Impediments to the development of Nigeria's agricultural exports

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Abstract. Until the 1960s, Nigeria exported many types of agricultural products: peanuts, peanut butter, cocoa beans, rubber, palm oil. The main cash crop was cocoa. However, as a result of neglecting the agricultural sector and focusing on the oil sector, Nigeria has turned from an exporter of agricultural products into a major food importer. The country continues to export cocoa, oil seeds and fruits, tobacco, animal skins, fruits and nuts, and agricultural products have been occupying the second place in export earnings after petroleum products throughout the years. However, the share of these goods in the total exports is insignificant. The successive Nigerian governments tried to launch their own programs for the development of agricultural production, the implementation of which would diversify exports. Over the past 50 years, this objective has not been met: 96% of export revenues still come from the sale of petroleum products. The author of the paper makes an attempt to identify factors that impede the stable development of the production of agricultural products for export. The identification of these factors should allow us to understand why the country has failed to diversify its export revenues by increasing the share of agricultural goods intended for export.

1. Introduction
Until the 1960s, Nigeria was not only the world's leading exporter of peanuts and peanut butter, palm kernel nuts and palm oil, but also provided sufficient food to its population. This trend changed in the 1970s due to the discovery of oil, after which the effective development of agriculture stopped. As a result of the transformation of Nigeria by the end of the 1980s from an exporter of agricultural products into their major importer, the agricultural sector fell into decay. The decline in the production of the main food crops – kassawa, yam and cocoyam – led to the onset of the food crisis. Exports of agricultural products, except for cocoa beans, have virtually stopped. The country's food needs were less than half satisfied, and food prices were skyrocketing. Rice, corn, wheat and wheat flour, meat, fish, milk and dairy products were imported every year. Between 1976 and 1987, food imports in value terms grew 5.75 times (from 400 million to 2.3 billion naira, or from 640 million to 690 million dollars) [1].
Most export-oriented agricultural holdings closed their business. Crops such as peanuts, cocoa beans, rubber, palm oil and cotton traditionally formed the basis of Nigerian non-oil exports, but at present only cocoa beans, a small amount of cotton, animal skins, palm oils and natural rubber are exported. For certain types of products (rice, wheat, sugar, fish), the country moved into the state of sustainable food dependence, in fact turning into a net importer of food.
All civilian governments of Nigeria tried to launch their own agricultural production growth programs (The National Accelerated Food Production Program (NAFPP) in 1973, Agricultural...
Development Projects in 1974, Operation Feed the Nation in 1976, Green revolution program in 1980, Directorate for Food Roads and Rural Infrastructure (DFRRI) in 1986, Family Economic Advancement Program (FEAP) in 1994, National Economic Empowerment and Development Strategy (NEEDS) in 1999, National, Special Program on Food Security (NSPFS) in 2002, etc.), which aimed at accelerating the growth of agricultural production and diversifying the country's exports. Yet all of these initiatives have failed. As a result, almost all available monetary and financial resources began to flow into the production and export of hydrocarbons. This has become one of the main obstacles to the integrated development of the Nigerian economy. Due to the volatility of world oil prices, the Nigerian economy has been experiencing recurrent ups and downs (figure 1).

![Figure 1. Nigeria's GDP and the price of oil.](image)

The domination of exports by several commodities may raise economic and political risks. Economic risks, first of all, include volatility and instability in terms of inflows of foreign currency, which lead to macroeconomic implications such as reduced economic growth, higher unemployment, inflation, capital outflows, insufficient foreign investment, etc. Political risks include reduced governance efficiency at the state level, escalation of conflicts, etc [2]. Export diversification should be aimed at mitigating these risks.

2. Results and discussion
Nigeria currently exports mainly hydrocarbons (96% of all exports in 2018). The largest importer of oil and mineral fuel (98% of all India’s imports come from Nigeria) is India. Despite Nigeria’s intentions to diversify its exports, they remain monocultural. The attempts by the government to revive the export of traditional crops have not yet had significant results. In addition to petroleum products, Nigeria's main export commodities are cocoa beans (0.9%), oilseeds and seeds (0.3%), tobacco (0.3%), hides and leather raw materials (0.2%) [3].

Today, agricultural products are the second largest source of foreign exchange earnings after crude oil; in 2001-2017, the average value of agricultural exports amounted to 3.4% of the total exports ($3 billion). However, in 2012 its value reached $16.5 billion, or 14.5% of the total exports, mainly due to the rise in exports of cocoa beans, which amounted to $3.8 billion, or 22.9% of the total agricultural exports [4]. Special attention should be paid to certain agricultural products that are most significant for Nigerian exports.

The leading role in the export of agricultural products belongs to cocoa. More than 2 million people are engaged in its production chain. In 2015-2016, Nigeria stood among the ten largest cocoa bean producers in the world (after Côte d'Ivoire, Ghana, Indonesia, Ecuador and Cameroon) [5]. In the 1970s...
and 1980s, the rapidly growing extractive sector required the injection of almost all available investments, so the cocoa industry was no longer supported, although such support was planned for throughout the post-colonial period in each of the adopted agricultural development programs. Nigeria was the first African country to liberalize cocoa trade in 1986, and this has reduced the allocation of agricultural resources to this sector, as well as the quality of cocoa beans.

Between 1961 and 2016, the territory for cocoa tree cultivation expanded, but the share of cocoa in exports decreased from 2.65% in 2012 to 0.92% in 2016 [6]. Many countries (Netherlands, the US, Indonesia, the UK, China, Russia, etc.) express interest in importing cocoa from Nigeria, however, due attention is not paid to the cultivation of this crop: there is not a single balanced program for the development of the cocoa sector. Among the key factors responsible for the low level of cocoa production, one should highlight the harm caused by insect pests, the lack of herbicides to combat them and the low level of mechanization. FAO experts who examined cocoa production in Nigeria identified another important factor – tree aging [7]. At the time of the study in 2013, the age of more than 60% of cocoa trees exceeded 40 years; accordingly, they had low yields. In Nigeria, cocoa yield is one of the lowest compared to other African producers. The impossibility of expanding production is also associated with a shortage of labor: the process of growing cocoa is very labor intensive, labor is poorly mechanized, income from sales is extremely low, so young people are not willing to participate in these processes [8].

The second most important export product is oil palm fruit. Until the 1980s, the production and export of oil palm fruits in Nigeria ranged from 15% to 20% of total exports. In 2006-2017 their share averaged only 11.2% of all agricultural exports. The peak of sales was observed in 2013, when the amount of export revenue reached $879 million, but by 2017 it fell to $180 million. The country annually produces about 1 million tons of palm oil and occupies the 5th place in the world by this indicator after Indonesia (41 million tons), Malaysia (39.5), Thailand (2.9) and Colombia (1.5) [9]. In the postcolonial period, the internal use of palm oil as the main source of vegetable fats and raw materials for light industry (the production of soaps and perfumes) has increased dramatically; Nigeria has evolved from an exporter to an importer of palm oil. About 1.6 million ha are occupied by oil palm tree (mainly natural groves) [6].

In 2006-2017, the revenue from tobacco exports grew rapidly: from $0.9 million in 2006 to $102.4 million in 2017. Tobacco is mostly sold to ECOWAS member countries ($91.6 million). The largest importers of the product in 2017 were Niger ($26.9 million), Côte d'Ivoire ($24.5 million), Guinea ($9.8 million), Cameroon ($8.4 million) and Ghana ($7.5 million) [4]. However, a negative trend was also observed: the gross harvest decreased from 15 thousand tons in 1970 to 6 thousand tons in 2017 [6].

The export of animal skins (cattle, sheep and goats) is also of considerable economic importance. For example, in 2018, Spain became the largest importer of Nigerian raw leather materials (0.97% of Spanish imports). On average, animal skins constituted about 21.8% of Nigeria's total agricultural exports. While the peak in sales volume was achieved in 2010 ($3 billion), the export of leather materials then decreased and in 2017 amounted to just $67.9 million. The fall in the volume of export of this product was partly influenced by the expansion of Nigeria's national shoemaking sector, accompanied by the increased consumption of domestic leather. In addition, underdeveloped veterinary services cannot prevent periodic outbreaks of animal diseases, which reduce the number of animal heads.

The share of fruits and nuts has gradually been growing in the structure of Nigerian exports. In 2006, they accounted for only 3.9% ($9 million) of all agricultural exports, but by 2017 their share was already 8.3% ($32 million). The most important in the group of nuts is peanuts, in the production of which until 1969 Nigeria occupied the 3rd place in the world, after India and China. In 1961, 1.4 million hectares were occupied by peanuts, and in 2018 the area under this crop almost doubled – to 2.7 million hectares. In 1961, peanut production reached 1.5 million tons, in 2016 – 3 million tons, i.e. doubled.

The areas under export crops, except for tobacco, have increased, but this does not equal an increase in the efficiency of their production. Almost all crops cultivated in Nigeria have low yields due to insufficient mechanization of labor, the use of outdated technologies, poor-quality seed material, etc. Therefore, areas under crops are expanded to increase the volume of production. The same situation is
observed in animal husbandry: cattle migrate, not having enough food and water in one location, and spend their energy on moving. From generation to generation, herders raise the same cattle breeds, which have low milk and meat productivity.

3. Conclusions
Nigeria is in dire need of export diversification: its one-sided focus leads to the inappropriate use of natural resources, hinders the development of the nation's own manufacturing industry, and keeps the country dependent on external economic factors, e.g. price fluctuations of the main export product. Non-diversified export leads to a disproportionate development of the economy and makes it necessary to satisfy a significant share of the needs of the population through imports.

In the 1970s, the shift in the attention of the Nigerian government from the agricultural sector to the oil sector dramatically weakened the country's agriculture. In terms of Nigeria's exports, the share of agricultural products declined significantly, while the share of petroleum products increased. Due to fluctuations in oil prices, the need has arisen to diversify the country's exports and reinstate the situation when agricultural goods prevailed in Nigeria's exports. The past agricultural policies failed to introduce necessary changes in the structure of exports.

A country's dependence on a particular primary good — in Nigeria's case, on hydrocarbons — jeopardizes the stability of its economy, while a diversified export basket can mitigate export earnings volatility and contribute to the country's overall economic growth. Nigeria has prospects for the development of agriculture to increase production for export: there is uncultivated agricultural land, and grown products are in demand both on the domestic and foreign markets.

The cocoa industry is Nigeria's second largest source of foreign exchange earnings after crude oil; more than 2 million people are employed throughout the value chain. Nigeria maintains its position as one of the largest cocoa bean producers in the world, but the production of this crop is not given due attention. At the moment, in Nigeria there is not a single document that would regulate the development of the cocoa sector in the country. Neither the established Cocoa Association of Nigeria (CAN), which was created to meet the needs of farmers, stakeholders, partners for sustainable development of the sector, nor Nigeria's entry into the International Cocoa Organization (ICCO) on October 10, 2018 as a major producer of this product, nor the holding of the First Nigerian International Cocoa Summit in August 2017 have changed the situation.

Nigeria can play a leading role in the production of cocoa in Africa, but in order to achieve this it is necessary to develop a phased plan for the revival of the industry, indicating specific activities and funding sources. The development of the industry will be facilitated by the involvement of youth into the agricultural workforce, the strengthening and support of the Cocoa Research Institute in Nigeria, the introduction of international best practices and the use of innovations and technologies for the development of the cocoa sector. Consistent and thorough development of programs to increase other types of exported goods is also needed.

The Government of Nigeria should pay particular attention to the development of agricultural legislation that will take into account the mistakes of previous agricultural development programs. It is imperative to involve farmers, pastoralists, agricultural scientists and other specialists to develop a feasible and comprehensive program.

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