



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# Intraregional Trade in West Africa

Mary E. Burfisher and Margaret B. Missiaen<sup>1</sup>

**Abstract:** Interest in intraregional trade within West Africa has been stimulated by debate on its potential to support broad economic growth and to enhance food security. This paper documents intraregional trade during 1970-82 among 18 West African countries, including estimated unrecorded trade. Analysis of trends in the size, composition, and flow of this trade indicate its continued importance and its vitality, as it changed rapidly in response to changing regional market conditions. Policies to promote intraregional trade need to consider product choice carefully. Efforts to achieve food security are not promising, since little complementarity exists in grain production. Some important sectors (in particular, cattle) cannot easily expand output. New industries, such as Ivorian processed foods, have the potential to achieve economies of scale and to supplant non-African suppliers due to lower transport costs. In general, any efforts to exploit the identifiable benefits of intraregional trade need to deal with the existing barriers to this trade, including tariff barriers, weak regional institutions, and nonconvertible currencies.

## Introduction

Interest in intraregional trade within West Africa has been stimulated by debate on the potential for trade among LDCs to meet various political and economic objectives. Such trade may be more effective than world trade in general in stimulating broad economic growth. Trade among LDCs can be beneficial because: a wider array of export markets can help a developing country's comparative advantage evolve; product demand may be similar among the trading countries so that small countries can achieve economies of scale; export markets and products can be diversified; and alternative export markets among LDCs can be developed as economic growth and import demand in developed countries slows down (Belassa, 1979; Lewis, 1980; and Linder, 1961). Increased trade among LDCs is politically desirable, as evidenced by its prominence among the objectives of many regional groupings of LDCs, including the Economic Community of West African States (ECOWAS). Finally, intra-LDC trade has been explored as a means for achieving food security within regional groupings of LDCs (Koester, 1986).

Assessing the potential of West African trade to meet these objectives has been hampered by the sketchiness of information on trade patterns within the region. One purpose of this paper is to document intraregional trade during 1970-82 among the 18 developing countries of West Africa. Unrecorded trade, which accounts for about 40 percent of intraregional trade, is also estimated. Trends in the size of this trade and in its composition and flow, which changed rapidly during this period in response to changing supply and demand conditions in the region, are analyzed. Whether West African governments can or should direct policy towards promotion of intraregional trade is considered in the "Conclusions" section below.

## Recorded and Unrecorded Intraregional Trade

A study of West African intraregional trade immediately confronts the problem of how to document it accurately, because a sizeable proportion is unrecorded by customs. Unrecorded trade is partly composed of smuggled, underinvoiced, and overinvoiced goods. But, in West Africa, it also results from the traditional nature of production and marketing systems for some of the region's most important traded commodities, notably live cattle. The limited administrative and statistical capabilities of some countries also result in poor or unavailable trade data.

Most of this study is based on officially recorded trade, using exporter data from UN trade tapes, supplemented with country trade statistics and various issues of FAO's *Trade Yearbook*. Two methods were used to estimate unrecorded trade. One source of information was *L'Économie Ouest Africaine*, published by the Banque Centrale des États de l'Afrique de l'Ouest (BCEAO), the central bank serving the monetary union among seven West African states and France. The BCEAO estimates unrecorded trade within the

BCEAO community based on assessments and, if necessary, a revaluation of officially reported export unit prices. The BCEAO also reconciles customs trade data with the distribution of Communauté Financière Africaine (CFA) currency within member countries. All CFA notes are tagged with member-country designations. For example, foreign CFA notes in circulation in excess of the amount reasonably warranted by official trade statistics would cause the BCEAO to revise upwards its estimates of that member's exports to other BCEAO countries (Haggblade, 1984).

A second basis for estimating unrecorded trade is to examine country trade data discrepancies between exporters and importers. The difference between the value of trade as reported by exporters and importers can occur for many reasons, but such a discrepancy is widely viewed as indicating illegal trade (e.g., Bhagwati, 1974).

Estimates of unrecorded trade cover only 10 of the 18 countries in West Africa. These countries, however, accounted for 95 percent of the recorded trade within the region during 1970-80. Some countries have an especially high proportion of unrecorded trade. For example, Benin's unrecorded exports accounted for nearly 80 percent of its total exports in the late 1970s. In contrast, unrecorded trade accounted for an average of only four percent of Ivory Coast's exports.

Intraregional trade among these West African countries was valued at \$1,600 million in 1981, a more than sevenfold increase in nominal value since 1970. Unrecorded trade accounted for an average of 40 percent of the intraregional trade during 1970-82 and was valued at nearly \$500 million annually in recent years (Table 1).

Table 1—Unrecorded and Recorded Regional Trade of Major West African Countries\*

Year	Unrecorded Trade					Total Recorded Trade	Total Trade	Share of Trade Unrecorded
	Mali	Cameroon	Ghana	BCEAO†	Nigeria			
	\$1,000							Percent
1970	1,402	54	3,603	86,355	10,369	102,183	214,113	48
1971	1,780	153	2,559	128,820	12,678	145,990	288,218	51
1972	78	2,497	2,735	135,405	20,373	161,088	335,889	48
1973	5,369	624	3,712	140,118	18,240	168,063	397,133	42
1974	4,218	1,738	3,363	202,709	21,489	233,517	651,864	36
1975	1,449	846	2,174	268,200	21,447	294,116	849,944	35
1976	80	6,204	4,973	304,009	2,973	318,239	807,614	39
1977	17	3,121	7,365	506,329	11,924	528,756	1,211,556	44
1978	2,069	2,663	10,679	434,960	39,105	489,476	1,157,419	42
1979	—	10,006	6,906	472,800	53,481	543,193	1,299,398	42
1980	2,996	17,945	10,365	252,423	49,057	332,786	1,601,446	21
1981	—	—	8,652	446,160	72,973	527,785	1,641,524	32
1982	—	—	2,815	410,246	13,785	426,846	1,215,372	35

\*Includes Benin, Burkina Faso, Cameroon, Ghana, Mali, Niger, Nigeria, Senegal, and Togo, accounting for 95 percent of regional trade during 1970-80.

†BCEAO members are Benin, Burkina Faso, Ivory Coast, Niger, Senegal, and Togo. Mali became a full member in 1984.

— = not available.

Sources: BCEAO and UN trade tapes.

## Major Intraregional Traders

Based on recorded trade data, intraregional trade is concentrated among less than half of the countries and became more concentrated during 1970-82. Nigeria, Ivory Coast, and Senegal are by far the top exporters in the region, accounting for about 50 percent of recorded intraregional exports in the early 1970s and 75 percent by the late 1970s. The livestock-exporting countries of Mali, Niger, and Burkina Faso also accounted for a large proportion of recorded intraregional trade. Togo held a brief role as a major exporter to other West African countries in the late 1970s when projects in its industrial development programme began production; by the early 1980s, many of Togo's projects had proved

inefficient and began to fail. The leading regional exporters are also the region's major importers, for the most part.

### **Agricultural Trade**

The region's five major agricultural exporters (Mali, Niger, Ivory Coast, Burkina Faso, and Senegal) accounted for about 90 percent of recorded intraregional agricultural trade during the 1970s. Burkina Faso, Mali, and Niger depended heavily on live cattle exports to the more affluent coastal countries. Ivory Coast and Senegal supplied a variety of agricultural products, including processed agricultural items, to a number of countries in the region. Ivory Coast, the region's leading agricultural exporter during most of the study period, doubled its market share from 15 percent to 30 percent during the 1970s. In the early 1970s, cola nuts and coffee accounted for 75 percent of its agricultural exports. Expansion of its market share was based on development of its agricultural processing industries, which enabled it to meet regional demand for food products such as bread, pasta, instant coffee, and dried soup. Ivory Coast replaced European or other suppliers for these products.

Ivory Coast's market expansion also rested on increased regional demand for its palm oil, as neighbouring countries changed from being exporters to importers of vegetable oil. In addition, Ivorian palm oil benefited from the region's substitution of more expensive oils, such as Senegal's groundnut oil, for cheaper palm oil.

Like Ivory Coast, Senegal has traditionally exported processed agricultural goods to other West African countries, but its share of intraregional agricultural trade declined slightly during 1970-82. In the early 1970s, its most valuable agricultural exports to neighbouring countries were cigarettes, groundnut oil, and wheat flour. Cigarette exports declined in importance, and wheat flour exports became insignificant as most West African countries built their own flour mills. Senegal's groundnut oil exports became uncompetitive with Ivorian palm oil exports to the region. As with Ivory Coast, Senegal's agricultural exports to the region became more diversified by the 1980s, to include animal feedstuffs, groundnut oil, fruits and vegetables, and cereal preparations (mostly pasta and bakery products).

### **Commodity Composition of Intraregional Trade**

The role of agricultural commodities in intraregional trade fell sharply in the early 1970s, from 45 percent in 1970 to 22 percent in 1974. It remained at about 20 percent up to 1979 before declining slightly again in 1980-82. That trend is mostly explained by developments in the world petroleum market. Petroleum is the leading nonagricultural commodity in intraregional trade. Nigeria and Cameroon are producers and regional exporters of crude petroleum. Several West African coastal countries refine imported crude for reexport to neighbouring countries. The increase in quantity and unit price of intraregional trade in petroleum caused the relative importance of all other intraregionally traded commodities to decline. In absolute terms, intraregional agricultural trade performed well in West Africa during 1970-81. West Africa's intraregional trade grew faster than its trade with the rest of the world throughout 1970-81. Annual growth in intraregional exports during 1970-75 was only slightly higher than growth in West Africa's other markets, but, when Nigeria is excluded, the annual growth rate of West Africa's intraregional trade was 21 percent, nearly double the growth rate of West Africa's other trade. West Africa's export growth in both markets began to slow during 1976-81, but intraregional trade retained its edge.

## Intraregional Livestock Trade

Livestock is the highest valued agricultural commodity in intraregional trade. In terms of cattle trade, West Africa can be characterized as an insular region, within which two groups exist. The Sahelian countries are the major producers and exporters, primarily because their vast land areas are marginal or unsuitable for crop production and because of the absence of the tsetse fly. The southward flow of cattle from the Sahel states is accounted for by the generally higher incomes in coastal countries.

Two factors have been particularly important in accounting for changed cattle trade patterns during 1970-82: drought and changing economic conditions, which shifted the distribution of import demand among the coastal consumption points. In addition, national policies (such as changes in export and import taxes) caused some apparent change in trade patterns as trade shifted between legal and illegal markets.

One way that prolonged drought has affected supply patterns is by causing changes in the areas suitable for traditional livestock rearing. In Mauritania, for example, export availability has fallen as meat production has declined. A second consequence of regional drought has been its effect in opening up the formerly secure Sahelian export markets to non-African suppliers. Volatile prices and disruption of Sahelian meat supplies to the coastal states following the 1973 drought prompted them to find new suppliers from outside the region and induced the development of infrastructure to handle chilled and frozen meat imports from Latin America and Europe. Despite the recovery of Sahelian meat exports, their market position is now more affected by their price competitiveness with non-African suppliers.

The most notable change in intraregional trade flows is the shift away from Ghana and towards Ivory Coast and Nigeria. Because its economy began to flounder and trade barriers were erected, Ghana's cattle imports were by 1984 only 2 percent of the 1970 level. Increased cattle imports by Ivory Coast reflect its relative prosperity within the region. However, since the 1973 Sahel drought, not much of its increased meat demand has been met from within the region. In 1970, live cattle imports, mainly from the Sahel, provided 84 percent of its beef supply. Imports from Europe and Latin America accounted for only about 3 percent of beef intake but jumped to 38 percent by 1976. In 1981, Ivory Coast imported prepared meats valued at \$25 million, mainly from France, other EC members and Argentina. This dwarfed its Sahelian live animal imports, valued at \$81,000.

Growth in Nigerian cattle imports during 1970-80 was driven by boom conditions in its economy, which raised the demand for meat. Unlike Ivory Coast, however, Nigerian meat import requirements were met mainly by Sahelian suppliers.

## Intraregional Grain Trade

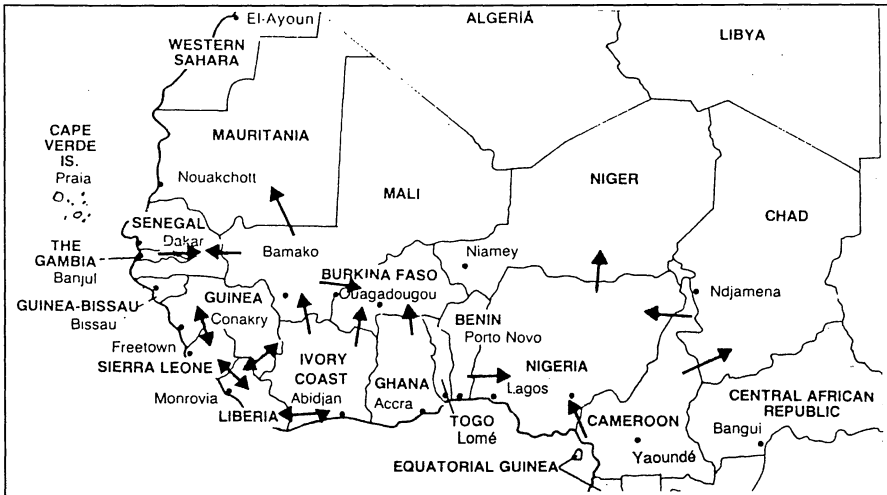
Recorded intraregional trade in maize, rice, and sorghum among the West African countries more than quadrupled to 18,000 tons during 1970-82. Nevertheless, it remained less than 1 percent of total imports of these commodities, which more than tripled to 2.6 million tons during the same period.

Although several West African countries exported small quantities of grain during the 1970s, all countries are net importers. A few countries are self-sufficient in a commodity and can export the surplus. These exports, however, are often financed by donors and not by the importing countries. Complementarity is difficult to achieve, since most of these countries are affected by drought in the same year. Rice is by far the most important imported grain in West Africa. Even though many West African countries produce rice, their high production costs make their rice noncompetitive with Asian suppliers.

Inefficient transport systems also increase West African grain prices. Transport networks are poorly developed and not set up to move grain from surplus to deficit regions. Also, most roads connect with ports, restricting grain movement in other directions.

Most West African countries attempt to restrict food exports to keep available supplies within the country. Information on production, stocks, and trade is so poor that most governments have no way of knowing whether domestic supplies are adequate. Differing tariff structures, quantitative import restrictions, and exchange controls discourage official transactions but may encourage unrecorded trade. Imports from suppliers outside the region are easier to arrange because of traditional ties and reliability of supplies.

Estimates of unrecorded grain trade do not exist. Grain is expected to move to high priced, hard currency countries from lower priced, soft currency countries. The situation is, however, much more complicated (see Map 1, below, where the arrows show grain movement under normal conditions). In the 1970s, despite a weak Ghanaian currency, little grain was sold in neighbouring countries because of high food prices in Ghana. Southern Nigeria imported rice and maize from Benin and Cameroon, while northern Nigeria exported sorghum to Niger. The Nigerian nairas earned in these exchanges were then used to purchase imported consumer goods and petroleum products that were subsidized by the overvalued naira.



Map 1—Direction of Grain Flows among West African Countries

An analysis of producer grain prices converted to dollars at both the official and unofficial exchange rates gives an indication of the direction of grain flows. Even though sorghum prices were relatively high in Nigeria, converting sorghum prices to dollars at unofficial rates brings the prices below those in Niger in most years, helping to explain Nigerian sorghum exports to Niger. In the early 1980s, the high producer price for rice in Liberia combined with the attractiveness of its currency pegged to the US dollar, generated an inflow of rice from neighbouring Sierra Leone and Guinea and created severe financial problems for Liberia's swamped cereal purchasing agency.

Other agricultural commodities that are presently traded within the region, and which hold potential for expanded trade, are palm oil, raw cotton, and cotton textiles. Most countries in the region import palm oil. West African producers should be able to compete with other palm oil suppliers to the regional market because of lower transport costs, although production and processing costs tend to be higher.

Intraregional trade in textile yarn and fabric showed a growing complementarity among some West African countries. In particular, Ivory Coast's textile production is based on imported cotton yarns from Burkina Faso, Nigeria, and Senegal. In turn, Ivory Coast exports fabrics and other textile goods to Mali, Benin, Niger, Senegal, and Togo. Further

development of the textile industry within the region is inhibited by the high producer prices for cotton, which increase the costs of local inputs for textile mills.

## Conclusions

Trade among West African countries continues to be important, with recorded and unrecorded trade accounting for seven percent of their world exports in 1981. The favourable growth rate of West Africa's intraregional trade relative to other world trade is an indication that the intraregional trade can be an important economic stimulus. The changing composition and direction of intraregional agricultural trade during the study period show it to be quickly responsive to changing market conditions in West Africa.

Trade contributes to growth through its dynamic role in promoting the development and modernization of productive capacity. Policies may be used to promote intraregional trade as administrative capabilities are strengthened. However, policies to support regional trade need to consider product choice carefully. Changes in intraregional trade during the study period signal underlying changes in West African economies. Some existing sectors important in intraregional trade (in particular, cattle) cannot easily expand output. Other industries will require regional coordination to avoid many countries developing identical industries, such as textiles. New industries and products that satisfy regional tastes, such as Ivorian processed foods, have the potential to achieve economies of scale in the regional market and to underprice non-African suppliers due to lower transport costs. Efforts to achieve food security are not likely to meet with success since little complementarity exists in grain production and trade within the region—most countries are affected by drought in the same year.

If policies are actively to promote increased intraregional trade, attention must be given to identifying the sectors or industries in which intraregional trade could be most effectively exploited, looking, for example, at differences in the costs of production within West Africa, the magnitude of scale economies, the nature of product demand in regional markets versus world markets, and comparative transport costs. In general, any efforts to capitalize on the identifiable benefits of intraregional trade need to take account of the existing barriers to this trade due to tariff barriers, weak regional institutions, and divergent monetary policies that make currency convertibility difficult.

## Note

<sup>1</sup>Economic Research Service, US Department of Agriculture.

## References

- Belassa, B. (1979) "Changing Pattern of Comparative Advantage in Manufactured Goods," *Review of Economics and Statistics*, Vol. 61, No. 2, pp. 259-266.
- Bhagwati, J.N. (Ed.) (1974) *Illegal Transactions in International Trade*, North Holland, Amsterdam, Netherlands.
- Haggblade, S. (1984) "Overview of Food Security in Upper Volta," report prepared for USAID/Upper Volta.
- Koester, U. (1986) *Regional Cooperation to Improve Food Security in Southern and Eastern African Countries*, Research Report No. 53, International Food Policy Research Institute, Washington D.C., USA.
- Lewis, W.A. (1980) "Slowing Down of the Engine of Growth," *American Economic Review*, Vol. 70, No. 4, pp. 555-564.
- Linder, S.B. (1961) *Essay on Trade and Transformation*, Almqvist and Wikesell, Stockholm, Sweden.

## DISCUSSION OPENING—*Timothy J. Bembridge* (University of Fort Hare)

Intraregional trade is nearly always more important than "world trade in general." For example, EC and Canada-US trade are intraregional. Even the vast so-called "world trade" carried on in the newly industrialized countries in Southeast Asia is intraregional. Thus, the West Africa case is not unique.

Government policy should be restricted to encouraging cross-border trade by eliminating many of the artificial barriers to such trade. Many barriers were created in the postcolonial period and, with the exception of the market-oriented Ivory Coast, have discouraged economic development. Active government policy should be to provide information and promote a common market along the lines of the EC. A common currency could be an important foundation stone.

The authors are correct in emphasizing the unreliability of trade statistics. One only has to look at the errors and omissions in balance-of-payments statements in many countries. The paper provided an interesting method of estimating unrecorded trade data. However, the authors do not explain how trade data discrepancies relate to unrecorded trade. Exporters and importers are different economic agents, and any equality in values would be coincidental.

Figures on unrecorded trade for Benin and Ivory Coast are *prima facie* evidence of the free market of the latter country and the socialist policies of the former. When trade is unfettered and free, trade is recorded. It tends to go "underground" when tampered with by restrictions and/or higher taxes.

Nigeria, being the largest country in the region, is obviously going to be the largest exporter and importer, and its inclusion in any group of countries will substantially swell that group's trade figures. Any trade statistics of this nature should be on a ratio basis; e.g., exports as a percentage of GDP.

The low shares of recorded trade given in Table 1 are somewhat surprising. Clearly, no "value" or "currency" measurements are going to reveal bilateral or bartering deals.

The authors could have strengthened their interesting paper by including a discussion on the reasons for Ivory Coast's prosperous processing industries. They state that its market expansion was assisted by the demand for palm oil. Why didn't countries respond?

The authors have made a sound economic analysis of the composition of traded commodities. Whatever the disturbing implications for agriculture of that composition, I would point out that, if a poor country can sell oil and buy food, it may be economically better off. Kuwait is an example of this. Likewise, Japan imports food and sells high-technology products.

The section on livestock trade is a fascinating piece of applied economic theory. One major supplier dries up and new suppliers fill the vacuum. Can the Sahel recover those markets if conditions improve? As Ivory Coast's industries shift from primary to secondary production (processing), the relative affluence accompanying such change allows them to import such primary products as meat. Ghana's plight appears to be politically induced.

With regard to trade in grain, a commodity is not necessarily exported because of a surplus of that commodity. As with any transaction, more is gained from its sale than its value for internal consumption. The likelihood of a grain surplus in Africa is remote. The authors aptly describe the massive economic disruptions caused by government mismanagement and shifting practices. This situation is already well documented.

Policies to support regional trade should not be concerned with choice of products. The question arises as to who will make the choice. The track record of governments in West Africa in this regard is not a good one. The decision should rather be left to the people themselves. One has only to compare the history of cocoa production in Ivory Coast and Ghana, which clearly suggests the direction government policy should take. If we must have an active government policy, it should be directed at dismantling marketing boards, import licences, export controls, and other trade restrictions. In LDCs, according to some estimates, almost half of customs duties go into the hands of officials.



Finally, I do not believe one can plan the affairs of millions of heterogeneous individuals in a developing country context. One should rather get on with the task of assisting them to manage their own affairs by promoting unfettered free trade.

**GENERAL DISCUSSION—*Jacques Brossier, Rapporteur*** (Institut National de la Recherche Agronomique, Dijon)

The authors were asked if potential existed to increase intraregional trade. They replied that potential does exist, but the countries must reduce or eliminate customs barriers. During the drought, all the countries closed their frontiers. Also, the economies of the countries are not complementary.

One participant asked about the consequences of the end of the petrol boom in Nigeria. The authors replied that Nigeria has never been an agricultural exporter in West Africa, but, before and after the petrol boom, many commodities (e.g., sorghum and livestock) have been exported to Nigeria, where the prices are always the highest in the region.

A question was asked about how currency issues, including devaluations and the impact of the Communauté Financière Africaine, affected the countries in the region. The authors replied that the CFA countries should have more intracountry trade, but their economies are too similar. World prices probably have more of an impact on trade than currency devaluations in the region.

One participant commented that because the data were mainly in terms of volume, one could not see the influence of prices.

Participants in the discussion included S.K. Ehui, K. El-Kheshen, U. Koester, E. Tollens, and J.C. Wells.