ANALYSING NIGERIA'S FOREIGN TRADE IN AGRICULTURAL PRODUCTS: CHALLENGES AND PROSPECTS FOR ECONOMIC DIVERSIFICATION

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Key words: Nigeria, foreign trade, exports, imports, agricultural products.

Summary. The article considers the changes in the volume and structure of exports and imports of agricultural products in Nigeria. The growing number of Nigerian population actualises the problems of food security for the country. Trends in the development of Nigeria's foreign trade for 2006-2023 are studied. The transformation of Nigeria's agricultural exports and imports for 2019-2023 is reflected. The major agricultural products as well as partner countries are identified.

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Introduction. In 1960, before oil took centre stage, Nigeria was one of the most promising agricultural producers in the world. Between 1962 and 1968, export crops were the country's main source of foreign exchange earnings. Nigeria was the world's number one exporter of palm oil, ahead of Malaysia and Indonesia, and exported 47 % of groundnuts, supplying the United States and Argentina. Gradually, Nigeria's status as an agricultural economy declined significantly. In 1960, the country produced and supplied 18 % of the world's cocoa production; in 2023, the share had fallen to 5 %. The country produced 79 % of tomatoes in West Africa and in 2023, 67 %, being the largest importer of tomato paste [1, 2].

The problems of Nigeria's foreign trade development have received attention both in general works of scholars and specialised ones [3, 4, 5, 6]. Tavgeni E. O., Shvedko P. V. and Lukashova A. A., having considered the peculiarities of customs and tariff regulation, noted the growth of Nigeria's sales market due to the growth of the middle class [7, p. 182, 184-186]. Having analysed the export of Nigerian agricultural goods (as of the end of 2014) Gavrilova N. G. linked its dynamics to the lack of agricultural financing [8, p. 61]. The largest impact on its size was influenced by the growth of fruit and nut growing areas (the growth of area under these crops per 1 ha increased agricultural exports by \$7.657 th), The gross harvest of cocoa, tobacco and oilseeds increased by 91.7 % [9, p. 176, 183-184].

The purpose of the work: to study the status and trends of exports and imports of agricultural products in Nigeria.

Materials and methods of research. In the process of conducting the study used official statistical information International Trade Centre, which

presents groups of agricultural products according to the Harmonised Commodity Description and Coding System. Based on this data, the change in Nigeria's foreign trade, as well as the values of individual groups are reflected, and periods of transformation of foreign trade values are outlined. FAOSTAT statistical data were used to characterise changes in the volume of production of plant and animal products.

Research results and discussion. The highest value of exports for the period 2006-2022 was achieved in 2011-2012. A fall was observed in 2015, especially in 2020, due to increased international tensions and supply disruption. The maximum growth rate to the previous year was in 2010, indicating a recovery from the fall in 2009. Exports showed a long-term growth, reaching 236.6 % in 2012, but this trend slowed down after 2020. The value of imports of goods increased from \$36.8bn in 2006 to \$79.8bn in 2020. The value of goods imports increased from \$36.8 bn in 2006 to \$79.8bn in 2022. The highest growth rate was observed in 2007 (137.7 %). Significant declines were recorded in 2009 (100.1 %) and 2012 (67.6 %). Imports grew by 215.4 % over the analysed period. Despite some positive performances (e.g. 2006 and 2012), the trade balance became negative from 2015 onwards. The largest deficit was observed in 2020 (-\$35.5 bn). The deficit has declined in recent years, with a deficit of -\$11.1bn in 2022.

Table 1 – Commodity structure of exports of goods by Nigeria in 2006–2023, %

Year	Agricultural products	Mineral products	Chemical products	Wood	Light industry products	Base metals	Machinery, equipment and vehicles	Other Products
1	2	3	4	5		7	8	9
2006	0,37	98,24	0,18	0,01	0,08	0,02	0,95	0,14
2007	1,76	94,92	0,72	0,65	0,30	0,42	0,47	0,75
2008	1,39	92,01	1,99	0,33	0,40	0,38	2,64	0,86
2009	5,01	90,39	1,12	0,29	0,52	0,32	1,17	1,19
2010	3,66	87,75	1,59	0,33	1,16	0,66	1,21	3,64
2011	1,89	89,23	6,23	0,07	0,26	0,48	1,16	0,68
2012	5,44	84,06	7,33	0,03	0,46	0,44	1,33	0,91
2013	5,30	87,72	3,23	0,39	0,58	0,60	0,93	1,24
2014	1,93	90,89	2,14	0,11	0,95	0,52	2,85	0,61
2015	2,98	87,96	0,44	0,11	0,12	0,52	7,39	0,49
2016	2,20	96,61	0,58	0,05	0,10	0,22	0,04	0,20
2017	1,86	96,19	0,78	0,09	0,08	0,19	0,63	0,19
2018	2,01	94,31	0,61	0,04	0,05	0,31	2,48	0,19
2019	1,82	87,17	0,52	0,01	0,04	4,20	6,09	0,16
2020	3,03	88,81	0,72	0,01	0,06	0,28	6,88	0,20

Continuation of the table 1

1	2	3	4	5	6	7	8	9
2021	3,35	89,43	2,38	0,04	0,09	0,81	3,57	0,34
2022	2,82	91,02	3,35	0,01	0,06	0,92	1,40	0,42
2023	4,03	91,97	1,90	0,01	0,07	0,97	0,62	0,42

Note – In-house development based on the commodity classification of the Unified CN of FEA of the EAEU and ITC Trade Map international trade data

An analysis of the commodity composition of Nigeria's merchandise exports for 2006-2023 suggests that mineral products have dominated throughout the period 2006-2023. Despite slight fluctuations, their share is consistently high, emphasising the dependence of the Nigerian economy on natural resource exports. The share of agricultural products increased significantly from 0.37 % in 2006 to 4.03 % in 2023. This indicates the gradual development of the agricultural sector. In 2011 and 2012, there was a significant increase in the share of chemical products (6.23 % and 7.33 % respectively), which is due to the strengthening of production or export opportunities. The share of machinery, equipment and vehicles peaked in 2015 (7.39 %) but declined thereafter, indicating a temporary increase in exports of this category. Light manufacturing and other products remained insignificant in merchandise exports between 2006 and 2023, indicating low competitiveness and limited production capacity in these sectors.

Nigeria's total exports for 2019–2023 increased by 13.1 %. The main contribution to its growth was provided by fertilizers (554 %), oilseeds (165.7 %) and food products (336.4 %). Mineral fuels remained the main export commodity, despite a relatively low percentage growth of 19.0 %. A group of products in the category "Tobacco and industrial tobacco substitutes" showed a single decrease of 21.1 %, which is due to changes in global consumption trends [10].

Let's analyze the export of the most significant types of agricultural products in Nigeria for 2019-2023.

Table 2 – Export structure of the most significant types of agricultural products in Nigeria for 2019-2023

Product	2019	2020	2021	2022	2023	2023 to 2019, (+/-)
Cocoa beans	248,8	279,5	564,1	554,7	623,9	375,1
Sesame seeds	288,7	287,1	284,7	330,6	427,9	139,2
Cashew nuts	109,6	107,6	183,1	206,5	327,5	217,9
Soybeans	0,5	13,6	9,4	39,7	249,9	249,4

Note – Own development based on international trade data ITC Trade Map

Cocoa beans were Nigeria's largest agricultural export item in 2023, although sesame seeds dominated in 2019-2020. The value of cocoa bean exports increased 2.5 times (\$375.1 mn) over 2019-2023. The largest increase occurred in 2021 (\$315.3 mn), stabilising at a high level thereafter. Sesame seeds was Nigeria's second most important agricultural export product in 2023. The value volume increased almost 1.5 times over 2019-2023 (\$139.2 mn). Despite a slight decline in 2020-2021, exports returned to growth in 2022-2023. Steady growth in cashew nut value volume was observed throughout the period 2019-2023, indicating strong and growing demand. The value volume increased almost 3 times (\$217.9 mn) during 2019-2023. Soybeans showed the sharpest increase in value volume over the 2019-2023 period: almost 500 times (\$249.4 mn increase). Exports of soya beans started to grow strongly from 2020, reaching a record high in 2023. Cocoa beans and sesame seeds thus remained Nigeria's key export products, while the impressive growth in the value of cashew nuts and soya beans shows the diversification of the export portfolio. The steady growth in exports shows that Nigeria is actively developing the agricultural market.

Table 3 – Top 10 importing countries of cocoa beans from Nigeria, 2019-2023 (USD mn)

Country	2019	2020	2021	2022	2023	2023 to 2019, (+/-)
Netherlands	109,4	126,8	177,8	219,2	247,7	138,3
Malaysia	15,5	21,8	125,7	78,9	157,6	142,1
Indonesia	29,8	30,6	60,8	86,1	79,7	49,9
Belgium	28	26	34,4	75,8	36,1	8,1
Germany	45,8	25,6	62,9	41,7	20,6	-25,2
Italy	0,7	0,9	2,7	6,7	19,9	19,2
Canada	0	4,9	28,9	12,5	15,2	15,2
Estonia	4,9	5	3,2	7,4	10	5,1
Turkey	0,4	0	2,6	0	8,3	7,9
United States	4,7	9,3	33,7	13,3	7,8	3,1
Other countries	9,6	28,6	31,4	13,1	21	11,4

Note – Own development based on international trade data ITC Trade Map.

The Netherlands' leading position among importers of cocoa beans from Nigeria in 2023 confirms its key role in the processing and distribution of cocoa: an increase of almost 2.3 times (\$138.3 mn). The constant increase in the value of imports of cocoa beans from Nigeria throughout the period indicates high stability and demand for products from not only the Netherlands, but also Italy. Malaysia had the largest increase in imports in 2019–2023: almost 10 times (\$142.1 mn). Indonesia and Belgium showed moderate growth in imports, in contrast to Italy and Canada. The only country with negative

dynamics was Germany: a decrease of almost 2.2 times (\$25.2 mn), which is due to changes in the structure of demand and, of course, competition in the market. Growing interest in raw materials for processing was demonstrated by Malaysia, Indonesia, Italy, Canada and Turkey, which proved to be important players with growing import volumes. The largest increase in the unit cost index of cocoa beans in relation to the countries under consideration belongs to Italy – 3014 %, and the specific – to the Netherlands (234 %) [10].

Table 4 – Top 10 countries importing sesame seeds from Nigeria, 2019–2023 (USD mn)

Country	2019	2020	2021	2022	2023	2023 to 2019, (+/-)
China	46	92	126,9	133,3	127,6	81,6
Japan	67	66,7	64,9	73,7	87,7	20,7
India	39	27,3	0,9	4,7	54,1	15,1
Turkey	55,3	39,3	27,6	20,8	43,1	-12,2
Vietnam	22,8	24,4	21,4	31,1	33,4	10,6
Greece	5,2	4,1	9,4	15,7	18,4	13,2
Republic of Korea	11,4	2,2	4,5	7,7	15,6	4,2
Germany	10,5	4,1	8,6	10,6	14,6	4,1
Poland	4,5	2,2	3	5,3	5,1	0,6
United States	2,7	1,7	1,3	3,1	3,7	1
Other countries	24,3	23,1	16,2	24,6	24,6	0,3

Note - Own development based on international trade data ITC Trade Map

China was the leader in terms of sesame seed imports from Nigeria for 2019–2023: growing imports almost 2.8 times in value terms (an increase of \$81.6 mn). The largest increase, however, was seen in 2020, after which values remained high, declining slightly by 2023. The value of Japan's sesame seed imports remained stable throughout the years, gradually increasing in the last two years. After declining to a low value in 2021, India's imports of the product increased to \$54.1 mn in 2023. India's imports increased to \$54.1 mn in 2023, indicating a recovery in demand and increasing needs of the Indian market [10].

Table 5 – Top 10 importing cashew nuts (inshell) from Nigeria, 2019–2023 (USD mn)

Country	2019	2020	2021	2022	2023	2023 to 2019, (+/-)
1	2	3	4	5	6	7
Vietnam	49,8	63,2	115,8	85,7	117,6	67,8
India	15,9	14,6	22,3	64,6	60	44,1
United States	0,3	0	0,2	2	1,8	1,5

Continuation of the table 5

1	2	3	4	5	6	7
Belgium	0,2	0	0	0,3	1,1	0,9
Germany	0	0	0	0,3	0,9	0,9
UAE	0,4	0,6	1	0,9	0,7	0,3
Qatar	0	0	0	0,7	0,5	0,5
Ghana	0	1,4	0	0	0,4	0,4
Cyprus	0	0	0	0	0,3	0,3
Croatia	0	0	0	0	0,3	0,3
Other countries	6,5	10,3	0,5	2,3	1,8	-4,7

Note – Own development based on international trade data ITC Trade Map

Vietnam is the clear leader among cashew nut importing countries, showing significant growth in imports of the product over the period 2019-2023: cashew nut (in shell) imports grew until 2021 (by 132 %), followed by a slight decline in 2022 and a recovery by 2023. The second major importer of cashew nuts (in shell) was India: a jump occurred in 2022 (by \$49 mn), associated with increased domestic demand. A slight increase in imports was followed by the US, Belgium and Germany. UAE, Qatar, Ghana, Cyprus, Croatia, and the UAE. The largest increase in the cashew nuts production value index (in shell) with respect to the countries under consideration belongs to Germany with 351 %, while the specific value of cashew nuts is attributed to the UAE (147 %).

Regarding the export of shelled cashews, the top 10 importing countries for 2023 included: Vietnam (\$108.7 mn), India (\$12.6 mn), US (\$4.8 mn), the Netherlands (\$3.5 mn), Germany (\$2.7 mn), the United Kingdom of Great Britain and Northern Ireland (\$1.4 mn), Italy (\$1.3 mn), Canada (\$1.3 mn), Belgium (\$1 mn), UAE (\$0.8 mn). The largest increase in the value index of cashew nuts (shelled) in relation to the countries under consideration belongs to Vietnam – 497 %, and the specific – to Italy (\$127 mn) [10].

India was the clear leader among soya bean importers over the period 2019–2022, with a growth of nearly 235.6 times. A sudden spike in 2022 and continued growth in 2023 indicates strong sustained demand. The second position with an impressive increase from no imports to \$84.8 mn in 2023 was shown by Pakistan, due to increasing demand for soya products. Although India and Pakistan occupy the key positions with the most significant volumes and growth, but potential destinations for Nigeria's soya bean exports could be France, Turkey and Nepal, which have shown prospects for increased supply.

Table 6 – Commodity structure of imports of goods by Nigeria in 2006–2023, %

Year	Agricultural products	Mineral products	Chemical products	Wood	Light industry products	Base metals	Machinery, equipment and vehicles	Other Products
2006	18,4	4,4	17,6	3,3	0,6	10,9	42,8	1,9
2007	21,0	3,6	17,8	3,2	3,2	13,7	35,7	1,8
2008	10,2	3,5	14,4	2,8	5,6	12,4	47,8	3,4
2009	12,3	2,3	16,4	2,8	2,2	10,5	49,7	3,8
2010	10,6	2,7	14,5	3,2	3,4	9,0	52,1	4,6
2011	32,6	10,7	11,8	2,0	1,6	6,1	32,4	2,7
2012	23,2	3,2	13,7	2,6	1,9	9,2	43,6	2,7
2013	18,1	20,7	16,2	2,2	1,7	7,9	30,7	2,5
2014	17,5	16,9	13,9	2,4	1,8	9,2	36,0	2,4
2015	17,4	19,0	14,3	2,5	1,8	8,6	33,9	2,4
2016	13,8	29,1	13,6	2,0	1,8	5,5	32,5	1,7
2017	16,9	30,4	15,1	2,3	1,9	5,5	26,7	1,2
2018	11,3	30,2	12,1	1,8	1,5	4,9	37,2	0,9
2019	10,4	16,0	12,3	3,1	1,5	4,6	47,8	4,2
2020	15,2	15,8	18,6	2,7	1,9	5,2	39,0	1,6
2021	14,7	31,5	14,2	1,9	1,5	5,1	29,7	1,5
2022	11,7	40,0	12,2	2,0	1,5	3,6	25,2	3,8
2023	10,9	33,9	8,8	2,1	1,0	2,5	36,5	4,3

Note – In-house development based on the commodity classification of the Unified CN of FEA of the EAEU and ITC Trade Map international trade data

During 2006–2023 (excluding 2011, 2017, 2021–2022), machinery, equipment and vehicles accounted for the major share of Nigeria's imports. The share of this group of goods was 38 % on average over 2006–2023, with the maximum share reached in 2010 at 52.1 %. Mineral products accounted for about a third of Nigerian purchases since 2017, and their share has undergone the most significant change since 2006, increasing by 13 %. Chemical products accounted for just over a tenth of total Nigerian imports, with an average share of 14.3 %. The share of agricultural products in Nigeria's total imports ranged from 10.2 % (2008) to 32.6 % (2011); base metals just over 7 %. Wood, light industrial products, and products not included in certain groups occupied a very small share, about 3 %, in Nigeria's import purchases: specific weights of 2.5 %; 2.6 %; and 2 %.

Let us analyse Nigeria's imports of the most significant agricultural products for 2019–2023.

Table 7 – List of top agricultural commodity items of Nigerian imports for 2019–2023, mn USD

Product	2019	2020	2021	2022	2023	2023 to 2019, (+/-)
Durum wheat	657	1946,5	2707,7	2225,5	1990,5	1333,5
Cane sugar	463,4	703,2	901,7	844,5	981,1	517,7
Frozen fish	612,9	837,4	708,9	678,3	565,1	-47,8
Malt	90,2	123,4	135,1	117,2	164,1	73,9

Note – Own development based on international trade data ITC Trade Map

Durum wheat shows a sharp increase in agricultural imports (202.9 %), which is certainly attributed to the increased demand for the product in Nigeria. The steady increase in import volumes of cane sugar (111.7 %) and malt (81.9 %) indicates the continued importance of these products in the market. The decrease in the value of frozen fish (7.8 %) shows a slight decline due to prevailing prices in the world market.

Table 8 – Top 10 durum wheat exporting countries to Nigeria, 2019–2023 (USD mn)

Country	2019	2020	2021	2022	2023	2023 to 2019, (+/-)
Poland	-	11,9	_	156,3	430,9	430,9
Latvia	59,2	275,1	270,8	288,9	414	354,8
Canada	135,1	344,5	366,9	213,1	390,3	255,2
Lithuania	-	302,6	402,9	400	278,7	278,7
Russian Federation	135,8	368,3	280,5	68,9	221,5	85,7
United States	258	471,8	558,1	605,4	193,2	-64,8
Brazil	_	_	_	_	28,4	28,4
France	_	11,8	11	3,9	23,4	23,4
Mexico	_	_	4,6	24	7,4	7,4
Estonia	_	_	63,8	61	2,8	2,8
Other countries	68,9	160,5	749,1	404	-0,1	-69

Note - Own development based on international trade data ITC Trade Map.

Poland, Lithuania, Brazil, France, Mexico and Estonia were initially inactive in supplying durum wheat to the Nigerian market, but this has changed since 2020. Latvia showed a significant increase of 599,7 %. Canada showed a moderate increase of 188,9 %. Being in a difficult environment for commodity exports, the Russian Federation also showed steady growth (+63.1 %). In 2021, Ukraine provided the largest increase in value (\$495,2 mn), while in 2022, only \$6.2 mn.

Brazil is the dominant exporter of cane sugar to Nigeria, increasing in value by 113,5 % (\$520,9 mn) over 2019–2023.

Table 9 – Top 10 countries exporting frozen fish to Nigeria, 2019–2023 (USD mn)

Country	2019	2020	2021	2022	2023	2023 to 2019, (+/-)
Chile	79,6	92,9	108,3	127,0	141,9	62,3
Netherlands	154,2	224,1	160,3	141,9	102,4	-51,9
Faroe islands	33,7	33,1	35,1	36,5	75,0	41,3
Ireland	15,7	37,4	33,5	35,8	52,3	36,6
Republic of Korea	17,7	9,6	4,9	21,0	33,2	15,5
Russian Federation	97,6	175,9	201,7	164,9	27,8	-69,8
China	11,1	12,7	5,6	5,4	19,3	8,2
Norway	11,2	49,7	17,7	27,7	15,5	4,3
Mauritania	56,5	48,6	50,5	28,2	13,1	-43,4
Germany	11,9	10,4	4,9	9,1	9,9	-2,0
Other countries	123,6	142,9	86,4	80,7	74,5	-49,1

Note – Own development based on international trade data ITC Trade Map

An analysis of the value of frozen fish exports to Nigeria for 2019–2023 shows that Ireland (233.1 %), Faroe Islands (122.6 %) and Republic of Korea (87.6 %) recorded the highest growth. Countries actively developed exports, adapting to market needs. Chile steadily increased its exports, in contrast to the explosive growth of Ireland and the Faroe Islands. The Netherlands experienced a significant decline due to competition from the Russian Federation and Chile. German shipments were stable, with a five-year decline of only 16.8 %. Major suppliers of frozen fish increased their market share, pushing other countries back by 39.8 %.

New entrants to the malt market in Nigeria Latvia, Lithuania and, especially, the Russian Federation, although slightly squeezed by 2019–2023. Belgium (up 47.8 %) and France (up 7.1 %), but the latter managed to remain at the top of the market.

Conclusion. Nigeria's economy remains highly dependent on mineral resources, particularly oil and natural gas, which makes it vulnerable to external price fluctuations. More than 80 % of the country's budget is formed by the oil and gas sector. Although there is a gradual increase in the share of agricultural products in exports, this sector has not yet become a key driver of growth. Temporary surges in the export of chemical products and equipment indicate attempts at diversification, which require additional investment and government support. Nigeria's imports are primarily focused on machinery and equipment. Fluctuations in the share of mineral and chemical products highlight the country's dependence on global economic factors. The decline

in agricultural imports may indicate strengthening domestic agricultural production.

Belarusian tractors have enjoyed steady demand in Nigeria since the 1980s. Efforts should continue to establish service centers, spare parts warehouses, and assembly facilities within Nigeria. Expanding deliveries and localizing the production of Belarusian trucks will enhance their appeal in the construction and logistics sectors. Belarus can offer Nigeria cooperation in the fields of vocational education, agricultural technologies, and scientific research.

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