

Developing Value Chains in Africa – mapping the soya value chain

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ABSTRACT

The African Continental Free Trade Area (AfCFTA) has ignited and put emphasis on deeper integration and the development of regional value chains in Africa, an important feature of the AfCFTA Agreement which aims to boost intra-Africa trade through reducing the time and cost of transacting across borders, enabling resources and skills to be shared across the continent, creating new market opportunities, and an enhancing regulatory environment for business.

Africa's majority population is highly dependent on agriculture for food security, incomes, and employment. Therefore, the promotion of agro-value chains is key to the development of most African economies. In this regard, analysis of agro-value chain is essential to an understanding of markets, their relationships, the participation of different actors, and the critical constraints that limit the growth of agricultural production and consequently the competitiveness of farmers.

This Trade Report focuses on the soya value chain (SVC), which is one of the 10 value chains identified by the United Nations Development Programme (UNDP) and the AfCFTA Secretariat's 2021 Futures Report titled "Which Value Chains for a Made in Africa Revolution." Other value chains identified include Automotives; Leather and Leather Products, Cocoa; Textiles and Apparel; Pharmaceuticals; Vaccine Manufacturing; Lithium - Ion Batteries; Mobile Financial Services; and Cultural and Creative Industries.

Keywords: Agriculture, AfCFTA, value chains

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Developing Value Chains in Africa – mapping the soya value chain

By Taku Fundira

Introduction

The African Continental Free Trade Area (AfCFTA) has ignited and put emphasis on deeper integration and the development of regional value chains in Africa. The AfCFTA, if fully implemented, is set to become the world's largest free trade area by creating a single market for goods and services of almost 1.3 billion people across Africa and deepening the economic integration of Africa. Development of regional value chains (RVC) is an important feature of the AfCFTA as AfCFTA aims to boost intra-Africa trade through reducing the time and cost of transacting across borders, enabling resources and skills to be shared across the continent, creating new market opportunities, and an enhanced regulatory environment for business..

Africa's majority population is highly dependent on agriculture for food security, incomes, and employment. Therefore the promotion of agro-value chains is key to the development of most African economies. In this regard analysis of agro-value chain is essential to an understanding of markets, their relationships, the participation of different actors, and the critical constraints that limit the growth of agricultural production and consequently the competitiveness of farmers.

This Trade Report focuses on the soya value chain (SVC), which is one of the 10 value chains identified by the United Nations Development Programme (UNDP) and the AfCFTA Secretariat's 2021 Futures Report titled "Which Value Chains for a Made in Africa Revolution." Other value chains identified include

Automotives; Leather and Leather Products, Cocoa; Textiles and Apparel; Pharmaceuticals; Vaccine Manufacturing; Lithium-Ion Batteries; Mobile Financial Services; and Cultural and Creative Industries¹.

The SVC is important in several ways as i) source of animal protein soya beans are usually the main source of raw materials for animal feed, which accounts for between 50 – 70% of livestock production costs in closed feed systems, ii) a strategic crop which is key to reversing the growing animal protein import trend due to the expanding livestock sector and securing food availability, job creation and agro industrialization within Africa, iii) as an input in other non-food sectors for use as feedstock for biofuels, ingredients in chemical and personal care and iv) provide smallholder farmers in Africa an opportunity to diversify their household income and enhance food and nutrition security.

Soybeans offer an opportunity to capture some value added through processing via the crushing process and transformation into vegetable oil or meal for feed (an input into the livestock industry). In this report more emphasis is placed on the importance of regional agro processing of soya which will have a significant impact on reducing the cost of animal feed and increase the competitiveness of livestock production and incentivise further downstream value addition of livestock products (meat, skins and hides, dairy, etc.) for both local and export markets. Therefore, the objective of this report is to analyse cross border trade flows to identify Africa's global players and the level of intra-Africa trade as well as mapping the VC players who can play a part in the development of a regional SVC.

The Trade Report then maps the regional African SVC players across the VC by highlighting at each stage of the VC, countries with a revealed comparative advantage (RCA). Market access issues are discussed as well as the role of AfCFTA in promoting the SCV industry in Africa. A gender analysis of the SVC is also undertaken with concluding remarks thereafter.

The analysis: data issues

For the purposes of this analysis, the International Trade Centre (ITC) TradeMap database which uses the Harmonised System (HS) of classification of trade to record cross border trade flows is used to analyse trade flows. The review period is from 2017 to 2021. Tariff data is sourced from the World Bank's World Integrated Trade Solution (WITS) database.

¹ UNDP, 2021. *Futures Report 2021 – Which Value Chains for a Made in Africa Revolution*. UNDP/AfCFTA Secretariat. [online]: <https://www.tralac.org/documents/resources/cfta/4669-afcfta-futures-report-2021-which-value-chains-for-a-made-in-africa-revolution/file.html>

The trade data analysis is split into the different stages of the SVC which is split into three stages

- i) Primary materials (soya beans – HS1201);
- ii) Processing (soya bean oil – HS150710; HS150790 and soya bean flour/meal – HS120810); and
- iii) Manufacturing (animal feed – soya oilcake – HS2304)

It is important to note that there are limitations to trade data and, for this analysis especially, access to reliable African trade data is not always available, and this does impact on the analysis. Furthermore, as trade data may be distorted or simply not reported for a given year, we only considered a review period for the years where complete data was available. In this case, the latest available year for data sourced from UN ITC TradeMap was 2021. We must therefore treat the analysis as indicative of trade flows over the review period.

Overview of global trade in soya products

Table 1 below summarises the top 10 soya trade global players. The global value of soya trade was estimated at about US\$ 130 – 140 billion in 2021 and the compound annual growth rate (CAGR) over the past five years was about 10%. Brazil, the US and Argentina dominate exports accounting for about 80% of global exports. Top 10 global exporters account for 92% share of global exports. In terms of export performance amongst the Top 10 global exporters, Russia and Bolivia recorded the highest export growth rates of 19% and 18% (CAGR) respectively. Ukraine experienced a decline in exports of 3% (CAGR) over the review period 2017-2021. With the current war in Ukraine, disruption in agricultural production will see Ukraine's agricultural exports in general declining further.

China, India, and Indonesia were the top importers in 2021 accounting for over 45% share of global imports, with Top 10 global importers accounting for 87% share of global imports. Iran and India recorded the highest import growth rates of 20% and 19% (CAGR) respectively. African countries are small players in the SVC global trade and do not feature in the Top 10 global players for both exports and imports.

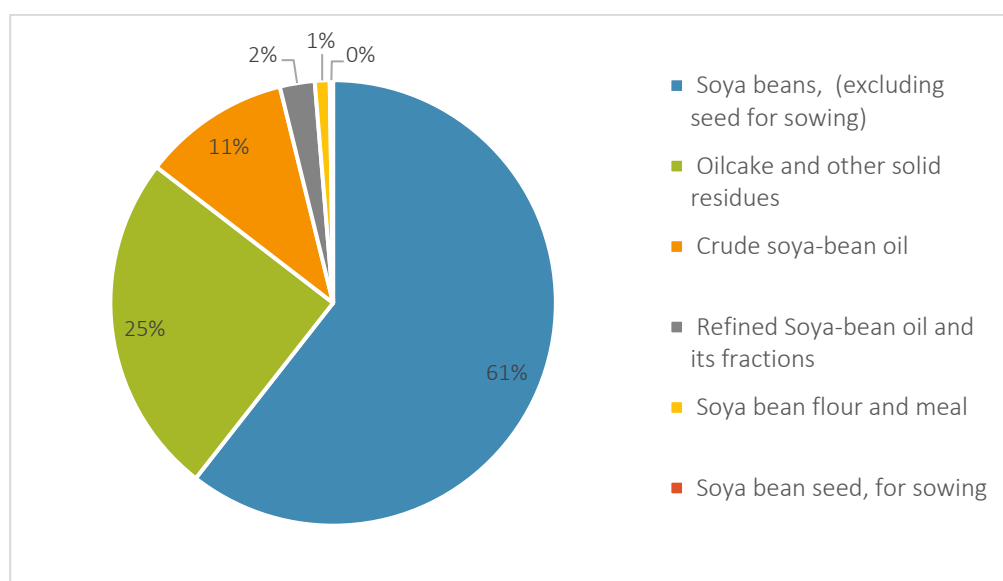
Table 1: Global trade profile of soya trade (2017-2021)

Top 10 Exporters (US\$ millions)					Top 10 Importers (US\$ millions)				
	2017	2021	% share	% CAGR (2017-2021)		2017	2021	% share	% CAGR (2017 - 2021)
World	91,163	128,590		9%	World	97,076	141,250		10%
Brazil	31,722	47,999	37%	11%	China	40,200	54,639	39%	8%
US	26,297	34,090	27%	7%	India	2,788	5,604	4%	19%
Argentina	15,544	20,973	16%	8%	Indonesia	2,825	4,221	3%	11%
Paraguay	3,340	4,361	3%	7%	Viet Nam	2,477	3,795	3%	11%
Canada	2,133	2,862	2%	8%	Thailand	2,357	3,643	3%	12%
Netherlands	2,063	2,652	2%	6%	Spain	2,307	3,613	3%	12%
Russia	704	1,431	1%	19%	Netherlands	2,778	3,492	2%	6%
Bolivia	698	1,365	1%	18%	Iran	1,675	3,431	2%	20%
Ukraine	1,293	1,169	1%	-3%	Germany	2,393	3,104	2%	7%
Germany	882	1,093	1%	6%	Japan	2,216	3,022	2%	8%
Rest of the World	6,488	10,597	8%	13%	Rest of the World	35,059	52,686	37%	11%

Source: ITC TradeMap

The bulk of trade in the SVC is dominated by soya beans which is the primary product accounting for 61% share of global trade. Oilcake which is an important component of animal feed accounts for 25% while crude soya bean oil accounts for 11% share. These three are the most traded goods, with little trade for soya bean seed for sowing which accounted for less than 1% share in 2021 (Figure 1). The domination of soya bean trade suggests that value addition occurs domestically in importing countries as reflected by the low trade in for example refined oil trade. This notion will be analysed further in this report.

Figure 1: Global trade shares of soya products (2021)



Source: ITC TradeMap

Table 2 highlights the top global players (exporters and importers) of soya products. From Table 2, the following can be noted:

- Brazil and the US together account for 74% of global exports of soya bean, which China accounts for 60% of the global imports.
- Argentina and Brazil dominate soya oil and the subsequent soya oilcake exports accounting for a combined 53% and 59% share of exports of these respective products.
- Soya oilcake imports are not dominated by few players, however, Indonesia, Vietnam and France are the top importers, while India alone accounts for 28% of global soya oil imports.
- Soya flour/ meal which is the least traded with a value of about US\$1.4 billion in 2021 was dominated by the US accounting for 81% of global exports and the Dominican Republic and Belgium importing 26% and 11% of the global imports in 2021.

Table 2: Top global players in the soya value chain

	2017 (US\$ mn)	2021 (US\$ mn)	Top Exporters (2021)	Top Importers (2021)
Soya beans, (excluding seed for sowing)	58,040	78,209	Brazil (49%); US (35%); Paraguay (4%)	China (60%); Argentina (3%); Thailand (3%)
Soya Oilcake	24,804	34,898	Argentina (36%); Brazil (23%); US (14%)	Indonesia (8%); Vietnam (7%); France (4%)
Soya Oil	9,891	16,687	Argentina (41%); Brazil (12%); US (5%)	India (28%); China (6%); Bangladesh (5%)
Soya bean flour and meal	1,022	1,386	US (81%); Italy (5%); Bolivia (3%)	Dominican Republic (26%); Belgium (11%); Peru (9%)

Source: ITC TradeMap

Africa's global trade positioning and performance

A look at Africa's global positioning reveals that Africa accounts for less than 1% of global trade in the SCV products and that Africa is a net importer of soya products, with a trade deficit of almost US\$ 4 billion in 2021. Total trade (exports and imports) in SVC products was just over US\$ 5 billion in 2021. In terms of performance over the review period 2021, Africa's global exports have been increasing although from a low base breaching the US\$ 1 billion mark in 2021 from just under US\$ 500 million in 2017. Imports on the other hand were on a downward trend from 2017 to 2019 and increasing from 2020 with a significant increase being recorded in 2021 (Figure 2).

Reduced supplies raised international prices for soya products post covid led to an increase in prices along the whole SVC and African countries were affected the most with high prices recorded especially for soya oil (for human consumption). In the US, soya oil prices rose by more than 50% in 2021 and continued to climb in 2022. The crisis in Ukraine further exacerbated the situation which prompted the uncertainty of Ukrainian sunflower seed oil supplies².

² Ates, A. M. Bukowski, M. 2022. *Examining Record Soybean Oil Prices in 2021–22*, United States Department of Agriculture Economic Research Service, Washington. [online]: <https://www.ers.usda.gov/amber-waves/2022/december/examining-record-soybean-oil-prices-in-2021-22/#:~:text=Reduced%20supplies%20raised%20international%20vegetable,continued%20to%20climb%20in%202022>.

Figure 2: Africa's soya value chain global trade performance (2017-2021)

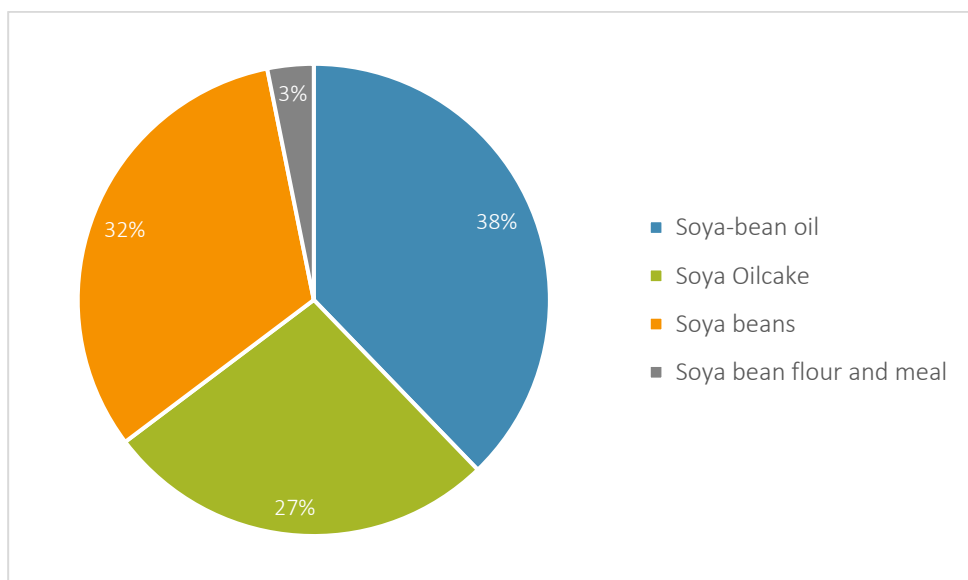


Source: ITC TradeMap

Africa's global exports of soya products

In Africa, unlike in the global trading environment, value added soya products dominated exports in 2021 with soya oil and soya oil cake accounting for 65% of Africa's global soya products exports. The primary soya beans accounted for an additional 32% with soya flour/ meal accounting for only 3% (Figure 3). The expanding livestock sector is a driving force for the industry, through the demand for feed. However, African producing countries still do not have excess capacity to export despite excess soya processing capacity due to production constraints. However, there is potential to grow production if incentives exist for smallholder farmers to move away from other cash crops such as cotton and tobacco.

Figure 3: Africa's global soya export shares by product (2021)



Source: ITC TradeMap

As already highlighted, Africa exports value added soya products the bulk of which is soya oil and soya oil cake. Exports of these have been increasing with soya oil and soya oilcake increasing by 33% and 18% (CAGR) respectively over the review period (2017-2021). Egypt, South Africa, and Morocco (the relatively industrialised economies in Africa) account for almost 75% share of total soya oil exports. Zambia (29%) is the top exporter of soya oilcake, alongside South Africa (23%) and Nigeria (22%).

The bulk of SVC products exports are destined to India (26%); Zimbabwe (10%) and Morocco (8%). Africa's soya bean exports are mostly destined for India which takes up 61% of the US\$ 362 million export market. Zimbabwe is a top market for Africa's SVC products featuring amongst the top importers except for soya flour/ meal. Table 3 below provides the summary of Africa's global exports.

Table 3: Africa's global exports and trade performance of soya products (2017-2021)

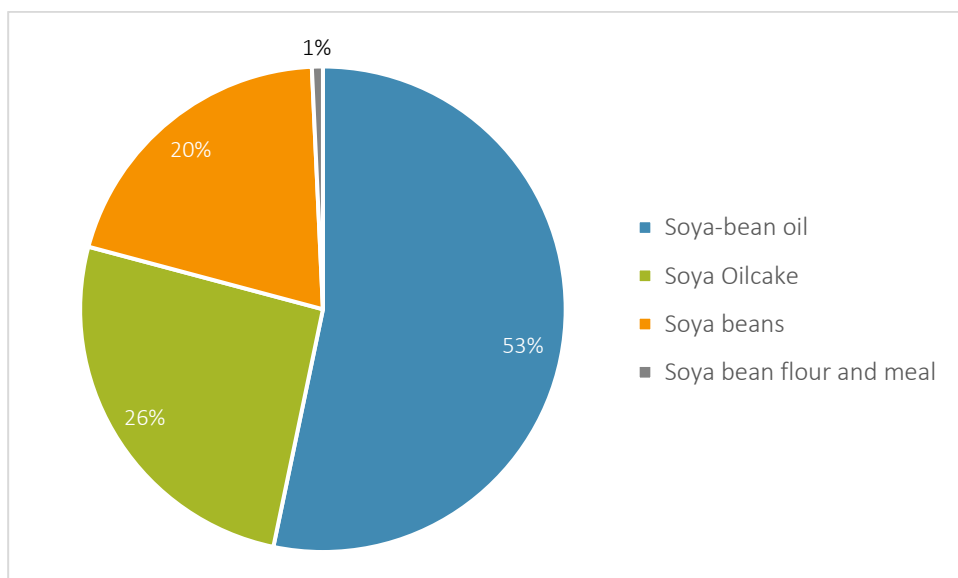
	2017 (US\$ mn)	2021 (US\$ mn)	% CAGR (2017-2021)	Top exporters (% share)	Top destinations (% share)
Soya-bean oil	136	426	33%	Egypt (58%); South Africa (24%); Morocco (11%)	Morocco (20%); Zimbabwe (11%); India (10%)
Soya Oilcake	157	304	18%	Zambia (29%); South Africa (23%); Nigeria (22%)	France (21%); Zimbabwe (14%); Kenya (14%)
Soya beans	135	362	28%	Malawi (21%); Tanzania (21%); Ethiopia (12%)	India (61%); Zimbabwe (13%); France (9%)
Soya bean flour and meal	43	36	-4%	Ethiopia (56%); Togo (13%); Tanzania (13%)	India (36%); US (24%); Italy (10%)
Total	472	1,127	24%	Egypt (24%); South Africa (18%); Zambia (10%)	India (26%); Zimbabwe (10%); Morocco (8%)

Source: ITC TradeMap

Africa's global imports of soya products

In 2021, Africa imported about US\$ 5 billion of SVC products. Soya oil and more specifically soya crude oil accounted for the bulk of imports. Soya oil accounted for 53% of Africa's global SVC products imports. Oilcake for an additional 26% and soya beans at 20% share (Figure 4). The low levels of industrialisation and low supply capacity of primary products (soya beans) attribute to the high imports of soya oil and its by product soya oil cake which require advanced technologies for maximum output and efficiency for competitiveness – something that's lacking in Africa especially for small micro and medium enterprises (SMMEs).

Figure 4: Africa's global imports share by product (2021)



Source: ITC TradeMap

Table 4 looks at Africa's global imports and major players. As witnessed above, Zimbabwe is a major importer across the VC, however, overall, Algeria, Morocco and Tunisia dominate imports by total value in 2021. Suppliers are mostly from Europe (Spain, Russia), South America (Argentina, Brazil), and the US. Zambia and South Africa feature amongst top suppliers for certain products such as soya oilcake and soya flour/meal.

Table 4: Africa's global imports and trade performance of soya products (2017-2021)

	2017 (US\$ mn)	2021 (US\$ mn)	% CAGR (2017-2021)	Top importers (% share)	Top suppliers (% share)
Soya-bean oil	1,819	2,567	9%	Algeria (32%); Morocco (25%); Zimbabwe (9%)	Spain (20%); Argentina (18%); Russia (8%)
Soya Oilcake	1,609	1,247	-6%	Morocco (23%); South Africa (18%); Algeria (16%)	Argentina (63%); US (17%); South Africa (6%)
Soya beans	303	970	34%	Algeria (53%); Tunisia (30%); Mozambique (3%)	Brazil (41%); US (23%); Canada (14%)
Soya bean flour and meal	38	35	-2%	Zimbabwe (56%); DRC (8%); Mozambique (6%)	Zambia (56%); US (16%); South Africa (12%)
Total	3,769	4,819	6%	Algeria (32%); Morocco (20%); Tunisia (8%)	Argentina (27%); Spain (11%); Brazil (10%)

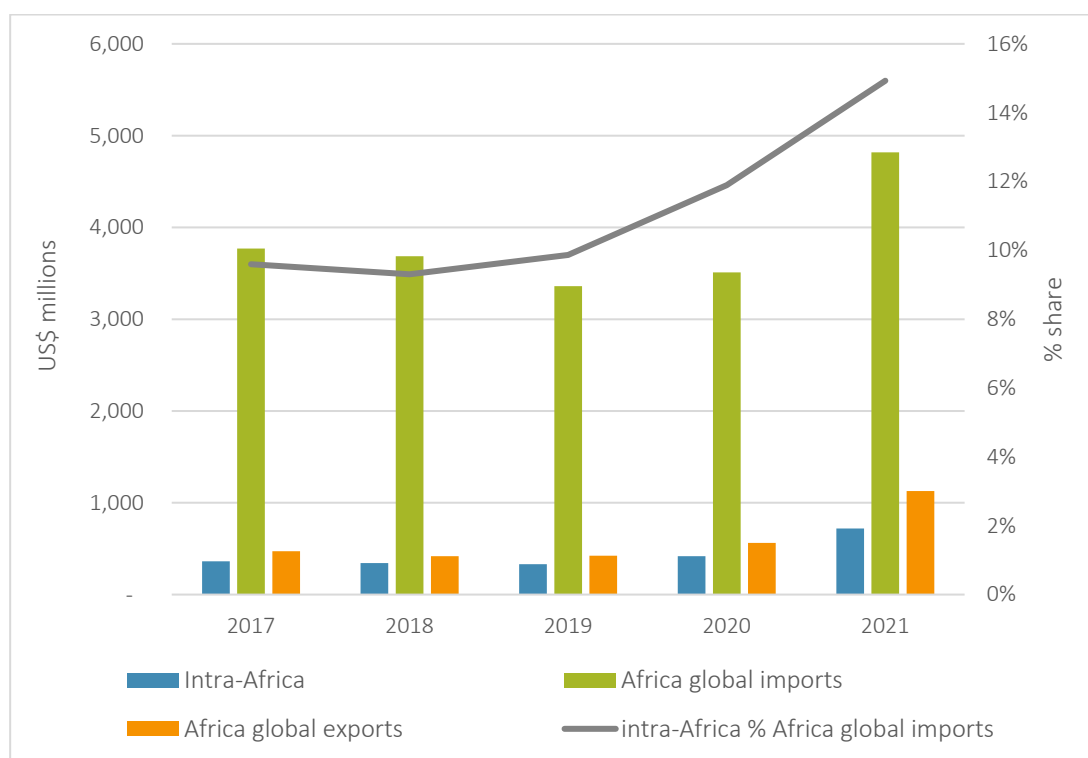
Source: ITC TradeMap

Intra-Africa trade in soya products

Globally Africa is a minor player in the SVC accounting for less than 1% of global trade. A look at intra-Africa trade reveals that most Africa's global exports are destined within Africa. Intra-Africa trade as share of Africa's global exports accounted for on average about 70% at any given period in the past 5 years. On the other hand, if one looks at intra-Africa trade as share of Africa's global imports, intra-Africa trade has been increasing from 10% in 2017 to about 15% in 2021 (Figure 5).

This trend is set to increase given the significant importance of the SVC as a cash crop, rising middle class, as soya is a key ingredient in animal feed, which makes up a large percentage of the cost of poultry production, which is the cheapest and most widely consumed protein in the African market. Beyond servicing the African market, a wider and deeper soya RVC will likely export to the rest of the world, as there is large, unmet, and growing global demand for soya³.

Figure 5: Intra-Africa trade comparison to Africa' global trade in soya products (2021)



Source: ITC TradeMap

³ ibid

Table 5 highlights the intra-Africa trade profile and performance of soya products over the review period 2017-2021. Intra-Africa trade was about USD 720 million in 2021 which has already been highlighted was 15% of Africa's global imports (65% of Africa's global exports).

East African and Southern African countries dominate trade across the value chain. Some West African and North African players feature at different stages along the value chain. South Africa, Zambia, Malawi are key producers in Africa. For soya beans these three countries account for over 80% of intra-Africa exports. Zimbabwe at any given stage along the SVC is a major importer. In North Africa Egypt is a major exporter of soya oil, while Morocco is the second largest importer of intra-Africa soya oil exports.

Table 5: Intra-Africa profile of soya trade (2017-2021)

	2017 (US\$ mn)	2021 (US\$ mn)	% share (2021)	% CAGR (2017-2021)	Top intra-Africa exporters	Top intra-Africa importers
Soya Oil	184	452	63%	25%	Egypt (35%); South Africa (28%); Mozambique (18%)	Zimbabwe (37%); Morocco (20%); Algeria (9%)
Soya Oilcake	105	172	24%	13%	South Africa (42%); Zambia (41%); Malawi (15%)	Tanzania (16%); Kenya (16%); Zimbabwe (16%)
Soya Beans	51	71	10%	8%	South Africa (38%); Zambia (24%); Malawi (19%);	Zimbabwe (40%); Rwanda (13%); South Africa (12%)
Soya bean flour and meal	21	24	3%	4%	Zambia (81%); South Africa (17%); Malawi (2%)	Zimbabwe (81%); Tanzania (3%); Ethiopia (3%)

Source: ITC TradeMap

Market access for soya products under AfCFTA

It is envisaged that the implementation of the AfCFTA will improve the African trade and investment environment. Crucial to this is market access resulting from tariff liberalisation and trade facilitation; industrialization and infrastructure programmes. To boost this, the pan-African payment and settlement system dedicated financing lines from various development and commercial banks and the

non-tariff barriers monitoring mechanism are supportive interventions that are expected promote the structural transformation of Africa and fast-track the achievement of UN Agenda 2030⁴.

Under the AfCFTA, there are 8 AU officially recognised regional economic communities (RECs), which are:

1. AMU (Arab Maghreb Union)
2. CEN-SAD (The Community of Sahel-Saharan States)
3. COMESA (Common Market for Eastern and Southern Africa)
4. EAC (East African Community)
5. ECCAS (Economic Community of Central African States)
6. ECOWAS (Economic Community of West African States)
7. IGAD (Intergovernmental Authority on Development)
8. SADC (Southern African Development Community)

Status update of each REC is summarised in Table 6 below.

⁴ Mene, W. 2021, in UNDP, 2021. *ibid*

Table 6: Status update on regional integration by each Regional Economic Community

Regional Economic Community	Goal ⁵	Trade regime Status	Remarks on REC agenda
AMU	to foster deeper regional integration with the goal of establishing a common market amongst member countries ⁶ .	No FTA in place.	No FTA has been established. Biggest hurdle to integration in the AMU has lack of political will, the Western Sahara conflict, and high levels of trade protection ⁷
CEN-SAD	The establishment of a comprehensive economic union and elimination of all obstacles impeding the unity of its member states to promote economic, cultural, political, and social integration. The revised treaty emphasised two other areas of cooperation: regional security and sustainable development ⁸ .	No FTA in place	Conflict and lack of political will in the region have stalled progress. CEN-SAD has been inactive since the fall of Libya's former leader Muammar Qadhafi. In 2019 Heads of States met for the first time since 2013 to revitalise CEN-SAD and address growing insecurity in the region ⁹ . On trade issues, there seems to be little appetite given that members states belong to multiple REC memberships some of which are at advanced stages on trade integration such as ECOWAS, COMESA and CEMAC (ECCAS) ¹⁰ .

⁵ Unless otherwise state, the Goals of each REC are summarised by the African Union and can be found here [online]: <https://au.int/en/organs/recs>

⁶ <https://issafrica.org/profile-arab-maghreb-union-amu>

⁷ AfDB, 2019. Regional Integration in the Maghreb – Challenges and Opportunities for the Private Sector. Synthesis report. African Development Bank, Abidjan [online]: <https://www.afdb.org/fr/documents/report-regional-integration-maghreb-2019-challenges-and-opportunities-private-sector-synthesis>

⁸ <https://ecfr.eu/special/african-cooperation/censad/#:~:text=Objectives,%2C%20political%2C%20and%20social%20integration.>

⁹ EIU, 2019. Sahelo-Saharan organisation holds first summit since 2013, TradePress, Economist Intelligence Unit [online]: http://country.eiu.com/article.aspx?articleid=1737911557&Country=Djibouti&topic=Politics&subtopic_4

¹⁰ AU, 2014. Highlights – Status of Integration in Africa V, African Union, Addis Ababa, Ethiopia. [online]: <https://au.int/sites/default/files/documents/32854-doc-status-of-integration-in-africa-v.pdf>

COMESA	to attain economic prosperity through regional integration.	FTA in place; CU not yet in place.	<p>Tunisia and Somalia are the latest member states of COMESA?</p> <p>17 member states are part of the COMESA FTA (DRC, Eritrea, Ethiopia, Somalia accession in process).</p> <p>13 member states fully implemented the COMESA FTA.</p> <p>18 COMESA intra-REC countries tariff liberalisation is at 59 per cent.</p> <p>CET with four tariff bands agreed upon but not yet implemented.</p> <p>Mauritius has already adopted the CET bands.</p>
EAC	to achieve prosperity, competitiveness, security, stability, and political unification in East Africa.	CU in place;	<p>EAC has managed to attain customs union status.</p> <p>New members include South Sudan and most recently DRC (29 Mar. 22)¹¹.</p> <p>Effort currently underway to have a single currency by 2024 paving way for attainment of the East African Monetary Union¹².</p>
ECCAS	to develop capacities to maintain peace, security, and stability as essential prerequisites for economic and social development; to develop physical, economic, and monetary integration.	No FTA in place 6 members part of CEMAC	<p>No free trade agreement in place.</p> <p>However, the CEMAC and ECCAS member states agreed in principle to adopt the CEMAC CET.</p> <p>Implementation of the CET is not yet official.</p>
ECOWAS	mandate of promoting economic integration in all fields of activity of the member states.	CU in place	<p>13 of the 15 countries apply the ECOWAS CET (excluding Liberia and Cape Verde).</p> <p>The ECOWAS Trade Liberalisation Scheme (ETLS) is the instrument used for the establishment of the ECOWAS FTA.</p> <p>The ETLS allows for certain products to be traded duty-free among the ECOWAS countries if certain requirements are met.</p>

¹¹ <https://twitter.com/jumuiya/status/1508736436174041091>

¹² EAC, 2020. Plans to put in place East African single currency by 2024 well underway, TradePress, East African Community. Arusha. [online]: <https://www.eac.int/press-releases/1657-plans-to-put-in-place-east-african-single-currency-by-2024-well-underway>

IGAD	to assist and complement the efforts of the member States to achieve, through increased cooperation: food security and environmental protection, peace and security, and economic cooperation and integration in the region.	No FTA in place	<p>IGAD's aim to have a free trade arrangement in place has failed to take off.</p> <p>All members of IGAD belong to one or more RECs and therefore overlapping membership is rife.</p> <p>Preferential access through other RECs</p>
SADC	to achieve economic development, peace and security, and growth, alleviate poverty, enhance the standard and quality of life of the peoples of Southern Africa, and support the socially disadvantaged through Regional Integration.	<p>FTA in place</p> <p>5 members part of SACU</p>	<p>SADC currently is an FTA.</p> <p>13 of the 16 members are part of the SADC FTA.</p> <p>Angola has submitted an offer to accede to the FTA and the DRC and Comoros are yet to join the FTA.</p> <p>5 Countries are members of Southern Africa Customs Union (SACU) with a CET.</p> <p>97 per cent of intra-SADC FTA tariff lines have been fully liberalised.</p>

Table 7 looks at the current most favoured nation (MFN) tariffs applied by each REC and the following can be highlighted:

- Tariffs range on average between 5% and 12% ad valorem equivalent (AVE) amongst the different RECs;
- ECCAS has the lowest average tariff of 5% and EAC has the highest average tariff of 12% (AVE);
- ECCAS and EAC apply duty free tariff on crude soya oil, however
- Refined oil attracts the highest tariff across the RECs with maximum applied by EAC of 30% (AVE) and AMU levying 25% (AVE);
- SADC and ECCAS levy the lowest tariffs for soya oilcake

In summary, tariffs are relatively low at the MFN rate given Africa's reliance on imports. With proper incentives, governance structures and best practices, Africa, has the capacity to expand production and fully utilise excess processing capacity in some of the African countries. The AfCFTA provides an opportunity for this to materialise.

Table 7: MFN Tariffs (AVE) applied by African REC countries in the soya value chain (2021)

HS6 Description	AMU	CEN-SAD	COMESA	EAC	ECCAS	ECOWAS	IGAD	SADC
Soya beans	2.5	10	9.75	10	5	10	10	9.09
Soya bean seed, for sowing	5	9	7.8	10	0	5	10	5.38
Soya bean flour and meal	-	10	11.5	10	6.67	10	10	14.58
Crude soya-bean oil	6.25	10	5.42	0	0	10	-	6.5
Refined Soya-bean oil	25	12.5	12.78	30	15	15	10	14.58
Soya Oilcake	-	11.25	7.65	10	5	10	10	4.85

Source: World Bank WITS database

Under the AfCFTA, countries and RECs have put in tariff offers for trade in goods and in the SVC, offers in place for all RECs for soya products with the exception of soya flour/meal wherein the EAC and SACU

have not made offers. Offers in place are within the current MFN applied rates with a range between 5% and 10% for all RECs and Egypt¹³.

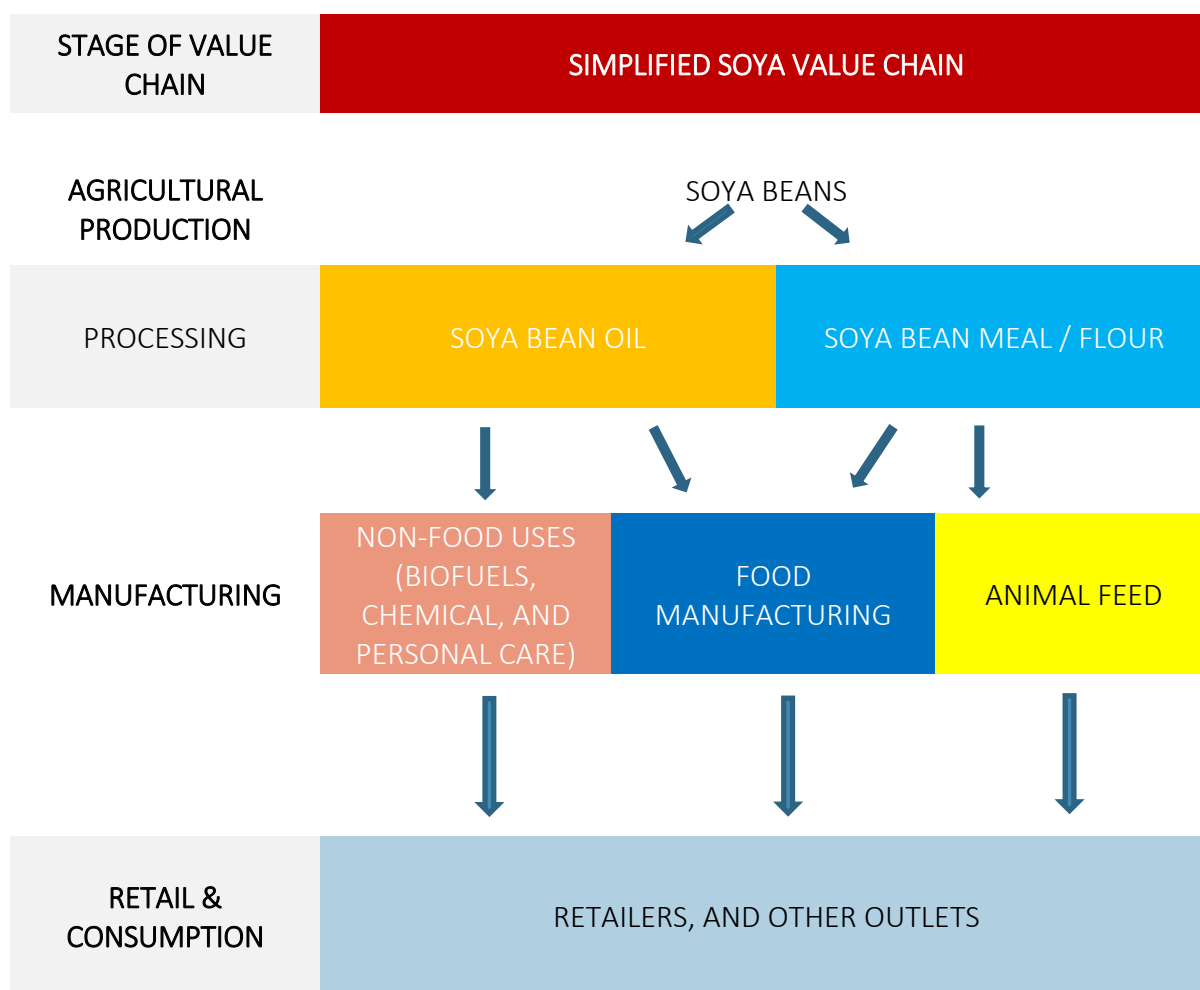
Mapping African soya players along the value chain

A VC map is a simplified representation of a complex and dynamic reality. VC maps are the core of any value chain analysis presented in pictorial or diagrammatic format. Mapping is about drawing a preliminary visual representation of the structure of the VC and detecting its main characteristics. The inputs and services that go into each step of the VC, and the enabling environment that affects the VC, cannot easily be shown on a VC map but are vitally important. Key inputs and services include but are not limited to seed, fertilisers, chemicals, extension advice, market information and finance. A comprehensive VC analysis consists of identifying chain actors at each stage and discerning their functions and relationships; determining the chain governance, or leadership, to facilitate chain formation and strengthening; and identifying value adding activities in the chain and assigning costs and added value to each of those activities. In this section, a simplified SVC is presented in Figure 6 highlighting key stages in the VC. This is then used to map key regional players using revealed comparative analysis (RCA) to determine production and export capacity of these players at each stage of the VC.

From the trade analysis presented below, most of the trade occurs in the processing and manufacturing stages. Soya oil is mainly used for human consumption while soya flour / meal mostly for animal feed with some used in baby fortified foods. Non-food uses are minimal in Africa and soya oil cake is a critical component of animal feed especially in the poultry industry.

¹³ UNDP, 2021. Futures Report, ibid

Figure 6: Simplified soya value chain



Source: Ceres¹⁴

Revealed comparative advantage

In this analysis, export data is used to calculate the relative comparative advantage (RCA) index for each African country at each of the three main stages in the SVC under analysis. RCA is based on Ricardian trade theory, which posits that patterns of trade among countries are governed by their relative differences in productivity. Although such productivity differences are difficult to observe, an RCA metric can be readily calculated using trade data to ‘reveal’ such differences (UNCTADSTAT, n.d.). Any RCA number above 1 indicates that the country has a revealed comparative advantage in that product, relative to the rest of the world. The greater the RCA above 1, the more intense the export advantage enjoyed by the country¹⁵.

¹⁴ Ceres, ‘n.d.’ Soya beans, Commodities Brief, Boston, USA. [online]: <https://engagethechain.org/soybeans>

¹⁵ Stuart, J. 2021. *The Automotive Components Trade in Africa: Its Place and Potential (2021 Update)*. tralac Trade Brief No. US21TB04/2021. Stellenbosch: tralac.

The objective of calculating the RCA is to identify regions/countries that can develop vibrant C&C RVCs capitalising on the opportunities that the AfCFTA is envisaged to provide. Table 8 shows the top African countries with an RCA above 1 at each stage of the SVC using 2021 data. Table 8 provides a summary of potential players. Note that countries with an RCA of 1 are included, mainly because they are amongst the current top exporters in Africa and therefore will be able to increase their competitiveness under conducive conditions which the AfCFTA may offer.

Table 8: Revealed comparative advantage of African countries participating in the soya value chain (2021)

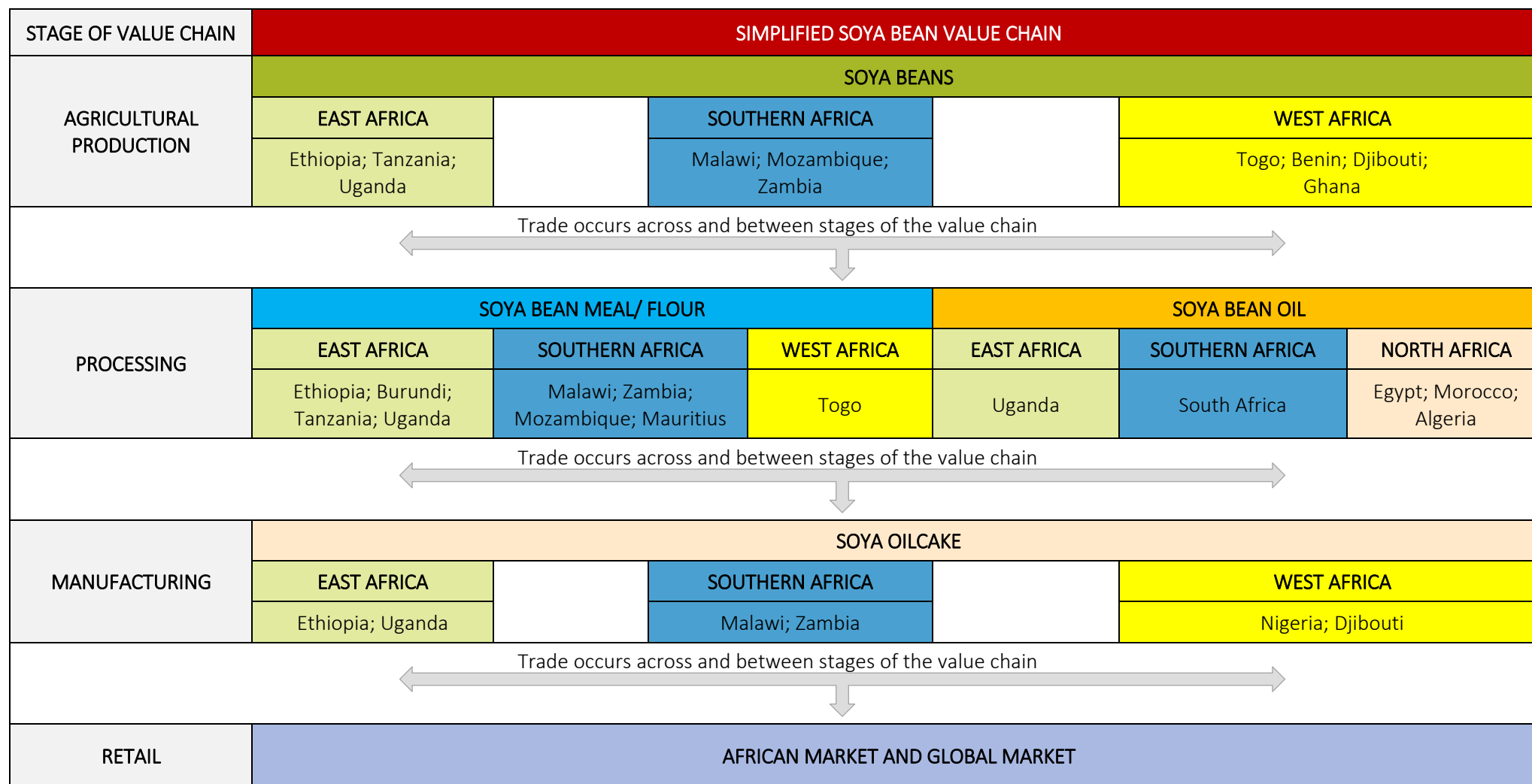
Soya Beans		Soya bean flour and meal		Soya Oil		Soya Oilcake	
Country	RCA	Country	RCA	Country	RCA	Country	RCA
Malawi	20	Ethiopia	104	Egypt	8	Malawi	16
Togo	5	Togo	71	Morocco	2	Djibouti	11
Ethiopia	4	Tanzania	12	South Africa	1	Zambia	5
Tanzania	3	Malawi	7	Uganda	1	Uganda	3
Benin	3	Burundi	5	Algeria	1	Ethiopia	1
Djibouti	3	Uganda	4			Nigeria	1
Mozambique	1	Mozambique	3				
Uganda	1	Zambia	2				
Zambia	1	Mauritius	1				
Ghana	1						

Source: Author's calculations based on ITC TradeMap data

Potential players in the AfCFTA soya value chain

East and Southern African countries have a comparative advantage across all but one of the stages in the SVC. Upstream, West African players also feature. Further downstream North African players feature, with Nigeria being the only West African country, albeit with an RCA of 1 in soya oilcake exports. Figure 19 depicts how a soya RVC could look like and players and regions at each stage could be part of the soya RVC. Undeniably, East, and Southern African countries will play an important role in the development of the soya RVC, acting as not only suppliers of raw materials, but also that processing and manufacturing networks are developed on the continent.

Figure 7: Potential regional value chain and associated regions for development



The SVC is attractive for some of the players highlighted above as they provide an alternative for producers and raise rural incomes. Mapping the players that may take part in the development of a soya RVC is therefore important in that it gives policymakers a workable tool to understand where to position national AfCFTA competitiveness strategies, as well as how to channel capacity-building for increased exports.

At the onset, therefore there is need for participating countries to address domestic challenges and improve competitiveness before taking part in the soya RVC. This entails doing things better and/or bigger” and includes enhancing the efficiency of the production processes and the quality of products to comply with buyers’ requirements. In support of a soya RVCs, there is need for regional harmonisation in areas such as seed production, access to market information, sharing lessons learnt from VC development programmes. As smallholder farmers are integral to the production of soya beans in some of the African countries such as Malawi, there is need to ensure that SMMEs, women and youth-led (WYE) agro-enterprises are empowered to participate in the soya RVCs under the AfCFTA.

Gender impact in agro-value chains

WYE agro-enterprises (which may also be operating as family businesses) in agricultural VCs have been identified as catalysts for rural transformation given their potential for creating employment and stimulating value addition both on and off-farm¹⁶. In countries such as Malawi and Zambia, women are actively involved in agricultural activities within SVC. However, to a greater extent, their participation/involvement levels do not extend beyond production related operations. This positioning curbs women’s bargaining power, decision-making and control over income and expenditure within the household. The Comprehensive African Agricultural Development Programme (CAADP) together with the AfCFTA can provide an opportunity to transforming agriculture from subsistence production to farming as a business where specific needs of women and smallholders are clearly prioritised¹⁷.

Access to finance for women farmers is a major constraint that is complex and layered with an interplay of factors made up of social, cultural, and traditional elements. In an era where technology is at the centre of productivity and agricultural transformation, the gender and social disparities related to age,

¹⁶ FAO. 2021. *Involving women and youth in responsible investment in agriculture and food systems in Ghana*. Rome, Food and Agricultural Organisation. [online]: <https://doi.org/10.4060/cb6880en>

¹⁷ ActionAid, 2011. *Making CAADP work for Women Farmers – A review of progress in six countries*. ActionAid. [online]: https://actionaid.org/sites/default/files/making_caadp_work_for_women_farmers_april_2011_final.pdf

ethnicity, income, education, and race, amongst others, are important for understanding the uptake (or not) of technological solutions. This places the need for reforms to address such disparities and put the needs of WYE agro enterprises at the heart of developing agro RVCs. The liberalisation of trade in services under the AfCFTA aims to reduce some of these constraints and enable the formation of RVCs and the structural transformation they can drive.

Given that agriculture and food systems are likely to remain the key generators of employment over the coming decades, and that 80% of all activities in the midstream of food value chain are undertaken by SMEs in Africa. It is necessary to generate the evidence to support the argument that family, women and youth-led agribusinesses have a key role to play in the rural transformation pathway underway in most African countries¹⁸.

There are various pathways to empowerment; for example, i) involving independence (of land, production, markets) and ii) through negotiating within a marriage contract. Policy reforms that will allow, joint land allocation to a married couple to ensure productive continuity in the event of a spouse dying become necessary. Furthermore, there is need for the development of policy frameworks that enhance the participation of more women stakeholders in the value addition of agricultural commodities. These will be strengthened by strategies to improve the participation of women across the value chains of agricultural commodities such as the SVC to improve earnings and enhance women's empowerment¹⁹.

Conclusion

Developing a soya RVCs under the AfCFTA will be beneficial to some countries especially in East and Southern Africa. Expanding soya bean production in these countries will boost the development of the SVC and ensure that processing capacity is fully utilised – something that is not currently happening. The expansion will however depend in part on the policy pursued in these countries, with respect to

¹⁸ AGRA. 2019. *Africa Agriculture Status Report: The Hidden Middle: A Quiet Revolution in the Private Sector Driving Agricultural Transformation* (Issue 7). Nairobi, Kenya: Alliance for a Green Revolution in Africa (AGRA), [online]: <https://agra.org/wp-content/uploads/2019/09/AASR2019-The-Hidden-Middleweb.pdf>

¹⁹ Kwaramba, H. M. Chigumira, E. Zimori, L. 2020. *Women Empowerment, Agriculture Commercialisation and Gender Relations: A Value Chain Analysis*, Mvurwi, Zimbabwe, Working Paper 042, Agricultural Policy Research in Africa (APRA), [online]: https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/15713/APRA%20WP42_Women_Empowerment_Agriculture_Commercialisation_and_Gender_Relations_Value_Chain_Analysis%2C_Mvurwi_Zimbabwe.pdf?sequence=5&isAllowed=y

soya bean production, processing, marketing and within the livestock industries. Infrastructure and policy investments are how governments can help.

Public investment in infrastructure and policies and regulations aiming to reduce transaction costs and increase capacity to manage supply chain risks become crucial. This amplifies the role of the private sector in driving agricultural productivity, opening markets, and facilitating increased private investment in the sector. Roads connect farmers to input and output markets, while public investment in more and improved wholesale markets in secondary cities and rural towns helps connect farmers products to where the demand is.

As the processing sector grows, it will create value addition and markets, but it will need and seek more raw material supply – something the right policy and regulatory framework can help with²⁰. The AfCFTA can create more certainty in such environments as it will act as an overarching framework that seeks to regularize and open markets. It will incentivise collaboration and coordination amongst its members, rather than protective measures like export or import bans.

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²⁰ Demmler K. M. *The Role of Small and Medium-sized Enterprises in Nutritious Food Supply Chains in Africa*. Global Alliance for Improved Nutrition (GAIN). Working Paper Series #2. Geneva, Switzerland, year. DOI: <https://doi.org/10.36072/wp.2>

Annex 1: REC Member States

Regional Economic Community (REC)	Member States
AMU (Arab Maghreb Union)	Algeria, Libya, Mauritania, Morocco, and Tunisia
CEN-SAD (The Community of Sahel-Saharan States)	Benin, Burkina Faso, Central African Republic, Chad, the Comoros, Ivory Coast, Djibouti, Egypt, Eritrea, the Gambia, Ghana, Guinea-Bissau, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal, Sierra Leone, Somalia, the Sudan, Togo, and Tunisia
COMESA (Common Market for Eastern and Southern Africa)	Burundi, the Comoros, the DRC, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Sudan, Eswatini, Seychelles, Tunisia, Uganda, Zambia, and Zimbabwe
EAC (East African Community)	Burundi, DRC, Kenya, Rwanda, South Sudan, Uganda, and Tanzania
ECCAS (Economic Community of Central African States)	Angola, Burundi, Cameroon, Central African Republic, Chad, Congo, DRC, Equatorial Guinea, Gabon, Rwanda and São Tomé and Príncipe
ECOWAS (Economic Community of West African States)	Benin, Burkina Faso, Cape Verde, Ivory Coast, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo
IGAD (Intergovernmental Authority on Development)	Djibouti, Ethiopia, Eritrea, Kenya, Somalia, the Sudan, South Sudan, and Uganda
SADC (Southern African Development Community)	Angola, Botswana, Comoros, the DRC, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Eswatini, Tanzania, Zambia, and Zimbabwe

Source: tralac