariff measures) to penetrate developed and emerging markets, and (ii) produce to low quality standards (Antoine, Sunday & Chahir 2020). Antoine, Sunday and Chahir (2020) also show that Africa's share in world agricultural exports averaged 4.2 % in 2003-18 (16.9% in Asia-Pacific developing region, and 15.6% in Latin America and the Caribbean (LAC) in the same period) implying low agricultural exports from the continent.

The main objective of this section is to empirically analyse the key agricultural traded products of the major African trading nations. Specifically, we will focus on:

- Identifying the top traded (exported and imported) agricultural commodities;
- Identification of top agricultural traders (i.e., those countries potentially with the most at stake in the subsidies reform negotiations); and
- Identification of their major foreign trading partners.

Following Annex 1 of the Agreement on Agriculture (AoA), agricultural products in this study include all HS chapters from one to twenty-four excluding fish products; and some other specific products listed in other chapters. The full list of the agriculture products analysed in this study is shown in Table 4 in Annex 1.

Following Bouët and Odjo (2019) we analyse export and import values (rather than volume) as the change in value shows changes in either price, volume or both. The empirical analysis begins by identifying the top export and import agricultural goods using the following three steps:

- (1) We downloaded all HS 6 agricultural export (import) products of Africa with the world;
- (2) Then we ranked African agricultural export (import) products based on their 2017-19 average values; and
- (3) Finally, we extracted the top 15 African exported (and imported) agricultural items for further analysis.

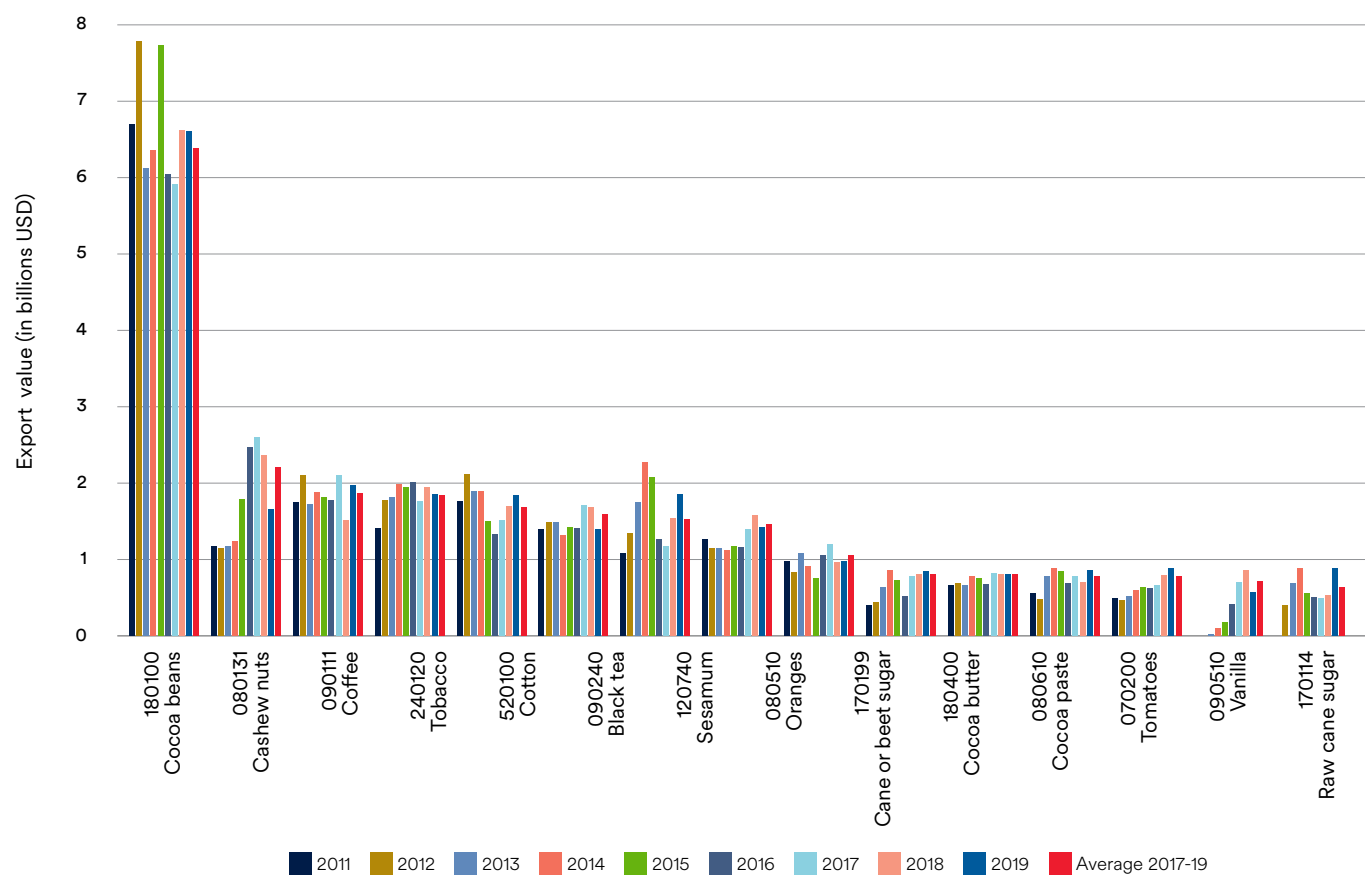
**Figure 1** shows the top 15 African agricultural export products. Cocoa beans are the biggest export followed by Cashew nuts, Coffee, Tobacco, Cotton, Black fermented tea, Sesamum seeds, Oranges, Sugar, Cocoa butter,

Grapes, Cocoa paste, Tomatoes, Vanilla and Raw cane sugar. The export picture is volatile. For example, where there was an initial decline, the export of Oranges increased until 2018 but declined in 2019. Exports of Cotton, Sesamum seeds, Cocoa butter, Cocoa paste, Tomato and Raw cane sugar rose moderately between 2016 and 2019. In contrast, the export of major African agricultural products such as Cashews, Black fermented tea, and Cane or beet sugar registered significant decrease within the last three years. Overall, African agricultural export growth was either stagnant or declining.

Figure 21 in Annex 1 presents the time-series plots of the top four African 4-digit agricultural products (1801-Cocoa beans, 0805-Citrus Fruit, 0801-Coconuts, Brazil nuts and cashew nuts, and 1701-Cane or beet sugar). In general, while West African countries are the major Cocoa bean exporters, the export of non-West African countries (for example Uganda) is growing. Moreover, the export of Citrus Fruit is dominated by non-West African countries namely South Africa, Egypt, and Morocco. Finally, the last panel in Figure 21 shows that while the export of Coconuts, Brazil nuts and cashew nuts, where West African countries are the main exporters, grow in the past two decades, exports of Cane or beet sugar were largely flat.

**Figure 2** reports the top 15 African Agricultural imported products. It is evident that imports of Wheat, Sugar, and Tobacco have shown marked increases in the last decade.

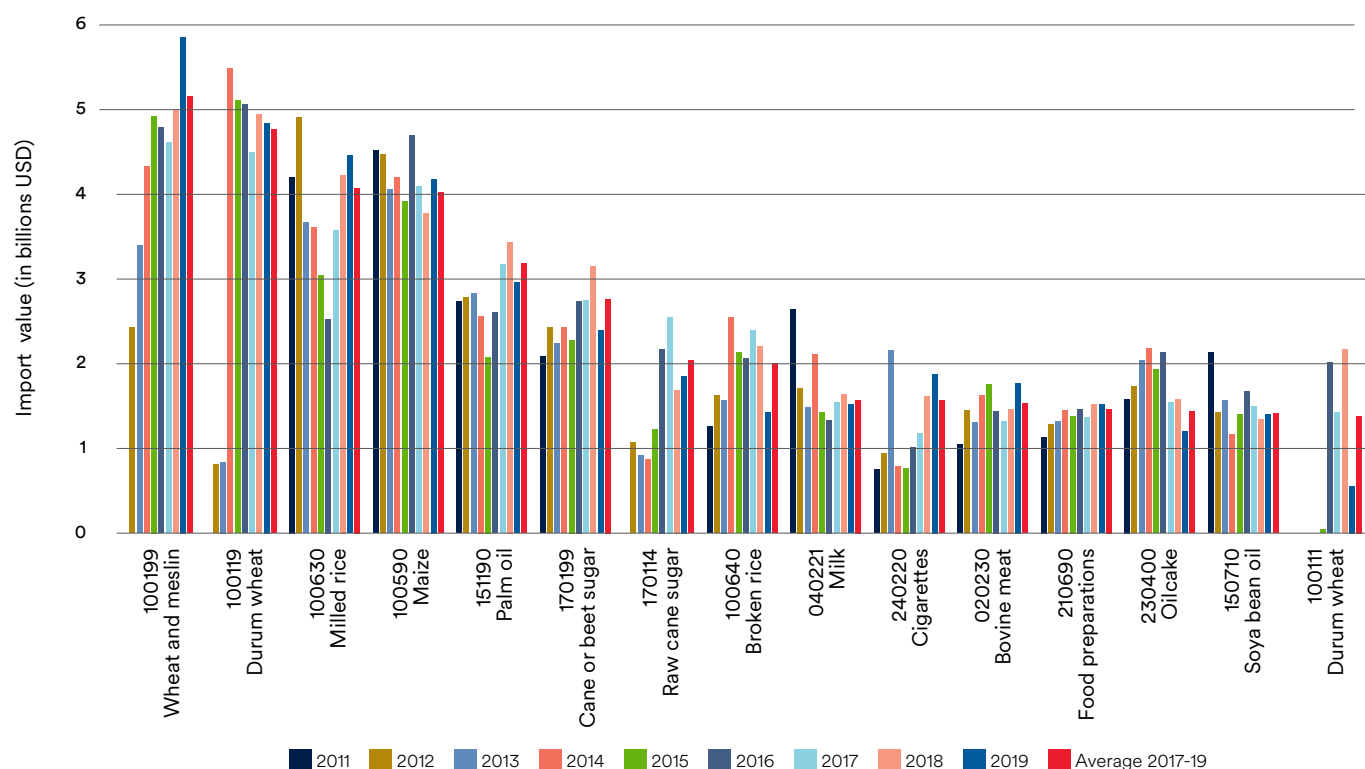
Figure 1: Top 15 HS 6-digit African agricultural export products (2011-2019)



Source: Authors' computation using the ITC Trade map HS 6-digit data



**Figure 2: Top 15 HS 6-digit African agricultural import products (2011-2019)**



Source: Authors' computation using the ITC Trade map HS 6-digit data

Figure 22 in Annex 2 presents the time-series figures of the top four HS 4-digit agricultural products for the major African importers, including Wheat and meslin (HS 1001), Rice (HS 1006), Cane or beet sugar and chemically pure sucrose (HS 1701), and Palm oil and its fractions (HS 1511). The figure indicates a significant increase in the import of the four agricultural goods. Relatively faster population and urbanization growth in Africa and the associated food consumption increase has markedly contributed to the recent agricultural import surge in the continent.

In addition to identifying the top traded African agricultural products, it is important to identify the source and destination countries. This will help us to identify from which countries the most subsidized African imports are coming. Furthermore, this analysis allows us to know where African exports face the most significant competition from products that receive trade-distorting domestic

support. To this end, we have analysed the major destinations and sources of top 15 HS six-digit African agricultural products<sup>2</sup>. Panel A of **Figure 3** reports the major 15 destination countries of African agricultural exports. The European Union (EU) is by far the largest destination. This is mainly attributable to the geographical and colonial relationship between the two continents. In this exercise, EU includes France, Spain, Italy, Germany, Belgium, and the Netherlands. Among EU countries, the Netherlands is the largest importer of African Agricultural products, followed by Belgium, Germany, and the United Kingdom (the UK left the EU on 31 January 2020). Following the EU, the US, China, and India take the second, third and fourth places as the major export destinations. Panel B of Figure 3 presents the major 15 import sources for the top African import products. The four major import sources are Brazil, the EU, Argentina, and the US.

The next natural question that should arise in the African trade analysis is which African countries would be potentially affected by the agricultural domestic support of the major subsidy providers? In order to identify the key African traders, we first identify the top 15 African exporters of the products reported in Figure 1 and the top 15 African importers of the import products presented in Figure 2. Then, we extracted the top 15 traders from the list of the top 15 exporters and top 15 importers identified in step one. Based on this, the major 15 African agricultural traders, when arranged orderly with import and export value, are Egypt, Nigeria, South Africa, Ghana, Morocco, Cote d'Ivoire, Ethiopia, Kenya, Benin, Mauritius, Cameroon, Tanzania, Zimbabwe and Uganda.

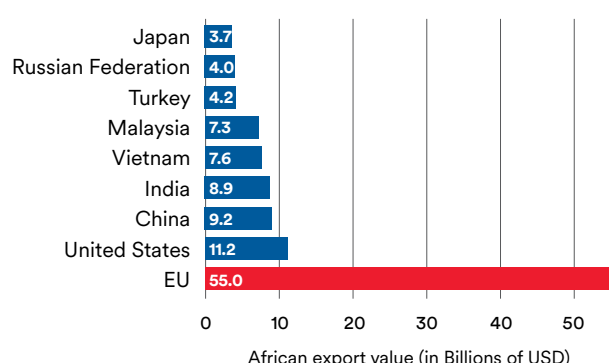
**Figure 4** presents the 2011-2019 export values of the major African agricultural exporters of the top 15 agriculture exports. Cote d'Ivoire stands out with exports heavily concentrated on three

2. The HS four code for the top 15 African agricultural exports are 1801, 0805, 0801, 1701, 2401, 0901, 1207, 0902, 5201, 0303, 0307, 1604, 3302, 1803 and 0806. The HS four code for the top 15 agricultural import products are 1001, 1006, 1701, 1511, 1005, 0303, 0402, 0207, 1507, 1201, 2402, 0202, 1901, 2106, and 2304. Appendix A reports the export and import level of the above products within 2011-2019.

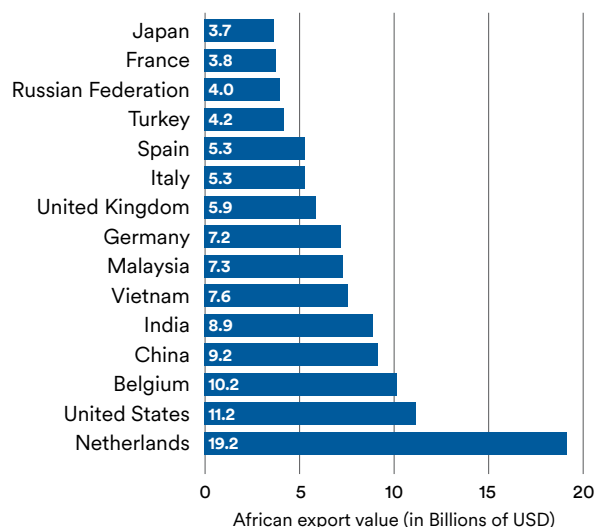


**Figure 3: Top destinations and sources of the 15 major HS 4-digit African Agricultural export and import products (sum of 2011-2020 value)**

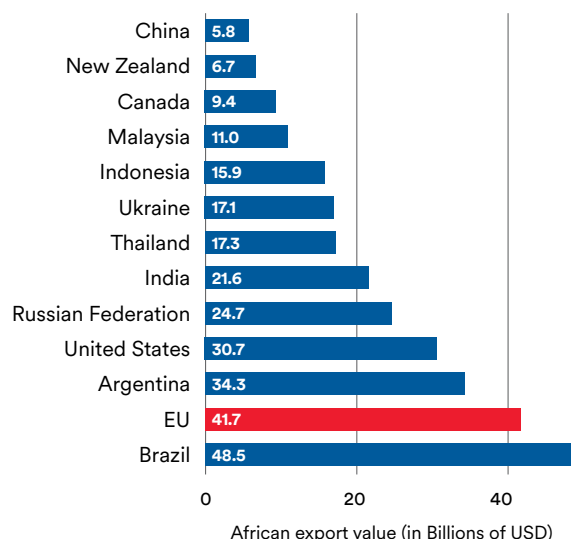
**3a) African exports to EU & non-EU countries**



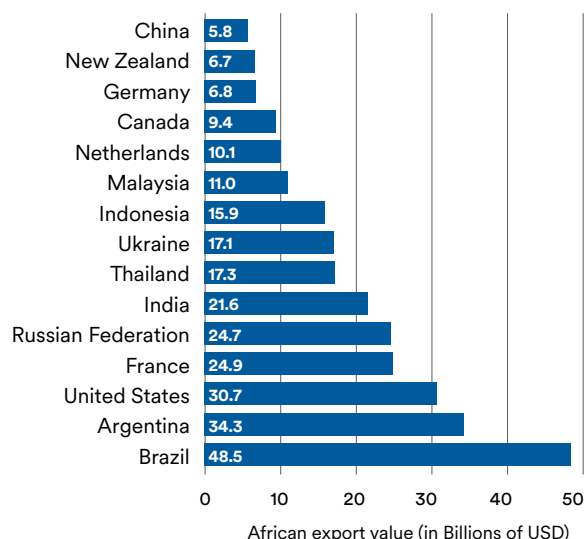
**3b) African exports to individual EU & non-EU countries**



**3a) African imports from EU & non-EU countries**



**3b) African imports from individual EU & non-EU countries**



Source: Authors' calculation using World Integrated Trade Solution (WITS) data.

Note: EU member states in this figure includes France, Spain, Italy, Germany, Belgium, Netherlands and the UK.

products: Cocoa beans, Cashew nuts and Cocoa paste. The second largest agricultural goods exporter in the past decade was Ghana. Ghana's exports also comprised a handful of agricultural products such as Cocoa beans, Cashew nuts and Cocoa butter. Relative to the latter two countries, South Africa's exports are relatively diversified.

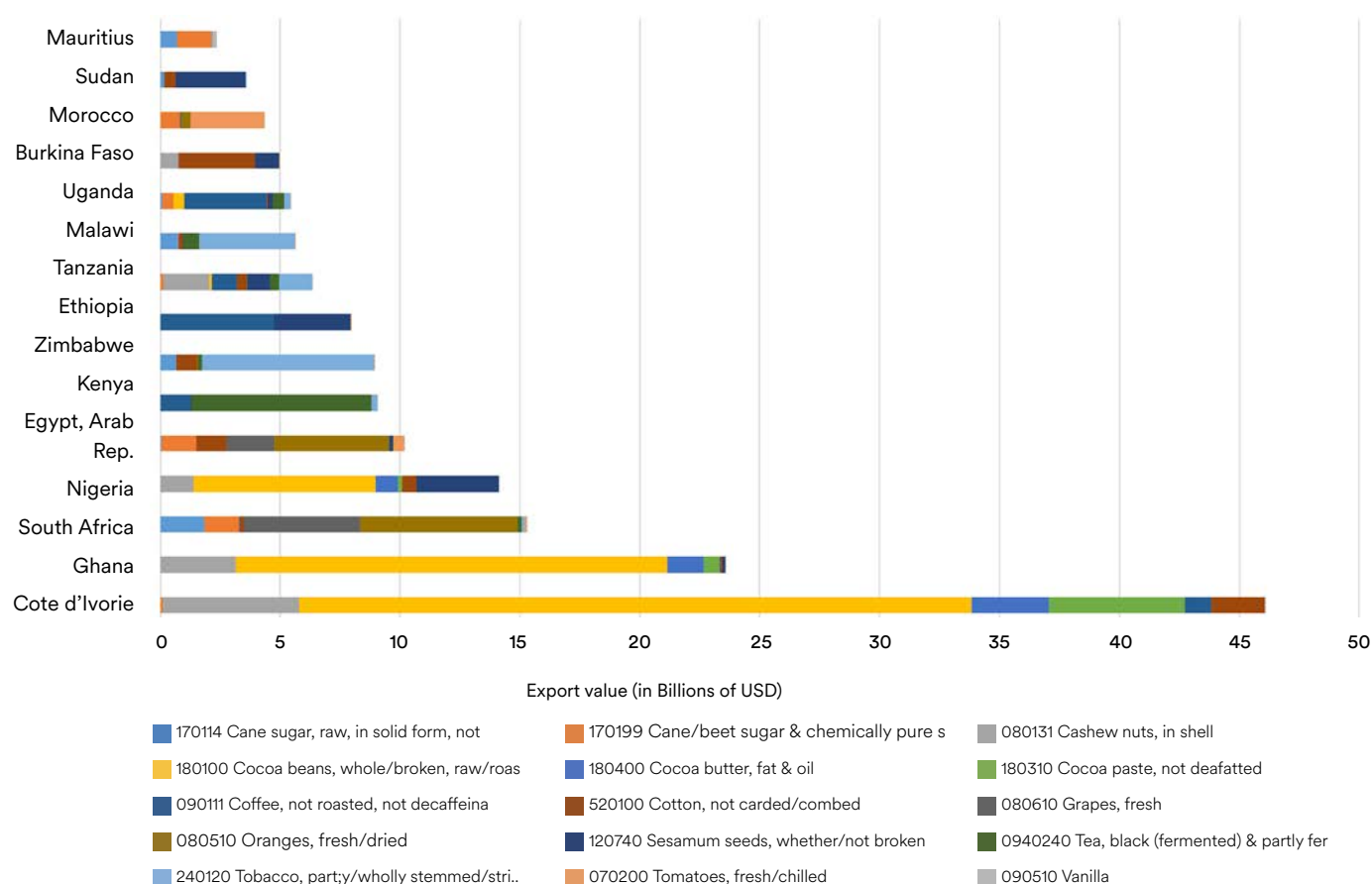
**Figure 5** illustrates the major 15 African agricultural importers during the last decade. As the chart demonstrates, Egypt is the largest importer followed by South Africa, Morocco, Nigeria, and Sudan. Egypt's three main agricultural import products are Wheat, Maize,

and Meat of bovine animals. South Africa's three major agricultural imports are Rice, Wheat and Palm oil. For Morocco, Wheat, Maize and Sugar were the three major agricultural imports.

In general, three key results can be drawn from the trade empirical analysis. First, Cocoa beans, Cashew nuts, Coffee, Tobacco, Cotton, Tea, Sesamum seeds, Orange, and Cane dominate African exports, whereas Wheat, Maize, Palm oil, Sugar, Rice, Milk, Cigarettes, and Meat constitute the lion's share of African agricultural imports. Second, volatile and stagnating African agricultural

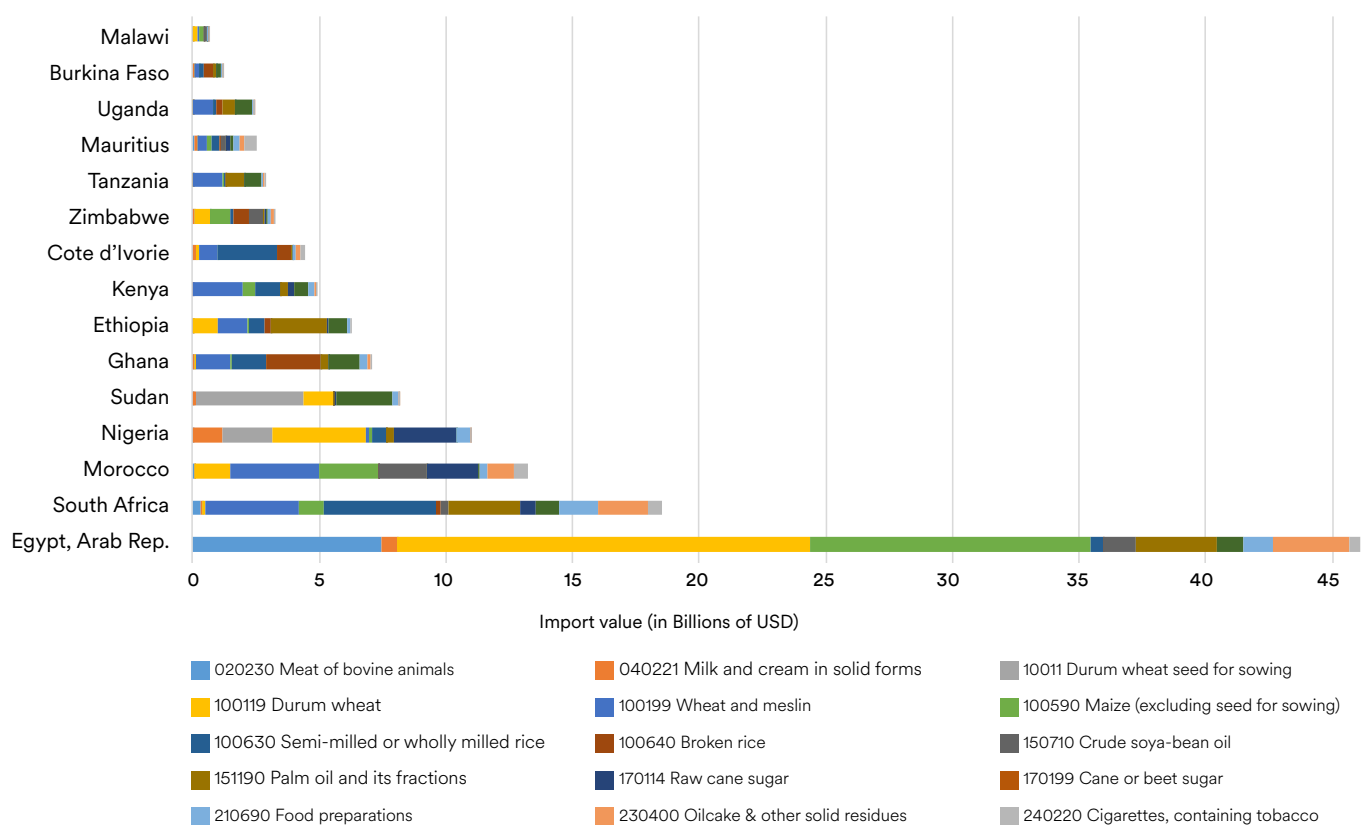
commodities are principally exported to the EU, the US, China, India, and Vietnam, whereas growing agricultural imports are sourced from Brazil, the EU, the US, Russia, and India. Thirdly, Egypt, South Africa, Morocco, Nigeria, and Ghana are the top 5 African agricultural commodities traders, and thus are the top African countries that could be affected by the major subsidy providers since they are either importing subsidized agriculture products or exporting to major trading partner countries where the competition from similar subsidized agricultural products is high.

**Figure 4: Major 15 African exporters of the top 15 HS 6-digit Agricultural products (Sum from 2011-2019)**



Source: Authors' calculation using World Integrated Trade Solution (WITS) data

**Figure 5: Top Major African importers of the top 15 HS 6-digit Agricultural products (Sum from 2011-2019)**



Source: Authors' calculation using World Integrated Trade Solution (WITS) data

# 3. African Agricultural Production Analysis

In the trade empirical analysis, we identified the key African agricultural traded commodities, the major trading partners and the key African agricultural trader countries that may engage in the subsidies reform negotiations.

To assist with establishing the likely effects of domestic support on African agriculture, a supplementary production analysis that establishes broad patterns of domestic agricultural commodities production in the key African agricultural traders is useful. In this section, we provide the production empirical analysis in relation to key African country's export and import profiles for those commodities.

We collected the production data from the Food and Agriculture Organization statistics (FAO stat). Since FOA Statistics (FOA Stat) and UN Comtrade use different product classification criteria, we have matched the above top 15 export and import items with the FOA product code. Table 1 provides the matched UN Comtrade and the FOA Stat product classification codes. In the production analysis, we have downloaded all the African agricultural production data, and then extracted all the agricultural products listed in **Table 1**. Finally, we analysed the top 15 agricultural products' production data.

Table 1: Matched UN Comtrade and FOA Stat agricultural commodities

	HS code for exports	FAO item code	HS code for imports	FAO item code
1	180100	661-Cocoa, beans	100199	15- Wheat
2	080131	217- Cashew nuts	100119	15- Wheat
3	090111	656-Coffee, green	100630	27-Rice, paddy
4	240120	826- Tobacco	100590	56-Maize
5	520100	328- Seed cotton	151190	254-Oil palm fruit
6	090240	667- Tea	170199	156-Sugar cane
7	120740	289- Sesame seed	170114	1723-Sugar Crops Primary
8	080510	490- Oranges	100640	27-Rice, paddy
9	170199	156-Sugar cane	040221	1780-Milk, Total
10	180400	--	240220	826-Tobacco
11	080610	560-Grapes	020230	947-Meat
12	180310	--	210690	--
13	070200	388-Tomatoes	230400	--
14	090510	692- Vanilla	150710	1723-Sugar Crops Primary
15	170114	156-Sugar cane	100111	15-Wheat



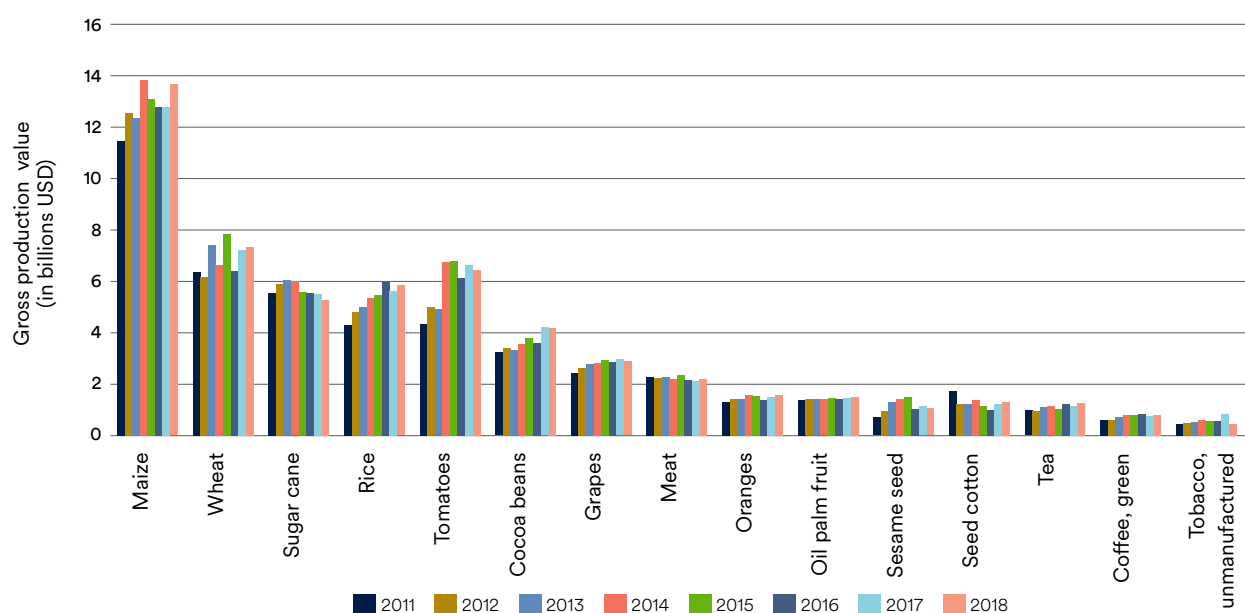
**Figure 6** presents the gross production values of the top 15 import and export agricultural products in 15 major Africa countries. As the graph demonstrates, among the 15 top traded agricultural commodities in the 15 African countries, maize accounted for the largest gross production in value followed by wheat, sugar cane, rice, and tomatoes. Furthermore, while the production of maize, rice, tomatoes,

and cocoa beans grew slightly in the past decade, the production of sugar cane, meat and cotton declined. The production level of the remaining eight agricultural commodities (that include key agricultural food items such as wheat) did not show any growth in the 2011-2018 period.

To better understand the evolution of agricultural production in the major 15 African trading economies, in Figure 7

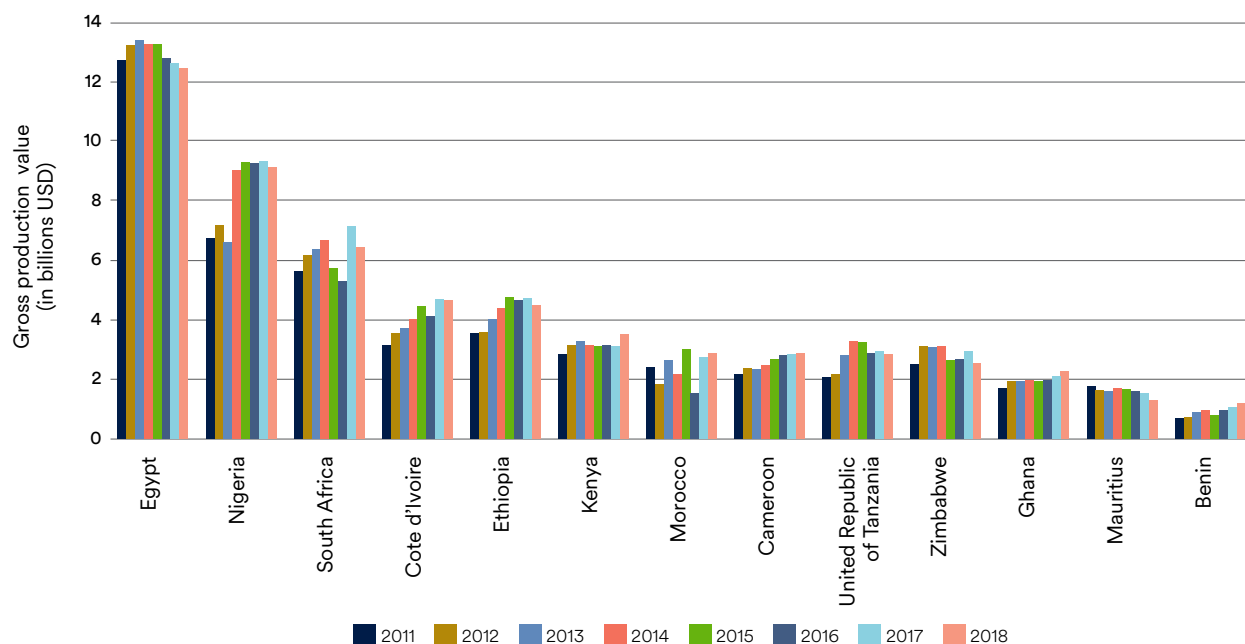
we present time series plots of the total production value of the 15 agricultural commodities in each country. Except in Cote d'Ivoire, Cameroon, Ghana and Benin, production value either declined between 2011-2018 or remained stagnant in the 2015-2018 period. The other interesting insight from **Figure 7** is that agricultural production value in Africa is largely driven by 3 countries—Egypt, Nigeria, and South Africa.

**Figure 6: Gross production value of 15 top agricultural products in 15 major trading African countries**



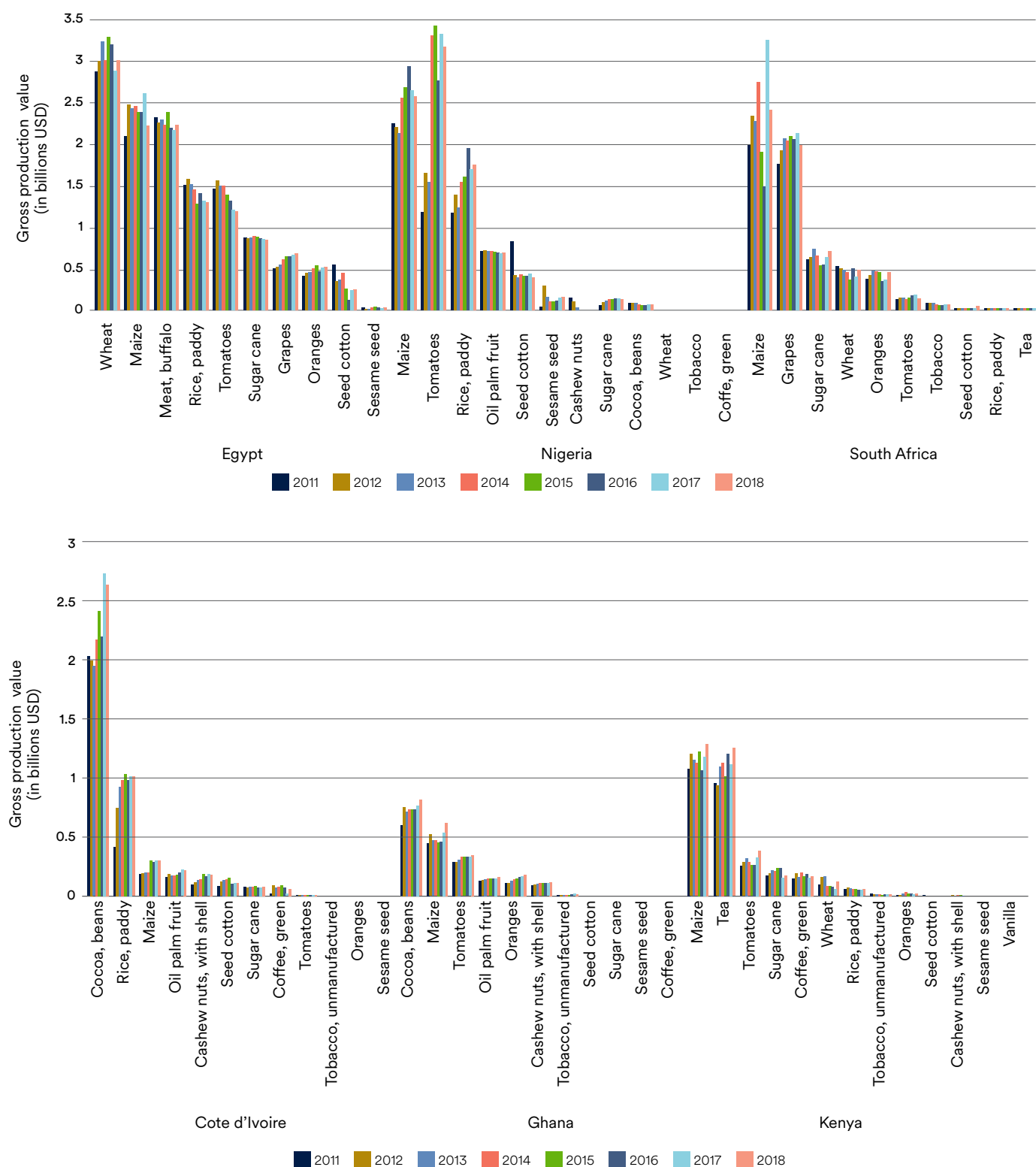
Source: Authors' calculation using FOA stat data

**Figure 7: Gross production value of 15 top traded agricultural products by the major 15 African agriculture trading countries**



Source: Authors' calculation using FOA stat data

Figure 8: Gross production value of top traded products for the top trading African countries (2011-2018)



Source: Authors' calculation using FOA stat data



It would also be interesting to know which products are driving the agricultural production values of each country. **Figure 8** presents the evolution of production values for selected African countries. For Egypt, production is predominantly driven by Wheat, Maize and Buffalo meat. On the other hand, Maize, Tomatoes and Rice constitute the major agricultural production commodities in Nigeria. Maize and Grapes dominate South Africa's agricultural production.

Overall, the main findings of the production analysis can be summarised as follows. Firstly, the top 5 highly imported or exported agricultural

products with high gross production value in Africa are maize, wheat, sugar cane, rice, and tomatoes. Secondly, the top five major WTO African member countries with the largest gross production value of the key export and import products identified in the trade analysis are Egypt, Nigeria, South Africa, Côte d'Ivoire and Kenya, and their agricultural production in the past decade is characterized by either a steady decline or stagnated trend.

Based on the trade and production empirical analyses, in **Table 2** we present the key African WTO Member countries (that may influence Africa's stance in the WTO domestic

support negotiations) and their key agricultural products.

To summarise, following the production, exports and imports analysis, and select literature, we identified 10 key commodities to focus on in the domestic support analysis: Wheat, Rice, Sugar, Tobacco, Tomatoes, Cotton, Maize, Beef, Oranges, and Milk. Therefore, in the following section, we investigate the domestic support trends for these products by the major African trading partners and subsidizers over the past two decades.



**Table 2: List of key Agricultural products and African WTO Member countries**

African Country		Key production products	Key export items	Key import items
Egypt	1	Wheat	Orange	Wheat
	2	Maize	Grapes	Maize
	3	Meat	Sugar	Meat
	4	Rice	Cotton	Palm oil
	5	Tomatoes	Vanilla	Oil cake
Nigeria	1	Maize	Cocoa beans	Wheat
	2	Tomatoes	Sesamum seeds	Sugar
	3	Rice	Cashew nuts	Milk
	4	Palm oil	Cocoa butter	Rice
	5	Cotton	Cotton	Cigarettes
South Africa	1	Maize	Orange	Rice
	2	Grapes	Grapes	Wheat
	3	Sugar	Sugar	Palm oil
	4	Wheat	Cotton	Oil cake
	5	Orange	Tobacco	Maize
Côte d'Ivoire	1	Cocoa beans	Cocoa beans	Rice
	2	Rice	Cocoa paste	Wheat
	3	Maize	Cashew nuts	Wheat
	4	Palm oil	Cocoa butter	Rice
	5	Cashew nuts	Cotton	Sugar
Kenya	1	Maize	Tea	Maize
	2	Tea	Coffee	Rice
	3	Tomatoes	Tobacco	Sugar
	4	Sugar	Sesamum seeds	Maize
	5	Wheat	Cane Sugar	Cane sugar

# 4. Agricultural Domestic Support Analysis

Per widely accepted conventions WTO members use amber, blue, green, and development boxes to differentiate the various categories of agricultural domestic support.

The fact that a relatively small subset of the WTO membership has access to FBTAMS is a major source of contention in the domestic support reform negotiations. The underlying concern expressed by some members is that the existence of the cap allows the beneficiary country to concentrate product-specific support on one or a few commodities up to the FBTAMS limit, thereby effectively evading the *de minimis* limits (Sharma 2020). Those members – most and mostly developing countries – that do not have an FBTAMS entitlement may still pay increasing amounts on product-specific support as their VOP grows, but this will be limited to the percentage cap. Consequently, a number of domestic reform proposals specifically target these FBTAMS entitlements, and in some cases set their elimination as a precondition for talks on other components of domestic support reforms.

Other WTO members have expressed concern about the growth of *de minimis* entitlements, given the evident growth of some countries' economies, and their VOP. It is obvious that as VOP grows so can product-specific support

payments — with highly distorting effects if concentrated on a few products.

In addition, some members have expressed concerns about the growth of development box expenditures, and their concentration on input subsidies that have the potential to distort product markets. It is further contended that since these payments are made by a very small subset of developing countries, contemplating reforms should be in the domestic support negotiations mix (Ministry of Foreign Affairs 2021).

Some developing country members are concerned about potential trade distorting payments residing in both the blue and green boxes, and advocate for these too to be included in domestic support reform negotiations (South Centre 2017). The Africa Group is among these proponents.

There are also issues concerning the use of reference prices to determine spending limits, as well as whether and how these could be updated in a process to set new spending caps. An alternative approach is to set overall monetary spending limits applicable to all members, allowing for special and differential treatment for least developed countries, and perhaps other categories of countries

such as small vulnerable economies. Furthermore, some members propose that in considering future entitlement benefits, consideration should be given to how those compare across countries on a per farmer basis – given the obvious per farmer discrepancy of, say, Swiss entitlements versus Indian.

Overall, there are many issues and permutations, as well as positions, on the table. It is beyond the scope of this paper to review them, let alone take a view on which are the most sensible. Rather, our focus is narrowly on the growth of entitlements and what this means for African agricultural trade.

In the trade data analysis we observed that the EU, the US, China, India, Japan, Russia, Brazil, Argentina, and Canada are either the major sources of African agricultural imports or the major African agricultural export destinations, or both. Thus, these major countries' domestic support for the agriculture sector has the greatest potential to distort African agricultural trade and production. Accordingly, we explore the degree, composition, and changes over time in these countries agricultural domestic support. Since this research is funded by the Australian government, for comparative purposes and in the interests of transparency we include Australia in the agricultural domestic support analysis.

## 4.1 Agricultural domestic support analysis using WTO notification data

Data analysis by the Australian Department of Foreign Affairs and Trade (DFAT) shows that total de minimis domestic support entitlements have grown hugely since the end of the Uruguay Round negotiations, exceeding FBTAMS entitlements by nearly three times. Much of this growth is concentrated in two large developing countries, China and India, which accounted for 28.1 percent and 9.6 percent of total domestic support entitlements in 2016, respectively, whereas the largest developed country group, the EU, stood at 15.7 percent.

Since actual agriculture subsidy outlays in the major economies for which measurements are available are substantially below these entitlements, the scope for subsidisation to

increase dramatically is evident. While large, developed countries with FBTAMS retain significant room to increase actual levels of support, as the US recently did under the Trump Administration, the problem has become much broader. In the COVID-19 context, characterised by extraordinary levels of monetary and fiscal stimulus designed to prop up entire economies, and deteriorating geopolitical relations encompassing intensified geo-economic competition, it is likely that some countries will choose to subsidise their farming sectors further.

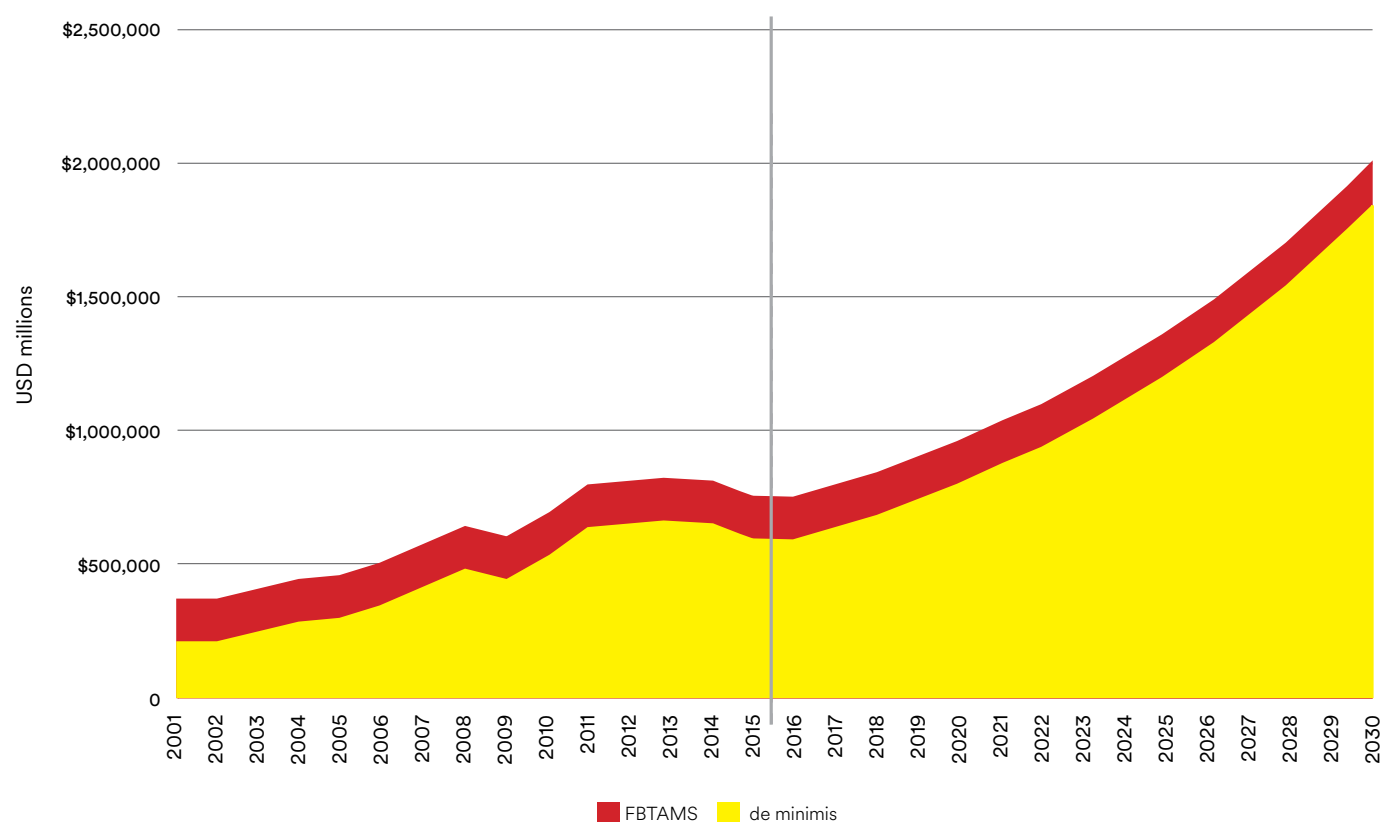
Hence, there is a strong case to be made for ‘squeezing the water’ (the difference between actual notified domestic support and entitlements)

out of the policy space enjoyed by the major players, both developed and developing, to limit potential future damage to agricultural markets that would be prejudicial to the interests of competitive suppliers elsewhere.

Below we explore these dynamics through an analysis of WTO domestic support notifications data. For **Figure 10 through Figure 14** FBTAMS (+ de minimis) represent entitlements ceilings, whereas the other figures represent actual notified payments broken down by category.

**Figure 10** presents the 2016 nominal agricultural domestic support by Africa’s top ten agriculture trading partners.<sup>3</sup> ‘Notified support’ signals actual spending and is captured in the de minimis figures, whereas FBTAMS

**Figure 9: Total trade distorting domestic support entitlements trend growth**



Source: Australia and New Zealand, JOB/AG/171

3. We have selected 2016 since the latest complete domestic support data for the 10 WTO members is available during this year.



is a ceiling. 'FBTAMS plus de minimis' is the overall expenditure entitlement. FBTAMS is a benchmark against which to assess notified amber box spend.

The largest domestic support in 2016 was China's green box subsidy, at close to 200 billion USD. The recent rapidly rising Chinese green box support was allocated for general services provisions (such as infrastructure and extension programs), regional assistance and environmental protection programs (Glauber et al. 2020). The US spent around 120 billion USD on green box subsidies, where domestic food aid constituted the largest share. The EU, India, and Japan also provided large amounts of green box subsidies in 2016. Only China and the EU paid blue box subsidies. China provided the largest amber box support (USD 23 billion) followed by the US (USD 16 billion), and the EU (USD 10.5 billion). While the US, the EU, China and Japan's amber box domestic support expenditures were below their entitlements, they still spent significant sums on domestic support,

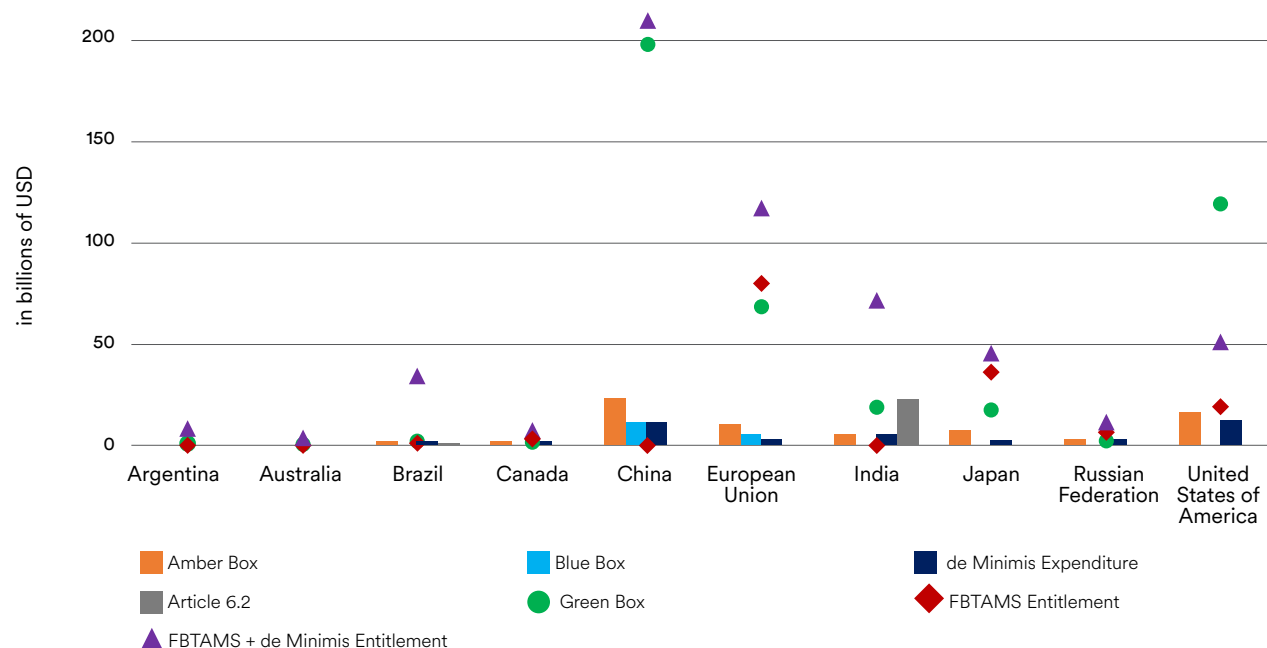
including the most trade-distorting amber box support. The US, China, and India were also the top three *de minimis* domestic support providers in 2016. Conversely, the domestic support notifications for Argentina, Australia, Brazil, and Canada show that they provided relatively low support while still being among the major global agricultural traders and producers.

At this point it is important to note that WTO notifications data is not without its problems. Many Members are substantially behind with their notification schedules, and many provide incomplete or partial data. This generates substantial confusion, and occasionally mistrust, with how these data are to be interpreted. Consequently, some WTO disputes and counter-notifications have been lodged with a view to challenging notifications data, with India and China being the respondents (see Annex 3).

Following Glauber et al. (2020), **Figure 12** presents the different classes of domestic support measured as a

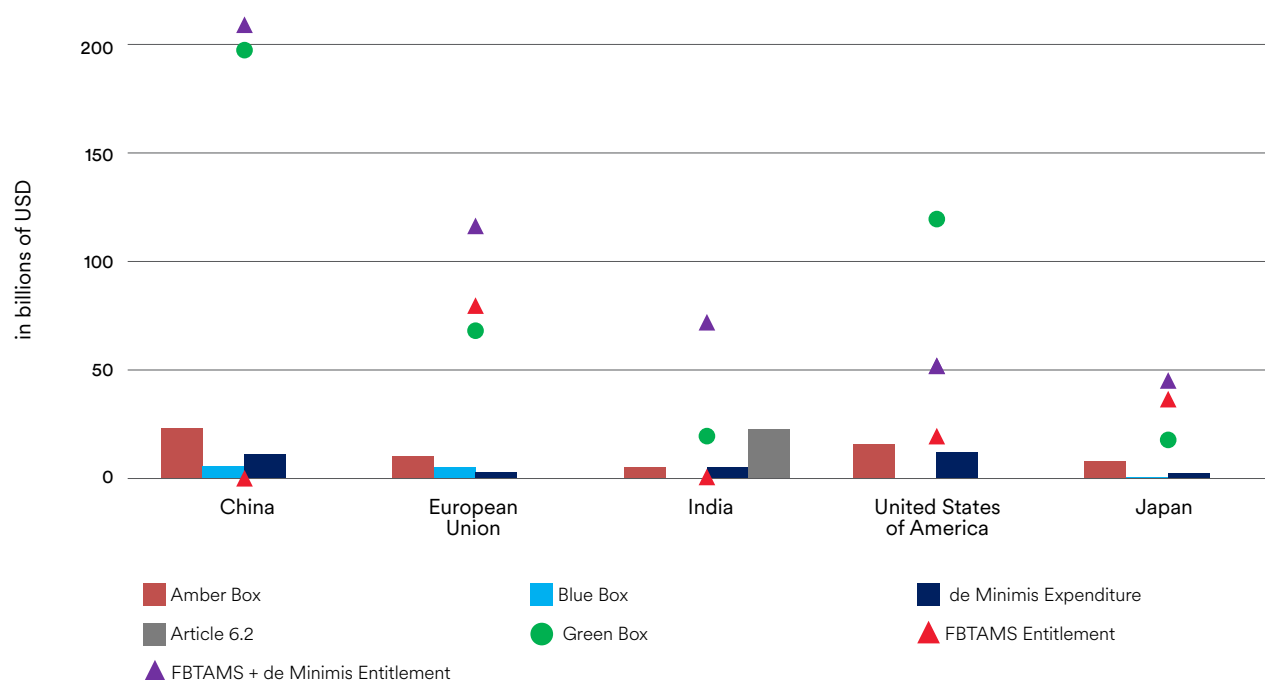
percentage of the VOP. Japan has the largest FBTAMS, and FBTAMS & *de minimis* support as a percentage of agricultural VOP, around 42-45%. Japanese Green box subsidy is also 20%. Glauber et al. (2020) explained that more than 40% of Japan's green box subsidy is given in the form of infrastructure services (such as drainage facilities, irrigation, and land consolidation). Furthermore, another 30% of the Japanese Green box subsidy was provided for environmental programs. Contrarily, China's green subsidy domestic support as a percentage of the VOP was less than 15% in 2016. The US, Japan, and the EU have provided 34%, 20% and 16% in Green box domestic support respectively. The other six countries' Green box subsidies did not exceed 5%, implying relatively low green box domestic support provision to their farmers when calculated relative to VOP. When we consider the extent and composition of the other trade distorting domestic support measures, Figure 12 shows that the largest Amber

**Figure 10: Notified agricultural domestic support expenditures and FBTAMS limits (2016 nominal values)**



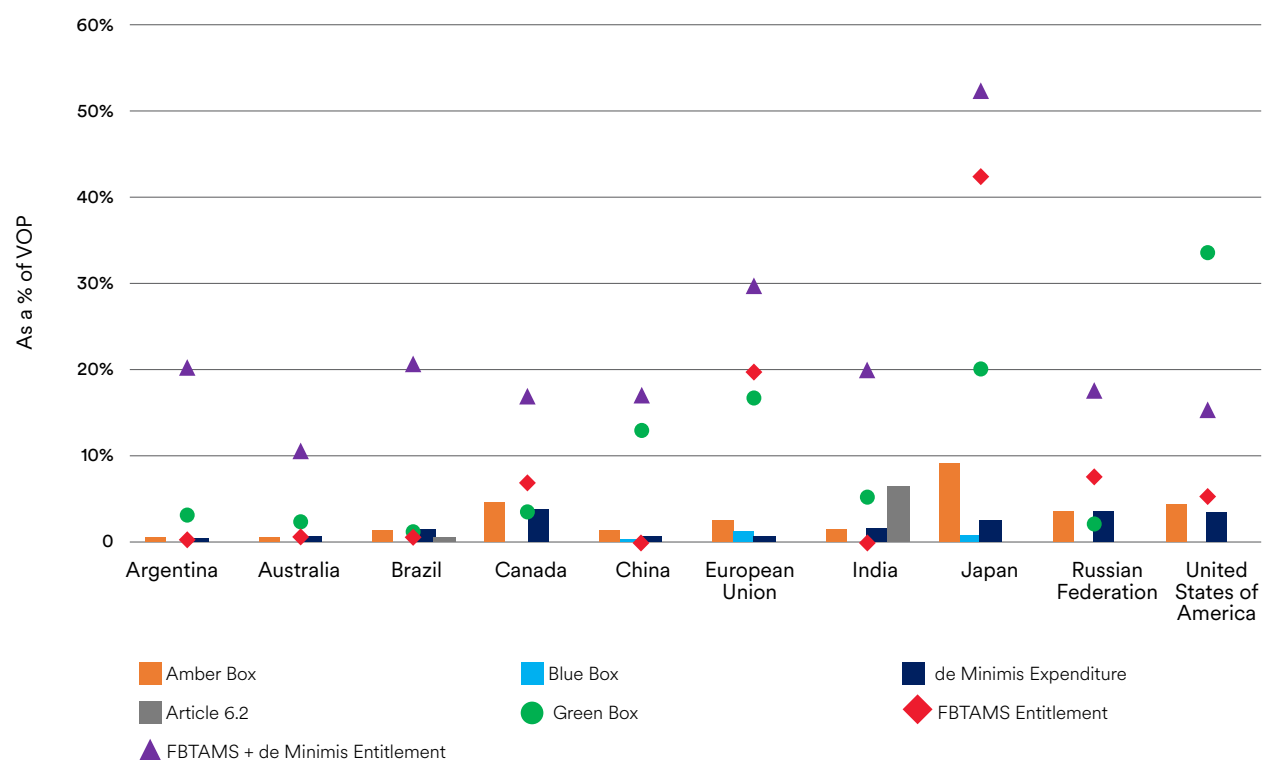
Source: Authors' calculation based on WTO notifications and DFAT FBTAMS entitlement data

Figure 11: Notified agricultural domestic support by the major trading partners with higher domestic support (2016 nominal values)



Source: Authors' calculation based on WTO notifications and DFAT FBTAMS entitlement data

Figure 12: Notified agricultural domestic support as a percentage of VOP (2016 value)



Source: Authors' calculation based on WTO notifications and DFAT FBTAMS entitlement data

box domestic support (relative to VOP) was provided by Japan, around 9% of the VOP. While the extent is below 5%, the Amber box agricultural domestic support as a percentage of VOP is also higher in Canada, the US, Russia, the EU, India, and China. The level of *de Minimis* domestic support as a percentage of VOP is also largest in Canada (4%), the US (4%), Russia (4%), then Japan (3%), India (2%) and Brazil (2%). In China *de Minimis* support (as a percentage of VOP) is only around 1%. While Blue box subsidies are low in many countries, they are relatively higher in the EU (1%) and Japan (1%).

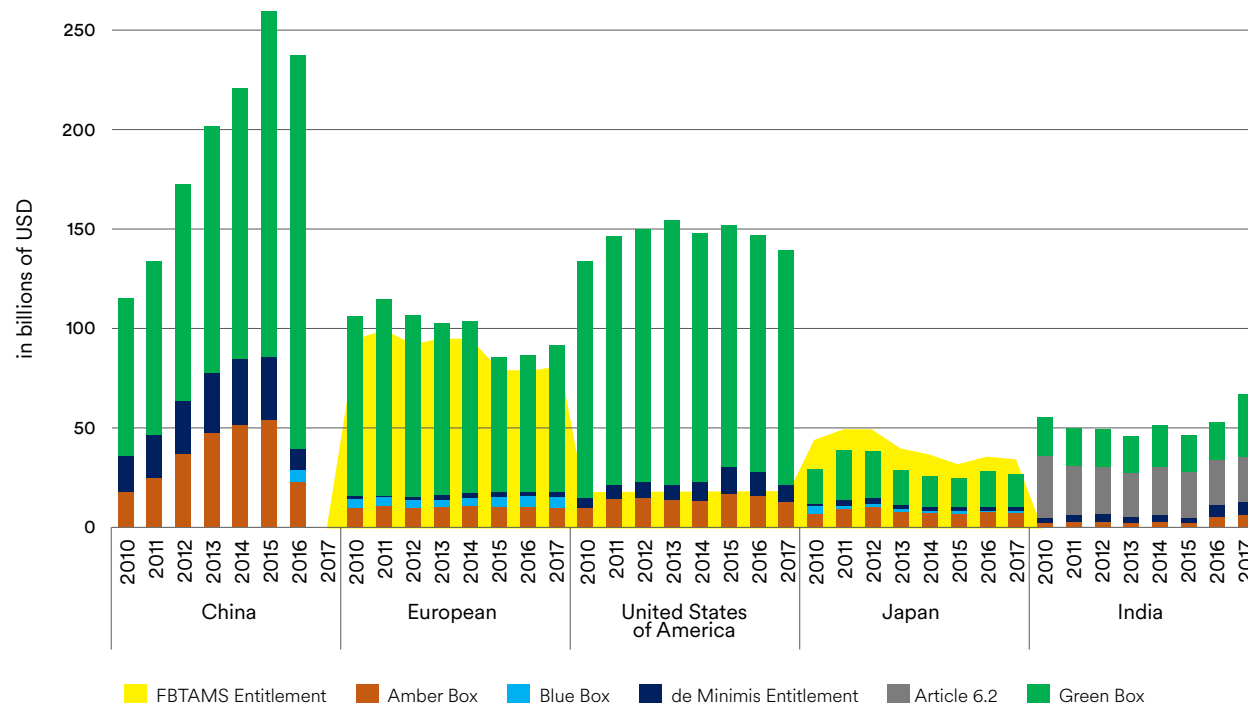
**Figure 13** and **Figure 14** present the 2010-2017 trends of the various agricultural domestic support boxes of the major agricultural traders<sup>4</sup>. The two figures show that aggregate agricultural domestic support has significantly increased in China since 2010. The two main purposes of China's steady domestic support increase are to raise farmers' income level and to foster the

country's long-term food security goals. In recent years, the Chinese government has started to reduce the stockpile for some agricultural commodities such as corn and cotton, leading to a slight decline in agricultural subsidies in 2016 (Hejazi & Marchant 2017).

In terms of change between 2010 and 2017, significant agricultural domestic support decline is observed in the EU (from 200 to 173 billion USD), Canada (12 to 3 billion USD), and Brazil (from 14 to 7 billion USD). The agricultural domestic support provided by Australia and Argentina is considerably low in comparison to the other WTO members, implying the potential to be major agricultural producers and exporters while providing low support to farmers. When we observe the trend of the main trade distorting boxes, Amber box subsidy considerably increased in China in the 2010-2016 period but has declined in Russia.

To conclude, the following two key insights can be drawn from the above domestic support empirical analysis. Firstly, green box subsidies, mainly provided by China, the US, the EU, India, and Japan, constitute the biggest form of domestic support by the majors. Secondly, while trade distorting amber box and *de minimis* subsidies rose considerably in China and India, both declined in Japan, the US, Brazil, and Canada, especially in more recent notifications years. Third: India is a significant user of the development box and is the only country of interest to the analysis that is doing so. Fourth: China has used the amber box outside of *de minimis* spending despite not having an FBTAMS entitlement to allow for this use. The same applies to India but to a far lesser degree.

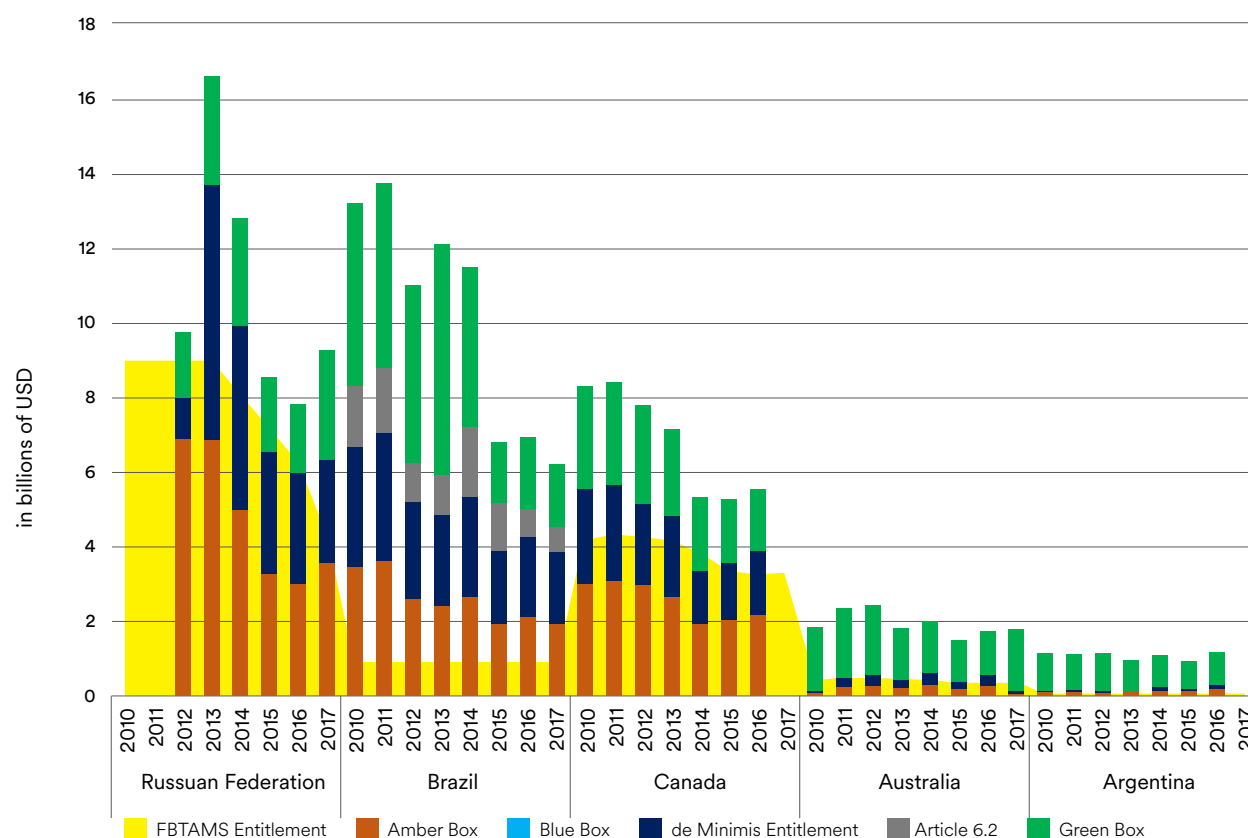
**Figure 13: Notified nominal agricultural domestic support values by the major trading partners (2010-17)**



Source: Authors' calculation based on WTO notifications and DFAT FBTAMS entitlement data

3. We have selected 2016 since the latest complete domestic support data for the 10 WTO members is available during this year.

**Figure 14: Notified nominal agricultural domestic support values by the major trading partners with lower DS (2010-17)**



Source: Authors' calculation based on WTO notifications data

## 4.2 Analysis of Product Specific Domestic Support

In this section, we analyse the extent and current trends of notified product specific domestic support by the ten WTO members. The analysis focuses on ten products that play prominent roles in African trade as well as production. Therefore, the products are selected based on our analysis in sections (a) and (b), being wheat, tomatoes, tobacco, sugar, rice, cotton, maize, beef, oranges, and milk. The notified domestic support for these products is obtained from the WTO Agriculture Information Management System (AGIMS) database and all domestic support values are converted into the same currency (i.e., USD) and expressed in millions of USD.

According to the WTO (2018a) product specific support is “support that does not meet the criteria of Annex 2 (Green Box) of the AoA, or trade and/or production distorting support that is not exempted under Article 6.2 or 6.5 of the AoA, nor support that is considered to be non-

product specific”. Product specific support payments commonly included in AMS are (1) market price support, (2) non-exempt direct payments dependent on a price gap, (3) non-exempt direct payments based on factors of production, and (4) other forms of support, such as crop or production insurance.

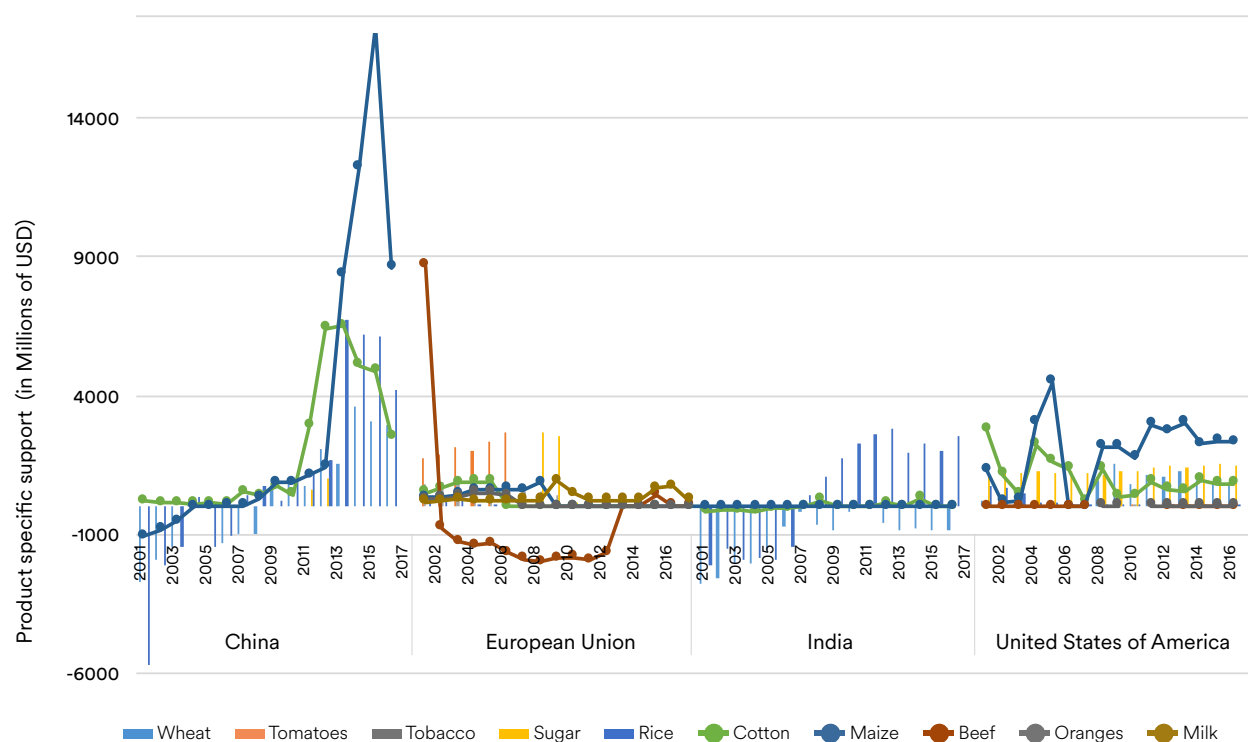
**One major limitation in the analysis of product specific support is that not all WTO member countries notify up-to-date domestic support data in their annual domestic support notification.**

For example, the latest product specific support notification of China is for 2016, hindering proper comparison of agricultural support among countries in more recent years.

*Figure 15* shows the evolution of product specific support between 2001 and 2017 for the 10 WTO member states. China provides sizable domestic support for maize, cotton, rice, and wheat. Chinese product specific support for these products significantly increased after 2009, although it showed a minor decline in 2016. India provides large support for rice; the US subsidizes maize, sugar, cotton, and wheat; the EU subsidizes milk; and Japan subsidizes milk and sugar. Furthermore, while it significantly declined in recent years, Brazil provided large domestic support for rice, cotton, and maize. Russia, Argentina, and Australia provide domestic support for a relatively few products. Observing the trend of the product specific support for



Figure 15: Product specific support for the ten African trading partners analysed (2001-17)



Source: WTO AGIMS database

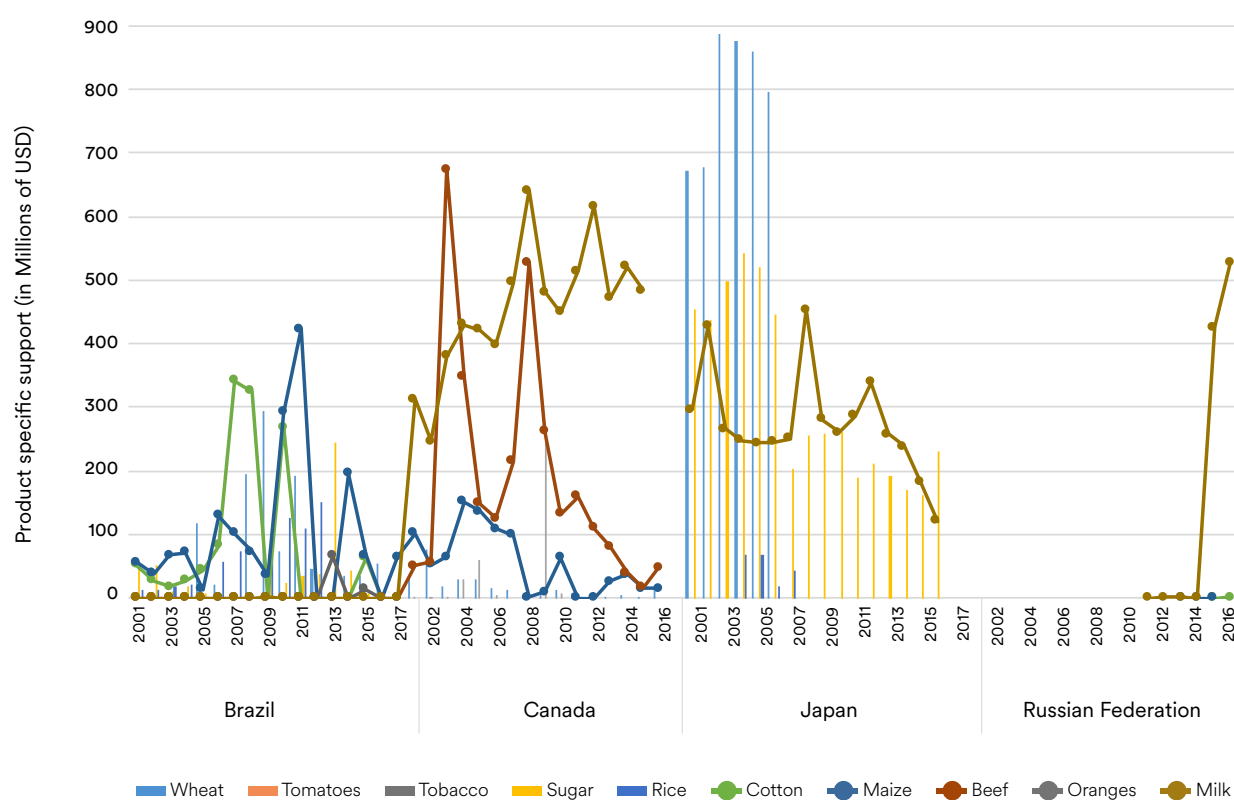
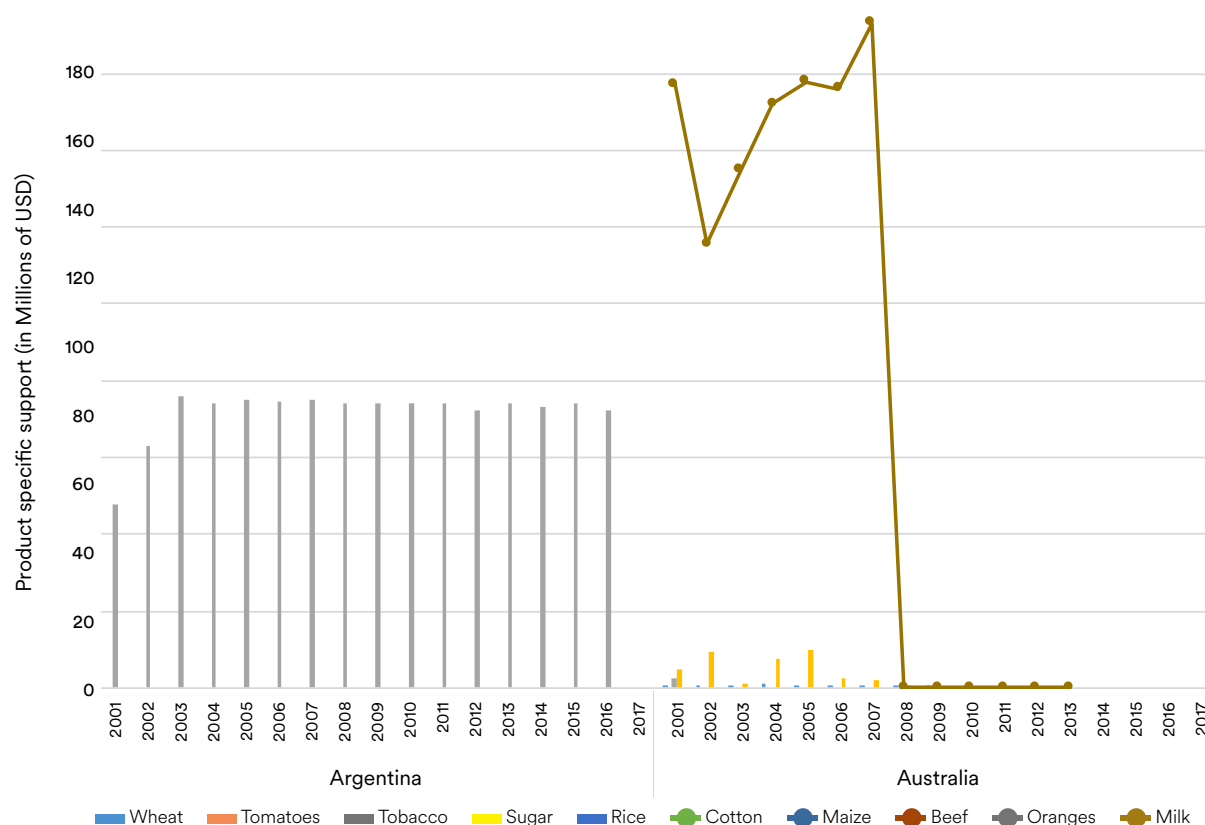


Figure 15: Product specific support for the ten African trading partners analysed (2001-17)



Source: WTO AGIMS database

the latter three countries, while Russia's milk subsidy rose in recent years, it declined in Australia. Argentina's annual tobacco domestic support remained around 80 million USD for the past 15 years. Overall, although US domestic support stabilized for various products, product specific support has shown a slight decrease recently for most countries.

Brink and Orden (2020, p. 16 & 106) observe that product specific support remains higher than non-product specific support, even though the trend is declining. They calculate that as from 1995 members' product specific AMSs make up a declining share of their AMS support, being 92% in 1995, and falling to 67% in 2016. The implication is that while product specific support remains of primary concern, the discipline AMS should include both variants to be effective. Also, because the total agricultural VoP is used to determine the non-product-specific de minimis allowance, this could allow what is in fact product-specific

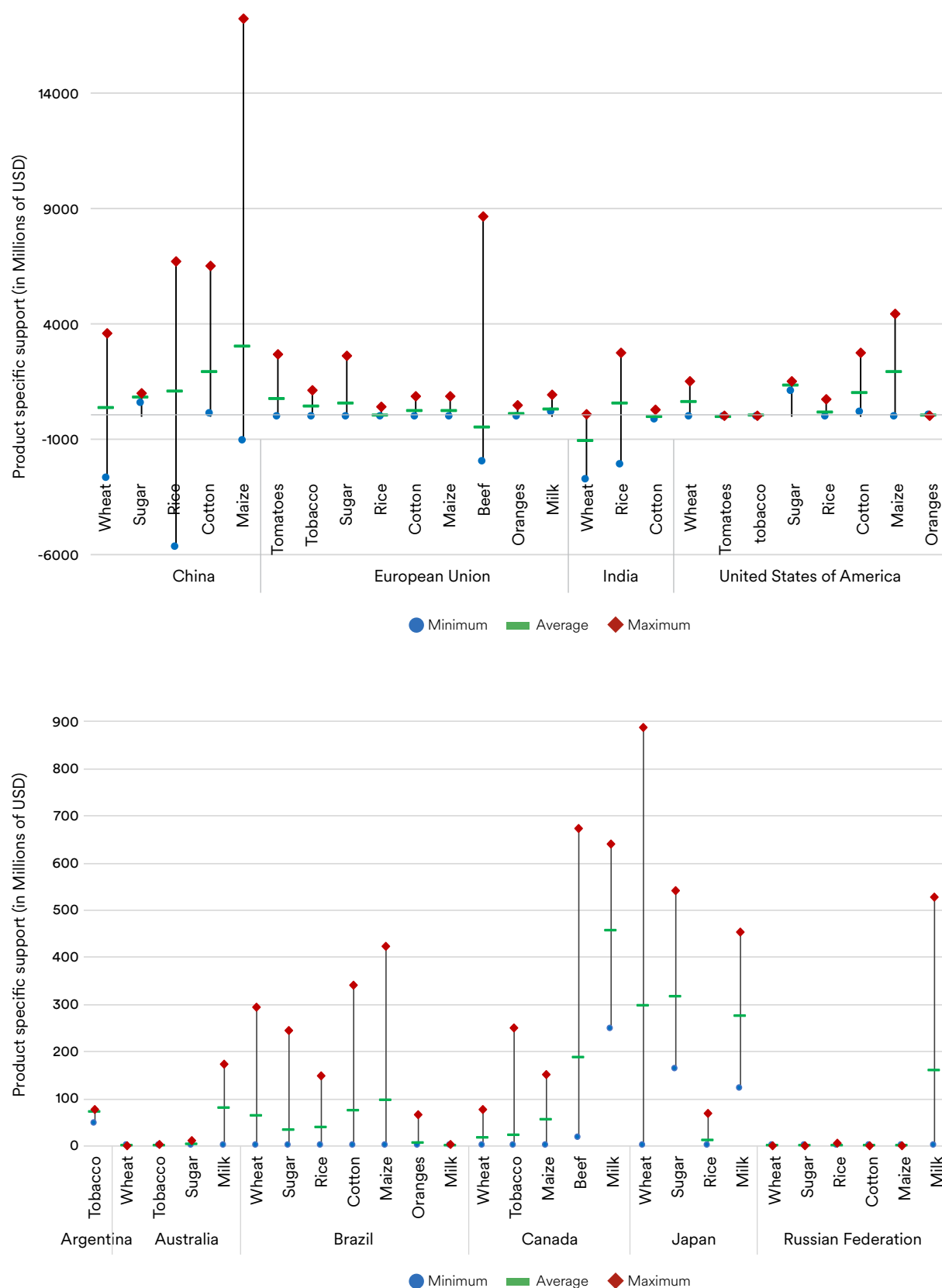
support for the producers of each of several individual products in excess of each product's specific de minimis allowance but classified within the non-product-specific de minimis allowance. This would be particularly so when production is focussed on a small group of commodities. This dynamic would serve to enhance the negative effects on African interests.

To observe the variation of agricultural product specific support of the ten WTO members, following Hepburn, J. and Bellmann, C. (2018), we calculated the lowest, average, and highest domestic support of each product in the past two decades. **Figure 16** illustrates substantial product specific domestic support differences between products and countries. The red and blue dots show the highest and lowest product specific support during the 2001-2017 period, where data is available. The green rectangles represent the average domestic support for each product. The vertical black lines indicate the variation

between the maximum and minimum product specific support.

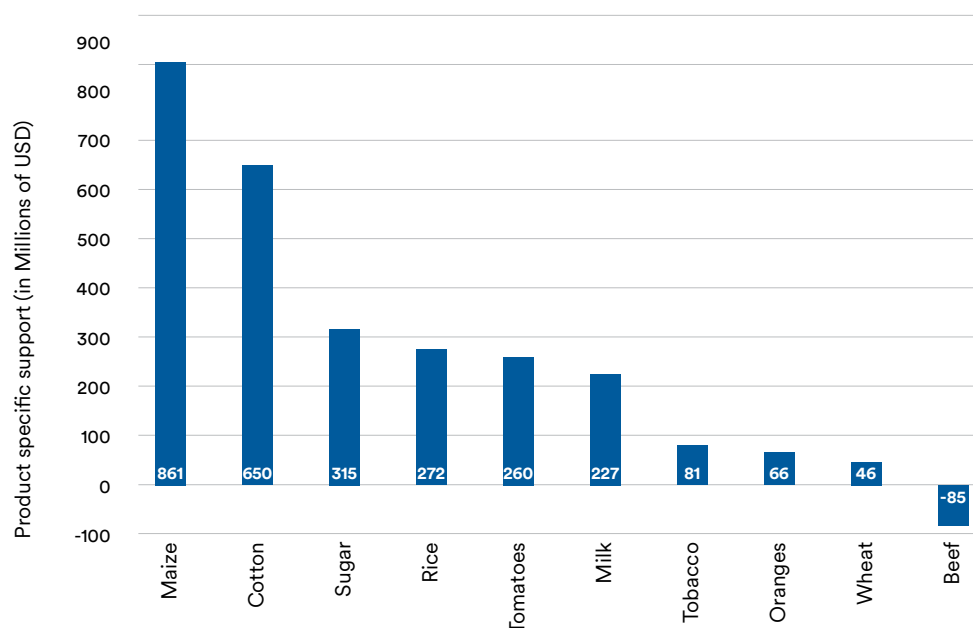
In China, the highest variation is observed in maize, followed by rice, cotton and wheat. The largest average product specific support is also granted to maize. In the EU, while the average value is negative, the highest and lowest product specific support is given for beef. Rice farmers in India, maize in the US, milk in Russia, sugar in Japan, milk in Canada, maize in Brazil, and milk in Australia received the highest product specific domestic support. Relatively larger variation in the product specific domestic support for different products is also observed in Japan, Canada, and Brazil in the previous two decades. Since these products are important export items for Africa, product specific support will significantly harm African farmers by distorting global trade through depressed prices (Hepburn, J. & Bellmann, C. 2018). But African consumers may be benefited by importing relatively cheaper agricultural products.

Figure 16: Low, average, and high values of product specific support provided by the ten trading partners (2001-2017)



Source: WTO AGIMS database

**Figure 17: The annual average subsidies per product for the 10 major subsidy providers (2001-2016)**



*Figure 17* demonstrates the annual average product specific support of the majors in the 2001-2016 period. Maize, Cotton and Sugar are the top three products that received higher annual average domestic support. The annual average domestic support for beef is negative.

In addition to the WTO domestic support notifications, the OECD has its own methodological framework to measure and evaluate the impact of support to agriculture for a diverse group of OECD and emerging economies. The OECD data place support in a broad analytical framework and include the prevalence of both trade and domestic measures. For purposes of this report, the main use of OECD data is to examine more recent trends in overall levels of support, which at the time of writing cover the period to 2019. Annex 5 examines support provided over the 2017-2019 period by the ten trading partners identified above.





# 5. Domestic Support Entitlements Growth: Implications for African Agriculture

There is precious little analysis of the implications of growing domestic support entitlements for African agricultural production and trade.

The most relevant paper we identified was in the form of a Policy Brief. Hepburn and Bellmann (2018) analysed the production, consumption, import, export, and domestic support patterns of selected and key African agricultural goods. Using data from the OECD-FAO Agricultural Outlook, the projected trend of their analysis shows that consumption growth rates will significantly outweigh agricultural production growth rates, implying the likely high role of agricultural imports to bridge the gap in the coming years. While this is the general trend in their analysis, there is significant diversity in terms of import, export, production, and consumption patterns of the key agricultural commodities in the coming decade. Overall, they highlighted that while exports of cotton, tea, and

coffee are far larger than domestic consumption, African countries will continue to be large net-importers of wheat, maize, beef, sheep meat, poultry, sugar and rice. Using 2008-2016 WTO members' notifications and OECD PSE data their product specific domestic support analysis also show that African agricultural exports of key commodities (such as cotton, wheat, rice, sugar, maize, meat, certain fruit and vegetables) are affected by trade-distorting support provided to producers by the major agricultural producers. However, being a Policy Brief the Hepburn and Bellmann (2018) study is necessarily not comprehensive, notably in the extent and depth of its trade and production analyses, as well as its coverage of domestic support categories in their entirety — and the linkages between provision of domestic support and impact on African agriculture. It is also apparent that their conclusion that African countries will continue to be large net importers needs qualification, since more recent analysis concludes that 4 countries—Nigeria, Angola, the Democratic Republic of the Congo (DRC), and Somalia—account for most of sub-Saharan Africa's net agricultural import position, whereas the rest

of the countries in this region (i.e., excluding North Africa) are actually net agricultural exporters (Fox & Jayne 2020).

Accordingly, in Section 5.2 we provide our analysis, linking domestic support entitlements growth to the empirics of African agricultural production and trade, as established in Sections 2 and 3. Importantly, we do not attempt rigorous modelling of these connections as that would require a different exercise and was beyond the scope of our report. First, we provide an analysis of the evolution of African negotiation positions on reform of agricultural domestic support.

## 5.1 An overview of African positions on domestic support reform

African WTO Members have historically opposed amber box subsidies use, especially on a product specific basis. This position is grounded on the premise that African farmers, most of whom are small scale, have struggled to produce and trade owing to perceived unfair competition with heavily subsidized imported agricultural products. African negotiators thus support substantial reductions of trade-distorting domestic support as enshrined in Article 20 of the AoA, the Doha mandate, and the present MC-12 phase of the agriculture negotiations. This opposition is an African priority with roots in the perceived injustices visited upon developing countries in the Uruguay Round, notably that developed countries generally enjoy the highest

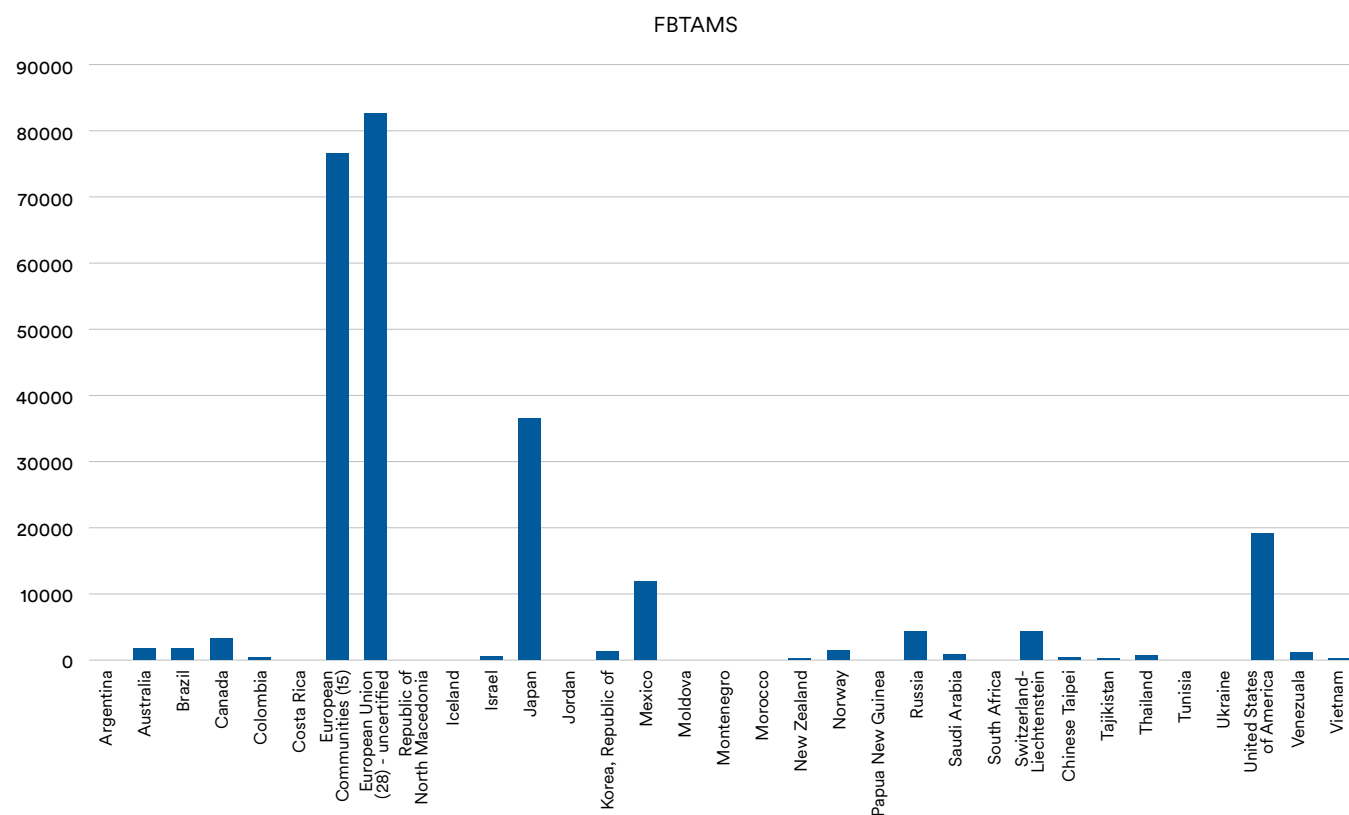
financial quantum of FBTAMS, whereas most of the WTO's membership do not. While over two thirds of those 32 WTO Members that have access to a FBTAMS allowance are developing countries, the quantum of their combined allowances is miniscule in relation to that of developed countries (Figure 17).<sup>5</sup> Only 3 African countries have FBTAMS entitlements: Morocco, South Africa, and Tunisia. Morocco and Tunisia have notified Amber Box use, but not beyond their de minimis levels (i.e., not utilising their respective FBTAMS entitlements), and South Africa has notified zero use of its entitlement.<sup>6</sup>

Given this context and considering the period leading up to the last WTO Ministerial Conference (MC-11 Buenos Aires in December 2017) and since,

one notes that the position of the group of African countries has been that FBTAMS allowances should be eliminated before negotiations to reduce and reform the disciplines on all domestic support entitlements can commence. This would represent a proverbial levelling of the playing field, leaving all members solely with access to the de minimis thresholds presently contained in AoA Article 6.4.

An examination of the position papers tabled by the Africa Group and the ACP Group (the large majority of which are the African countries) in the MC11 era to the present pre- MC12 period, provides an insight into the African mindset on domestic support reform. We proceed to examine the contours of these position papers in a sequential manner.

Figure 18: FBTAMS Entitlements under the AoA



Source: WTO

5. A tabulated layout of these FBTAMS entitlements is provided in Annex 4 to this report.

6. The Canadian analytical tool indicates that Morocco's last amber box notification was made in 2007, South Africa's in 2014 and Tunisia's in 2018. See WTO document JOB/AG/190 of 7 December 2020.

## In the ACP proposal from the post Nairobi period in November 2016 (JOB/AG/87) we find some close textual resonance with the present Cairns Group 'entitlement' view.

The proposal relates that trade-distorting domestic support has been declining in several WTO Members compared to the early post-Uruguay Round levels, partly as a result of domestic reforms but also as a result of changes in agricultural commodity prices. It continues that, "today, important gaps exist between AMS entitlements and applied levels. Recent developments suggest, however, that the trend towards lower trade distorting domestic support might slow down or even be reversed in some cases as a result of declines in commodity prices" (emphasis added). The proposal continues in stating that future disciplines should reduce existing asymmetries in domestic support entitlements, with a particular focus on those products which benefit most from subsidies referred to under Article 6 of the AoA. The aim would be to reduce the difference between the maximum AMS entitlements and the current actual levels of domestic support. Two specific disciplines are cited, being: firstly, to establish a binding overall comprehensive limit on the sum of all trade-distorting domestic support; and secondly, to establish binding product specific limits to trade-distorting domestic support so as to avoid concentration of support on certain products. The caveat to the overall limit concept would be that the development box provisions of Article 6.2 of the AoA Agriculture will remain unchanged.

The ACP thinking on the topic subsequently begins to diverge from the earlier 'entitlement' concept. In examining the ACP proposal in the pre-

MC11 era (JOB/AG/112) (WTO 2017a) one notes the stance that capping Overall Trade-Distorting Domestic Support (OTDS)<sup>7</sup> alone would not make any significant impact as the OTDS as applied for the top developed country subsidizers was below the de minimis level. Therefore, it was mooted that negotiations would also have to achieve stricter disciplines on product-specific support. Notably this product-specific discipline would now also include stricter disciplines on the product-specific support in the green box. The concept of full elimination of FBTAMS is also introduced at this point by way of the following wording, "All existing Final Bound Total AMS entitlements shall be eliminated".

The full elimination concept is then echoed by the Africa Group in their proposal for the MC11 declaration (WTO 2017b) where the Group postulates that, "As a first step, and in order to bring about a level playing field, Members with Final Bound AMS entitlements shall eliminate these AMS entitlements. This will reduce the tendency to concentrate domestic supports in specific products." This 'first step' wording has since been interpreted to constitute a pre-condition to further domestic support negotiations. Also, in this proposal one sees an elaboration of the work that the Group foresees on the green box, being the development of strict criteria for green box support elements in paragraphs 5 to 13 of Annex 2 of the AoA. Note that by contrast the Cairns position does not encompass the green box at all, i.e., they accept the non-distorting disposition of the green box.

A joint South Centre-African Trade Policy Centre paper (South Centre 2017) unpacks the various drivers of these pre-MC11 Africa Group positions. First, their desire to maintain the balance of concessions reflected in the Doha Round agriculture texts, specifically the draft modalities reflected in Rev 4, 2008 (WTO 2008). Second, a strong emphasis on promoting equity via the AoA's rules, the elements of which are listed in the paper, and not introducing new inequities. In relation to this the paper avers that Rev 4 provides a

reasonable balance, for example by retaining developing countries' de minimis at 10 percent and incorporating public stockholding subsidies into the green box subject to being targeted only at low income or resource-poor farmers, while not disciplining developed countries direct payment and decoupled income support programmes. It also did not discipline Article 6.2 input and investment subsidies available to developing countries. The paper contends that the concessions to developing countries cited in this paragraph meet three key Doha mandate criteria, being preservation of food security policy space, as well as S&DT, and addressing the needs of LDCs and Net Food-Importing Developing Countries. The paper also highlights concerns over potentially harmful effects of agriculture subsidies on African countries production, via importation, although this is not related to the food security needs of NFIDCs, i.e., that they may rely on such imports to address domestic needs.

The first Africa Group proposal directed at MC12 (JOB/AG/173) stems from November 2019 (WTO 2019a). This position paper does not explicitly say that there is an FBTAMS elimination pre-condition, rather the position paper refers to the reforms of each of the box types in turn. This could be taken to mean that JOB/AG/173 replaces the earlier stances as Africa Group thinking evolved after MC11. The more likely conclusion, however, seems to be that JOB/AG/173 should be read as incremental to and building upon the previous statements of position. It proposes that Members with scheduled AMS entitlements apply a cap on their product-specific support beyond de minimis based on the average of the last three years figures notified to the Committee on Agriculture. A commitment should then be made to further reduce the amount of product-specific support beyond de minimis as a percentage of the product's value of production (VoP), with a view to reaching the de minimis percentages in Article 6.4 within a time frame to be

7. In the present era the 'OTDS' in Rev4 of 2008 is now akin to what is coined 'the trade and production-distorting domestic support entitlements in agriculture' as per the Cairns proposal RD/AG/81 Rev1 of September 2020.

determined. The proposal is silent on the non-product specific portion of such support<sup>8</sup>. From this text it is also evident that the Africa Group is happy to keep the current de minimis entitlements, for all members. Again, this follows from the text where it is stated that the reductions will end at the point where they are, “reaching the percentages stipulated in Article 6.4 of the AoA” — being the de minimis percentages. The call for the added green box disciplines is reiterated and a call for the total elimination of the blue box by a date to be determined is introduced.

The next notable insight is in the Africa Group’s verbal statement at the WTO’s Committee on Agriculture Special Session meeting held on 23 April 2021. This statement affirmed the Group’s alignment with its position expressed in JOB/AG/173, and in particular that the proposal sets out its ‘ideas on reducing trade distorting support in an incremental manner’. (Emphasis added). The statement added an explanation of what the Africa Group considers as trade distorting domestic support, being that it should fulfill 2 criteria. First, it would be granted to large-scale commercial farmers producing with the aim of exporting; and second, it would allow for unlimited sums of support to be concentrated into specific products. The statement cites AMS beyond de minimis levels as well as blue box support as meeting these two criteria. Conversely their ensuing logic is that Article 6.2 development support granted to low-income and resource-poor farmers, as well as de minimis support with the stipulated levels of Article 6.4 would not meet the two distortive effect assessment criteria.

The current African view at the time of drafting this paper can be gleaned from

the suite of papers issued by the Africa Group in mid-July 2021 (JOB/AG/203 – domestic support, JOB/AG/204 – on public stockholding, JOB/AG/205 – on the SSM and JOB/AG/206 – on COVID-19 and food security). The proposal specific to domestic support (JOB/AG/203) specifically hones in on FBTAMS entitlements. The focus is on the rebalancing of the historical injustices in the Amber Box and the proposal cites several specific examples as to why the current FBTAMS entitlement is inequitable. In summary the paper references that 32 Members enjoy Final Bound AMS above de minimis levels (see Figure 18 above) and observes that within these 32 Members, Developed Members make up half of the holders and hold 96% of FBTAMS entitlements<sup>9</sup>. The other half of the holders are Developing Members that account for the residual 4%, while 104 Developing Members outside of the 32 entitlement holders have a zero FBTAMS entitlement.

## The paper cites what it sees as two essential problems with the FBTAMS entitlements, which it describes as biases.

In the first instance any single product may receive AMS far above the de minimis level otherwise applicable to that product. Examples cited include the EU’s AMS on skimmed milk powder at 88.6% of VOP in 2018 and the USA’s AMS at 57% of VOP on sesame seed in 2014. In the second instance any proportion of the total AMS entitlement

can be focused on any product leading to a concentration of support. Examples cited include that in 2013 the USA directed 23% of its product specific AMS to dairy, the EU directed 39% of its product specific AMS to butter, and Canada directed 65% of its AMS to milk. Mention is also made of the increase in AMS type support as a COVID-19 response, noting that the USA and the EU provided very high levels of domestic support as pandemic support using FBTAMS above the de minimis levels and that this pandemic support has even exceeded the entitlement levels in some cases. Three alternatives for specific modalities are then provided, with the essential theme being that FBTAMS be reduced to the point of elimination, to the level where only de minimis allowances remain for all Members, thus retaining both the product specific and non-product specific de minimis items at the current AoA Article 6.4 levels. The reference to non-product specific support in the modality options clarifies the earlier potential lacuna on non-product specific support in the November 2019 proposal. Special and differential treatment options are also suggested within the three alternative modality options. The proposal is silent on the desired status of the development box but a reading of the sister proposal on COVID-19 and food security (JOB/AG/206 as issued concurrently with JOB/AG/203) fills this gap and states emphatically that the development box should be retained as being essential to resource poor farmers and hence paramount in the production of food and in the quest for food security<sup>10</sup>. Neither of the proposals make references to the blue or green boxes.

8. This observation is also made by Brink and Orden (2020 pg. 90): “The African Group proposes to rule out product-specific AMSs larger than de minimis levels for members with a positive BTAMS. As in the proposal by China and India, non-product-specific AMS would not be subject to this stricture.” The subsequent proposal (JOB/AG/203) however clarifies the potential oversight (being that that Members could keep their scheduled AMS entitlements as long they are used in a non-product specific manner) and does make specific reference to including non-product specific support for reduction to de minimis levels.

9. Within the 96% a mere 6 Members account for 92% of total FBTAMS, namely EU 51.4%, Japan 23.1%, USA 12.1%, Russia 2.8%, Switzerland 2.7% and Canada 2.1%.

10. The precise wording used is as follows: “Article 6.2 and Article 6.4 should be carved out of reduction commitments on trade distorting domestic support. Article 6.2 support is for small, resource poor farmers. Now more than ever, the development box to assist rural development, livelihood of farmers and agricultural development is of paramount importance, both for food production and for food security purposes. Article 6.4 de minimis supports cannot be put in the same category as Article 6.3 Final Bound AMS supports. Art 6.4 supports are capped at 10% for product specific supports for the large majority of developing countries that have 0 Final Bound AMS. These de minimis supports cannot therefore be used to concentrate supports in specific products the way some developed Members are able to, using their Final Bound AMS entitlements.”





## 5.2 An assessment of African positions in light of entitlements growth

The current African position that FBTAMS entitlements must be eliminated as a starting point in the domestic support negotiations is shared by other leading developing country members. Again, this is based on the premise of addressing the perceived existing imbalances in AoA entitlements as presently scheduled. Notably, China and India have made a joint proposal in this regard (WTO document JOB/AG/137) (WTO 2018b). This proposal postulates that reforms in agriculture subsidies must address what they call

“the asymmetry between the developed Members on the one hand and most of the developing Members on the other hand” when considering the relative entitlements of the developed and developing countries to amber box support beyond de minimis levels, and high product-specific support in particular. The proposal also sets out that the elimination of AMS beyond de minimis entitlements must remain as a pre-requisite for consideration of other reforms in domestic support negotiations. Importantly, however, they

qualify that this is a long-term objective, and in the interim a ceiling for, and reduction of, AMS beyond de minimis as product-specific support would be a reasonable initial step in the reform process.

In examining the African position, especially in that of JOB/AG/173 discussed above, one finds a close resonance with the China-India position in JOB/AG/137. This is especially so in the proposal to reduce FBTAMS entitlement to provide product specific AMS beyond de minimis levels,

aiming to eliminate this support. In examining the proposals textually, it may be that there was some purposeful alignment of the submissions so as to add weight to the suggestion. The relationship between the Africa Group and the China-India coalition is based on the common aim of addressing the perceived historical injustices in FBTAMS entitlements under a developing country banner. Africans are intimately cognisant of the needs of small farmers as these represent the major proportion of growers in most African countries. In this there is an

affinity with the structure of the grower sectors in India and China where small-scale farmers are also plentiful. The Africa Group has also indicated its desire to keep the development box as is without subjecting this facility to further discipline. To this end there is also the perception that India's extensive use of the development box is a practice that African countries may need to emulate in uplifting small scale farmers in the future. The Africa Group also has sympathy for the Indian position on the topic of 'public stock holding for food security purposes'

(PSH) and would like to see access to its use extended to any future PSH programmes that Africans may want to introduce.<sup>11</sup>

Underlying these observed common purposes, it is worth recalling that the South Centre's work is highly influential in shaping the negotiating positions of developing countries through policy-oriented research and support in effectively participating in international negotiating processes, especially in the WTO.<sup>12</sup> Note that China, India and all the foremost African countries are members of this think tank.

## Box 1: A Brief Look at Public Stockholding - The Indian Case

India is one of the fastest growing G20 economies, with an agriculture sector that continues to play an extremely important role in the economy and society: farmers and farm laborers represent almost half of total employment, while 15% of the population of 1.3 billion people is undernourished. A key aim of agriculture policy is to ensure national food security via affordable prices for consumers and, at the same time, remunerative prices for producers. This aim is pursued via a complex web of programmes, policies and institutions that, overall, tend to benefit consumers and to implicitly tax producers (see Figure 33 in Annex V).

Public procurement, storage and distribution of mostly rice and wheat are major elements of India's agriculture policy package. The National Food Security Act (NFSA) undertakes to provide 50% of the urban population and 75% of the rural population with subsidized grains. The Food Corporation of India (FCI) procures these grains domestically at a Minimum Support Price (MSP), which is usually below the price on international markets. These grains are stored by state agencies, and some states also procure grains directly. The MSP is set annually at the national level, before planting begins, and subsequent purchases are open-ended (that is, all grains offered are purchased, subject only to quality conditions). The FCI releases grains for the Targeted Public Distribution System (TPDS) to states at a Central Issue Price (CIP), which is always much lower than the MSP. State governments identify eligible families, issue ration cards, and distribute grains primarily through Fair Price Shops at the CIP or, sometimes, lower prices.

As is the experience in other countries, public management of buffer stocks is a costly proposition. India's 'food subsidy bill' has increased almost six-fold over the past decade, equivalent to about 7% of the total central government budget. Whether this level of expenditure is financially sustainable or not, there are opportunity costs; that is, these funds will not be available for other priority initiatives, from health and education to physical and digital infrastructure.

Building, maintaining, and releasing stocks have other short- and medium- term impacts. It is generally difficult to target the poor effectively; in some cases, the most vulnerable households may receive less assistance than needed while in other cases households that are not poor may receive assistance unnecessarily. There are domestic market impacts and, depending on the scale of the programme, international market spill overs, in particular when stocks are being built (pushing prices up) and released (pushing prices down). In India, the focus on rice and wheat has unintended impacts on consumption (potentially contributing to unbalanced diets) and on production (diverting farmers from higher value but unsubsidized crops).

For all these reasons, the stated objectives, the selected instruments, and the actual impacts on rural and on urban households of agriculture policies, including stockholding policies, warrant continual review and improvement to ensure the desired outcomes are effectively realized. This is true in India, and it is equally true in other major food producing, consuming, and trading economies.

11. While the PSH topic is closely related to that of domestic support, it is negotiated as a stand-alone topic, and is excluded from the terms of reference for this study. A brief description of PSH is provided later in Box 1 of this paper.

12. See: [www.southcentre.int](http://www.southcentre.int).



Arguably the African and Asian proposals do not address the huge growth of total de minimis domestic support entitlements since the end of the Uruguay Round negotiations, to the current point where they now exceed FBTAMS entitlements by nearly three times and, even more strikingly, are projected to increase to almost 2 trillion USD by 2030 (see Figure 9). It is important to drill down into these data. As shown in Figure 18, China's entitlement has registered rapid growth. Similarly, other large developing countries' entitlements, notably those of India and Brazil, are rising. The EU and US entitlements, by contrast, while high were stable over time. However, except for Nigeria and Egypt, the African countries analysed in this report had very low entitlement levels. The stark entitlement gap between these African countries and their major trading partners is shown in panel C of **Figure 18**.

The tension between the FBTAMS elimination proposal versus overall entitlement discipline caps proposal is evident in Sharma (2020, p. 13) who contends that attempts have been made to 'belittle' developing members' position. He notes that the FBTAMS entitlement is fixed in monetary terms, therefore, as a percentage of the VoP of agriculture products it has declined with an increase in the VoP over time. He notes that these entitlements

can be concentrated on one or a very few products, yielding product-specific support well in excess of de minimis levels and very high levels of support per farmer. Consequently, he contends that a reduction in policy space under the de minimis limit as well as capping of the development box under the Australia-New Zealand line of reasoning<sup>13</sup> would be highly disadvantageous for developing members and is in contrast to the Doha Development Round's mandate, under which S&DT for developing members is an integral part of agriculture negotiations. He then supports the China-India proposal since it would preserve available policy space under the amber box for developing country members, while concurrently eliminating the FBTAMS entitlement for developed members.

That said, we need to recall that the limits on AMS support of the members without an FBTAMS are a de minimis percentage of the nominal VoP of individual products and of the agriculture sector. Since nominal VoP tends to increase over time, the corresponding AMS limits also increase. China and India, without a FBTAMS entitlement but with large VoP in agriculture, have more room for AMS support than, say, the United States with a FBTAMS entitlement but with a lower de minimis percentage and a lower VoP.

A question for African countries is whether retention of amber box policy space for developing countries is in their interests, given the huge growth of de minimis entitlements – particularly for China and India. There is substantial African product intersect with Indian and Chinese subsidization (and its growth), that requires careful interrogation from the standpoint of what makes good economic sense. Even if African economies grow relatively rapidly for the next few decades, their entitlements will not increase to similar absolute levels as those enjoyed by China, India, and Brazil. Furthermore, while there are high hopes that the African Continental Free Trade Agreement (AfCFTA) will substantially boost intra-African trade, the fact remains that for the foreseeable future most African agricultural trade will be with the rest of the world (FAO and AUC 2021). It follows that for the medium-term Africa cannot forget about its major trading partners' subsidization in the hope that trade with them becomes irrelevant relative to AfCFTA trade.

By way of examples of the risk inherent in retaining amber type support or policy space predicated thereupon, the following product cameos are provided based upon their being highlighted as products of African interest in the production and trade analysis.



13. WTO document JOB/AG/171 November 2019.

## Box 2: Domestic support and African cotton production

Raw cotton is the fifth largest agricultural export item for the 15 African countries discussed in this report, but it has steadily declined during over the past decade. In addition to Benin, Burkina Faso, Chad and Mali (also known as the Cotton-4, C-4), other major African cotton exporters and African agricultural producers are Cote d'Ivoire, Egypt, Zimbabwe, Nigeria, Tanzania and Sudan. Globally, the US, Brazil, India, China, Pakistan, and Turkey are major producers of cotton. While some non-African cotton producers consume a significant share of their production, others account for a major export share of the global cotton exports. For example, Sharma et al. (2021) illustrates that the share of exports in production in 2020 constituted 85.6% in for the US, 76.6% in Brazil, 16.7% in India, 1.2% in Pakistan and 0.5% in China in 2020. Thus, some of the largest cotton producers, such as China, India, and Pakistan use their production almost entirely for domestic consumption. However, for the C-4 countries, in 2020, 91.2%, 88.9%, 105.3% and 68.2% of production was exported by Benin, Burkina Faso, Mali and Chad, respectively.

The product specific domestic support analysis shows that China, the US, Brazil, the EU, and India have provided the largest cotton subsidies. For instance, the 2001-2017 average cotton-specific domestic support to cotton in China, the US, the EU and Brazil was \$1.9 billion, \$1.1 billion, \$259 million and \$73 million, respectively. Different studies that analysed the impacts of domestic support for cotton have demonstrated shown the large price-depressing effect of the cotton-specific government domestic support in these countries. For example, ODI (2004) find that 52% of world cotton production was affected by the cotton subsidy provided the majors in 1999/2000.

Sharma et al. (2021) also documented that the world price of cotton has declined from 155.7 cents/pound in 2011 to 70 cents/pound in 2020, where US cotton exports as a percentage of production grew from around 75% to 85.6% in the same period. The US provides massive cotton domestic support to farmers through various programs such as insurance premium subsidies, price loss coverage, and market loss assistance, which creates artificial comparative competitive advantage in the international market. Currently the US is also the top exporter of Cotton.

This massive cotton domestic support and enabled by the majors' entitlement of the majors, and the associated artificial comparative advantage has a disastrous impact on the agricultural exports and farm income of African developing countries (Sharma et al. 2021). Thus, the C-4 countries, have been consistently expressing argued for reduction in of trade and production distorting domestic support by the majors as subsidies for the cotton-specific production subsidies are 'cultivating poverty' by impacting cotton export, cotton price and the livelihood of their farmers. While disciplining trade distorting cotton subsidies would play a bigger role for in poverty reduction in West and Central African countries (WTO 2003), the issue remains to be an unfinished WTO agenda item. In this regard, the C-4 countries nonetheless continue to stress that domestic support for cotton by certain WTO Members distorts prices and disrupts international cotton markets, with severe consequences for the economies and societies of African cotton producing countries (WTO 2019b).



### Box 3: Domestic support and African chocolate production

As the empirical analyses demonstrate, Africa is the major producer and exporter of Cocoa beans. In particular, Western African countries which contribute around 70% of the world's Cocoa beans production. Cote d'Ivoire, Ghana, and Nigeria are the major West African Cocoa beans exporters. While the global Chocolate industry is worth of \$150 billion, West African countries account for less than \$6 billion (only 4% of the total) (van Huellen & Abubakar 2021), as they predominantly export the raw Cocoa beans towards the EU and the US markets. Clearly This implies that value addition of to Cocoa beans through domestic processing companies would help to increase African cocoa producer countries the export values of export for African Cocoa producer countries.

Producing finished Chocolate bars in Africa is constrained by different factors. Besides the raw Cocoa powder, Chocolate production requires some other important ingredients such as sugar, and milk powder. However, these two key Chocolate ingredients receive substantial domestic subsidy support by from the majors. In the domestic support analysis, we showed that sugar is one of the most heavily subsidized products. While these subsidies depress global prices, presumably to the benefit of chocolate producers everywhere, the additional cost of exporting to Africa means that even though African countries are major producers of Cocoa beans, they

may struggle to compete with Chocolate producers in advanced countries owing to the latter's excessive production and trade distorting support in for the basic chocolate ingredients.

To capitalize on intra-African trade opportunities that will be created by the African Continental Free Trade Area (AfCFTA), the Ghanaian Cocoa processors have recently asked the government to scale up domestic support for the domestic Chocolate industry (Ghanaian Times 2021). The support may include tax reductions for local semi-processed cocoa beans producers and tax reduction, including on equipment that are relevant used for local cocoa value addition. Besides However, lacking sophisticated Chocolate packaging knowhow, and reliable electric power supply, and the limited financial capability of the Ghanaian government relative to the high domestic support by the majors, would make means Ghanaian Cocoa value addition is extremely challenging. Therefore, suggesting domestic support reduction negotiations via the WTO may be the most viable solution to facilitate finished Chocolate production and exports from the country.

**Figure 19** shows that African countries are marginal users of the development (S&DT) box, notwithstanding its uncapped availability.<sup>14</sup> A recent Brazilian analysis (Ministry of Foreign Affairs 2021) shows clearly that only 5 (non-African) developing countries dominate this entitlement's uptake concentrating expenditures on input subsidies. Brink and Orden (2020, p. 40) calculate that 2014-16 average total annual support exempted under Art. 6.2 was USD 31.3 billion, notified by 33 developing country members. For many members the amount exempted corresponds to a small percentage of

their VoP. If this support was included in AMS, the amounts are relatively small relative to de minimis limits or FBTAMS. The authors note that in the African context a possible exception may be Zambia which notified Article 6.2 spending at 8% of the VoP in the early 2000's.<sup>15</sup>

From the data set out in Figure 10 it is clear that Indian support dominates Article 6.2 expenditures (US\$ 25.1 billion in 2019/20, US\$ 24.2 billion in 2018/19, and US\$22.6 billion in 2017/18), and from the data analysis in Section II it is clear that India is a major trading

partner of African countries. The African position is that this box should not be touched, yet it is not clear that African countries could effectively make use of it from a budgetary perspective, nor that other developing countries with much greater financial capacity to use it are not harming African trading interests by having uncapped recourse to it. It may be that available de minimis policy space is sufficient and of wide enough scope to accommodate anything that an African agricultural policy maker may want to do in the domestic support area for the medium term at least.

14. A caveat is necessary here. It is by no means clear that African countries — along with many other developing countries — reliably notify their domestic support expenditures.

15. Brink and Orden (2020, p. 57) also observe that Egypt and India have received the largest numbers of questions in the Committee on Agriculture regarding Article 6.2 notifications. They note that the questions seek more descriptive details of the wide diversity of the notified development box policy measures and how they conform to the criteria of Article 6.2, as well as explanations of significant increases of Article 6.2 support in general, or under particular policies, such as input subsidization.



#### **Box 4: Domestic support and African maize production**

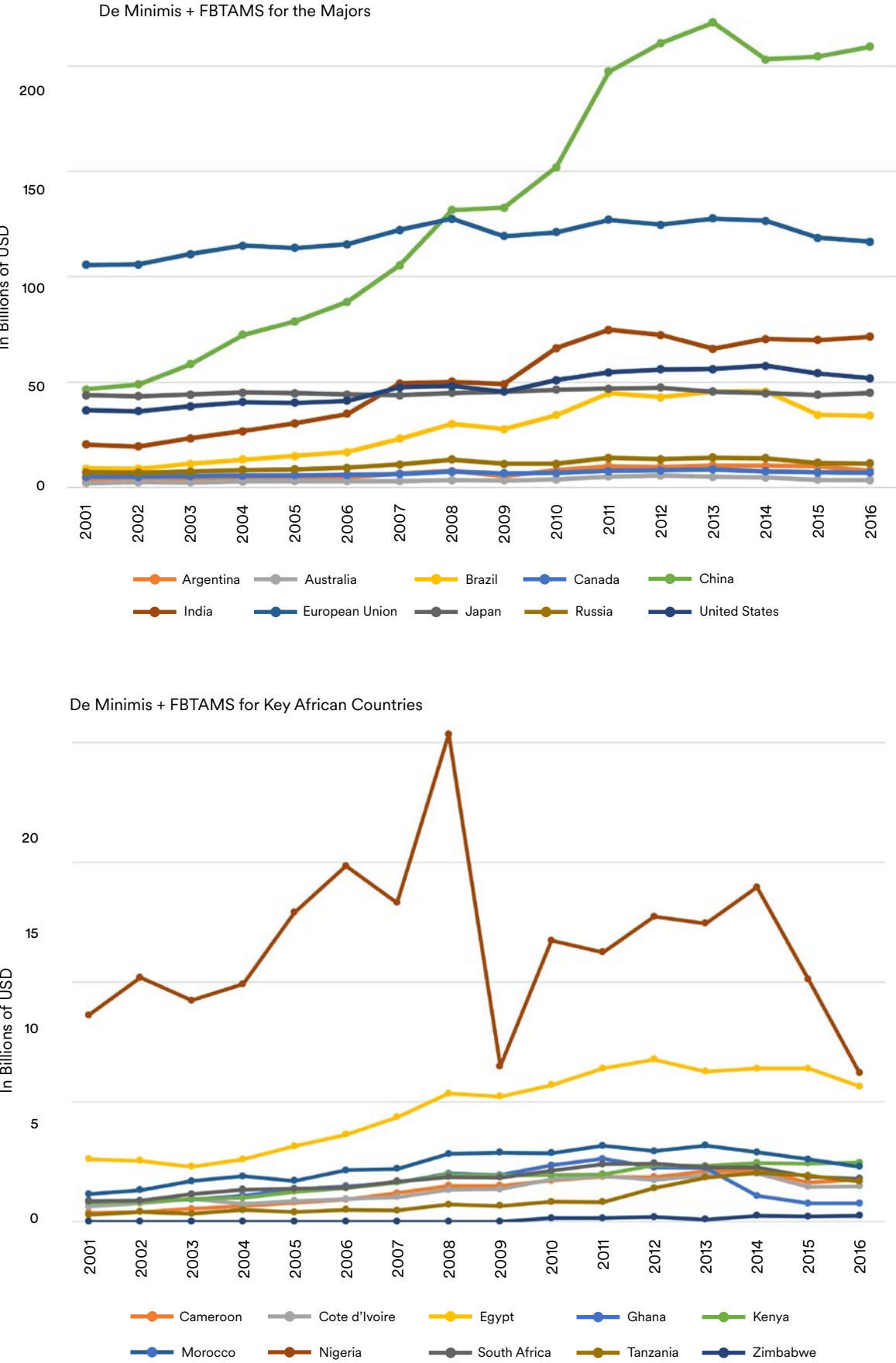
Maize is the second most traded crop after wheat in the world. The US, Brazil, Argentina and Ukraine are the four largest maize exporters of maize, accounting for 90% of the total global maize exports of maize. It is also a key staple crop in Eastern and Southern African countries. In particular, maize is used a major human consumption item in Malawi, Tanzania, Kenya, Zambia and Zimbabwe (Kornher 2018). Although it is a major staple crop in East and Southern Africa, our production analysis demonstrates that Maize is either the top or the second top highest largely produced agricultural item in many African regions and countries (see the production values in Egypt, Nigeria, South Africa, Ghana and Kenya in Figure 8). Overall, among the 15 heavily traded agricultural products discussed in this report, Maize accounted for the largest gross production in value for the 15 top trading African countries (around \$12.6 billion, on average).

Furthermore, as we have demonstrated in section IVIV, maize is one of the most heavily subsidized products in China, the US, the EU, Brazil, and Canada. The WTO AGIMS data also shows that in the 2001-2017 period the average maize-specific domestic support values to maize of provided by these countries are was \$3.05 billion in China, \$1.9 billion in the US, \$264 million in the EU, \$95 million in Brazil, and \$55 million in Canada, in the 2001-2017 period.

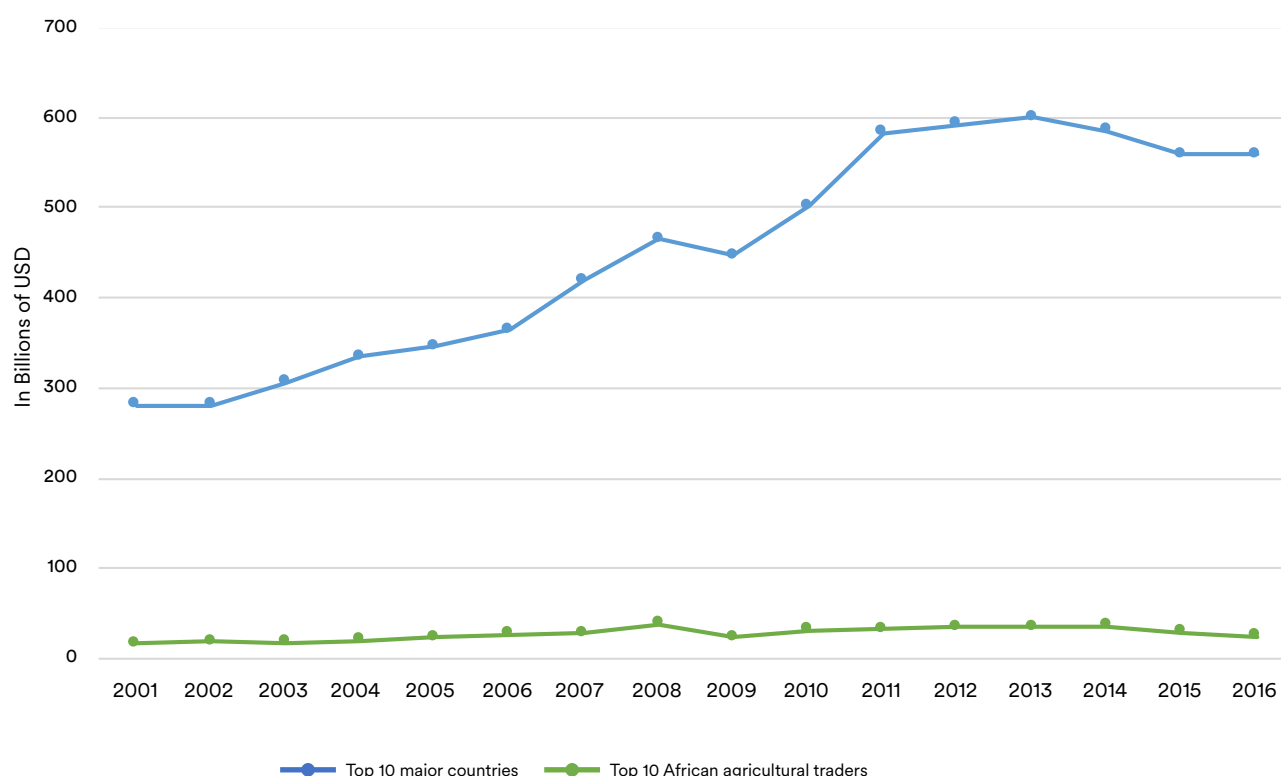
**Glauber et al. (2020) also showed that the combined Chinese and US maize product specific support has exceed \$11 billion implying the unprecedented growth of maize domestic support in the two major maize producers.**

For example, using economic simulation analysis, Sumner (2005) found that US subsidies depressed global maize prices by about 9 to 10 percent. Therefore, the price-depressing effects of such support will certainly distort the maize production and trade of several African countries. Trade distorting subsidy reform by WTO members will help African countries to improve food security and achieve the second Sustainable Development Goal (Hepburn, Jonathan & Bellmann, Christophe 2018).

Figure 19: De Minimis and FBTAMS entitlement for the majors and for the key African trade countries (2001-2016)



Aggregate FBTAMS + de Minimis entitlement trend (2001-2016) for the Majors and key African trading countries



One possible African response to the prospect of growing entitlements would be to align African efforts with a proponent of widely encompassing disciplines on overall domestic support. This would likely be in a sequential manner beyond the immediate MC12 positioning. The Cairns Group would be a logical group to potentially partner with. Recent developments at the CoASS reveal exactly such a development. At the CoASS meeting held on 25 May 2021, a short and broadly worded statement was issued jointly by the Africa Group and the Cairns Group. The statement indicates that the two groups will work together to obtain a result at MC12 that addresses trade- and production-distorting domestic support in agriculture that is sufficiently ambitious and specific to enable meaningful reform of trade and production-distorting domestic support so as to enable fairer agricultural trade. While the statement is short and lacking

specific detail, this should not detract from the significant political weight that it signals. This may represent a phase in the negotiations beyond the immediate MC12 phase where Africa is discerning its own trade interest as being served well by comprehensive reforms as distinct from the more advanced non-African developing countries. This said, it is clear that the immediate MC12 African focus as reflected in its July 2021 suite of proposals, is geared at the elimination of FBTAMS entitlements beyond de minimis levels in line with the established African stance.

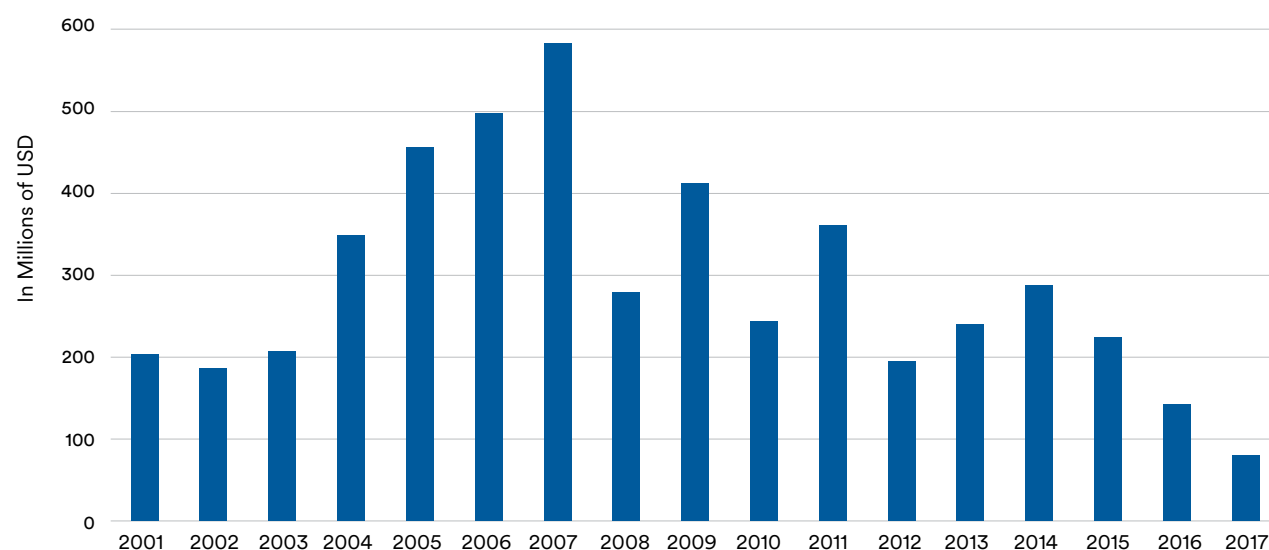
**Table 3** summarises the similarities and differences in the current stances of the two groups in relation to the various elements that make up the domestic support landscape.

From this tabulation it would seem that the two groups have commonality on the general direction of domestic support reform and are already

intersecting fairly well conceptually. Of course this is not completely so on a detailed level. In order for the two groups to fully align, the main elements upon which there will need to be a pivot as between the respective stances are on the de minimis allowance, the green box and the development box – potentially accepting some additional green box discipline for the Cairns contingent and some additional de minimis and development box discipline for the Africa Group (call it a ‘DD-G pivot’ for short). In fostering the cooperation required to achieve this pivoting of stances, South Africa as the only WTO member common to both negotiating groups, may have a bridging role to fulfil in bringing the respective positions into full alignment. It may also happen that as the negotiations post MC12 unfold, other Africa Group members consider joining the Cairns Group as members or observers.



**Figure 20: Notified nominal Article 6.2 agricultural domestic spending values by 25 African WTO members (2001-2017)**



Source: WTO

Note: The 25 African WTO members that notified article 6.2 support (development box expenditures) are Botswana, Burkina, Faso, Burundi, Cameroon, Chad, Congo, Côte d'Ivoire, Egypt, Gabon, Lesotho, Madagascar, Malawi, Mali, Mauritius, Morocco, Namibia, Nigeria, Senegal, Seychelles, South Africa, The Gambia, Togo, Tunisia, Uganda, and Zambia.

**Table 3: Comparison of Africa and Cairns Group Stances on Domestic Support Elements**

Element	Africa Group	Cairns Group
Conceptual basis	Emphasis on historical imbalances.  Modalities tend to address current actual domestic support use.	Prospective view of future domestic support risks.  Modalities focus on entitlements.
Legal basis	Article 20 AoA.	Article 20 AoA.
FBTAMS	Entitlement based and reduce to de minimis levels.  Product and non-product specific support disciplined concurrently over differing time periods.	Include in combined overall entitlement and cut by 50% by 2030  Product and non product specific support disciplined concurrently.
De minimis	Keep within Article 6.4's % limits.	Include in combined overall entitlement and cut by 50% by 2030
Blue Box	Eliminate by a determined date.  No cap required due to the elimination thereof.	Include in combined overall entitlement and cut by 50% by 2030  Some cap implied due to infinite nature.
Green Box	Cap direct payments in paras 5-13 of Annex II.	Exclude from entitlement definition based on non-distorting assumption.
Development Box	Retain unchanged per current formulation.	Include in combined overall entitlement and cut by 50% by 2030

# 6. Conclusion and Recommendations

**In the context of stalled negotiations on agriculture at the WTO to reduce trade-distorting domestic support, this report examined trends in actual support as well as support entitlements.**

The focus is on Africa. In addition to examining the major commodities produced, imported, and exported by African countries, the actual levels of support and the support entitlements of Africa's major trading partners as well as those for Africa itself were reviewed. This analysis relied primarily on WTO notification data, supplemented with more recent data from the OECD, as well as relevant published literature. The report also reviewed various position papers put forward by WTO members, with an African focus.

From examining African country trade and production data it is clear that agricultural production over the past decade has been characterized by either a declining or a stagnating output trend, with growth being largely driven by 3 countries: Egypt, Nigeria,

and South Africa. A similar picture emerges for agricultural exports where growth was either stagnant or declining, and concentrated in raw or low value-added commodities. Faster population and urbanization growth in Africa relative to production growth, and the associated food consumption increase that has accompanied this, has markedly contributed to an agricultural import surge into the continent in recent years (Hepburn & Bellmann 2018), although there is evidence that many sub-Saharan countries are net agricultural exporters (Fox & Jayne 2020). The EU is by far the largest export destination for African agricultural goods, and this is mainly attributable to the geographical and colonial relationship between the two continents.

Three broad conclusions can be drawn from our analysis of African agricultural trading patterns. First, cocoa beans, cashew nuts, coffee, tobacco, cotton, tea, sesamum seeds, oranges, and sugar cane dominate African exports, whereas wheat, maize, palm oil, sugar, rice, milk, cigarettes, and meat constitute the lion's share of African agricultural imports. Second, the main export destinations are the EU, the US, China, India, and Vietnam, whereas agricultural imports are sourced from Brazil, the EU, the US, Russia, and India. Third, the top 15 African agricultural traders (ranked by combined import

and export values), are Egypt, Nigeria, South Africa, Ghana, Morocco, Cote d'Ivoire, Ethiopia, Kenya, Benin, Mauritius, Cameroon, Tanzania, Zimbabwe and Uganda. Egypt, South Africa, Morocco, Nigeria, and Ghana are the top 5 African agricultural traders, and thus are the most likely African countries that could be affected by domestic support provided by Africa's major trading partners.

The EU, the US, China, India, Japan, Russia, Brazil, Argentina, and Canada are either the major sources of African agricultural imports, the major African agricultural export destinations, or both. Thus, these countries' domestic support for the agriculture sector has the highest potential to distort African agricultural production and trade. In examining the African import and export product mix, the data identify 10 commodities of key interest to Africa: wheat, rice, sugar, tobacco, tomatoes, cotton, maize, beef, oranges, and milk. Each of these commodities receives meaningful levels of support in at least some of Africa's major trading partners. This pattern is evident from both the WTO and OECD data.

In considering Africa's interest in the domestic support discourse today, very large amounts of trade-distorting support are permitted under WTO rules, and these amounts continue to increase. FBTAMS + de-minimis support is highly trade-distorting, by definition, and while FBTAMS is bound

at a fixed level, de-minimis support is capped as a percentage of the VoP, increasing VoP, in nominal terms as the VoP increases. Support under the blue box is also trade-distorting, though somewhat less so given the requirement that payments be production-limiting. Support under article 6.2 provides developing countries with very wide scope to provide support for development purposes, some of which can also distort production and trade. Only the green box is intended for support that is non — or at least minimally — trade-distorting.

At present there are no limits to support, whether trade-distorting or not, that can be provided under the blue box, Article 6.2, or the green box. The FBTAMS + de minimis entitlement is about 1 trillion USD today and is expected to double to 2 trillion USD within a decade. Most of these support entitlements accrue to very large economies; six of Africa's major trading partners (three developed and three developing countries) account for over 50% of the total FBTAMS + de minimis entitlement. However, actual support levels provided are much lower; Africa's major trading partners, together, utilize about 20% of their total entitlement.

These facts would suggest that a feasible domestic support reform process could usefully begin with a commitment to cap trade-distorting support entitlements, and then to begin to reduce them. While there would be no immediate impact on the policy space available to any country, there would be significant benefit for all WTO members to reduce the risk of trade-distorting support increasing in future, simply by 'removing the water' from current entitlement limits. It is also clear that both FBTAMS and de minimis entitlements need to be dealt with, particular for large economies, given the growth in de minimis entitlements, which now significant overshadow FBTAMS entitlements.

Looking at the nature of domestic support provided offers further insights for effective multilateral reform. Of Africa's major trading partners, the 5 largest economies provide very high levels of both trade-distorting and minimally trade-distorting (i.e., green box) support. All utilize the available boxes to varying degrees, and all provide varying support levels for specific commodities. Of the commodities most highly traded by Africa, milk, sugar, rice, and to a lesser extent meat and cotton tend to receive the highest levels of commodity specific support across Africa's major trading partners.

While we have not conducted the kind of comprehensive modelling worked required to definitively link provision of trade and production-distorting domestic support to agricultural commodities of interest to African farmers, that such subsidies do distort production and trade incentives is not in dispute. Since African countries are least able to 'play the subsidies game', as we showed in Section 5.2 they have much to gain from substantial reform of the most egregious forms of domestic support to agriculture.

The fact that most support provided tends to be highly trade-distorting and to at least some degree concentrated on specific commodities has several implications. Most importantly, it argues for a clearer delineation between trade-distorting support, to be capped and reduced over time, and minimally trade-distorting support, to be available without limit. In particular, the four categories of trade-distorting support boxes could usefully be reduced and simplified. Further, until there are massive reductions in permissible trade-distorting support, individual commodity caps (or concentration limits) appear necessary to avoid excessive concentration of support with the consequent disruption on commodity markets — and on development opportunities. A well-defined green box is essential for all countries. In the case of Africa, for example, much higher, not lower,

levels of support for agricultural education, extension, and innovation, inspection services, physical and digital infrastructure, and so on are needed to reverse the flat trends in production and trade performance.

Looking ahead to MC12, an explicit commitment to work towards a cap on trade-distorting domestic support entitlements, and subsequently towards reducing both entitlements and trade-distorting support, would offer benefits to all WTO members. Doing so would be much easier if current agriculture policies were made much more transparent. This would not only provide the information needed for WTO members to consider ways forward on the basis of evidence, rather than perception, but is an essential step in building the trust needed for a sustainable and mutually beneficial improvement in the functioning of global agriculture markets. The updating of domestic support notifications is a particular task that African countries need to attend to. This should be a feasible task, given that (absent of contrary notification) it would seem that African countries provide very low levels of support at present. Attending to this would provide further credibility for Africa and enable the Group to claim some high ground.

**It would not be outside of the realm of possibility that a combined Africa Group – Cairns Group stance could significantly sway the trajectory of the future disciplines on domestic support in the WTO.**



The two groups have already recently stated that they will work together to obtain a result at MC12 (WTO 2021). Their joint stance aims to address trade and production-distorting domestic support in a manner that is sufficiently ambitious and specific to enable meaningful reforms, and in so doing to enable fairer agricultural trade. This short statement signals significant political intent and may well represent a development in the negotiations beyond the immediate MC12 phase where Africa is discerning its own trade interest as being well served by comprehensive domestic support reforms.

**If proponents of agricultural trade reform cannot unite behind a common reform objective and agree to take the next important step down the reform path, there is a risk that meaningful progress continues to remain elusive.**

It is in the interest of the Africa Group, and more broadly the entire WTO Membership to avoid the perfect being the enemy of the good. (Gonzalez et al. 2021).<sup>16</sup>

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16. A recent scoping of possible deadlock breaking ideas for the present phase of the agriculture negotiations was released in May 2021 by a group of eminent experts in the field of agricultural trade negotiations. This work may provide some bases for the Africa Group and the Cairns Group to distill a more concrete joint position. Please see <https://newpathwaysagric.wordpress.com/>



# ANNEX 1:

## Further African Trade Data

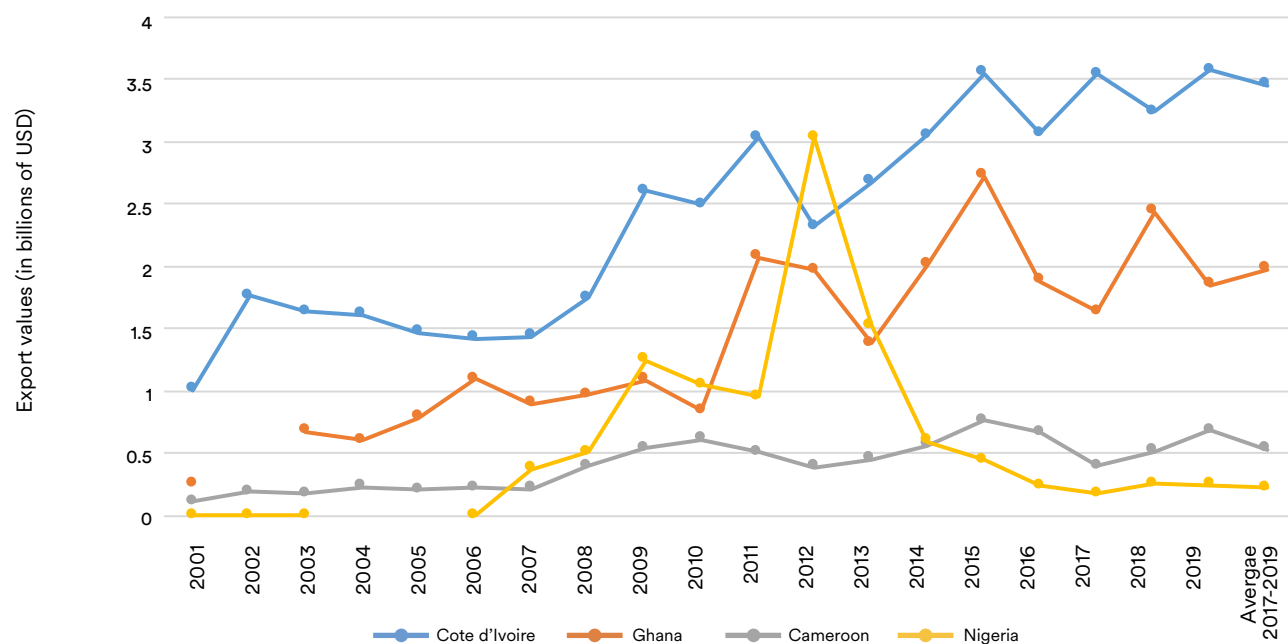
Table 4 Agreement on Agriculture List of agricultural products

(i)	HS Chapter 1-24 excluding fish and fish products, plus		
(ii)	HS Code	290543	Mannitol
	HS Code	290544	Sorbitol
	HS Heading	3301	Essential oils
	HS Heading	3501-3505	Albuminoidal substances, modified starches, glues
	HS Code	380910	Finishing agents
	HS Code	382360	Sorbitol n.e.p
	HS Heading	4101-4103	Hides and skins
	HS Heading	4301	Raw fur skins
	HS Heading	5001-5003	Raw silk and silk waste
	HS Heading	5101-5103	Wool and animal hair
	HS Heading	5201-5203	Raw cotton, waste and cotton carded or combed
	HS Heading	5301	Raw flax
	HS Heading	5302	Raw hemp

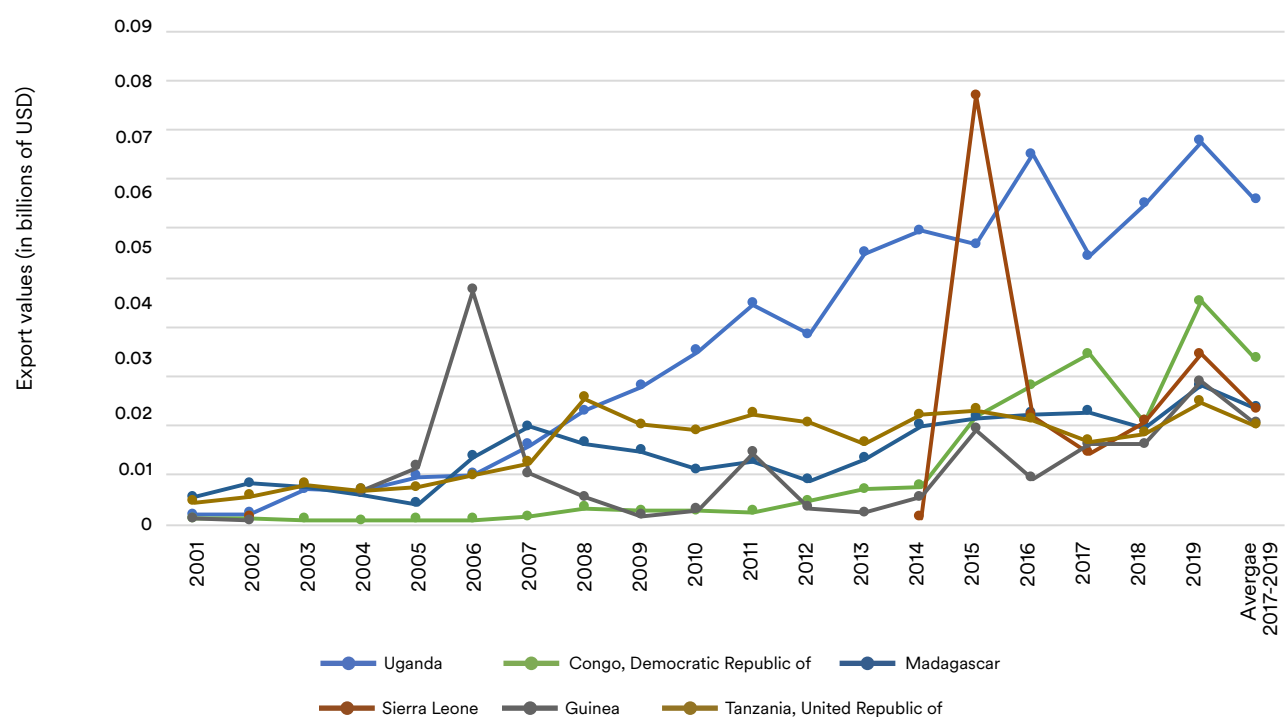
Source: Annex 1 of the Agreement on Agriculture (AoA).

Figure 21: Top four agriculture exported products by exporter country (data is extracted from the ITC Trade map database)

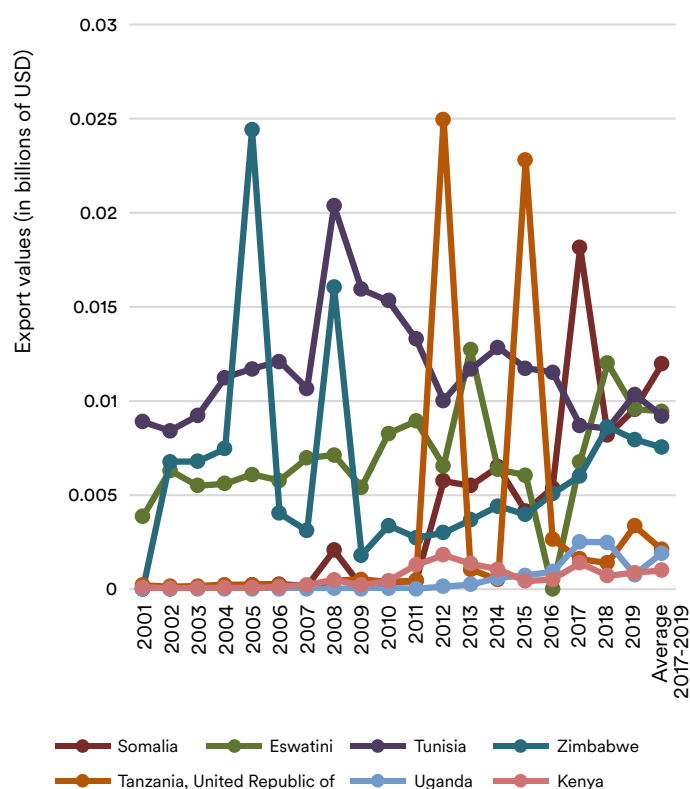
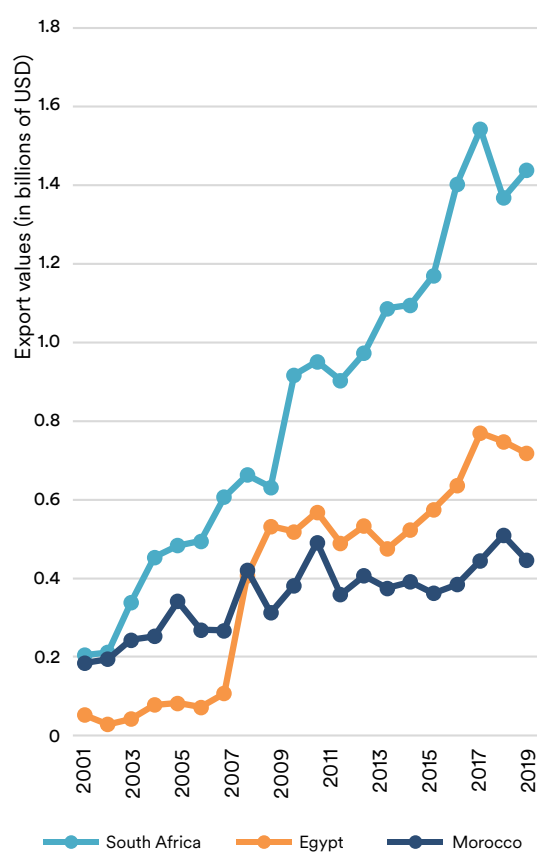
### Top four African Cocoa bean (HS 1801) exporters



### Other top African Cocoa bean (HS 1801) exporters



## Top 10 African Citrus Fruit (HS 0805) exporters



## Top 10 African Coconut, Brazil nut and cashew nut (HS 0801) Exporters

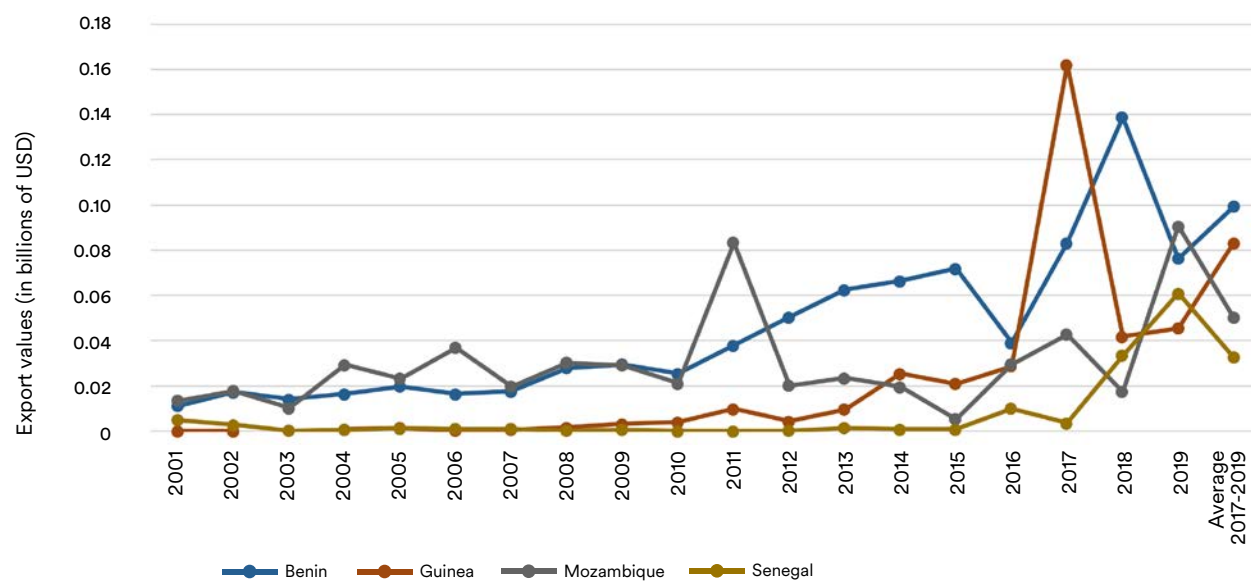
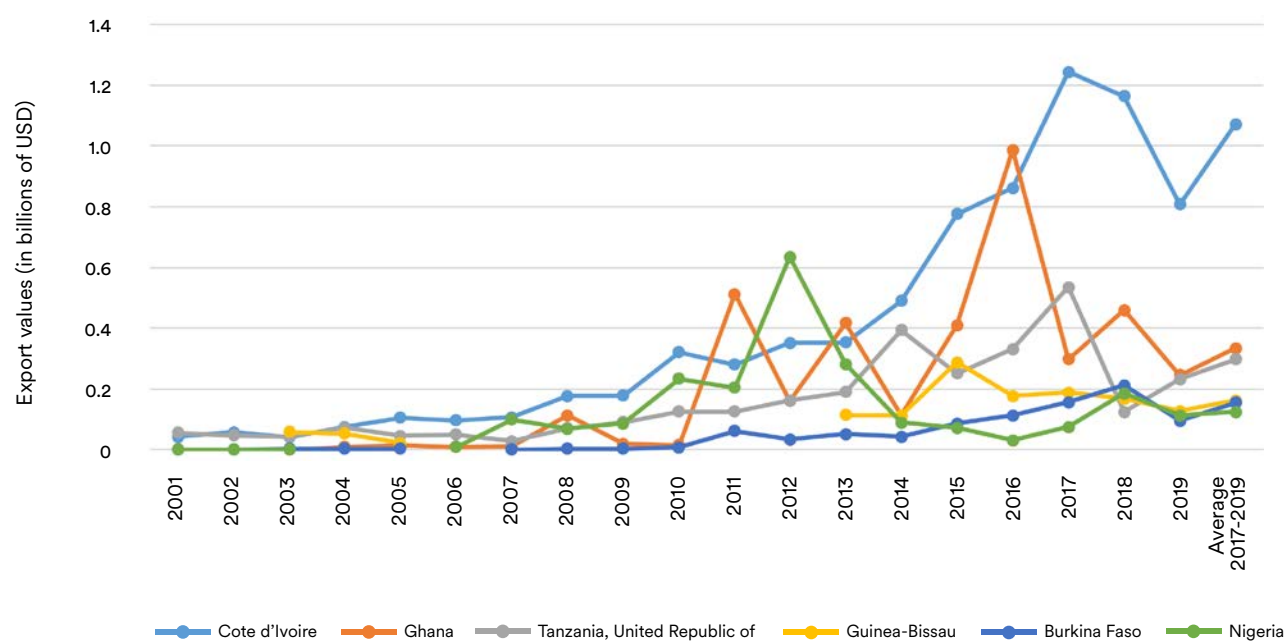
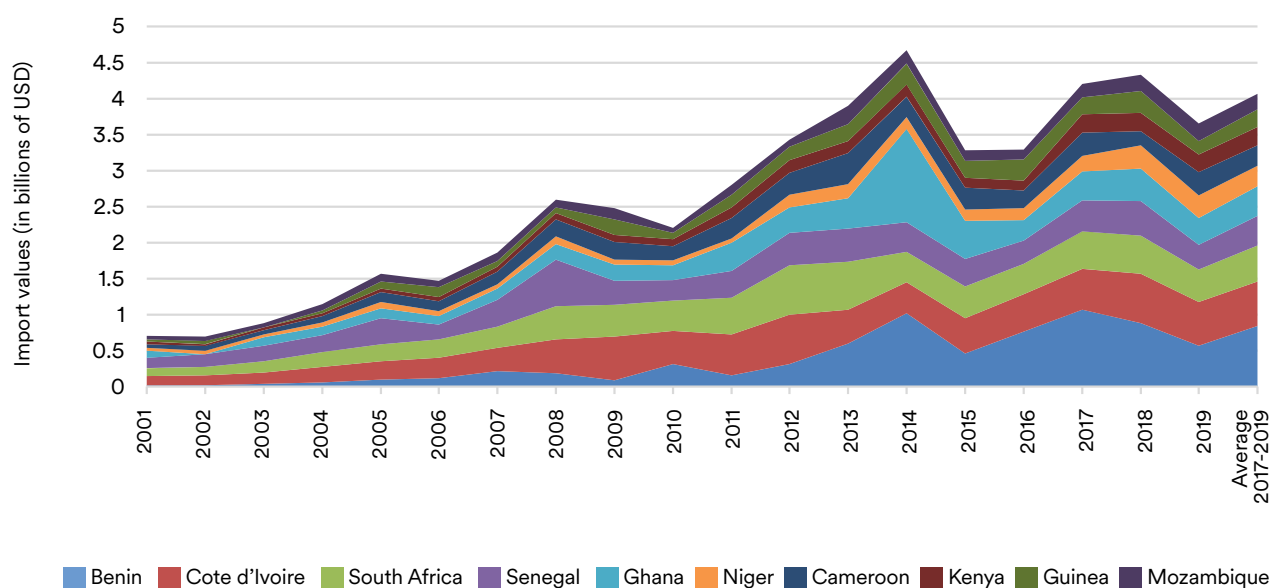
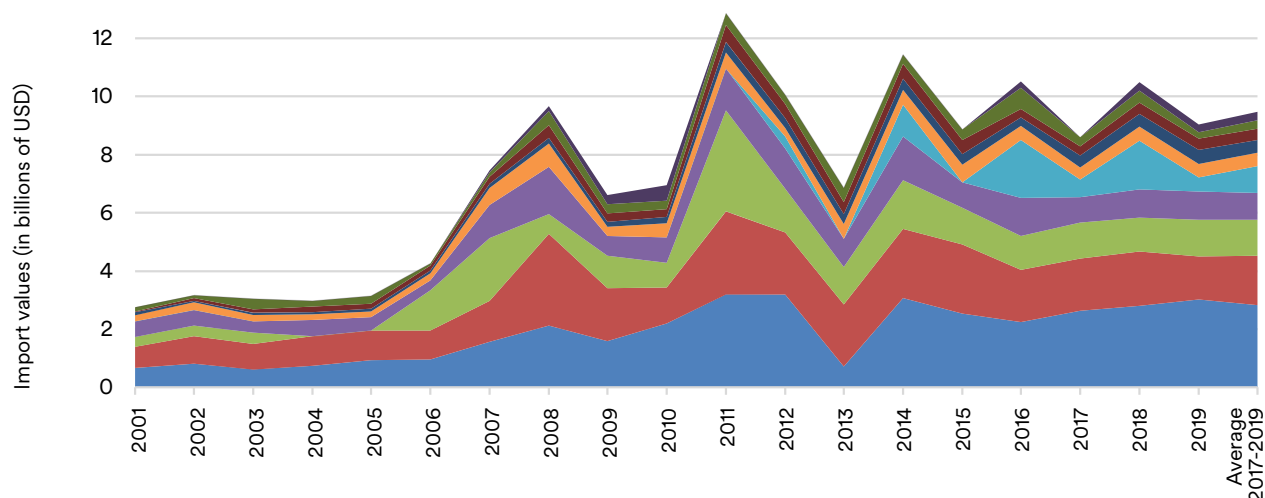


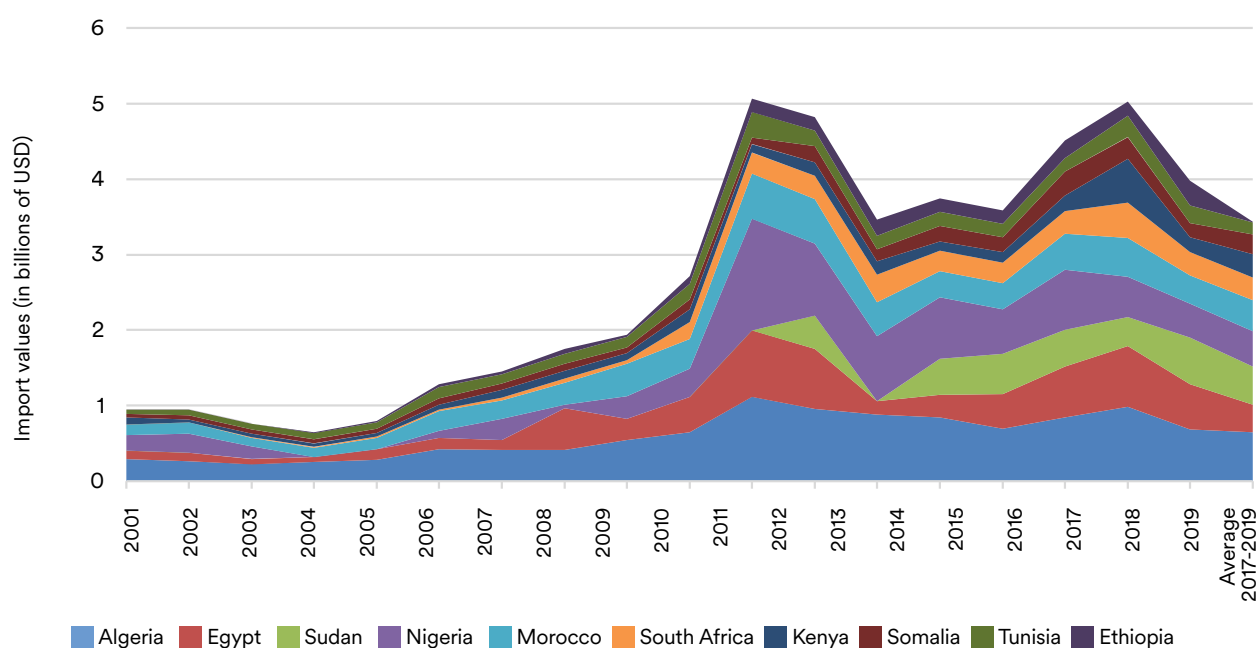


Figure 22: Top four agriculture imported products by importer country (data is extracted from the ITC Trade map database)

### Top 10 African Wheat and meslin (HS 1001) Importers



### Top 10 African Cane or beet sugar and chemically pure sucrose (HS 1701) Importers



### Top 10 African Palm oil and its fractions (HS 1511) Importers

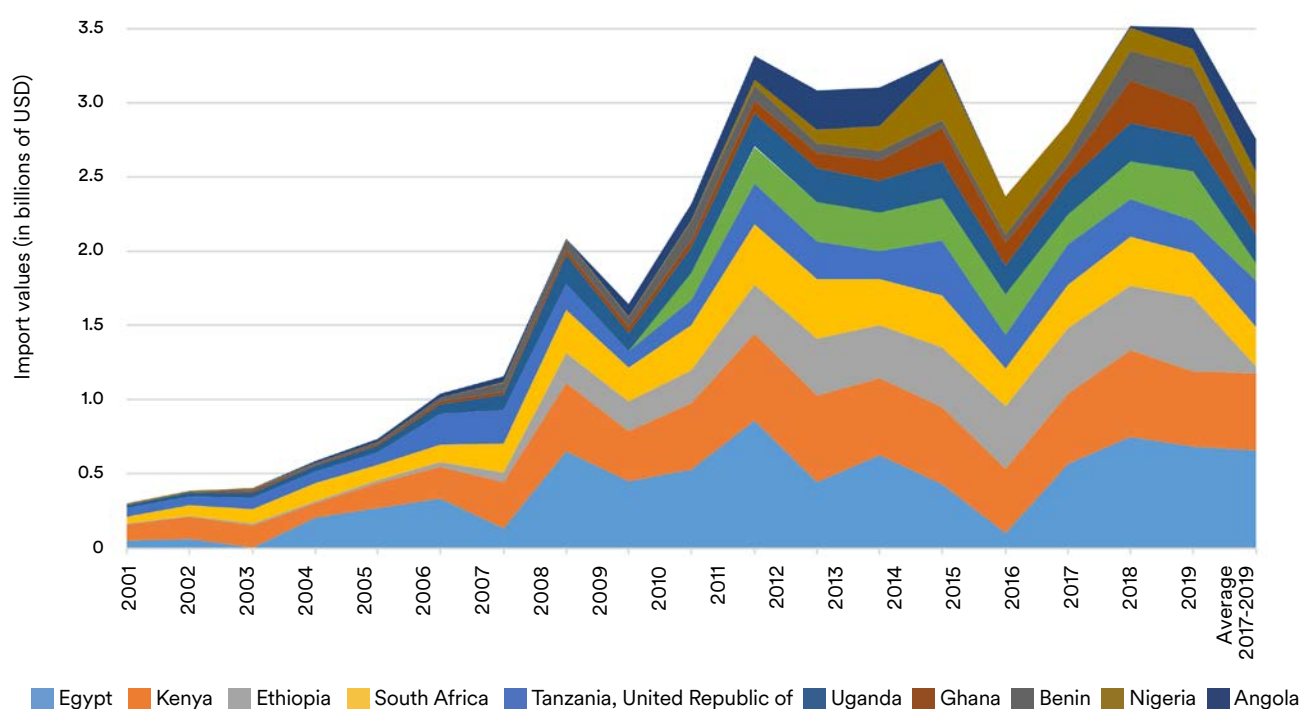
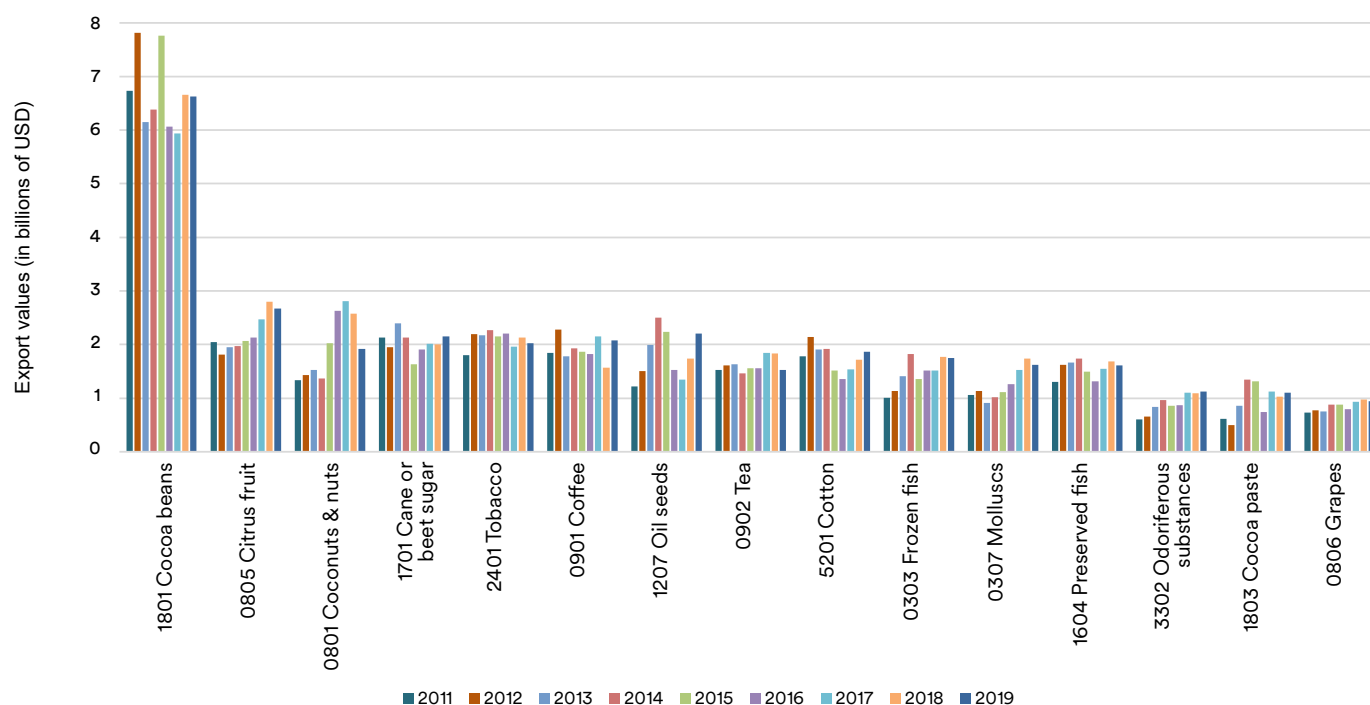
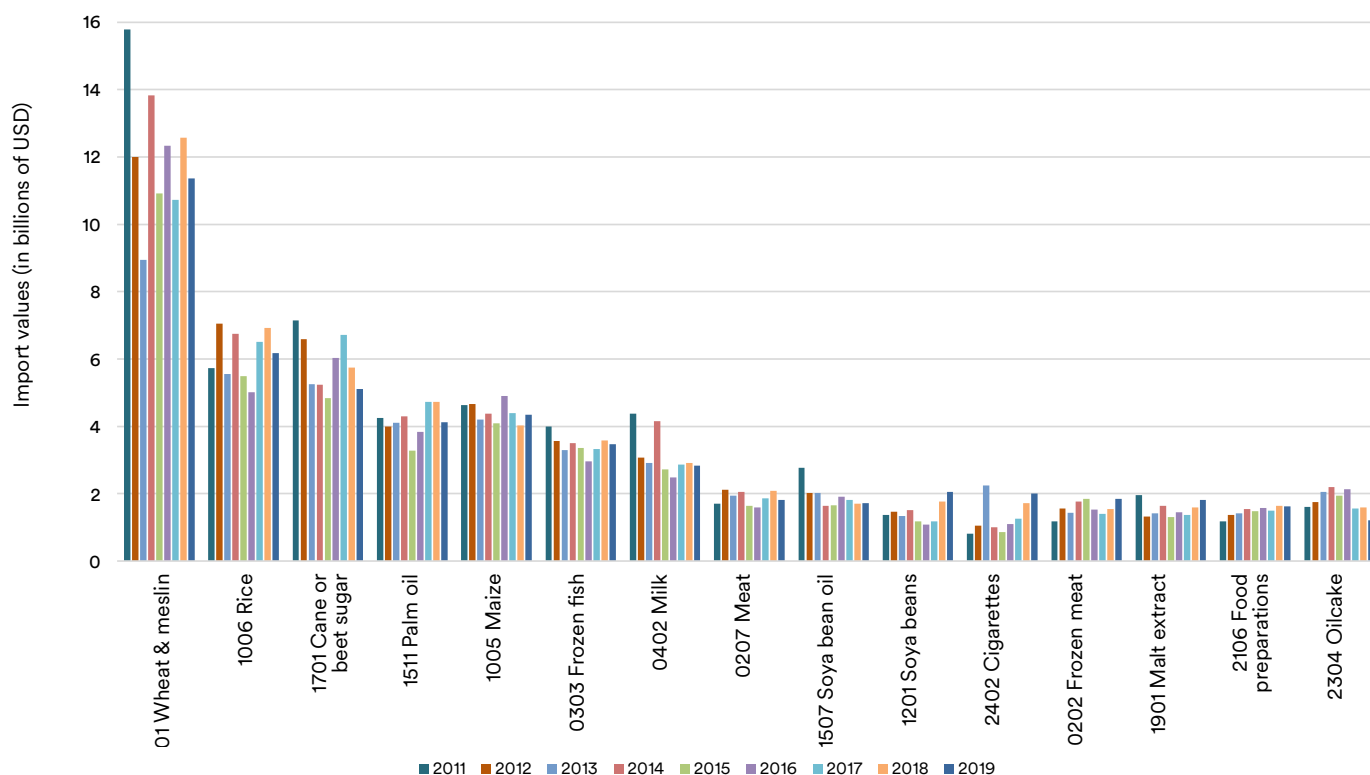


Figure 23: Top 15 African export and import products from 2011-19

#### Top 15 HS 4 African agricultural export products (2011-2019)



#### Top 15 HS 4 African agricultural import products (2011-2019)



# ANNEX 2:

## Understanding the Agreement on Agriculture's Boxes<sup>17</sup>

There are basically two categories of domestic support being: support with no, or minimal, distortive effect on trade on the one hand (often referred to as “Green Box” measures) and trade-distorting support on the other hand (often referred to as “Amber Box” measures). For example, government provided agricultural research or training is considered to be of the former type, while government buying-in at a guaranteed price (“market price support”) falls into the latter category. Under the Agreement on Agriculture, all domestic support in favour of agricultural producers is subject to rules. In addition, the aggregate monetary value of Amber Box measures is, with certain exceptions, subject to reduction commitments as specified in the schedule of each WTO Member providing such support.

### The amber box

All domestic support measures considered to distort production and trade (with some exceptions) fall into the amber box, which is defined in Article 6 of the Agriculture Agreement as all domestic supports except those

in the green, blue and development boxes. These include measures to support prices, or subsidies that are directly related to production quantities.

These supports are subject to limits: “de minimis” minimal supports are allowed (5% of agricultural production for developed countries, 10% for developing countries). The WTO members that had larger subsidies than the de minimis levels at the beginning of the post-Uruguay Round reform period, are committed to reduce these subsidies. Some countries who acceded to the WTO post 1995 also have this larger than de minimis amber box entitlement.

The reduction commitments are expressed in terms of a “Total Aggregate Measurement of Support” (Total AMS) which includes all supports for specified products together with supports that are not for specific products, in one single figure. In the Agriculture Agreement, AMS is defined in Article 1 and Annexes 3 and 4.

### The green box

The Agreement on Agriculture sets out a number of general and measure-specific criteria which, when met, allow measures to be placed in the Green Box (Annex 2). These measures are exempt from reduction commitments and, indeed, can even be increased without any financial limitation under the WTO. The Green Box applies to both developed and developing country Members but in the case of developing countries special treatment is provided in respect of governmental stockholding programmes for food security purposes and subsidized food prices for urban and rural poor. The general criteria are that the measures must have no, or at most minimal, trade-distorting effects or effects on production. They must be provided through a publicly funded government programme (including government revenue foregone) not involving transfers from consumers and must not have the effect of providing price support to producers.

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17. Summarised from the WTO website: [http://www.wto.org/english/tratop\\_e/agric\\_e/agric\\_e.htm](http://www.wto.org/english/tratop_e/agric_e/agric_e.htm)



## Government service programmes

The Green Box covers many government service programmes including general services provided by governments, public stockholding programmes for food security purposes and domestic food aid -as long as the general criteria and some other measure-specific criteria are met by each measure concerned. The Green Box thus provides for the continuation (and enhancement) of programmes such as research, including general research, research in connection with environmental programmes, and research programmes relating to particular products; pest and disease control programmes, including general and product-specific pest and disease control measures; agricultural training services and extension and advisory services; inspection services, including general inspection services and the inspection of particular products for health, safety, grading or standardization purposes; marketing and promotion services; infrastructural services, including electricity reticulation, roads and other means of transport, market and port facilities, water supply facilities; expenditures in relation to the accumulation and holding of public stocks for food security purposes; and expenditures in relation to the provision of domestic food aid to sections of the population in need. Many of the regular programmes of governments are thus given the “green light” to continue.

## Direct payments to producers

The Green Box also provides for the use of direct payments to producers which are not linked to production decisions, i.e., although the farmer receives a payment from the government, this payment does not influence the type or volume of agricultural production (“decoupling”). The conditions preclude any linkage between the amount of such payments, on the one hand, and production, prices, or factors of production in any year after a fixed base period. In addition, no production shall be required in order to receive such payments. Additional criteria to

be met depend on the type of measure concerned which may include:

Decoupled income support measures; income insurance and safety-net programmes; natural disaster relief; a range of structural adjustment assistance programmes; and certain payments under environmental programmes and under regional assistance programmes.

## The blue box

Direct payments under production limiting programmes (often referred to as “Blue Box” measures) are exempt from commitments if such payments are made on fixed areas and yield or a fixed number of livestock. Such payments also fit into this category if they are made on 85 per cent or less of production in a defined base period. While the Green Box covers decoupled payments, in the case of the Blue Box measures, production is still required in order to receive the payments, but the actual payments do not relate directly to the current quantity of that production.

## The development box

The type of support that fits into the developmental category are measures of assistance, whether direct or indirect, designed to encourage agricultural and rural development and that are an integral part of the development programmes of developing countries. They include investment subsidies which are generally available to agriculture in developing country Members, agricultural input subsidies generally available to low-income or resource-poor producers in developing country Members, and domestic support to producers in developing country Members to encourage diversification from growing illicit narcotic crops.

## The de minimis exemption

All domestic support measures in favour of agricultural producers that do not fit into any of the green, blue and developmental exemption categories are subject to reduction commitments. This domestic support category captures policies, such as market price support measures, direct production subsidies or input subsidies. However, under the *de minimis* provisions of the Agreement there is no requirement to reduce such amber box trade-distorting domestic support in any year in which the aggregate value of the product-specific support does not exceed 5 per cent of the total value of production of the agricultural product in question. In addition, non-product specific support which is less than 5 per cent of the value of total agricultural production is also exempt from reduction. The 5 per cent threshold applies to developed countries whereas in the case of developing countries the *de minimis* ceiling is 10 per cent.

# ANNEX 3:

## WTO Domestic Support Counter-notifications and China DS511 Dispute

### CASE 1: WTO REF: G/AG/W/193

Certain Indian Measures Providing Market Price Support to Pulses, including Chickpeas, Pigeon Peas, Black Matpe, Mung Beans and Lentils.

Communication from Australia, Canada and the US of America.

#### India's Notified MPS Relative to Canada and the United States' Calculations of India's MPS

Pulses	
India's Notified MPS by Value (U.S. dollars, millions and Indian Rupees, millions)	US 397.67 Rs. 26,673
India's Notified MPS as % of VoP	<b>1.81%</b>
<b>Chickpea (Gram)</b>	
Canada/U.S. Calculated MPS by Value (Indian Rupees, millions)	Rs. 217,956
Canada/U.S. Calculated MPS as % of VoP	<b>31.7%</b>
<b>Pigeon Pea (Tur)</b>	
Canada/U.S. Calculated MPS by Value (Indian Rupees, millions)	Rs. 220,402
Canada/U.S. Calculated MPS as % of VoP	<b>63.6%</b>
<b>Mung Bean (Moong)</b>	
Canada/U.S. Calculated MPS by Value (Indian Rupees, millions)	Rs. 103,006
Canada/U.S. Calculated MPS as % of VoP	<b>51.6%</b>
<b>Lentils (Masur)</b>	
Canada/U.S. Calculated MPS by Value (Indian Rupees, millions)	Rs. 28,776
Canada/U.S. Calculated MPS as % of VoP	<b>41.0%</b>

## CASE 2: WTO REF: G/AG/W/189

India's Measures to Provide Market Price Support to Sugarcane.  
Communication from Australia.

### Market Price Support (MPS) for Sugarcane, 2011-12 to 2016-17

Marketing Year	(A) Applied Administered Price (AAP)  (Rs./MT)	(B) External Reference Price (ERP)  (Rs./MT)	(C) Eligible Production  (Million MT)	(D) Total Market Price Support (MPS)  (Million Rs.) ((A)-(B))*(C)	(E) Value of Production (VoP)  (Million Rs.)	(F) MPS/VoP (D)/(E)
2011/12	1,450	156.16	361.037	467,124	601,390	77.7%
2012/13	1,700	156.16	341.200	526,758	682,790	77.1%
2013/14	2,100	156.16	352.142	684,508	727,770	94.1%
2014/15	2,200	156.16	362.333	740,551	784,330	94.4%
2015/16	2,300	156.16	348.448	747,017	748,790	99.8%
2016/17	2,300	156.16	306.069	656,163	695,260	94.4%

No comparative figures are present in the above table as India did not notify any sugar support.

This matter is currently under WTO dispute settlement proceedings. See W/DS580 (sugar complaint by Australia) as well as W/DS579 (sugar complaint by Guatemala) & W/DS581 (sugar complaint by Brazil). The panels were combined, and the last public announcement was that the final reports to the parties would not be issued before the second quarter of 2021 (see WT/DS580/9).

## CASE 3: WTO REF: G/AG/W/188

Certain Measures of India Providing Market Price Support To Cotton.  
Communication from the United States.

### India's Notified MPS Relative to United States' Calculations of India's MPS

	MY 2010/11	MY 2011/12	MY 2012/13	MY 2013/14	MY 2014/15	MY 2015/16	MY 2016/17
<b>India's Notified MPS by Value</b> (U.S. dollars, millions Indian Rupees, millions)	No MPS Notified	USD 0.27 Rs. 12.94	USD 143.76 Rs. 7,820.54	USD 1.41 Rs. 85.31	USD 305.09 Rs. 18,654.42	USD 17.97 Rs. 1,176.48	No MPS Notified
<b>India's Notified MPS as % of VoP</b>	No VoP or MPS Notified	<b>0.00%</b>	<b>1.14%</b>	<b>0.01%</b>	No VoP notified	No VoP notified	No VoP or MPS Notified
<b>U.S. Calculated MPS by Value</b> (Indian Rupees, millions)	Rs. 356,485	Rs. 433,047	Rs. 540,754	Rs. 585,283	Rs. 576,100	Rs. 504,150	Rs. 557,223
<b>U.S. Calculated MPS as % of VoP</b>	<b>53.7%</b>	<b>55.9%</b>	<b>78.9%</b>	<b>70.9%</b>	<b>81.4%</b>	<b>80.9%</b>	<b>67.9%</b>

## CASE 4: WTO REF: G/AG/W/174

Certain Indian Measures Providing Market Price Support to Rice & Wheat.  
Communication from the United States.

### India's Notified MPS Relative to United States' Calculations of India's MPS

	MY 2010/11	MY 2011/12	MY 2012/13	MY 2013/14
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#### RICE

<b>India's Notified MPS by Value</b> (U.S. dollars, millions Indian Rupees, millions)	USD 2,282.17 Rs. 103,976	USD 2,647.39 Rs. 126,863	USD 2,796.70 Rs. 152,141	USD 1,983.73 Rs. 120,016
<b>India's Notified MPS as % of VoP stated by India in Answer to CoA Question</b>	<b>7.22%</b>	<b>7.44%</b>	<b>7.68%</b>	<b>5.45%</b>
<b>U.S. Calculated MPS by Value</b> (Indian Rupees, millions)	Rs. 1,121,561	Rs. 1,365,406	Rs. 1,652,817	Rs. 1,780,185
<b>U.S. Calculated MPS as % of VoP</b>	<b>74.0%</b>	<b>80.1%</b>	<b>84.2%</b>	<b>76.9%</b>

#### WHEAT

<b>India's Notified MPS by Value</b> (U.S. dollars, millions Indian Rupees, millions)	USD (161.98) Rs. (7,380)	USD 117.76 Rs. 5,643	USD (604.23) RS. (32,870)	USD (817.81) Rs. (49,478)
<b>India's Notified MPS as % of VoP stated by India in Answer to CoA Question</b>	<b>(0.73%)</b>	<b>0.48%</b>	<b>(2.50%)</b>	<b>(3.53%)</b>
<b>U.S. Calculated MPS by Value</b> (Indian Rupees, millions)	Rs. 618,688	Rs. 731,486	Rs. 904,191	Rs. 964,973
<b>U.S. Calculated MPS as % of VoP</b>	<b>60.1%</b>	<b>60.9%</b>	<b>68.5%</b>	<b>65.3%</b>



## DISPUTE DS511: “CHINA - DOMESTIC SUPPORT FOR AGRICULTURAL PRODUCERS”

Complainant: the USA.

This dispute<sup>18</sup> concerns China's provision of domestic support in the form of market price support (MPS), for producers of wheat, rice, and corn/maize in 2012, 2013, 2014, and 2015.

The crux of the dispute was the calculation of the value of China's market price support (MPS) provided to producers of wheat, rice and corn/maize. Under the AoA, MPS is calculated using a mathematical formula composed of three variables: the applied administered price (AAP), the fixed external reference price (FERP) and the quantity of production eligible to receive the AAP (QEP). For the purposes of the present case, the resulting value of MPS is compared against China's 8.5% de minimis commitment. To allow for

this comparison, the MPS is expressed as a percentage of the total value of production of the commodity at issue. In the present dispute, if such percentage is greater than China's 8.5% de minimis commitment, then China is not in compliance with its obligations under Articles 6.3 and 3.2 of the AoA.

The Panel found that in each of the years 2012-2015, China exceeded its 8.5% de minimis level of support for each of these products. The Panel then found that because China's level of support exceeded the de minimis level, it was also in excess of China's commitment level of “nil” specified in its schedule of commitments. Consequently, the Panel concluded that China acted inconsistently with its obligations under

Articles 3.2 and 6.3 of the AoA. On 26 April 2019, the Dispute Settlement Body (DSB) adopted the panel report. In May 2019, China informed the DSB that it intended to implement the recommendations and rulings of the DSB in a manner consistent with its WTO obligations and that it would need a reasonable period of time to do so. A reasonable period of time was agreed between the parties (11 months and 5 days) and after an extension the reasonable period of time expired on 30 June 2020. The parties are now in compensation and compliance proceedings as the USA disputes that China has honoured its undertaking to comply with the DSB ruling.

### Calculation of MPS for wheat from 2012-2015

Wheat MPS Calculation	Units	2012	2013	2014	2015
Total national production	million tons	121.023	121.926	126.208	130.185
Producer price	¥/ton	2,166.20	2,356.20	2,411.80	2,328.60
Total value of production	million ¥	262,160.02	287,282.04	304,388.45	303,148.79
MPS Calculation					
QEP	million tons	93.128	96.354	99.903	102.528
AAP	¥/ton	2,040.00	2,240.00	2,360.00	2,360.00
Average 1996 1998 FERP (c.i.f price)	¥/ton	1698.13	1698.13	1698.13	1698.13
Wheat MPS = (AAP FERP)*QEP	million RMB	31,837.83	52,211.49	66,122.74	67,860.03
MPS / Total value of production	percentage	12.14	18.17	21.72	22.39

Source: Summarised from Panel Report DS511

18. Summarised from: [https://www.wto.org/english/tratop\\_e/dispu\\_e/cases\\_e/ds511\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds511_e.htm). The tables provide an indication of the quantum of the subsidies involved, and are taken from the Panel report. Note that the corn/maize measure had expired so no ruling was provided on corn, hence no table of quantum is present.

#### Calculation of MPS for Japonica rice from 2012-2015

Japonica rice MPS Calculation (US)	Units	2012	2013	2014	2015
Total national production	million tons	64.539	64.341	65.256	65.760
Producer price	¥/ton	2,919.60	2,936.60	3,035.20	2,951.20
Total value of production	million ¥	188,426.83	188,944.93	198,065.65	194,070.65
Average 1996-1998 FERP (f.o.b. prices - milled)	¥/ton	3290.63	3290.63	3290.63	3290.63

#### MPS Calculation

QEP	million tons	50.892	51.823	51.793	52.060
AAP (unmilled)	¥/ton	2,800.00	3,000.00	3,100.00	3,100.00
Average 1996-1998 FERP (unmilled equivalent)	¥/ton	2303.44	2303.44	2303.44	2303.44
Japonica MPS = (AAP adjusted FERP)*QEP	million RMB	25,270.76	36,097.66	41,256.06	41,468.62
MPS / Total value of production	percentage	13.41	19.10	20.83	21.37

Source: Summarised from Panel Report DS511

#### Calculation of total MPS for Indica rice from 2012-2015

	Units	2012	2013	2014	2015
Total value of production (all Indica rice)	million RMB	378,140.32	369,629.88	385,909.49	383,505.66
Total Indica rice MPS calculation	Units	2012	2013	2014	2015
Total MPS for Indica rice = early season MPS + mid late season MPS)	million RMB	90,342.63	111,931.99	121,047.67	122,955.21
MPS / Total value of production Indica rice	percentage	23.89	30.28	31.37	32.06

# ANNEX 4:

## WTO members' Aggregate Measurement of Support Entitlements

	Country	Currency	Value	US\$ million (January 2019)	De minimis %
1	Argentina	\$ at the 1992 rate	75,021,292.4	75.0*	10
2	Australia	\$A million	471.9	337.1	5
3	Brazil	US\$ thousand	912,105.2	912.1	10
4	Canada	Can\$ million	4,301.0	3,233.0	5
5	Colombia	US\$ thousand	344,733.0	344.7	10
6	Costa Rica	US\$ thousand	15,945.0	15.9	10
7	European Communities (15)	€ million	67,159.0	76,687.1	5
	European Union (28)	€ million	72,378.0	82,646.6	5
8	North Macedonia	€ million	16.3	18.5	5
9	Iceland	SDR million	130.1	92.9	5
10	Israel	US\$ thousand	568,980.0	569.0	10
11	Japan	¥ billion	3,972.9	36,475.0	5
12	Jordan	JD	1,333,973.0	1.9	10
13	Korea, Republic of	W billion	1,490.0	1,327.9	10
14	Mexico	Mex\$ 1991 million	25,161.2	11,821.4	10
15	Moldova	SDR million	12.8	9.1	5

	Country	Currency	Value	US\$ million (January 2019)	De minimis %
16	Montenegro	€	333,278	0.4	5
17	Morocco	DH million	685.0	71.9	10
18	New Zealand	\$NZ million	288.3	195.4	5
19	Norway	Nkr million	11,449.0	1,339.1	5
20	Papua New Guinea	US\$ million	34.2	34.2	10
21	Russia	US\$ billion	4.4	4,400.0	5
22	Saudi Arabia	SR million	3,218.3	858.2	10
23	South Africa	R million	2,015.4	145.4	10
24	Switzerland – Liechtenstein	Sw F million	4,257.0	4,303.4	5
25	Chinese Taipei	NT\$ million	14,165.2	436.3	5
26	Tajikistan	US\$ thousands	182,667	182.7	10
27	Thailand	B million	19,028.5	598.2	10
28	Tunisia	D million	59.3	19.6	10
29	Ukraine	UAH million	3,043.4	109.2	5
30	United States of America	US\$ million	19,103.3	19,103.3	5
31	Venezuela	US\$ thousand	1,130,667.0	1,130.7	10
32	Vietnam	VND billion	3,961.6	175.5	10

Source: WTO Secretariat, augmented by authors.



# ANNEX 5:

## Agricultural Policy Analysis using OECD methodology and data

In addition to the WTO domestic support notifications, the OECD has its own methodological framework to measure and evaluate the impact of support to agriculture in the 37 OECD member countries, 5 non-OECD EU member states, and 12 emerging economies with which the OECD collaborates on agriculture policy. The OECD data place support in a broad analytical framework and include the prevalence of both trade and domestic measures. This offers important insights into the role of covered countries' net government policies in promoting, or hindering, their agricultural sectors' performance.

There are explicit differences in OECD and WTO methodologies for monitoring and evaluating support to agriculture. For purposes of this report, the main use of OECD data is to examine more recent trends in overall levels of support; while WTO data generally cover the period to 2016 or in some cases to 2017, OECD data cover the period to 2019. Here we examine support provided over the 2017-2019 period by the ten trading partners identified above.

### Box 1: Definition of OECD indicators of agricultural support

- **Producer Support Estimate (PSE)** is the annual value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, regardless of their nature, objectives and impacts on farm production or income. The PSE is often expressed as a percentage of gross farm receipts (**%PSE**).
- **Market Price Support (MPS)**: Transfers from consumers and taxpayers to agricultural producers from policy measures that create a gap between domestic market prices and border prices of a specific agricultural commodity, measured at the farm gate level.
- **Payments based on output**: Transfers from taxpayers to agricultural producers from policy measures based on current output of a specific agricultural commodity.
- **Payments based on input use**: Transfers from taxpayers to agricultural producers arising from policy measures based on on-farm use of inputs, including variable input use, fixed capital formation, and on-farm services.
- **Payments based on A/An/R/I, production required** Transfers from taxpayers to agricultural producers arising from policy measures based on current or non-current (i.e. historical or fixed) area, animal numbers, revenue or income, and requiring production.
- **Payments based on A/An/R/I, production not required** Transfers from taxpayers to agricultural producers arising from policy measures based on non-current (i.e. historical or fixed) area, animal numbers, revenue or income, and not requiring production.
- **General Services Support Estimate (GSSE)** is the annual value of gross transfers from measures that create enabling conditions for the primary agricultural sector by developing private or public services, institutions, and infrastructure, regardless of their nature, objectives and impacts on farm production or income.
- **Total Support Estimate (TSE)** is the annual value of gross transfers from taxpayers from policy measures that support agriculture, regardless of their impacts on farm production or income. The TSE is often expressed as a percentage of GDP (**%TSE**).

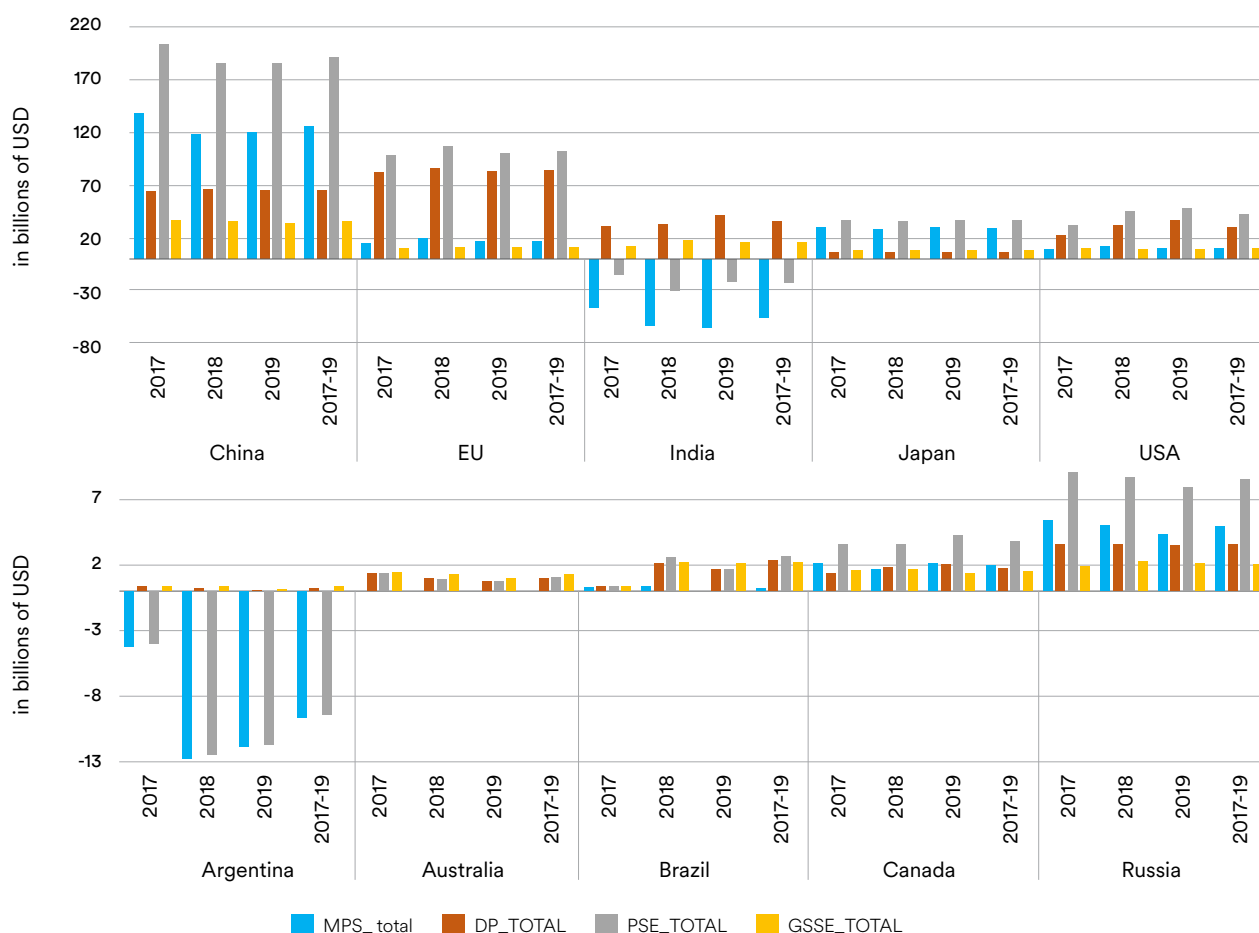
**Figure 24** presents the OECD producer support estimate (PSE), broken down by market price support (MPS) and direct payments (DP), as well as the general services support estimate (GSSE), for the ten trading partners between 2017-19. For most of these countries, support provided via general services to the sector (such as for inspection services, innovation, and infrastructure) is significantly lower than support provided directly to producers. The exceptions are Australia, where the PSE is quite low, and Argentina and India, where the PSE is negative. The highest level of producer support in nominal terms is provided by China, followed by the EU, Japan and the US. Both China and Japan rely relatively more on MPS while the EU and US rely primarily on DPs. Of the countries providing lower levels of support in nominal terms, Australia and Brazil rely primarily on DPs while Canada and Russia rely more on MPS. Two countries provide negative support overall. Argentina provides very low levels of

DPs while export taxes keep domestic prices well below international prices, resulting in large negative MPS. In the case of India, a myriad of domestic and trade policies contributes to domestic prices being below international levels, resulting in negative MPS and more than offsetting the very large DPs that are provided to producers.

Direct payments can be further separated into four major sub-categories. These include direct transfers from taxpayers to agricultural producers based on (1) current output, (2) on-farm use of inputs, (3) current area, animal numbers, revenue, or income and requiring production (DP\_AARI/P) and (4) current area, animal numbers, revenue, or income and not requiring production (DP\_AARI/NP)(OECD 2020). As **Figure 25** demonstrates, the ten trading partners all rely on forms of DPs that tend to be the most production and trade distorting (i.e. DPs based on output, input use, and

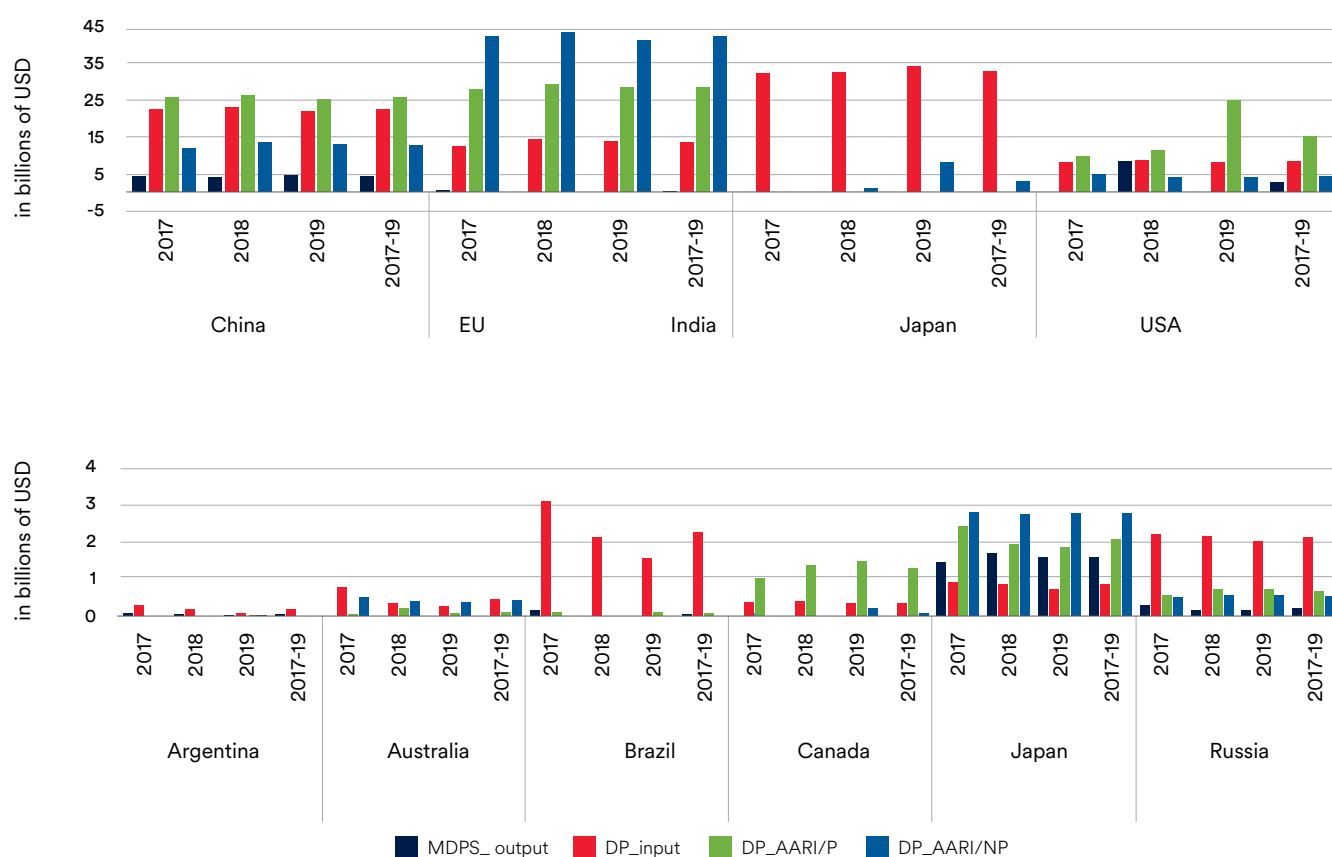
AARI requiring production). The highest levels of DPs are provided in the EU, China, India, and the US. Within this group, the EU relies most heavily on (less distorting) payments based on AARI and not requiring production, China relies relatively little on payments based on output, and India relies almost exclusively on payments based on input use. The US relies primarily on payments based on AARI and requiring production and is unique in this group to increase payments significantly in recent years – DPs in the other three countries remained essentially flat. Across the countries with relatively low levels of DPs, Argentina and Australia have very low levels of payments, Brazil and Russia rely relatively more on payments based on input use, Canada favours payments based on AARI and requiring production, and Japan relies largely on payments based on AARI, some requiring production and some not.

**Figure 24: OECD Indicators: MPS, DP, PSE and GSSE support for the ten trading partners, 2017-19**



Source: OECD

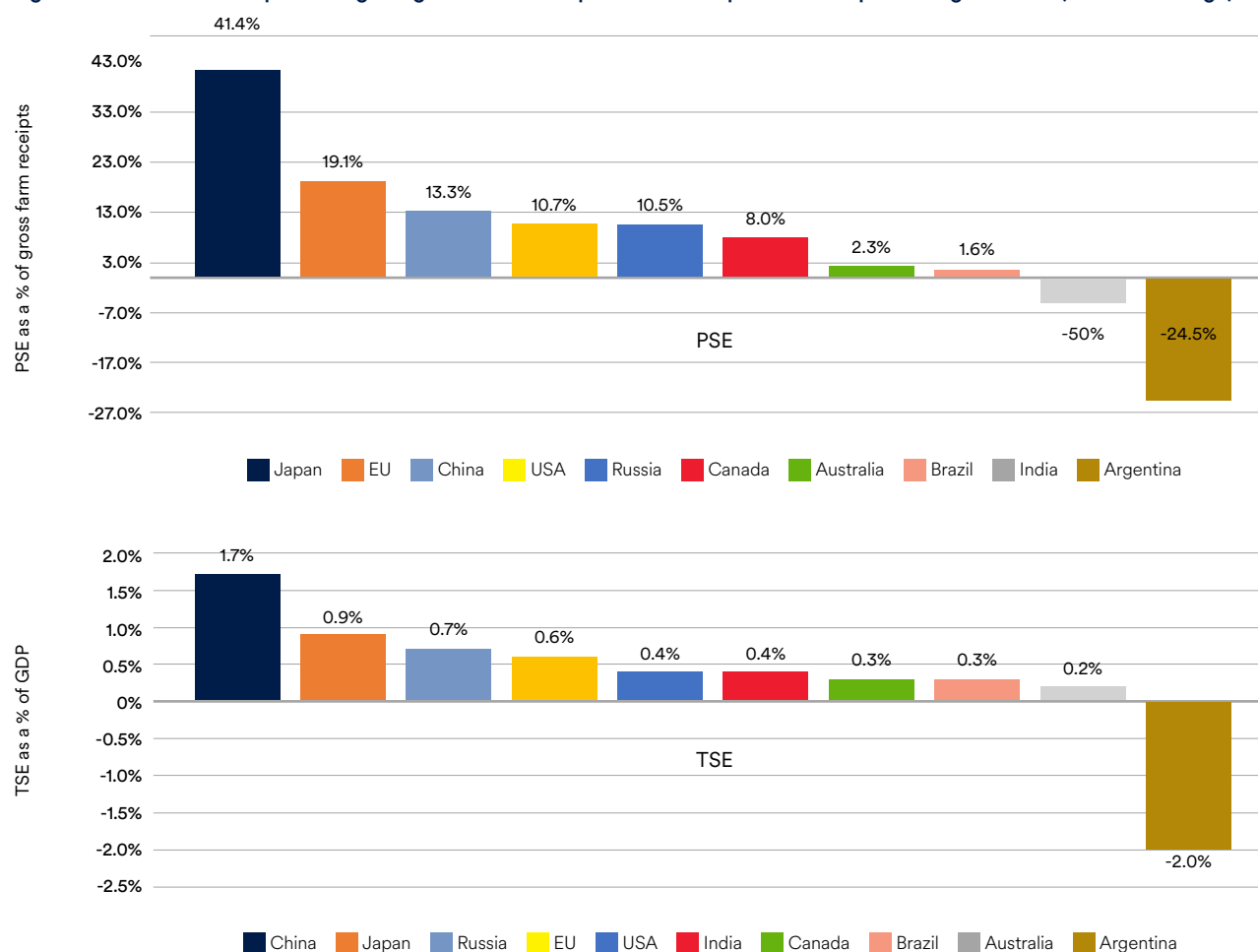
Figure 25: Direct payments broken down by output, input use, AARI/P and AARI/NP for the ten trading partners, 2017-19



Source: OECD



**Figure 26: Total PSE as a percentage of gross farm receipts and TSE expressed as a percentage of GDP (2017-19 average)**



Source: OECD

**Figure 26** shows the (2017-19 average) producer support estimate in each of the ten trading partners as a percentage of their gross farm receipts (%PSE) and their total support estimate as a percentage of their GDP (%TSE). The %TSE in this figure includes all the above-described forms of support plus some consumer transfers that are not analysed here. Looking at support relative to the value of production (i.e. gross farm receipts) changes the

picture considerably, and is arguably the more valid basis for international comparisons.<sup>19</sup> Japan provides the highest level of estimated support, with a %PSE of 41%, followed by the EU, China, and the US. China has the highest %TSE, at 1.7%, followed by Japan, Russia, and the EU. The other six countries have a %TSE below 0.5%.

19. The OECD uses support to producers as a percentage of gross farm receipts as the most appropriate indicator for international comparisons since it reflects the economic value of the output of the sector and takes account of the size of the economy as well as its structure. As shown here, nominal values are always large for large economies. Other indicators are of course possible, such as support per farmer. This will generate lower or higher values where there are many small farms or fewer large ones, respectively, and consequently need to be interpreted with care. Depending on the distribution of farm size and commodity-specific support, average levels of support per farmer can be highly misleading. Another indicator, supports per hectare, will generate lower or higher values where production systems are more or are less extensive. Again, care needs to be taken to interpret this indicator when comparing across countries.



## OECD Agriculture Support Estimates for Africa's Ten Major Trading Partners, 2017-2019

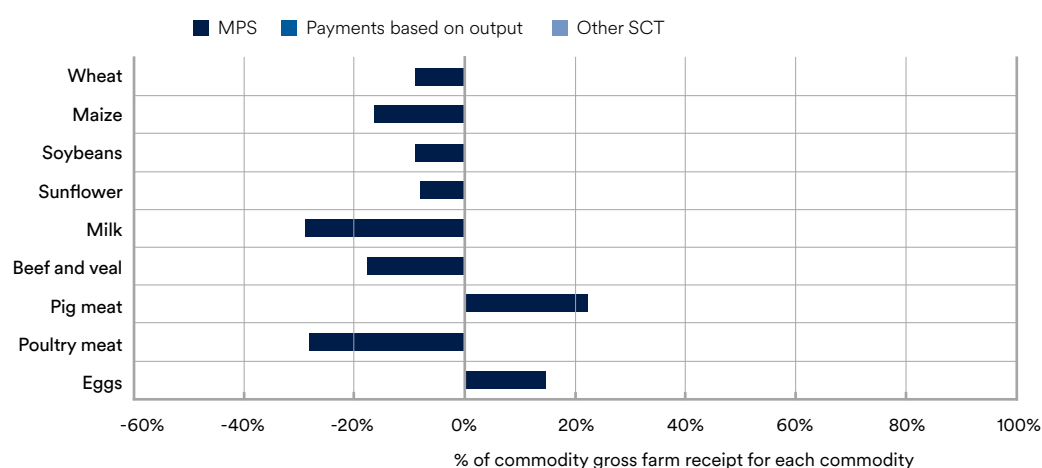
### ARGENTINA

Argentina is a very productive agriculture producer and exporter, even while operating in a highly uncertain macroeconomic and sectoral policy environment. Today the sector receives low and declining levels of government

support for innovation, infrastructure, and inspection services. Few commodities receive production-linked support (tobacco, pig meat, eggs) and export taxes depress domestic producer prices so that most commodities

effectively receive “negative support”. Relative to gross farm receipts, producer support is estimated at -21.4% over the 2017-19 period.

Figure 27: Argentina: Transfer to specific commodities (SCT), 2017-19



Source: OECD (2020), “Producer and Consumer Support Estimates”, OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>.

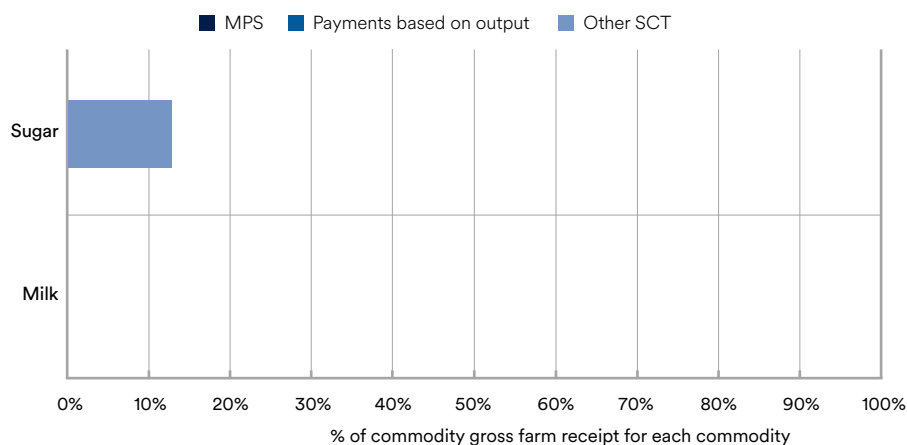
### AUSTRALIA

Agriculture in Australia is highly developed and efficient, supplying both domestic and export markets. Low levels of support are provided, the majority of which is for general services to the sector, in particular research

and development and on-farm water management. Support is also provided to mitigate the impact of droughts and other natural disasters and to enable income smoothing via tax averaging measures. Sugar is the only commodity

receiving specific support, related to investments to reduce environmental risks. Overall, producer support averaged 2.3% of gross farm receipts during 2017-19.

Figure 28: Australia: Transfer to specific commodities (SCT), 2017-19



Source: OECD (2020), “Producer and Consumer Support Estimates”, OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>.

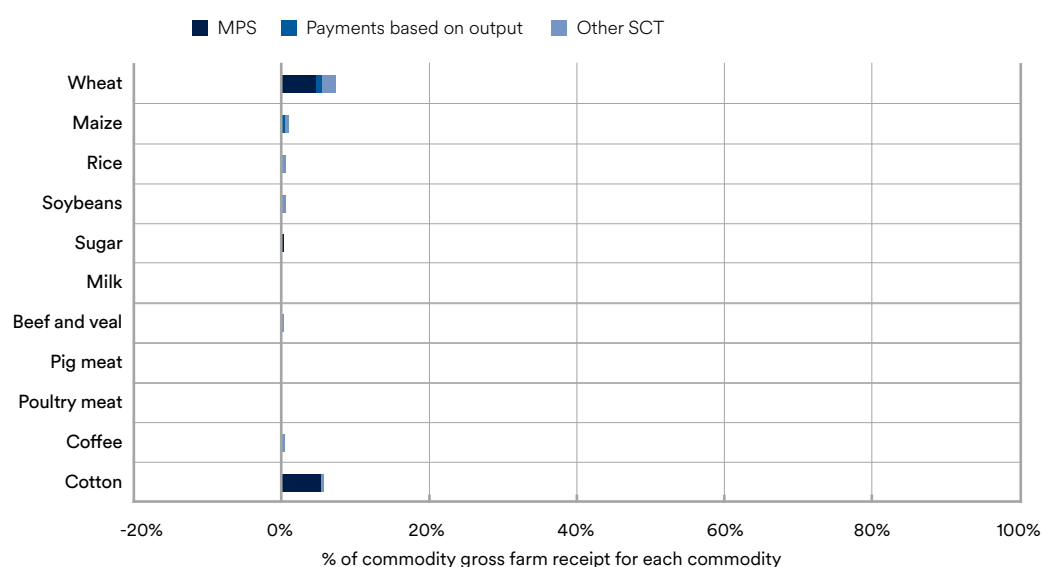
## BRAZIL

Brazil is a major agriculture producer and a highly competitive exporter. Support levels are very low, and most of the support to producers is provided in the form of concessional credit. Support for

general services to the sector is dominated by funding for research & development, and for innovation more broadly. Low levels of specific commodity support are provided to

wheat and cotton. Overall, support to producers during 2017-19 averaged just 1.6% of gross farm receipts.

**Figure 29: Brazil: Transfer to specific commodities (SCT), 2017-19**



Source: OECD (2020), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>.

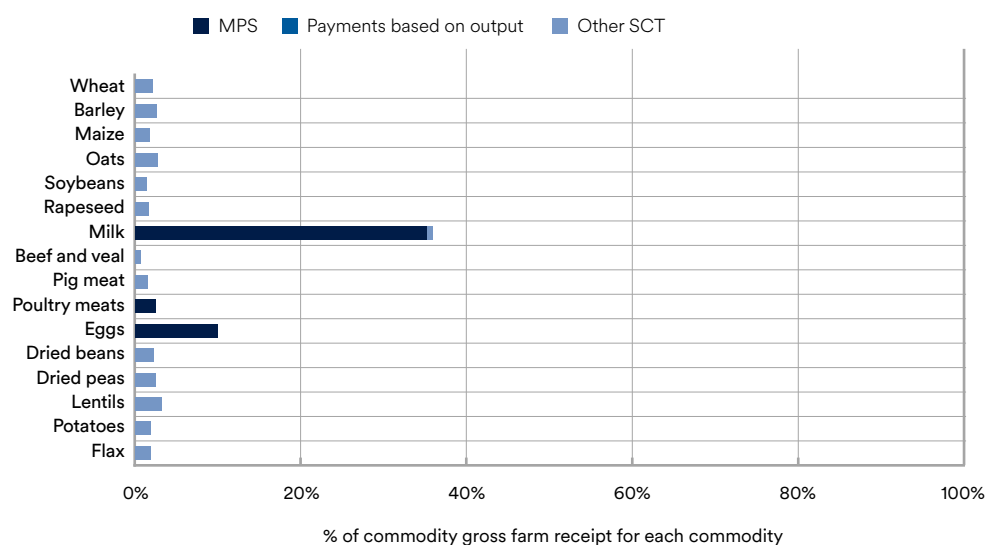
## CANADA

Agriculture in Canada includes both globally competitive export-oriented industries and supply managed industries focused on serving the domestic market. Even as overall support levels have been declining support for general services to

the sector have been increasing somewhat, in particular for innovation and inspection. Relatively low levels of support are provided today, but with significant variation across commodities. Milk receives very high support (over

30% of gross farm receipts), while eggs receive a relatively low level of commodity specific support. Overall, support to producers averaged 8.0% of gross farm receipts over 2017-19.

**Figure 30: Canada: Transfer to specific commodities (SCT), 2017-19**



Source: OECD (2020), "Producer and Consumer Support Estimates", OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>.

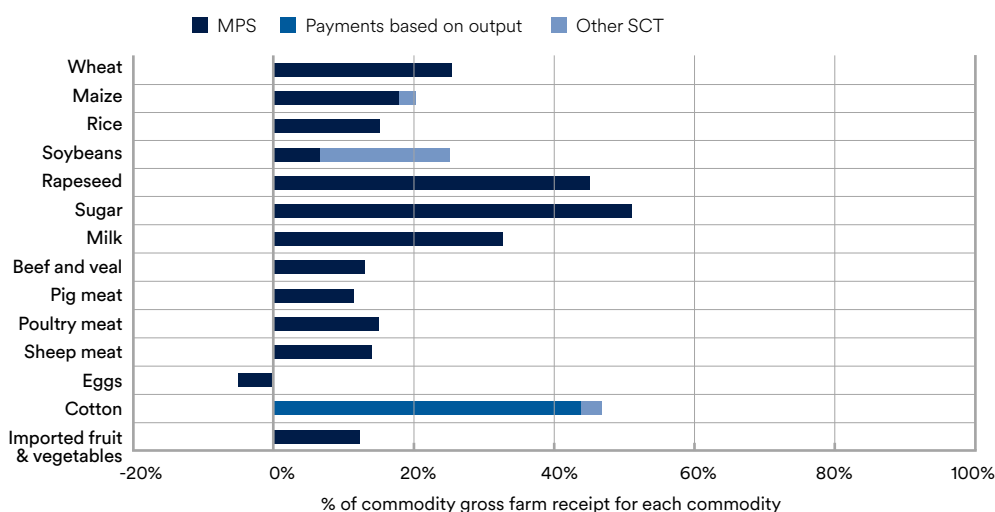
## CHINA

China is the world's largest agriculture producer. Support levels have stabilized somewhat recently after more than two decades of substantial increase. Much of this support remains linked to production and prices, while support for general

services to the sector is dominated by public stockholding. There is also significant support for infrastructure and for innovation. Support for specific commodities is pervasive, with very high support (over 30% of gross farm receipts)

for sugar, cotton, rapeseed, and milk. Overall, support to producers averaged 13.3% of gross farm receipts during 2017-19.

**Figure 31: China: Transfer to specific commodities (SCT), 2017-19**



Source: OECD (2020), "Producer and Consumer Support Estimates"; OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>.

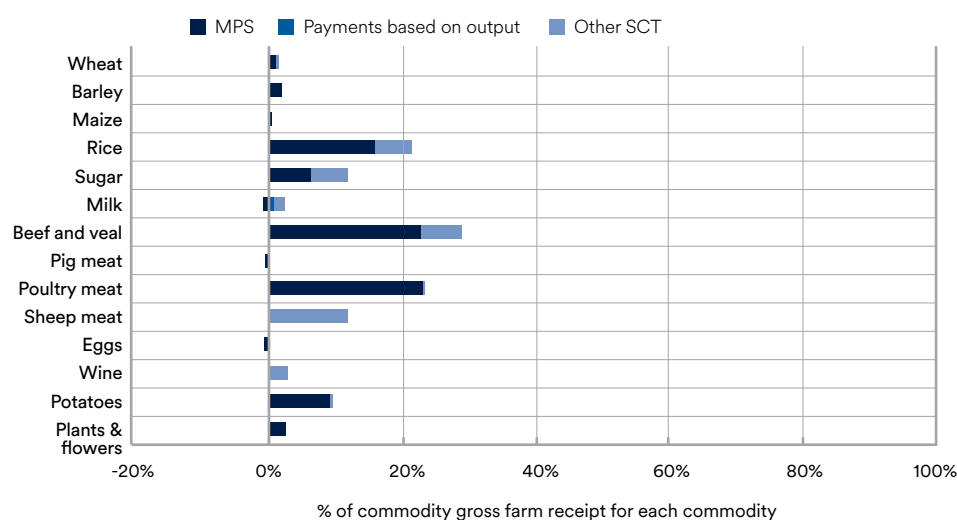
## EUROPEAN UNION (EU)

Agriculture in the EU is diverse and highly developed, supplying both EU and export markets. Support levels have declined considerably over time and the share of production-linked support

has fallen even further. Still, support to producers remains high. Support for general services to the sector has been stable and has increasingly focused on innovation. A number of commodities

receive specific support, in particular beef & veal, rice, poultry, sugar and sheep meat. Overall, support to producers during 2017-19 averaged 19.1% of gross farm receipts.

**Figure 32: European Union: Transfer to specific commodities (SCT), 2017-19**



Source: OECD (2020), "Producer and Consumer Support Estimates"; OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>.

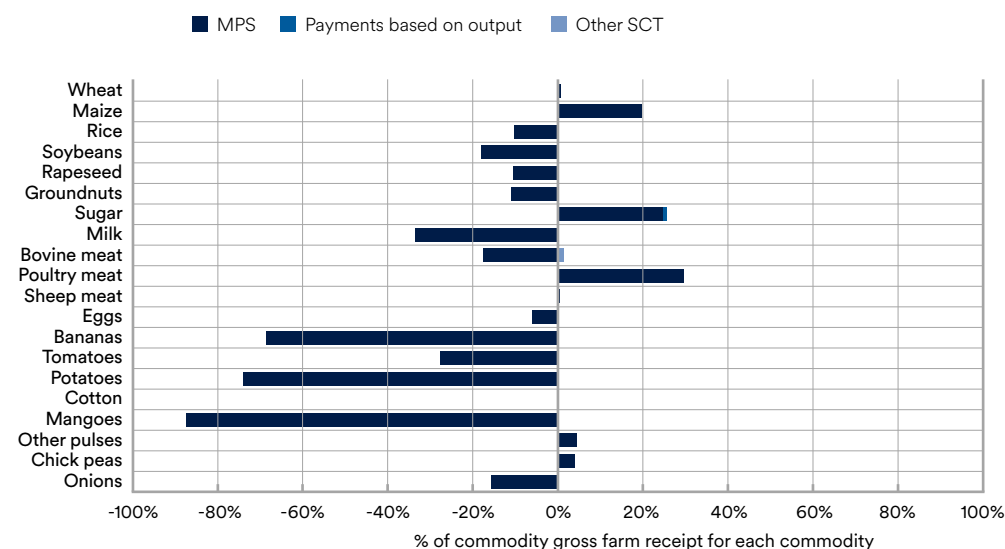
## INDIA

India is a large agriculture producer and amongst the world's largest exporters of rice and cotton. Support for general services to the sector is relatively low, but increasing recently, along with support for public stockholding [See Box 1]. The sector receives high levels

of support for inputs, such as fertilizers, electricity, and irrigation. Most support, however, is linked to production and prices of specific commodities. Poultry, sugar and maize receive relatively high levels of support; on the other hand, many commodities effectively receive

“negative support” as a result of a complex mix of domestic and trade policies that benefit consumers but penalize producers. Relative to gross farm receipts, producer support is estimated at -5.0% over the 2017-19 period.

**Figure 33: India: Transfer to specific commodities (SCT), 2017-19**



Source: OECD (2020), “Producer and Consumer Support Estimates”; OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>.

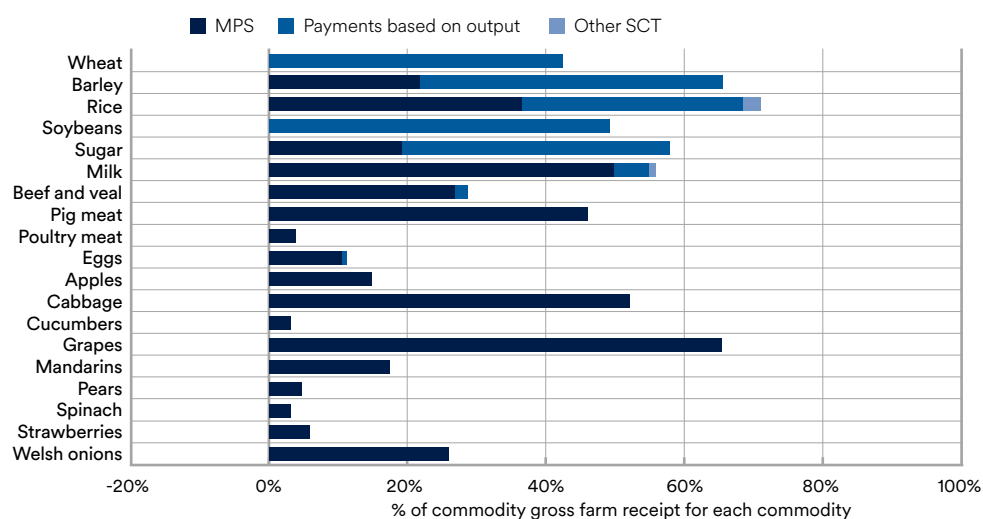
## JAPAN

Agriculture in Japan is focused primarily on supplying the domestic market, albeit with growing interest in high quality niche export markets. Support for general services to the sector are stable, and primarily directed towards

irrigation and drainage infrastructure. Support to producers is very high and remains closely linked to production and prices. As a result, support for specific commodities is pervasive, with very high support (over 30% of gross farm

receipts) for rice, grapes, barley, sugar, milk, cabbage, soybeans, pig meat, and wheat. Overall, support to producers averaged 41.4% of gross farm receipts in 2017-19.

**Figure 34: Japan: Transfer to specific commodities (SCT), 2017-19**



Source: OECD (2020), “Producer and Consumer Support Estimates”; OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>.



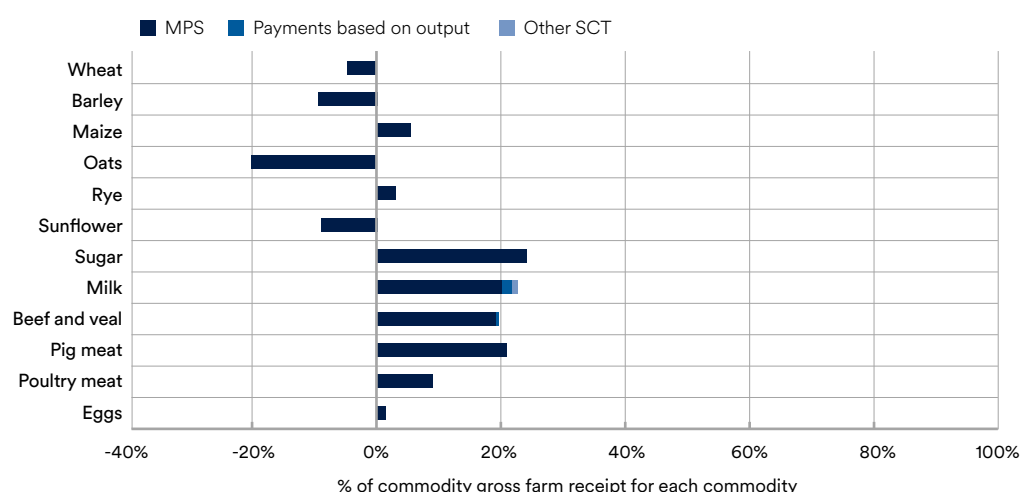
## RUSSIAN FEDERATION

Russia is a large agriculture producer, with both export-oriented and import competing industries. Support for general services has been relatively stable and focuses on innovation, infrastructure, and inspection services. Support to producers is largely linked

to production and prices and includes both “negative support” for export competitive commodities that can be subject to implicit and explicit taxes (oats, barley, rye, wheat) and import restrictions that protect other commodities from competition in the

domestic market (sugar, milk, pig meat, and beef & veal). Relative to gross farm receipts, producer support is estimated at 10.5% over the 2017-19 period.

**Figure 35: Russia: Transfer to specific commodities (SCT), 2017-19**



Source: OECD (2020), “Producer and Consumer Support Estimates”, OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>.

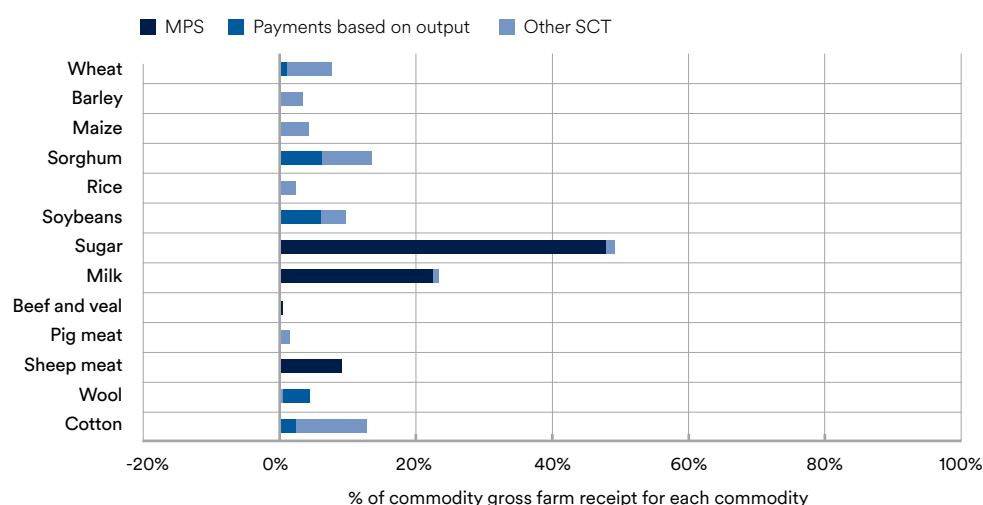
## UNITED STATES

Agriculture in the US is highly developed and competitive in both domestic and export markets. The support level for general services to the sector has been stable, but with an increasing share directed towards innovation and

infrastructure. Support to producers had been declining for some time but increased recently, in particular due to new trade mitigation measures in 2018 and 2019. A number of commodities receive specific support, including milk,

and very high support (over 30% of gross farm) is provided for sugar. Overall, support to producers during 2017-19 averaged 10.7% of gross farm receipts.

**Figure 36: United States: Transfer to specific commodities (SCT), 2017-19**



Source: OECD (2020), “Producer and Consumer Support Estimates”, OECD Agriculture statistics (database), <http://dx.doi.org/10.1787/agr-pcse-data-en>.

# 8. References

- Anderson, K & Valenzuela, E 2021, 'What impact are subsidies and trade barriers abroad having on Australasian and Brazilian agriculture?', *Australian Journal of Agricultural and Resource Economics*, vol. 65, no. 2, pp. 265-290.
- Antoine, B, Sunday, PO & Chahir, Z 2020, *Africa Agriculture Trade Monitor. International Food Policy Research Institute (IFPRI). Washington, DC.*
- Bouët, A & Odjo, SP 2019, *Africa agriculture trade monitor 2019*, Intl Food Policy Res Inst.
- Brink, L & Orden, D 2020, 'Taking stock and looking forward on domestic support under the WTO Agreement on agriculture', *Commissioned Paper*, vol. 23.
- Deuss, A 2015, 'Review of the performance and impacts of recent stockholding policies', in *Issues in Agricultural Trade Policy: Proceedings of the 2014 OECD Global Forum on Agriculture*. OECD Publishing, Paris. <https://doi.org/10.1787/9789264233911-5-en>.
- FAO and AUC 2021, *Framework for boosting intra-African trade in agricultural commodities and services*. Addis Ababa.
- Fox, L & Jayne, TS 2020, 'Unpacking the misconceptions about Africa's food imports, *Africa in Focus*, The Brookings Institution.'
- Ghanaian Times* 2021, 'Artisanal cocoa processors demand support to expand. New Times Corporation (NTC), Accra – Ghana.'
- Glauber, JW, Hepburn, J, Debucquet, DL & Murphy, S 2020, *What national farm policy trends could mean for efforts to update WTO rules on domestic support*, International Institute for Sustainable Development.
- Gonzalez, A, Groser, T, Gulati, A, Hewitt, J, Hoda, A, Matthews, A & Galmes, GV 2021, 'New pathways for progress in multilateral trade negotiations in agriculture'.
- Greenville, J 2017, 'Domestic Support to Agriculture and Trade: Implications for Multilateral Reform', Geneva: ICTSD.
- Hejazi, M & Marchant, MA 2017, 'China's evolving agricultural support policies', *Choices*, vol. 32, no. 2, pp. 1-7.
- Hepburn, J & Bellmann, C 2018, 'How Could Africa Be Affected by Product-specific Support for Farm Goods? Policy Brief. Geneva: International Centre for Trade and Sustainable Development (ICTSD)'.
- Kornher, L 2018, 'Maize markets in Eastern and Southern Africa (ESA) in the context of climate change'.
- Ministry of Foreign Affairs 2021, 'Article 6.2 of the Agreement on Agriculture (AOA) in perspective. Brazil Government, Brazil'.
- ODI 2004, *Developed country cotton subsidies and developing countries: unravelling the impacts on Africa*.
- OECD 2018, *The Economic Effects of Public Stockholding Policies for Rice in Asia*. OECD Publishing, Paris. <https://doi.org/10.1787/9789264305366-en>.
- OECD 2020, *Agricultural Policy Monitoring and Evaluation 2020*. OECD Publishing, Paris. <https://doi.org/10.1787/22217371>.
- OECD 2021, OECD-FAO Agricultural Outlook presents production, consumption, trade and price trends for the coming decade - Global agri-food systems need to transform to reach SDGs by 2030. <https://www.oecd.org/agriculture/news/oecd-fao-agricultural-outlook-presents-production-consumption-trade-and-price-trends-for-the-coming-decade.html>.
- OECD/ICRIER 2018, Agricultural Policies in India, *OECD Food and Agriculture Reviews*. OECD Publishing, Paris. <https://doi.org/10.1787/9789264302334-en>.
- Sharma, SK 2020, *A Quantitative Analysis of Proposals on Domestic Support in WTO Agriculture Negotiations: Need for Reaffirming the Development Agenda*, Centre for WTO Studies, Delhi.
- Sharma, SK, Sawant, A, Vats, P, Naik, S & Lahiri, T 2021, 'Disciplining Trade-Distorting Support to Cotton in the US: An Unfinished Agenda in WTO Negotiations'.
- South Centre 2017, *The WTO's agriculture domestic supports negotiations*, South Centre's Trade for Development Programme (TDP), Geneva.
- Sumner, D 2005, 'Boxed In Conflicts between U.S. Farm Policies and WTO Obligations'.
- van Huellen, S & Abubakar, FM 2021, 'Potential for Upgrading in Financialised Agri-food Chains: The Case of Ghanaian Cocoa', *The European journal of development research*, vol. 33, no. 2, pp. 227-252.
- WTO 2003, 'Poverty reduction: sectoral initiative in favor of cotton. Joint proposal by Benin, Burkina Faso, Chad and Mali. WTO Doc. No. TN/AG/GEN/4.'
- WTO 2008, Revised draft modalities for agriculture. TN/AG/W/4/Rev.4. Committee on Agriculture Special Session.
- WTO 2017a, Domestic support submission by Guyana on behalf of the ACP group. JOB/AG/112. Geneva.
- WTO 2017b, Ministerial decision on domestic support. JOB/AG/132.
- WTO 2018a, *Analysis and observations on product specific support*. JOB/AG/150. Committee on Agriculture Special Session
- WTO 2018b, *Elimination of AMS beyond de minimis to reduce distortions in global agricultural trade-some incremental steps. Proposal by China and India*. JOB/AG/137. Geneva.
- WTO 2019a, *African group elements on agriculture for meaningful development outcomes at the twelfth ministerial conference*. JOB/AG/173. Committee on Agriculture Special Session.
- WTO 2019b, 'Agriculture negotiations at the WTO. Communication by the co-sponsors of the sectoral initiative on cotton. TN/AG/GEN/49/Rev.1'.
- WTO 2020, *The framework for negotiations on domestic support: examining a possible way forward on trade-distorting domestic support entitlements in agriculture*. RD/AG/81/Rev.1\*. Committee on Agriculture, Special Session.
- WTO 2021, *Farm talks enter critical stage as Cairns, African groups unite on call for MC12 outcome*. Committee on Agriculture.

### **Kaurna acknowledgement**

We acknowledge and pay our respects to the Kaurna people, the original custodians of the Adelaide Plains and the land on which the University of Adelaide's campuses at North Terrace, Waite, and Roseworthy are built. We acknowledge the deep feelings of attachment and relationship of the Kaurna people to country and we respect and value their past, present and ongoing connection to the land and cultural beliefs. The University continues to develop respectful and reciprocal relationships with all Indigenous peoples in Australia, and with other Indigenous peoples throughout the world.

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