

Global Marketing of Agricultural and Mineral Products, Pre-Requisite for Africa's Economic Development

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Abstract

The study was on global marketing of agricultural and mineral products for economic development of African countries. Export activities of the fifty-three member countries of the Continent, with particular focus on the five North African countries making up Arab Maghreb Union (AMU) were investigated. Relevant literatures, with theories, were explored to substantiate the study. Qualitative method of research was adopted using secondary data. Africa: intra-regional export trade statistics by countries were sourced; for 2006 to 2008. Measures of central tendency, dispersion, skewness and kurtosis; and the relationship in-between them were highlighted to bring out the required results needed from the study. Data were expressed in United State of America, (US\$) billion dollars. Findings revealed that Africa was so endowed with abundant natural resources, expanse of uncultivated fertile land, skilled and unskilled labour, water and unexplored mineral deposits. Products from agriculture and minerals are mostly for subsistence while the exportable ones are not being produced mechanically. It was recommended that Africa should move beyond international marketing as global marketing guarantees abundant production of quality products for exports, the regional economic communities should be united in their regional policies and programmes to foster specialization and optimal productivity of the representative country's products.

1. Introduction

Of the seven continents of the world, (Hirsch, (Jr), Kett, and Trefil (2002), Africa is so much endowed with natural resources (Alao, 2005). The colonial masters then found Africa, a place, where raw-materials and mineral deposits abound to cultivate and extract for further processing. As a result of African countries lacking modern technology and know-how, colonial masters and other foreign investors carted away the raw-materials, technologically processed them into finished goods, repackaged, and sent them back to African countries to sell at high prices (Awodun, 2007, Otokiti, 2007). Most of the fifty-five African countries, for now, are involved in international marketing as they export in raw forms only; the quantities of agricultural and mineral products they believe they could afford. However, hardly does the value of the exportable raw-materials pay for the required foreign goods and services that the exporting countries need (Jain and Mboma, 2007). Cateora and Graham (2005) claimed that the transition from international marketing to global marketing is catalyzed by a company's crossing the threshold of more than half its sales revenues coming from abroad. Hence, the first challenge of this study was that African countries' orientation towards global markets and associated planning activities rarely assisted the countries achieve economic development. Another challenge is the fact that most of them are more into international marketing rather than global marketing of these products, hence the economic development of the continent generally and the individual countries in particular is yet to advance. The objectives of this paper therefore are:

- (i) To illustrate why African countries should employ global marketing for their agricultural, and mineral products to penetrate international markets.
- (ii) To propose agricultural and mineral products for African countries' production specialization.
- (iii) To highlight the role of Regional Economic Communities in achieving desired volume production for export.

2. Review of Related Literature

Theodore, (1983) Kotabe, and Helsen, (2004), Kotler and Keller, (2006), Hughes, et al (2010) referred to global marketing as marketing activities that are coordinated and integrated across multiple country markets. The integration is said to involve standardized products, uniform packaging, identical brand names, synchronized products introduction,

similar advertising messages, or coordinated sales campaigns across markets in several countries (Johansson, 2003). At this stage, countries, regional economic communities and African Union need to treat the world, including the home markets as one. Cateora and Graham (2005) claimed that the transition from international marketing to global marketing is catalyzed by a company's crossing the threshold of more than half its sales revenue coming from abroad, however, ability to produce and export quality products demands that will achieve product-market advantage demands high-technology. Hughes, et al (2010) incidentally affirmed that international operations of business in global marketing reflect the heightened competitiveness brought about the globalization of markets, interdependence of the world's economies, and the growing number of countries with their products vying for the world's markets. Alao (2005) argued on why managers of agriculture products could not employ and engage strategic orientations at the planning, execution and monitoring stages of products development to ensure compliance with the global markets requirements. Also, Alao claimed that the sustainable development of non-timber forest products by Nigeria will enhance its economic rehabilitation.

Jain and Mboma (2007), Cayla, and Arnould (2009) asserted that for Africa to be emancipated economically, African countries must aspire at having very convincing representation at global market, concentrate on exportable products that will earn patronage and payments to support their economic programmes, and also satisfy local consumption back home. Nordhaus, (2002), Hodgson, (2007), Blaug, (2007) expressed that concepts of comparative advantage and specialization allow nations to concentrate their production resources in sectors where they are relatively more efficient, as this tends to encourage sectoral specialization nation by nation. Pendergast, and Pendergast (2008) gave analyses of the products exported between 2006 through 2008. In the context of undertaking global marketing of agricultural and mineral products, Pendergast, and Pendergast (2008) expressed that it is expedient of the regional economic communities to be united in their regional policies and programmes to ensure that the regional communities foster specialization and optimal productivity of the representative country's products. The regional communities enumerated are:

1. Economic Community of West African States (ECOWAS).
2. Common Market for Eastern and Southern Africa (COMESA).
3. Economic Community of Central African States (ECCAS), and
4. Arab Maghreb Union (AMU).
5. South African Development Community (SADC)

Table 1 below shows the data for the products of Countries North of Africa as expressed in %s of Exports (2006-2008).

Country	Agric Products for Export	% to Total Export	Mineral for Export	% to Total Export
Algeria	Wheat, Cereal	5%	Petroleum, Petroleum Products, Natural Gas	} 95%
Egypt	Cotton Textile	20% 14%	Crude Oil & Petroleum Products, Metal - Product, Chemicals	
Libya			Crude Oil Refined Petroleum - Products, Natural Gas	} 94%^
Morocco	Food & Beverage, Textile, Clothing, Shoes, Fisheries		Phosphates, Fertilizers, Base Metal, Industrial - Minerals	
Tunisia	Olive Oil, Cereals, Potatoes, Onion, Melon, Fish, Textile	43%	Phosphate, Chemicals	

Source: *Worldmark Encyclopedia of National Economies* By Pendergast, S. and Pendergast, Tom (2009)

3. Theoretical and Empirical Framework

3.1 Factor Proportions Theory

Heckscher-Ohlin (1900s) propounded an international trade theory called factor proportions theory. The theory stresses that countries should produce and export goods that require resources (factors) that are abundant and import goods that require resources in short supply. This theory differs from the theories of comparative advantage and absolute advantage since those theories focus on the productivity of the production process for a particular good. On the contrary, the Heckscher-Ohlin (1900s) theory states that a country should specialize on the production and export using the factors that are most abundant, and thus the cheapest. Not to produce, as earlier theories stated, the goods it produces most efficiently. The theory argues that the pattern of international trade is determined by differences in factor endowments. It predicts that countries will export those goods that make intensive use of locally abundant factors and will import goods that make intensive use of factors that are locally scarce. The problem with the H-O theory, however, is that it excludes the trade of capital goods (including materials and fuels). In the H-O theory, labour and capital are fixed entities endowed to each country. In a modern economy, capital goods are traded internationally. Gains from trade of intermediate goods are considerable, as it was emphasized by Samuelson (2001).

3.2 Reality and Applicability of the Heckscher-Ohlin Model

The Heckscher-Ohlin theory (1900s) is preferred to the Ricardo theory by many economists, because it makes fewer simplifying assumptions. Leontief (1953) published a study, where he tested the validity of the Heckscher-Ohlin theory. The study showed that the U.S was more abundant in capital compared to other countries; therefore the U.S would export capital-intensive goods and import labour-intensive goods. Leontief found out that the U.S's export was less capital intensive than import. After the appearance of Leontief's paradox, many researchers tried to save the Heckscher-Ohlin theory, either by new methods of measurement, or either by new interpretations. Leamer (1953) emphasized that Leontief (1953) did not interpret HO theory properly and claimed that with a right interpretation, paradox did not occur. Brecher and Choudri (1982) found that, if Leamer was right, the American workers consumption per head should be lower than the workers' average consumption. Many famous textbook writers, including Krugman and Obstfeld (1988) and Bowen, Hollander and Viane (1998) were negative about the validity of H-O model. After examining the long history of empirical research, Bowen, Hollander and Viane concluded: "recent tests of the factor abundance theory, H-O theory and its developed form into many-commodity and many-factor case, that the H-O-V equations also indicated the rejection of the theory." Heckscher-Ohlin theory was not well adapted to the analyze South-North trade problems. The assumptions of HO are less realistic with respect to North-South than North-North (or South-South) trade. Income differences between North and South is the one that third world cares most. The factor price equalization, a consequence of HO theory, has not shown much sign of realization. HO model assumes identical production functions between countries. This is highly unrealistic. Technological gap between developed and developing countries is the main concern of the poor countries.

3.3 Neo-Ricardian trade theory

The main contributors on neo-Ricardian trade theory included Steedman (1979) and Metcalfe (2007). They have criticized the Heckscher-Ohlin model on the basis that the notion of capital as primary factor has no method of measuring it before the determination of profit rate (thus trapped in a logical vicious circle). The merit of neo-Ricardian trade theory is that input goods are explicitly included to the analytical framework. This is in accordance with Sraffa's (1960) idea that any commodity is a product made by means of commodities. The limit of this theory is that the analysis is limited to small country cases. Ricardian trade theory ordinarily assumes that the labor is the unique input. This is a great deficiency as a trade theory, for the intermediate goods occupy the major part of the world international trade. McKenzie and Jones emphasized the necessity to expand the Ricardian theory to the cases of traded inputs.

3.4 Ricardo-Sraffa trade theory (1955)

Chipman (1965) observed in his survey that McKenzie (1956) stumbled upon the questions of intermediate products and discovered that "introduction of trade in intermediate product necessitates a fundamental alteration in classical analysis." It took many years until recently when Shiozawa (2009) succeeded in removing this deficiency. The Ricardian trade

theory was now constructed in a form to include intermediate input trade for the most general case of many countries and many goods. This new theory was called Ricardo-Sraffa trade theory.

It is emphasized that the Ricardian trade theory now provides a general theory which includes trade of intermediates such as fuel, machine tools, machinery parts and processed materials. The traded intermediate goods are then used as inputs of production in the importing country. Capital goods are nothing other than inputs to the production of goods and services. Thus, in the Ricardo-Sraffa trade theory, capital goods move freely from country to country. Labour is the unique factor of production that remains immobile in the country of its origin.

Mankiw (2007) compared Ricardian theory and Heckscher-Ohlin theory and stood by the Ricardian side. Mankiw argued that Ricardian theory is more realistic than the Heckscher-Ohlin theory as the latter assumes that capital does not move from country to country. Mankiw's argument contains a logical slip, for the traditional Ricardian trade theory does not admit any inputs. Shiozawa's result saves Mankiw from his slip. The neoclassical Heckscher-Ohlin-Samuelson theory only assumes production factors and finished goods. It contains no concept of intermediate goods. Therefore, it is the Ricardo-Sraffa trade theory that provides theoretical bases for the topics such as outsourcing, fragmentation and intra-firm trade.

4. Methodology

Qualitative method of research was adopted using purely secondary data. Africa: intra-regional trade statistics by countries were sourced; for 2006 to 2008; on exports; with emphasis on the 5 nations of North Africa making up the Arab Maghreb Union (AMU). While percentages (%) to total exports were taken on key agricultural and mineral products, total exports figures, intra-African export figures, and % share of intra-African exports in total exports were taken for the North African countries. Measures of central tendency in terms of arithmetic mean, and median, measure of dispersion, in terms of standard deviation, and skewness and kurtosis; and the relationship in-between them were highlighted to bring out the required results needed from the study. Data were expressed in United State of America, (US\$) billion dollars.

Table 2 given below depicts the North Africa: Intra-Regional Trade Statistics by Country, 2006 – 8 (in US\$ billion unless otherwise indicated)

	Total Exports			Intra-African Exports			Share of Intra-African Exports in Total Exports, %		
	2006*	2007*	2008**	2006*	2007*	2008**	2006*	2007*	2008**
North Africa									
Algeria	53.8660	56.4991	78.2340	1.1004	1.3223	1.8697	2.04	2.34	2.39
Egypt	20.7602	23.8592	29.8490	1.3165	1.5180	1.8577	6.34	6.36	6.22
Libya	39.6848	43.3994	60.2570	0.8932	1.0981	1.4804	2.25	2.53	2.46
Morocco	13.2701	16.2084	20.4690	0.5689	0.7120	0.8314	4.29	4.39	4.06
Tunisia	11.6880	14.6236	19.1840	1.1393	1.4709	1.8343	9.75	10.06	9.56
Total	139.2691	154.5897	207.9930	5.0183	6.1213	7.8735	24.67	25.68	24.69
Average	27.85	30.92	41.60	1.00	1.22	1.57			
Median	20.76	23.86	29.85	1.10	1.32	1.83			
Standard Deviation	18.31	18.32	26.35	0.29	0.33	0.45			
Skew	0.79	0.73	0.76	-0.88	-1.11	-1.62			
Kurtosis	-1.40	-1.64	-1.04	0.59	0.49	2.23			
Tot African Exp	272.1818	328.7255	411.0753	27.0448	33.7914	39.2762	8.03	8.72	8.47
Tot African Trade	572.5991	708.8646	824.4023	57.8478	72.3697	83.6277	8.80	9.10	9.12

Source: *Worldmark Encyclopedia of National Economies* By Pendergast, S. and Pendergast, Tom (2009)

* Revised

** Estimates

***Not available

Table 2 above shows the export trade analysis of North African countries, 2006 through 2008. The total exports for the five countries grew progressively in 2006 through to 2008. Also, the data presented as the intra-African exports for the five countries for 2006 to 2008 grew progressively. It was therefore right that in the re-arrangement of the entire data, median was found as 20.76, 23.86, and 29.85 respectively for 2006, 2007, and 2008, which incidentally fell on Egypt. The standard deviation also showed how each country export drives deviated from the other, both in total exports and in intra-African exports for the same period of time. The implication of the positive skewness, that is, 0.79, 0.73 and 0.76 with lower data than the negative skewness, that is, -0.88, -1.11, and -1.62 with higher data, was that the five North African countries exported less quantities of products than the quantities imported, while the reverse was the case with kurtosis analysis. That is, the negative kurtosis data, -1.40, -1.64, and -1.79 depicting lower data than the positive kurtosis data, that is, 0.59, 0.49, 2.23 with higher data was that, the five North African countries imported more quantities of products than the quantities exported. However, the Continent's share of global trade edged upwards to 9.12% in 2008 from 8.80% in 2006; while the Continent's share of global exports also improved during the period from a level of 8.03% in 2006 to 8.47% in 2008 (Ekra, 2009). Generally the African trading partners include United States of America, members of European Union, members of Asia continent and their African counterparts.

5. Conclusion and Implications

The following conclusions were drawn and the implications proffered:

- i. With the fertile land, academically and professionally qualified agriculturalists, geologists and favourable climatic conditions all year round, Africa and its countries are in good position to supply the required food items to other continents of the world.
- ii. The exploration of the numerous mineral deposits should be a task in this 21st century. Their availability will open up Africa and indeed the countries into the riches of global markets.
- iii. Africa might not meet up with world's demand of its agricultural and mineral products except it fully employs modern technology in its exploration of the deposits and production of the world demands of the goods.
- iv. To this end, regional economic communities/countries should identify and target key high growth sectors internally with greatest growth potential and marketability.
- v. The export process should be sector-specific, and sector strategies should offer the framework within which exports are encouraged and incentivized.
- vi. African countries should employ modern technologies in the development of agriculture, mineral, and other products and services yielding revenue.
- vii. African countries via the Economic Commission for Africa (ECA) should operate under a Custom Union with a common external tariff, enjoy freed internal tariffs among each other under Free Trade Agreement and enjoy preferential market access to the E.U and Western Markets respectively with trade preferences of duty and quota free entry of all agricultural and mineral products.
- viii. The Economic Commission of Africa (ECA) should endeavour to give proper policy guidelines, control and coordination to the activities of regional economic communities. Production of products should be intensified mechanically for local consumption, as well as for exports.
- ix. Lastly, the effective global marketing programmes employed will increase the 9.12% expansion in the value of African trade in 2008 to achieve over 21.28% of the world export trade in 2015.

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