What Can Africa Expect From Its Traditional Exports?

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Abstract

This study examines the implications of recent trade trends and long-term price projections for Sub-Saharan Africa's major exports. Its policy message for Africa is two fold. First, Africa must diversify away from traditional products or continue to experience serious negative trade effects including; (i) declining or relatively low growth in global demand for these goods, (ii) falling real prices for traditional products, (iii) very unstable prices and export earnings, (iv) a continued marginalization in world trade, and (v) diminished growth and industrialization prospects. However, there is no evidence that any general diversification is occurring. Domestic and international policy initiates must assign a far greater importance to the need for diversifying Africa's exports.

Second, it is unlikely that major shifts in the composition of exports can occur in the short to medium-term. As such, the removal of general anti-export biases in African countries' domestic policies, as well as initiatives to promote more competitive (low cost) prices for traditional exports, still require immediate attention. Future markets for traditional products will be highly competitive and African countries failing to implement policies promoting production efficiencies and lower costs should expect to experience major competitive export losses for these key items.

Authors' Affiliation and Sponsorship

Francis Ng
Research Analyst, Trade Team, The World Bank
E-mail: Fng@worldbank.org

Alexander Yeats
Consultant, Trade Team and Africa Region, The World Bank
E-mail: Ayeats@msn.com

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Editor in charge of the series: Antoine Waldburger, AFTM3, Email: awaldburger@worldbank.org, who may be contacted for hard copies.

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Francis Ng
Research Analyst, Trade Team, Development Research Group, The World Bank
E-mail: Fng@worldbank.org

Alexander Yeats
Consultant, Trade Team and Africa Region, The World Bank
E-mail: Ayeats@msn.com

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Table of Contents

Boxes

Tables

Executive Summary

Conventional thinking alleges unfavorable demand characteristics for the raw materials that constitute Sub-Saharan Africa's traditional exports jeopardize the region's growth and industrialization prospects. Empirical evidence suggests that the income elasticities of demand for these goods are generally well below unity. If true, this would tend to diminish Africa's importance in world trade relative to exporters of high income elasticity goods, like machinery, chemicals, and transport equipment, and also adversely influence the region's relative economic growth rate. Second, the level of demand, and prices, for traditional products can be strongly affected by cyclical changes in global economic activity. It has been alleged that these "induced" demand changes have been an important cause of instability in commodity prices and revenues that, purportedly, had serious adverse implications for development planning and industrialization.

Third, it has been argued that inherent weakness in long-term demand will cause real commodity prices to fall relative to those for manufactures which, in turn, would cause the terms-of-trade for African countries to deteriorate. For some products, the weakness in demand was thought to have been exacerbated by competition from synthetics. As an example, exports of hard fibers, like Agave or Sisal, have been reduced by competition from man-made fibers, just as the replacement of some metals by plastics reduced global demand for metal ores. Finally, it has been asserted that trade barriers in major importing markets may have an adverse impact on the level of demand for, and structure of, some commodity exports. Would the removal of any post-Uruguay Round trade barriers markedly improve expectations for Africa's traditional exports?

With regard to the policy discussion of these issues, it should be noted that many key propositions were formulated on the basis of empirical evidence from the 1950s or 1960s. Important changes have since occurred in the global economy. UNCTAD reports that less than 50 percent of world trade consisted of manufactures in the mid-1950s, while the current share of these goods is about 75 percent. The present share of commodities and raw materials (approximately 25 percent) is about one-half what it was in the mid-1950s -- it would now be about 5 percentage points lower if crude petroleum was excluded. One factor responsible for this shift in the composition of trade was the conversion of many important commodity producing countries into exporters of manufactures. This conversion started with the Asian NICs in the early 1970s, followed by a group of "second tier" countries like Malaysia and Thailand in the late 1970s and 1980s. Today, more than 60 percent (by value) of the total exports of former largely commodity producing countries like Brazil, China, India, Malaysia, Mauritius, Pakistan and Thailand consist of manufactured goods. This major re-orientation of global production and trade toward manufactures may have altered the prospects of the fewer remaining commodity exporters, like those in Africa. Thus, this study addresses a key question. ***What can Africa expect from its traditional exports?***

A. General Trade Trends

Over the last decade, global trade in Africa's traditional exports grew at a rate of 1.9 percent, or about one-third the corresponding rate for all goods. This is a continuation of trends observed for the 1980s. Furthermore, 1990-1999 trade growth rates for over 40 percent of Africa's traditional products were actually negative. The last half of the decade witnessed a major collapse in demand for many of these goods with 1995-99 global imports of several traditional products falling by more than ten percent annually. These developments contributed to the further erosion of Africa's global trade share which fell from 1.8 percent in 1990 to 1.3 percent in 1999.

Conceivably, considerable variation could occur in the recent trade performance of individual African countries depending on their specific "basket" of traditional exports. However, the data show no African country's traditional exports came close to matching the 1990-99 rate of growth of world trade. Traditional exports of all African countries, except for South Africa and Malawi, experienced negative global demand growth during 1995-99, and in some cases the declines were dramatic. Growth rates for Mali's traditional exports (largely cotton) fell by about 15 percentage points (from 6 to -9.2 percent), while the declines in annual growth rates for Ethiopia, Uganda and Angola were 16 percentage points or more. Exporters of traditional products seemingly are vulnerable to important adverse demand and price shocks when global economic activity weakens, as it did during the period of the East Asian financial crisis.

Over the last decade, world trade growth (5.7 percent) was roughly double that for income, as measured by GDP. On average, our income elasticity estimate for Africa's traditional exports is just over one-third (0.36). This implies that, if GDP expands at its recent rate of 2.5 percent, global trade in traditional products should grow by under one percent per year. As such, continued reliance on traditional exports will significantly extend Africa's marginalization in world trade. This trend could be reversed, or the rate of marginalization slowed, if Africa achieved major competitive gains for these products to compensate for their relatively low demand growth. However, a recent analysis of Africa's supply capacities found no evidence that these competitive gains were occurring.

The recent record provides no indication that the longer-term deterioration in traditional product prices has reversed. Over 1990-99, average real prices for all traditional products declined by about 24 percent. In a few cases, like coffee and lumber, where some modest improvement occurred, real prices still remain well below their 1980 levels. In addition, long term price projections by the World Bank reinforce the basically negative outlook for traditional products and most commodities.

B. Price Instability Problems

Traditional product price instability is a major problem for exporters. Average annual price changes for these goods generally exceeded those for the all non-oil commodity price index, while one-half the traditional products experienced average price changes that were at least 50 percent greater. However, annual data clearly understate instability problems since traditional product prices often experienced sizable consecutive year directional changes. Over a three year period, consistent directional price shocks as high as 101 percent occurred, while changes of 150 percent were observed in four consecutive year data. These major price swings are generally associated with a "collapse" of traditional product prices as, over 80 percent of the time, they were in a downward direction.

The question of whether shifting the composition of exports from unprocessed to processed traditional products would reduce price and export earnings instability is examined. This possibility exists if demand for processed traditional products like chocolate, tobacco manufactures, or ferrous metals are relatively stable, or if "administered" pricing is used for these goods. The supporting evidence for this proposition is strongest for traditional products where further processing is normally labor intensive, but no similar pattern occurs for foodstuffs and most metals. Over the last decade there is little evidence that prices for processed traditional products were rising faster, or falling less, than those for unprocessed products. However, prices for processed traditional products often incorporate a substantial "mark up" over those exported in raw form.

C. Implications of the Competitive Environment

Changes in Africa's ability to compete in global markets have the potential to substantially alter what the region should expect from its traditional products. If Africa's global market shares for these products experienced substantial erosion this would make the already poor demand and price expectations worse. However, the overall competitive changes during the last decade were so small that their general influence was negligible. However. for one or two individual traditional exports, like copper, a significant erosion of market shares further worsened African expectations for these products.

While Africa generally maintained its ability to compete with other foreign suppliers of most traditional goods, a related question concerns the importance of government imposed trade restrictions which place Africa at a competitive disadvantage vis-à-vis local producers. Available data suggest OECD protection facing most traditional products is generally low, although several agricultural products, like sugar and tobacco, are important exceptions. In these cases, industrial countries have the opportunity to significantly improve market access conditions for specific traditional products. However, trade barriers facing Africa's traditional products in many developing countries are sufficiently high that their liberalization could improve the outlook for these goods.

D. Growth Prospects for African Exports

An "export growth prospects" index is used to empirically assess what African countries should expect from their traditional and non-traditional exports. The index facilitates comparisons of prospects for any given exporter with those of other regional or non-regional countries, or with the general growth in world trade. Numeric values for the index show Africa should expect its traditional export's growth to fall well short of that for world trade. The index also shows the growth prospects for Africa's non-traditional exports are often more favorable. However, non-traditional exports probably could not significantly improve the general short-term outlook for Africa's exports since they normally constitute a very small share of most Africa countries' trade. Short to medium term prospects can be strongly affected by the SSA countries ability to become relatively low cost producers and to remove domestic anti-export biases.

This study's message for Africa is two fold. First, Africa must diversify away from traditional products or continue to experience serious negative trade effects including; (i) declining or relatively low growth in global demand for these goods, (ii) falling real prices for traditional products, (iii) very unstable prices and export earnings, (iv) a continued marginalization in world trade, and (v) diminished growth and industrialization prospects. However, there is no evidence that any general diversification is occurring. Domestic and international policy initiates must assign a far greater importance to the need for diversifying Africa's exports.

Second, it is unlikely that major shifts in the composition of exports can occur in the short to medium-term. As such, the removal of general anti-export biases in African countries' domestic policies, as well as initiatives to promote more competitive (low cost) prices for traditional exports, still require immediate attention. Future markets for traditional products will be highly competitive and African countries failing to implement policies promoting production efficiencies and lower costs should expect to experience major competitive export losses for these key items.

What Can Africa Expect From Its Traditional Exports?

Francis Ng and Alexander Yeats

I. INTRODUCTION

Conventional thinking alleges several unfavorable demand characteristics for the primary commodities and raw materials that constitute Sub-Saharan Africa's traditional exports may jeopardize the region's growth and industrialization prospects.[1] First, empirical evidence suggests the income elasticities of demand for these goods are generally well below unity (See Stern *et al* 1976). If true, this would tend to diminish Africa's importance in world trade relative to exporters of high income elasticity goods, like machinery, chemicals, and transport equipment, and also adversely influence the region's relative economic growth rate. Second, the level of demand and prices for primary products can be strongly are affected by cyclical changes in economic activity in major importing countries. Some economists previously suggested these "induced" demand changes were an important cause of instability in commodity prices and revenues that, purportedly, had serious adverse implications for development planning and industrialization.[2]

Third, it has been argued that inherent weakness in long-term demand will cause real commodity prices to fall relative to those for manufactures that, in turn, would cause the terms-of-trade for African countries to deteriorate.[3] For some products, the weakness in demand was thought to be exacerbated by competition from synthetics. As an example, exports of hard fibers, like Agave or Sisal, have been reduced by competition from man-made fibers, just as the replacement of some metals by plastics has reduced global demand for metal ores. Finally, it has been asserted that trade barriers in major importing markets may have an adverse impact on the level of demand for, and structure of, some commodity exports (For earlier statements on the purported nature of this problem see Balassa 1968, Basevi 1966, or UNCTAD 1969, 1973). Would the removal of any post-Uruguay Round trade barriers markedly improve expectations for Africa's traditional exports?

With regard to the policy discussion of these issues, it should be noted that many key propositions were formulated on the basis of empirical evidence pertaining to the 1950s and 1960s. Important changes have since occurred in the global economy. UNCTAD reports less

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[1] Although, a few Sub-Saharan African countries progressed in shifting their exports toward manufactures, primary commodities and raw materials are still of far greater relative importance. Ng and Yeats (2000, p. 19) show these latter goods constitute about three-quarters (by value) of the total 1998 exports of the 14 largest African countries and about 87 percent of the exports of 13 mid-sized African countries.

[2] See Cuddy (1978), MacBean (1966), Michaely (1962) or Lim (1976) for useful earlier discussions and empirical evidence on these issues. To counter the effects of unstable demand for primary products UNCTAD(1972)(1976) proposed the creation of a "common fund" that would purchase, or sell, stocks of 18 "core" commodities in a counter-cyclical manner to stabilize prices. However, several individuals subsequently observed that, if supply fluctuations were the source of instability, a common fund's operation would further de-stabilize prices and export revenues.

[3] Chief advocates for this argument were Raul Prebish, former chairman of the UN Economic Commission for Latin America, and Hans Singer. See Hogendorn (1987), Findlay (1980) or Spraos (1980) for discussions of the issues and relevant empirical information.

than 50 percent of world trade consisted of manufactures in the mid-1950s while their current share is about 75 percent. The present share of commodities and raw materials (approximately 25 percent) is about one-half what it was in the mid-1950s -- it would now be about 20 percent if crude petroleum is excluded. One factor responsible for this shift in the composition of trade was the conversion of many important commodity producing countries into exporters of manufactures. This conversion started with the Asian NICs in the late 1960s and early 1970s, followed by a group of "second tier" countries, like Malaysia and Thailand, in the late 1970s and 1980s. Today, more than 60 percent (by value) of the total exports of former largely commodity producing countries like Brazil, China, India, Malaysia, Mauritius, Pakistan and Thailand consist of manufactured goods.[4] Has this major re-orientation of global production and trade toward manufactures altered prospects of the fewer remaining commodity exporters, like those in Africa?[5]

[4] Some countries re-oriented production and trade toward manufactures at remarkable speed. In 1970, only 4.7 percent of Thailand's exports were manufactures, yet these goods' share was 66 percent in 1990. Over this period, the share of manufactures exports rose from 2 to 68 percent for Mauritius. In 1970, about three-quarters of Singapore's exports consisted of commodities, yet their current share is only about 15 percent.

[5] This might occur if the declining number of commodity exporters caused the global supply curve for these goods to shift upward and to the left. However, productivity increases attributable to increased mechanization may limit, or reverse, the magnitude of any such shifts. Alternatively, the impact of diminished reserves of some non-renewable commodities, like metal ores, might have a negative impact on supply and exert upward pressure on prices. Such issues received little attention in the earlier debates on prospects for commodity exporting countries.

Box 1. Major Findings of a Companion Study of Sub-Saharan Africa's Supply Capacity

An earlier study undertaken for the World Bank's Africa Region examined production and supply constraints of Sub-Saharan African countries (Ng and Yeats, 2000). Its major findings, which are also relevant to the present investigation, were as follows;

- During the last three decades global Sub-Saharan African exports either declined in absolute terms or expanded at a slower pace than world trade. Sub-Saharan Africa accounted for 3.1 percent of world exports in the late 1950s, yet by the mid-1990s this share fell to 1.2 percent. UN COMTRADE statistics show this reduction was largely due to the erosion of Africa's competitive position in international markets. For the region's 30 most important non-oil exports combined, Africa's import market share declined by over 11 percentage points (from 20.8 to 9.7 percent, which implied annual trade losses of about $11 billion. The value of these losses is about the same as current OECD official development assistance (ODA) to Africa. .

- For the 14 largest African countries, as a group, manufactures share of all exports rose from 17 to 27 percent over the last decade. However, much of this increase was due to Mauritius, Madagascar and South Africa, although several "unusual" products, like precious stones, increased the share of manufactured exports from a few other countries. No similar increase occurred for a group of 13 "mid-sized SSA countries where the share of manufactures held constant at 13 percent.

- No major expansion occurred in the diversity of products exported by most Sub-Saharan African countries, although there were a few exceptions like Madagascar and Kenya. Indeed, the product concentration of some African countries' exports became more concentrated over the last decade. Africa continues to be heavily dependent on a relatively few commodities which have been the region's traditional exports.

- An analysis of recent changes in Africa's exports indicates no general increase occurred in the number of industries in which most countries have a "revealed" comparative advantage. This is consistent with statistics showing Africa generally failed to diversify its export base and, in several countries, trade became more concentrated. That is, a fewer number of products were being exported at the end of the decade than at the beginning.

- There is little evidence that the relative importance of exports of processed domestically produced commodities increased, nor do the data indicate that intra-industry trade between Africa and other countries grew. Although other studies suggest the rapidly growing international trade in parts and components has been a major factor promoting interdependence and globalization little evidence was found that Africa was an important participant in this activity.

- Evidence was cited that strongly suggested the recent "lackluster" trade performance of African countries was largely due to an unfavorable internal environment. Cross-country indices of the quality of African governance, trade, fiscal, monetary and legal policies indicate major scope for improvement exists. The business climate in Africa appears to be distinctly inferior to that in many countries which compete with the region for foreign investment.

Source: Conclusions drawn from Ng and Yeats (1997)(2000)

This study examines recent empirical information relating to these points. It proposes specific criteria for identifying Africa's "traditional products" and then determines how important these items are in current regional exports. Next, the implications of price trends and estimated income elasticities for traditional products over the last decade are examined in order to assess what Africa might expect from these goods in the future. This section also analyzes changes in the direction of trade for traditional products to determine whether the relative importance of OECD markets has been changing, or whether important changes have occurred in the countries originating these exports. Third, we attempt to determine whether expectations for earnings growth and price stability might be improved if the composition of Africa's traditional exports shifted from primary to processed forms of these goods. That is, would expectations be significantly improved if Africa shifted exports from (say) raw cotton to cotton thread or fabric? Fourth, the study assesses the importance of tariffs and nontariff barriers in major markets and attempts to determine what effects their removal might have. The study closes with the application of a new "trade growth prospects" index that numerically shows how relatively favorable, or unfavorable, expectations should be for a country's traditional and nontraditional products. The index allows an individual SSA country to assess its export growth prospects relative to world trade, or to those of other African exporters. The study closes with a discussion of the policy implications of the empirical findings.

II. DATA AND METHODOLOGY

The key question addressed in this study is *what can Sub-Saharan Africa expect from its traditional exports?* As such, the analysis primarily focuses on the characteristics of global demand for the types of goods Africa exports, and not on the export performance of the African countries themselves. A central concern is whether specific demand characteristics for these exports would produce below average rates of growth and extend the region's marginalization in world trade.[6] Given that most African traditional exports are primary commodities, the question as to whether regional exports have demand characteristics that differ significantly from other commodities is also addressed. This possibility exists since many African exports like cocoa and coffee are tropical products that generally can only be produced by countries in southern locations.

A. Statistical Issues

Key Observations

Given that this investigation focuses on global demand prospects for Africa's traditional exports , it minimizes the problem of Sub-Saharan African countries widespread failure to report their trade statistics to UN COMTRADE. Rather, demand prospects for these goods can be analyzed from readily available UN import statistics for OECD and most developing countries. These available countries account for about 90 percent of world trade.

For relevant empirical information needed to address the issues, import statistics compiled by the United Nations and maintained in this organization's COMTRADE records were utilized. At the time this investigation was initiated, annual **UN COMTRADE** trade statistics through 1999 were available for over 70 developed and developing countries. These records included all the original OECD members as well as most larger developing countries like

[6] Earlier the authors examined the influence of *supply* or competitive problems on African exports (Ng and Yeats 1997 and 2000). See Box 1 for a summary of the major findings. One striking conclusion was that erosion of global market shares for the SSA countries' 30 largest export products since the early 1960s caused annual revenue losses of approximately $11 billion - a figure about equal to official development assistance to the region. Inappropriate anti-competitive domestic policies were cited as the major reason for the erosion of Africa's ability to compete. The present study largely focuses on global *demand* characteristics for Africa's major exports in order to determine whether they offset, or reinforce, the adverse *supply* effects.

China, India, and Indonesia. Our comparison of UN COMTRADE with the highly aggregate IMF **Direction of Trade Statistics** indicates the countries available in COMTRADE account for about 90 percent of world trade (see the notes to Table 1 for a listing of these countries). The major gaps in the UN statistics were in data for most states of the former Soviet Union, and many Sub-Saharan African countries, themselves, who chronically fail to report to the United Nations. The lack of data for the latter should have a negligible effect on our analysis since relatively little regional intra-trade appears to occur for Africa's traditional export (Yeats 1999).

Given this study's global focus, the required aggregation of many individual country trade statistics, often at low levels of product detail, would have posed serious problems. However, a trade data access and manipulation program developed within the Bank (named WITS for World Integrated Trade System) facilitated this aspect of the analysis. WITS could both access UN COMTRADE records and aggregate trade statistics, across products and countries, at both highly aggregate and low levels of product detail. Since the UN records contained matched annual trade value and quantity data, WITS could also compute unit value (price) statistics back to the early 1960s, at least for revision 1 of the SITC system.[7] However, our analysis largely focuses on developments during the 1990s when many former large commodity exporters, like China, Brazil and India, had largely shifted the their export profiles to manufactures so we based our analysis on more detailed SITC Revision 2 statistics.

An additional point concerns the selection and treatment of the African countries whose export prospects are to be assessed. Following the procedures employed in our earlier study (Ng and Yeats 2000), we differentiate between 14 "larger" African exporters which had 1999 exports of over $1 billion, and a second group of 14 mid-size countries with exports of over $250 million. This distinction is based on the fact that larger exporters like South Africa, Zimbabwe and Kenya often have a more diversified export base than the mid-sized countries although, this is not true for the large African oil exporters. Since, it has been asserted countries with a more diversified trade base may experience less instability in their total export earnings, and also experience less adverse terms-of-trade swings, we made the distinction between large and mid-sized countries to evaluate this proposition.[8] Finally, since the remaining "small" countries, with exports of under $250 million, are generally dependent on relatively fewer commodity exports we felt it more efficient to evaluate their trade prospects separately in an annex to this report.

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[7] While all import values are reported by UN COMTRADE in US dollars, and can be aggregated across countries, non-standardized quantity reporting practices may make it impossible to compute a global unit value for a good. For example, the United States may report quantity imports in terms of actual numbers while the EU may report imports of the same good in kilograms. Division of the combined import values by the combined dissimilar quantity units would produce a nonsensical unit value estimate. For this reason, our later analyses of price behavior may be based on statistics from the largest import markets under the assumption that, with arbitrage, these will parallel global patterns.

[8] These assertions originate from a debate in the 1960s and 1970s about the relationship between country size and trade concentration. Khalaf (1974), for example, presents evidence that smaller countries may have more concentrated export profiles, purportedly due to their more limited resource base or constraints associated with small domestic market size. This debate had important economic and political implications in that it raised the question whether there is a minimum "viable" size for independent countries. Most African countries attempted to offset constraints associated with small domestic markets by joining regional trade arrangements.

B. Identifying "Traditional" Products

Key Observations

Previous empirical investigations that attempted to identify traditional or non-traditional exports generally used an "export share criteria" to differentiate between these types of goods. That is, a traditional export product has been defined as one that accounted for at least three percent of a country's total exports. We utilize a procedure that accounts for both the total value of a product and Africa's global market share for the good. The traditional products defined using this criteria account for about 70 percent of total regional exports.

An important question is how "traditional" products should be defined. One approach could rank African exports by value and then select the largest items. There are several attractions, and potential problems, with this procedure. The first problem is that the resulting list is dominated by crude petroleum which accounts for about one-third of the region's total exports. Any aggregation of petroleum and non-energy traditional products could make it difficult to correctly identify underlying trends and prospects if market conditions for oil are significantly different than those for other goods. Also, high export values need not necessarily indicate the region has a comparative advantage in a good. Ng and Yeats (2000) show SSA countries do not have a revealed comparative advantage in several items, like refined petroleum products, that appear in a "high value" list. This suggests a more useful approach would be to first define traditional products as those for which Africa has a relatively high share in global markets (this would be consistent with the region having a revealed comparative advantage in the good) which has been maintained over a number of years.[9]

For a first pass at defining traditional products, we compiled a list of 31 items in which Africa had its highest global market shares which in all cases were over 10 percent. In other words, these goods have production characteristics that allowed Africa to traditionally maintain a strong export presence in global markets. The market share criteria was used to identify products, like goat or sheep hides, which had relatively low global or regional export values, but Africa was still a major factor in international markets for these goods. However, we recognize that some high value products should be added to the "traditional" list if their share in SSA exports was consistently above their share in world trade (this, essentially, is the definition of revealed comparative advantage). Employing this "dual" criteria we added 7 items to the traditional product list. Petroleum is classified as a traditional product, but we examine its

[9] A literature search revealed several previous of attempts to define "nontraditional" and "traditional" exports which helped clarify our thinking on this issue. Most empirical studies employed export share thresholds to distinguish between the two classes of goods. In Labys and Lord (1990), for example, the dividing line between traditional and nontraditional exports is set at 1 percent of total merchandise trade. Balassa (1977, p. 17) defined non-traditional primary products as those accounting for less than 2 percent of total exports. In an earlier study involving all exports, nontraditional products were defined as those accounting for less than 3 percent of all exports (Balassa 1971). Recently, in its World Development Indicators the World Bank (1997, p. 259) defined "traditional exports" as the ten largest three-digit commodity groups in a country's exports in a base year (1983-84), unless the ten do not account for at least 75 percent of total exports. In this case more three-digit groups are added until at least 75 percent is reached. Nontraditional exports are, by implication, all of the rest. Our definition is essentially consistent with the approach used by the Bank except that we work at a lower four-digit SITC level of detail and also introduce a market share criterion.

prospects separately in an annex. Combined, our list of petroleum and non-energy traditional products account for over 70 percent of Africa's current total exports.

Table 1 lists the 38 four-digit SITC (Rev. 2) traditional products, it reports the total global value of trade in each item during 1990, 1995 and 1999, and also shows Africa's share of world trade in each product at the beginning and end of the last decade. Altogether, these traditional products accounted for about 55 percent of Sub-Saharan Africa's non-oil exports.[10] Africa is a major factor in world trade in cocoa beans, manganese ore, uranium, and hard fibers as the region has a global import share of more than 50 percent for each product. It should be noted that the list in Table 1 is dominated by primary commodities as only one manufactured good (ferrous alloys) satisfied our criteria for inclusion. Another notable point is that products like palm oil, palm nuts and kernels, copra, groundnuts or vegetable oil cake, which historically were important, are not included due to their greatly diminished role in current regional exports (see Box 2).

An interesting question concerns the magnitude of African trade losses reflected in the market share erosion for these products. If Africa maintained its 1960s market shares for these items its current exports would now be $7.7 billion higher. Competitive share losses for palm oil are of major importance ($1.8 billion) and are about $1.1 billion for both alumina and unmilled maize.

[10] We distinguish between non-oil and petroleum traditional products for several reasons (see Annex 2). Petroleum is produced in a relatively few SSA countries and, unlike the other traditional products, most African countries are net oil importers. As such, favorable price prospects for oil may have favorable implications for the relatively few producers, but have unfavorable implications for most other African countries who are net oil importers. We intentionally excluded diamonds from our traditional product list for several reasons. First, UN COMTRADE records generally do not report quantity units for diamond imports so import unit values could not be calculated. Second, relatively large discrepancies in partner country statistics for unset diamonds suggests false invoicing or smuggling probably imparts an important bias in trade data for these goods.

Box 2. Implications of the Demise of Some African "Historical" Exports!

If one attempted to tabulate a list of Africa's traditional exports on the basis of trade statistics for the 1960s or 1970s, the items included undoubtedly would be quite different from those in Table 1. Four decades ago, Africa was a major producer of several vegetable oil and oilseed products like palm oil or palm kernel oil, it had an important position as an exporter of metaliferous ores including copper and tin, and also had a relatively high share of world exports of foodstuffs like maize, rice, meat extracts, and fish oils. On the basis of actual world trade shares in the 1960s, Africa appeared to be on the verge of becoming an important global exporter of products like: preserved meat, preserved fruit, non-wheat flour and meal, fruit jams and jellies, improved or reconstituted wood, and animal feeds. However, over the next four decades Africa experienced massive losses of global market shares for these goods with the result that the value of the region's exports at the end of the century were often lower than in the 1960s. As such, many of these products should not now be considered traditional exports, but should be thought of as historical exports which do not now have an important influence on expectations for the region's current trade performance.

The statistics shown below illustrate this point. As an example, in 1962 African exports of palm nuts and kernels totaled $75 million, and the region accounted for 91 percent of world trade in this commodity. However, by 1999 exports fell to under $3 million and Africa's global market share was almost one-tenth of what it was in the 1960s. Similarly, Africa's 1962 global market shares for groundnuts, palm kernel oil, and palm oil ranged from 51 to 83 percent, but are now only about 2 to 3 percent, and the combined exports of these items are currently lower than they were four decades ago. This major deterioration in export performance explains why some, possibly expected, products have not been included in this study's list of traditional products.

	African Exports ($000)		Africa's World Trade Share (%)	
Commodity (SITC)*	1962	1999	1962	1999
Palm Nuts & Kernels (2213)	75,061	2,861	91.1	9.9
Groundnuts Green (2211)	184,279	24,542	83.4	3.2
Palm Kernel Oil (4224)	8,941	15,816	53.1	2.2
Palm Oil (4222)	36	11,634	50.9	1.0
Natural Abrasives (2752)	13,247	2,059	27.6	0.2
Fixed Vegetable Oils, nes (4229)	8,555	10,131	16.0	1.3
Alumina (5136)	25,608	60,330	13.8	0.7
Unmilled Maize (0440)	18,762	20,725	13.2	0.2
Fur Skins (2120)	37,855	757	12.3	0.1
Vegetable Oil Cake (0813)	47,401	49,264	10.9	0.8
Copper Ore & Concentrates (2831)	11,492	44,633	8.7	0.9
Oils of Fish (4111)	7,825	1,453	8.6	0.4
Bovine & Equine Hides (2111)	18,155	24,627	8.0	0.9
Unwrought Tin (6871)	21,761	267	7.8	0.0
Meat Extracts (0133)	2,120	759	7.6	0.6
Tin Ores and Concentrates (2835)	5,851	9,139	6.0	0.5
Plywood (6312)	12,149	48,659	5.2	0.6
Glazed or Polished Rice (0422)	6,346	601	3.5	0.0
TOTAL OF ABOVE	505,444	328,257	13.9	1.0

* Since Revision 2 data were not available until the mid-1970s, these statistics are based on the earlier Revision 1 classification which first became available in 1962.

III. LONG TERM DEMAND PROSPECTS

A key question relating to what Africa should expect from its traditional exports concerns longer-term demand prospects for these goods. Several procedures could be employed for addressing this issue. One could, for example, calculate the global import growth rate for each traditional product and then compare these rates with those for other types of goods. Such comparisons could help indicate whether there are some traditional products with relatively favorable, or unfavorable, demand prospects. This constitutes a *product specific* approach concerning what Africa might expect from traditional exports. Second, a *country specific* approach could focus on prospects for the specific "basket" of goods a given African country exports. The issue here is whether differences in the composition of traditional exports from individual SSA countries can produce significant differences in overall export prospects.

A. Global Trade Trends for Traditional Exports

Key Observations

Over the last decade, global trade in Africa's traditional exports grew at a rate of 1.9 percent, or about one-third the corresponding rate for all goods. This is a continuation of trends which are observed in data for the 1980s. Furthermore, 1990-1999 trade growth rates for over 40 percent of the traditional products were actually negative. The last half of the decade witnessed a major collapse in demand for many of these goods with 1995-99 global imports of several traditional products falling by more than ten percent. These developments contributed to the further erosion of Africa's global trade share for all goods which fell from 1.8 percent in 1990 to 1.3 percent in 1999.

Table 1 provides empirical information on key global trade trends for Africa's traditional exports over the last decade. The right-most column shows the annual growth rate of world trade in each item, while similar growth rates are shown for the 1990-95 and 1995-99 sub-intervals.[11] For comparison, the lower half of the table shows statistics on trade changes for several broad product groups like all manufactures. These items have been included for use as a "benchmark" for evaluating the relative growth in traditional products trade. Finally, the table also shows Africa's world trade share for each product over the decade which, in the aggregate, were relatively stable at over 13 percent.

The first impression from these statistics is that no really positive points are evident. Over the decade, the average annual growth rate for all traditional products was 1.9 percent, while the annual growth of world trade (5.7 percent) was 3 times higher. However, the disparity is even greater if comparisons are made with all manufactures which grew at an annual rate close to 7 percent. Furthermore, the last half of the decade witnessed a major collapse in demand for

[11] The first half of the last decade witnessed an impressive expansion in demand and prices for some primary commodities, including a number of traditional products (Ng and Yeats 2000) or World Bank (2000). Prices and demand declined sharply from about 1997 when global trade in traditional products fell at an annual rate exceeding 3 percent. The evidence suggests, see Table 7 which follows, that the Asian financial crisis had a major adverse impact on demand and prices as regional imports of some products, like cotton, experienced major contractions that had no parallel in Europe or North America.

many of these goods with 1995-99 global imports of several products falling by more than ten percent. These developments contributed to the further reduction of Africa's global trade share from 1.8 percent in 1990 to 1.3 percent in 1999 (see Table 1).

A second negative point is that the annual global trade growth rates for over 40 percent (17 of 38) of the traditional products was negative over the decade. Global demand for both unwrought copper alloys and goat skins fell by more than 15 percent annually, while trade in manganese ore and sheep skins declined at annual rates exceeding 5 percent. Major consecutive year production surpluses caused a collapse in sugar prices which resulted in a 25 percent decline in the value of trade over the decade, while trade in goat and sheep skins has been declining since the mid-1970s. Several traditional products, like cottonseed and tobacco leaf parts, that experienced relatively high growth rates are globally relatively unimportant with annual world trade under $200 million. Limited global market size would seemingly restrict potential benefits from African efforts to expand these goods exports.

Table 2 provides an overview of the global trade changes for traditional exports by combining the individual product data into 10 groups with similar production characteristics or end uses. For example, the tropical beverage group incorporates statistics for cocoa beans, coffee beans, tea, and cocoa powder, while the ferrous ores and metals group consists of iron ore and ferro-alloys (the notes to Table 2 indicate the product composition of each group). The table shows global imports of each group and imports from Sub-Saharan Africa along with similar trade statistics for all agricultural raw materials, and ores, minerals and metals. Since the product composition of the traditional products is somewhat similar to these aggregate groups, it is of interest to determine if recent trade changes for Africa's traditional exports differed substantially from these groups of related products.

Table 1. The Growth of World Trade in Sub-Saharan Africa's Traditional Exports (1990-99)

Traditional African Export Product (SITC No.)	Sub-Saharan Africa's Global Trade Share (%) 1990	1999	Reported Global Imports From All Countries ($million)* 1990	1995	1999	Average Annual Global Import Growth Rate From All Countries (%) 1990-95	1995-99	1990-99
Cocoa Beans (072.1)	63.6	77.5	2,094	2,819	2,968	6.1	1.3	4.0
Manganese Ore (287.7)	56.3	57.2	914	696	517	-5.3	-7.2	-6.1
Uranium or Thorium Ore (286.0)	7.6	56.2	74	71	64	-0.8	-2.4	-1.5
Sisal or Agave Fibers (265.4)	42.2	52.5	58	54	43	-1.5	-5.6	-3.3
Industrial Diamonds (277.1)	10.4	43.7	437	344	918	-4.7	27.8	8.6
Sesame Seeds (222.5)	9.4	32.8	428	495	462	2.9	-1.7	0.9
Groundnut Oil (423.4)	41.4	30.8	365	334	227	-1.8	-9.1	-5.1
Tea (074.1)	27.1	30.7	1,657	1,695	1,800	0.5	1.5	0.9
Metals of the Platinum Group (681.2)	36.6	26.1	6,072	5,782	10,199	-1.0	15.2	5.9
Other Nonferrous Ores (287.9)	19.9	22.7	2,658	3,241	2,116	4.1	-10.1	-2.5
Saw and Veneer Logs (247.2)	19.0	22.7	5,361	6,307	4,936	3.3	-5.9	-0.9
Parts of Tobacco Leaf or Stems (121.3)	15.8	21.0	79	133	160	11.1	4.6	8.2
Sheep Skins Without Wool (211.7)	8.0	20.9	618	740	271	3.7	-22.2	-8.7
Products of Melted Metal Ores (278.6)	20.7	20.7	393	494	483	4.7	-0.6	2.3
Ferrous Alloys (671.6)	17.0	20.4	5,712	8,858	6,359	9.2	-8.0	1.2
Raw Cotton (263.1)	14.9	20.1	7,816	10,304	5,706	5.7	-13.7	-3.4
Cocoa Butter and Paste (072.3)	16.4	20.1	1,614	2,065	2,172	5.1	1.3	3.4
Asbestos Simply Worked (278.4)	19.3	19.5	562	503	256	-2.2	-15.5	-8.4
Raw Goat and Kid Skins (211.4)	32.0	19.2	125	70	20	-11.1	-26.4	-18.2
Natural Gums and Resins (292.2)	31.0	19.1	256	380	277	8.2	-7.6	0.9
Raw Sugar (061.1)	18.8	19.0	4,385	5,383	3,317	4.2	-11.4	-3.1
Tobacco Stripped (121.2)	13.7	18.5	3,198	3,927	4,526	4.2	3.6	3.9
Cotton Seeds (222.3)	22.1	17.2	79	144	192	12.8	7.5	10.4
Chemical Wood Pulp (251.6)	13.9	15.6	1,025	1,320	918	5.2	-8.7	-1.2
Other Leathers (611.6)	7.3	15.6	1,602	1,640	1,089	0.5	-9.7	-4.2
Beryllium and Titanium (689.9)	19.2	14.5	1,312	2,796	2,364	16.3	-4.1	6.8
Non-Monetary Gold (971.0)	13.5	13.3	18,457	25,986	25,000	7.1	-1.0	3.4
Metaliferous Nonferrous Wastes (288.1)	7.5	12.7	1,914	1,987	1,820	0.8	-2.2	-0.6
Coffee Green or Roasted (071.1)	16.4	12.5	7,880	15,047	11,014	13.8	-7.5	3.8
Natural Calcium Phosphates (271.3)	16.0	11.8	1,752	1,364	1,381	-4.9	0.3	-2.6
Other Coal Not Agglomerated (322.2)	7.5	10.1	18,411	20,303	18,302	2.0	-2.6	-0.1
Iron Ore Not Agglomerated (281.5)	9.7	9.2	7,771	8,502	7,429	1.8	-3.3	-0.5
Lumber Shaped Nonconifer (248.3)	8.4	7.8	6,067	8,895	8,613	8.0	-0.8	4.0
Fruit, Fresh or Dried (057.9)	5.5	7.8	5,997	7,775	8,790	8.2	0.9	4.9
Prepared or Preserved Fish (037.1)	5.8	6.2	3,652	5,406	5,610	5.3	3.1	4.3
Aluminum Alloys , Unwrought (684.1)	3.0	4.8	14,964	25,207	20,543	11.0	-5.0	3.6
Shellfish (0360)	4.6	4.6	11,788	17,920	17,101	8.7	-1.2	4.2
Copper Alloys, Unwrought (682.1)	19.1	4.2	12,197	17,082	11,704	7.0	-9.0	-0.5
ALL ABOVE PRODUCTS	13.5	13.2	159,744	216,069	189,667	6.2	-3.2	1.9
Global Trade in All Goods (0 through 9)	1.8	1.3	3,195,029	4,713,653	5,262,729	8.1	2.8	5.7
All Goods less Petroleum (0 to 9 - 3)	1.2	0.9	2,846,232	4,365,128	4,891,379	8.9	2.9	6.2
All Manufactures (5 through 8 - 68) **	0.4	0.4	2,243,810	3,509,707	4,050,750	9.4	3.6	6.8

* The totals are the combined imports of all original OECD members plus Algeria, Argentina, Bangladesh, Barbados, Belize, Bolivia, Brazil, Chile, China, Colombia, Costa Rica, Cyprus, Ecuador, Egypt, El Salvador, Greenland, Guatemala, Honduras, Hong Kong (China), Hungary, India, Indonesia, Israel, Jamaica, Kenya, Rep. of Korea, Macau (China), Malaysia, Malta, Mauritius, Mexico, Nepal, Nicaragua, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Romania, Singapore, SACU, Taiwan (China), Thailand, Trinidad & Tobago, Turkey, Tunisia, Uruguay and Venezuela.

**This product was added on the basis of its overall size in SSA exports and the fact that trade data show the region has a revealed comparative advantage in its production.

Source: Based on the reported UN import statistics of the countries listed in the note.

Table 2. The Growth of World Trade in Major Groups of Sub-Saharan Africa's Traditional Exports (1990-99)

Traditional Export Product Group *	Reported Imports from Sub-Saharan Africa ($million) 1990	1999	Reported Global Imports From All Countries ($million)* 1990	1995	1999	Average Annual Global Import Growth Rate From All Countries (%) 1990-95	1995-99	1990-99
Tropical Beverage & Related Products	3,337	4,664	13,245	21,626	17,954	10.1	-4.6	3.4
Non-Ferrous Metals and Ores	6,441	5,538	40,105	56,862	49,327	7.2	-3.5	2.3
Ferrous Metals and Ores	1,731	1,979	13,483	17,360	13,788	5.2	-5.6	0.2
Fresh and Preserved Seafood	738	1,230	15,440	23,326	22,711	8.6	-0.5	4.4
Other Foodstuffs	1,359	1,394	11,175	13,987	12,796	4.6	-2.3	1.5
Hides and Leather Products	206	231	2,345	2,450	1,380	0.9	-13.5	-5.7
Minerals and Products	1,843	2,155	21,118	22,664	20,422	1.4	-2.5	-0.4
Lumber and Products	1,750	1,988	12,709	16,902	14,744	5.9	-3.4	1.7
Fibers and Other Agricultural Materials	1,654	2,076	11,230	14,562	10,627	5.3	-7.6	-0.6
Gold and Industrial Diamonds	2,535	3,721	18,894	26,330	25,918	6.9	-0.4	3.6
TOTAL OF ABOVE PRODUCTS	21,594	24,976	159,744	216,069	189,667	6.2	-3.2	1.9
Total Excluding Gold and Diamonds	19,059	21,255	140,850	189,739	163,749	6.1	-3.6	1.7
MEMO ITEM								
All Foods and Feeds	13,117	17,170	392,450	546,653	502,689	6.9	-2.1	2.8
All Agricultural Raw Materials	4,202	4,489	103,020	139,964	109,409	6.3	-6.0	0.7
All Ores, Minerals and Metals	9,530	8,708	132,036	176,955	158,645	6.0	-2.7	2.1
All Manufactured Goods**	9,474	16,034	2,243,810	3,509,707	4,050,750	9.4	3.6	6.8
ALL TRADED GOODS	57,243	68,836	3,195,029	4,713,653	5,262,729	8.1	2.8	5.7

*The groups listed below are composed of the following traditional products; Tropical Beverage Products (cocoa beans, tea, cocoa butter and paste, and coffee); Non-Ferrous Metals and Ores (manganese ore, uranium or thorium ore, metals of the platinum group, other nonferrous ores, beryllium and titanium, metaliferrous nonferrous waste, unwrought aluminum alloys, unwrought copper alloys); Ferrous Ores and Metals (ferro-alloys, iron ore); Fresh and Preserved Seafood (shellfish, prepared or preserved fish); Other Foodstuffs (sesame seeds, groundnut oil, raw beet and cane sugar, fresh or dried fruit); Hides and Leather Products (sheep skins without wool, raw goat and kid skins, other leathers); Minerals and Products (simply worked asbestos, products of melted metal ore, natural calcium phosphates, other coal not agglomerated); Lumber and Products (saw and veneer logs, natural resins and gums, chemical wood pulp, non-conifer shaped lumber); Fibers and Other Agricultural Materials (sisal or agave fibers, parts of tobacco leaf or stem, raw cotton, tobacco stripped, cotton seed); Gold and Diamonds (non-monetary gold, industrial diamonds).

**What appears to be a fairly robust growth in imports of manufactures from Africa is something of an anomaly due to a relatively small number of unusual products. The rapid expansion of diamonds, especially from Angola and the Democratic Republic of the Congo, account for about one-fifth the overall increase. While it might be argued that diamonds are not a manufacture they are so classified due to a defect in the original SITC system which failed to distinguish between raw and cut diamonds. A case can be made that the latter are in fact a manufactured good. Other unusual developments that had an importance influence on the 1999 manufactures total was the registration of flags of convenience in Liberia (which is recorded as ships and boats in the SITC) and the leasing of aircraft by several African countries like Ghana. See Ng and Yeats (2000, p 16).

Source: Based on the reported UN import statistics of the countries listed in the notes to Table 1.

Three conclusions follow from these statistics;

• Over the last decade, global trade growth for each traditional product group fell well short of corresponding rate for world trade. Trade in the traditional hides and leather group fell at an annual rate of almost 6 percent, due largely to a long term decline in global demand for raw hides. Fresh and preserved seafood had the highest growth rate (4.4 percent) of any traditional group, but this was still about one-quarter lower than the rate for world trade.

• Whether or not gold and industrial diamonds are included has little influence on the overall trade performance of all traditional products. If the former are excluded the traditional product growth rate is reduced by only two-tenths of a percent. In part, this is due to the relatively low share (13.7 percent) of gold and industrial diamonds in all traditional products. In contrast, over one-quarter of all traditional product exports consist of non-ferrous ores and metals.

• For the decade, world trade in all traditional products grew at an annual rate (1.9 percent) which was below that for either the all foodstuffs, or ores, minerals and metals groups, but higher than that for agricultural materials. The annual 1995-99 rate of global trade decline for traditional products exceeded that for foodstuffs and ores, minerals and metals, but was less than that for all agricultural materials. Broadly speaking, 1990-99 trade changes for traditional products were basically in line with those for other commodities.

In short, these initial statistics suggest that 1990-99 global trade for all Africa's traditional exports combined was essentially static. It also raises the question of whether there are African non-traditional exports with more favorable trade prospects (see Box 3).

B. Prospects for Individual SSA Countries

Key Observations

Conceivably, considerable variation could occur in the recent trade performance of individual African countries depending on their specific "basket" of traditional exports. However, the data show no African country's traditional exports came close to matching the 1990-99 rate of growth of world trade. Traditional exports of all African countries, with the exception of South Africa and Malawi, experienced negative global demand growth during 1995-99, and in some cases the declines were dramatic. Growth rates for Mali's traditional exports (largely cotton) fell by about 15 percentage points (from 6 to -9.2 percent), while the decline in annual growth rates for Ethiopia, Uganda and Angola were 16 percentage points or more. Exporters of traditional products seemingly are vulnerable to important adverse demand and price shocks when global economic activity weakens, as it did during the period of the East Asian financial crisis.

The empirical information examined, thus far, provides a relatively pessimistic view of prospects for most African traditional exports. Average annual growth rates for these products were well below that for world trade, and also below rates for two broader groups of commodities (foodstuffs and ores, minerals and metals). However, the fact that considerable variation exists in growth rates for individual traditional products (see Table 1) may lead to important differences in African export performance across countries, depending on the particular basket of goods traded. Just how much can prospects of individual African countries vary due to the specific traditional products they export is an important question?

A constant market share analysis can directly address this question. This approach isolates the influence of changes in global demand for the specific goods an African country j exports (ΔD_j) in the absence of any changes in the country's market shares, or diversification into new product lines. Specifically, the projected impact of demand changes on traditional exports is derived from,

$$(1) \qquad \Delta D_j = \Sigma\, s_{oi}(D_{ti} - D_{oi})$$

where soi is country j's global market share for traditional product i in period o, and Dti and Doi represent global trade in product i in periods o and t. The right hand side of the equation is summed over all traditional products to produce an aggregate demand change index for the country. See Kravis (1970) for one of the earlier applications of this approach.

Table 3. Estimated Effects of Demand Changes on Large and Mid-Size African Countries' Traditional Exports (1990-99)

African Exporter	1990 Traditional Exports ($million)	Projected Demand Induced Exports of Traditional Products ($ million) 1995	1999	Annual Rate of Growth in Projected Demand Induced Exports (%) 1990-95	1995-99	1990-99
LARGER COUNTRIES						
Angola	10	18	15	12.3	-4.6	3.9
Cameroon	841	1,237	1,020	8.0	-3.8	2.2
Congo, Dem. Rep.	1,278	1,944	1,436	8.7	-5.9	1.3
Congo, Rep.	196	230	183	3.2	-4.4	-0.8
Cote d'Ivoire	1,833	2,565	2,410	6.9	-1.2	3.1
Gabon	552	553	428	0.0	-5.0	-2.8
Ghana	945	1.342	1,290	7.3	-0.8	3.5
Kenya	596	805	705	6.2	-2.6	1.9
Liberia	264	311	259	3.3	-3.6	-0.2
Mauritius	346	426	273	4.3	-8.5	-2.6
Nigeria	274	355	329	5.3	-1.5	2.1
SACU	9,124	11,016	11,353	3.8	0.6	2.5
Zambia	1,165	1,672	1,170	7.5	-6.9	0.0
Zimbabwe	703	932	781	5.8	-3.5	1.2
All Above Countries	18,127	23,406	21,652	5.2	-1.5	2.0
MID-SIZE COUNTRIES						
Benin	53	74	57	6.7	-5.1	0.7
Ethiopia	200	343	237	11.4	-7.2	1.9
Guinea	50	70	55	7.1	-4.7	1.2
Madagascar	138	213	177	9.0	-3.6	2.8
Malawi	254	313	330	4.3	1.1	3.0
Mali	166	219	135	5.7	-9.2	-2.2
Mauritania	408	507	460	4.4	-1.9	1.3
Mozambique	137	178	142	5.4	-4.4	0.4
Senegal	357	408	356	2.7	-2.7	0.0
Sudan	343	445	275	5.3	-9.2	-2.5
Tanzania	264	393	288	8.2	-6.0	1.0
Togo	202	211	171	0.8	-4.1	-1.8
Uganda	200	359	263	12.4	-6.1	3.1
All Above Countries	2,772	3,733	2,946	6.1	-4.6	0.7
ALL SSA COUNTRIES	21,596	28,076	25,324	5.4	-2.0	1.8
MEMO ITEM:						
(Global Trade Statistics)						
ALL GOODS	3,195,029	4,713,653	5,262,729	8.1	2.8	5.7
Manufactures	2,243,810	3,509,707	4,050,750	9.4	3.6	6.8
Foods and Feeds	392,450	546,653	502,689	6.9	-2.1	2.8
Agricultural Material	103,020	139,964	109,409	6.3	-6.0	0.7
Ores, Minerals & Metals	132,036	176,955	158,645	6.0	-2.7	2.1

Source: Tabulations based on trade statistics reported to COMTRADE by countries listed in the notes to Table 1.

Table 3 summarizes the results when the constant market share analysis was applied to all traditional products exported by each of the large and mid-size African countries (Appendix Table 3 identifies each country's traditional exports and also reports their 1999 trade values). Shown here are the 1990 values of each country's traditional exports, and 1995 and 1999 projected exports associated with global demand changes. To facilitate cross-country comparisons, the projected growth rates are shown for the full decade and for two sub-intervals.

Finally, the table reports growth rates for global trade in all goods, and in four broad product groups to provide standards for comparison.

The following points reflected in Table 3 should be noted:

- No African country exports what could be called a really superior, or inferior, combination of traditional products, although there are cross-country differences in the demand induced growth rates. Angola (primarily an exporter of non-oil traditional products like shellfish and coffee), Cote d'Ivoire (primarily cocoa beans, cocoa butter, and lumber), and Malawi (stripped tobacco, tea and raw sugar) have projected 1990-99 demand induced export growth rates exceeding 3 percent, while Gabon (saw logs, manganese ore, and shaped lumber), Mauritius (raw sugar), Mali (raw cotton) and Sudan (sesame seeds, natural gums and resins, and raw sugar) have the lowest projected negative growth rates, all under -2.8 percent.

- No African country came close to matching the rate of growth of world trade. The latter increased at an annual rate of 5.7 percent for the decade which was almost 2 percentage points higher than that for Angola which had the highest projected traditional product growth rate (3.9 percent). As a group, demand induced growth rates for the larger African countries (2 percent per year) was almost three times that for the mid-size exporters. The fact that several of the latter are land-locked probably limits their ability to export some relatively high growth traditional products like fish and crustaceans.

- Traditional exports of all countries, with the exception of South Africa and Malawi, experienced negative rates of demand induced growth during the 1995-99 period, and in some cases the declines from the first half of the decade were dramatic. Growth rates for Mali's traditional exports (largely cotton) fell by about 15 percent (from 5.7 to -9.2 percent), while the *change* in annual growth rates for Ethiopia, Uganda and Angola was 16 percent or more. Very few African countries appear to export a combination of traditional goods that guards against excessive instability in periods of slowing world trade.

In short, the evidence suggests it is unlikely that a country could export some basket of traditional products that would generate growth rates that parallel those for world trade. This is not an impossibility, however, since Table 1 shows five traditional products, namely, platinum, industrial diamonds, parts of tobacco leaf or stem, cotton seed, and miscellaneous base metals grew at a 1990-99 pace that exceeded world trade growth.

C. Implications of Recent Income Elasticity Estimates

Key Observations

Over the last decade, world trade growth (5.7 percent) was roughly double that for income, as measured by GDP. On average, our income elasticity estimate for Africa's traditional exports is just over one-third (0.36). This implies that, if GDP continues to expand at its recent rate of 2.5 percent, global trade in traditional products should grow by under one percent per year. As such, continued reliance on traditional exports will significantly extend

Africa's marginalization in world trade. This trend could be reversed, or the rate of marginalization slowed, if Africa achieved major competitive gains for these products to compensate for their relatively low demand growth. However, a recent analysis of Africa's supply capacities found no evidence that competitive gains were occurring.

A useful way of assessing implications of the trade performance statistics previously reported is to compare these data to changes in real income in major markets. Does the recent evidence continue to support the assumption of low income elasticities of demand for the types of products Africa exports, or have their prospects improved?. That is, have global real imports of these goods grown at a pace that comes closer to matching growth rates for real GDP in the major consuming countries? A related question is whether income elasticities for processed or semi-processed traditional products (like plywood and veneers) are higher than those for raw form item (like unworked or simply shaped timber)? If so, could Africa expect more from its traditional exports by moving up commodity processing chains where such an adjustment is economically feasible?[12] The answers to such questions have an important bearing on Africa's export prospects.

The income elasticity of demand for a given product j in country k (I_{jk}) is defined as the percentage change in demand (imports) for the good attributable to a change in income of a consuming country. That is, I_{jk} is defined as,

(2) $$I_{jk} = [(Q_{jt} - Q_{jo})/Q_{jo}] \div [(Y_{kt} - Y_{ko})/Y_{ko}]$$

where Q_{jt} and Q_{jo} represent the quantity of j consumed in period t and o, respectively, while Y_k is a measure of the level of income in country k. Some previous studies attempted to "approximate" income elasticities by directly dividing percentage changes in the quantity of imports of a specific good by percentage changes in real GDP in the importing country, that is, through use of the ratio of changes in imports to those in income.

This approach, however, may provide potentially biased estimates for income elasticities of demand in that it does not account for the potential effects any price changes which may have occurred. It also does not account for any changes in the level of competition between domestic and foreign producers, or changes in tariffs or NTBs facing foreign suppliers. However, for many of Africa's traditional exports, particularly tropical products, competition between foreign and domestic producers in industrial markets is likely to be small and unlikely to change quickly over time.[13]

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[12] Africa may not have a comparative advantage in processing some domestically produced commodities. The fabrication of ores into metals is generally a capital intensive operation which normally would be undertaken in richer countries. However, transformation of raw cotton, or wool, into fabric or clothing would seemingly be suitable for local processing. UNCTAD (1975) discusses the potential benefits for developing countries in shifting the composition of exports to processed commodities. These include; important job creation effects, it may increase trade contacts and provide benefits associated with "outward-oriented" policies, there may be important linkages from processing industries to other sectors of the economy, it may reduce the instability of export earnings, and it may produce an increase in export revenues and foreign exchange earnings. In contrast, Roemer (1979) examines some of the problems may encounter in efforts to increase domestic processing.

A more reliable, and theoretically accurate, income elasticity estimate could be derived by netting out the influence of price changes. Specifically, the projected change in imports due to price changes is,

(3) $(Q_{jt} - Q_{jo})^* = Q_{jo} \times \varepsilon_{jk} \times (U_{jt} - U_{jo})/U_{jo}$

where U_j is the import unit value for product j in the two time periods, and ε_{jk} represents published estimates for the price elasticity of demand for the good. The latter were drawn from several sources such as Stern *et. al.* (1976). The import unit values used for these estimates were computed from UN COMTRADE data. Since countries may report different quantity units for imports our analysis was confined to major markets like the EU(15), Japan and United States which reported on a common basis. This procedure made it possible to derive an estimate of income elasticities (I_{jk}^*) with the influence of price effects netted out. Specifically,

(4) $I_{jk}^* = [(Q_{jt} - (Q_{jt} - Q_{jo})^* - Q_{jo})] \div (Y_{kt} - Y_{ko})/Y_{ko}$

where Y measures the level of real income in the two time periods.

Table 4 utilized combined 1990 and 1999 import statistics of the EU(15), Japan and United States to produce estimates for these countries' income elasticities for traditional exports. The table shows the weighted average trade-income ratio changes and income elasticity estimates for each traditional product group, as well as that for all products combined.[14] The range in elasticity estimates within each group is reported, and the specific items with the highest and lowest elasticities are identified. For example, Table 4 shows the average income elasticity for fresh and preserved seafood is 1.35, the range in estimates for the underlying products is from 2.12 to 1.00. Prepared fish had the highest elasticity in this group (2.12), while shellfish had the lowest (1.00).

[13] Other factors besides income changes can influence consumption growth. Global trade in the traditional product simply worked asbestos (SITC 2784) declined by almost 50 percent over the last decade due, in part, to health concerns involving this item. Changes in demand for agricultural products, like sugar, are influenced by high tariffs and NTBs, just as excise and other domestic taxes influence demand for tobacco. Technological factors, more efficient utilization of raw materials in production, or the development of substitutes have had a negative impact on demand for some traditional products. Internal factors in the exporting country may also influence the level of global trade. Ethiopia is one of the world's largest suppliers of sesame seeds whose production and export was affected by the level of domestic hostilities. Although economic theory acknowledges the possibility of a negative income elasticity (Henderson and Quandt, 1958, p. 26-28) these non-income factors probably generated some of the negative estimates observed in our results.

[14] Income elasticity estimates are sometimes generated within the context of multi-variable regression models that attempt to hold both price and non-price factors constant. See, for example, Stern et. Al. (1976). Our approach focuses directly on price changes and does not account for other factors that may influence import levels.

Table 4. Estimates of Trade Income Changes and Income Elasticities of Demand in the EU (15), Japan and United States for Major Groups of Traditional African

Traditional Product Group*	Group Average	Range in Estimates High	Range in Estimates Low	High and Low Value Products High	High and Low Value Products Low
TRADE-INCOME CHANGES					
Tropical Beverage Products	0.45	1.67	-1.21	cocoa beans	cocoa butter
Non-Ferrous Metals & Ores	0.49	3.70	-0.85	beryllium and titanium	manganese ore
Ferrous Metals & Ores	-0.17	2.19	-0.21	ferro-alloys	iron ore
Fresh & Preserved Seafood	1.42	2.29	1.01	prepared fish	shellfish
Other Foodstuffs	1.17	3.83	-0.87	prepared fruit	groundnut oil
Hides & Leather Products	0.54	0.66	-3.82	other leather nes	goat hides
Minerals and Products**	0.83	1.03	-2.97	coal	asbestos
Lumber and Products	0.55	0.67	0.51	shaped lumber	wood pulp
Fibers & Agricultural Materials	-0.73	2.12	-1.68	tobacco leaf parts	raw cotton
Gold and Diamonds***	-0.16	-0.16	-0.16	gold	gold
All Above Products	0.55	3.83	-3.82	prepared fruit	goat hides
INCOME ELASTICITY ESTIMATES					
Tropical Beverage Products	0.70	1.67	-1.18	cocoa beans	cocoa butter
Non-Ferrous Metals & Ores	0.24	3.76	-1.25	beryllium and titanium	manganese ore
Ferrous Metals & Ores	-0.39	1.89	-0.43	ferro-alloys	iron ore
Fresh & Preserved Seafood	1.35	2.12	1.00	prepared fish	shellfish
Other Foodstuffs	0.76	3.62	-1.50	prepared fruit	groundnut oil
Hides & Leather Products	0.21	0.33	-4.21	other leathers nes	goat hides
Minerals and Products**	0.23	0.67	-3.06	coal	asbestos
Lumber and Products	0.36	0.64	0.28	shaped lumber	saw logs
Fibers & Agricultural Materials	-0.96	1.81	-2.00	tobacco leaf parts	raw cotton
Gold and Diamonds***	-1.21	-1.21	-1.21	gold	gold
All Above Products	0.36	3.76	-4.21	beryllium and titanium	goat hides

* See the notes to Table 2 for a list of items in the product groups.
** Since no quantity units were available for uranium ore and platinum these items are excluded from this group.
*** Since no quantity units were available for industrial diamonds this item is excluded from the group.

Source: Tabulations based on trade statistics reported to COMTRADE by countries listed in the notes to Table 1.

For all traditional products combined, both the average trade-income change ratio (0.55) and income elasticity estimate (0.36) are well below unity, which is consistent with earlier estimates (Stern *et. al.* 1976). However, the number of instances (8 of 10) where the lower range of the elasticity estimates are negative is surprising. Negative values imply that demand for these items is contracting in spite of rising real income levels. Average traditional product trade-income ratios and income elasticities are negative for three of the ten product groups. Goat hides registers the lowest income elasticity (-4.26) of any traditional product followed by asbestos.

The statistics in Table 4 have important trade policy implications for Sub-Saharan Africa. Over the last decade, the rate of growth in world trade (5.7 percent) was roughly double that for income as measured by GDP. On average, the income elasticity for traditional products is just over one-third (0.36). This implies that, if GDP continues to grow at its recent annual rate of 2.5 percent, global trade in traditional products should expand by under one percent per year. As such, reliance on traditional exports will continue Africa's marginalization in world trade. It appears the only way this trend could be reversed is for Africa to achieve major competitive gains for these products which compensate for the relatively low rate of grow in import demand. However, a recent analysis of Africa's supply capacities found no evidence that such competitive gains were occurring (Ng and Yeats 2000).

Table 5 utilizes a "demand growth prospects" classification scheme to summarize implications of the income elasticity estimates for individual traditional products. Although the boundaries are by their nature arbitrary, six product classification groups were established which incorporate a range of income elasticities.[15] Traditional products which clearly have pronounced negative prospects (their income elasticities are below -1.5), like asbestos, are classified in the "strong negative demand growth prospects group" while, at the other end of the scale, products like ferro-alloys and prepared fish, where trade is growing considerably faster than GDP, are classified in the "strong positive growth prospects" category. Between these two extremes are three categories for likely static demand growth prospects products, and products with probable positive, or negative, growth prospects. Within each group the products are listed in terms of ascending income elasticities. For example, within the "strong negative growth prospects" group goat skins has the lowest income elasticity and sheep skins has the highest.

The general message emerging from Table 5 reinforces the essentially pessimistic impressions from the previous analyses. Twenty two (63 percent) of the traditional products seemingly have either static or negative demand growth prospects. These "static or negative" products accounted for about 30 percent of Africa's 1999 total non-oil exports, or about 60 percent of all traditional product exports. However, in contrast, to the essentially negative prospects of most products, Table 5 suggests there are important items, like prepared fish, where the outlook is for probable positive or strong demand growth. The 13 items classified in the "positive growth" groups accounted for about 20 percent of SSA non-oil exports in 1999. In terms of export values, the most important traditional products with favorable demand prospects include;

- *Shellfish, crustacea and prepared fish.* Exports of these products from Africa totaled over $1.2 billion in 1999 and accounted for one percent or more of the total exports of 21 African countries. Recent statements in several trade journals suggest that prospects for seafood and seafood products may be even more favorable than suggested by Table 5 due to the impact of "mad cow" and "foot and mouth" disease, particularly in Europe. The favorable demand outlook is enhanced by a slight recent increase in Africa's global market share (see Table 1).

- *Unwrought aluminum.* Imports from Africa totaled about $1 billion in 1999 with about 98 percent of these shipments originating in South Africa, Cameroon and Ghana. Aluminum is highly energy intensive in production so future demand and production prospects will be influenced by changes in petroleum and other energy prices. The World Bank (2000, p. 80) suggests the longer-term outlook is favorable and projects a 7 per cent real price rise over 1999-2010. Over 1990-99, Africa's global market share for aluminum held constant (Table 1).

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[15] The boundaries in Table 5 were established in recognition of the fact that other factors besides income changes may have affected import levels. For example, imports of some agricultural products like sugar or groundnut oil may have been negatively affected by the Uruguay Round "tariffication" of nontariff barriers facing these products. It has been suggested that tariffication may have raised agricultural protection in cases. However, barriers were clearly lowered on most manufactures, agricultural raw materials, and ores, minerals and metals. Our limits in Table 5 were set in an attempt to isolate the influence of income changes as opposed to exogenous trade barrier changes.

- *Fresh or Prepared Fruit*. Global imports of fresh and prepared fruit rose by over $3 billion over the last decade and now total about $8.8 billion. Africa has a geographic advantage in many of these goods in that it is either an all season or off season producer. That is, when African produce is ready for harvest winter conditions generally prevail in the major northern hemisphere markets. Several trade journals suggest that Africa needs to further develop fast reliable air service to deliver fresh produce to the major OECD and developing country markets. The favorable demand outlook for these products is considerably enhanced by an increase of over 2 percentage points in Africa's global market share (Table 1).

- *Beryllium and Titanium.* Global imports of these products almost doubled over the last decade, a point that is reflected in the group's relatively high income elasticity. Beryllium is an important additive to other metals making them stronger and lighter. Future prospects for Beryllium are uncertain due to concerns that exposure to the product may pose lung and other health hazards. Over the last decade, Africa experienced considerable erosion in its global market share for these products.

Table 5. Probable Demand Growth Prospects for Individual Traditional Products

Growth Prospects Category (no. of items)*	Traditional products**
Strong Negative Demand Growth Prospects (3)	Raw Goat and Kid Skins
(I_{jk}* < -1.5)	Asbestos Simply Worked
	Sheep Skins Without Wool
Probable Negative Demand Growth Prospects (8)	Natural Calcium Phosphates
($-1.5 \le I_{jk}$* < -0.5)	Manganese Ore
	Non-Monetary Gold
	Cocoa Butter and Paste
	Groundnut Oil
	Other Nonferrous Ores, nes
	Raw Beet and Cane Sugar
	Groundnut Oil
Static Demand Growth Prospects (11)	Raw Cotton***
($-0.5 \le I_{jk}$* ≤ 0.5)	Metaliferous Nonferrous Waste
	Iron Ore
	Tea
	Saw Logs
	Other Leathers, nes
	Other Coal Not Agglomerated
	Natural Gums and Resins
	Wood Pulp
	Sesame Seeds
	Unwrought Copper Alloys
Probable Positive Demand Growth Prospects (6)	Shaped Lumber
($0.5 < I_{jk}$* ≤ 1.5)	Coffee Beans
	Products of Melted Metal Ores
	Shellfish and Crustacea
	Cotton Seeds
	Tobacco Stripped
Strong Positive Growth Prospects (7)	Cocoa Beans
(I_{jk}* > 1.5)	Parts of Tobacco Leaf or Stem
	Ferro-Alloys
	Prepared or Preserved Fish
	Unwrought Aluminum Alloys
	Prepared or Preserved Fruit
	Beryllium and Titanium

* Prospects for export earnings will be determined both by changes in demand and supply. If global supply conditions are expanding faster this could produce static or even declining export revenues

** Within each group the products are listed in terms of ascending income elasticity estimates. For example, within the "strong negative growth prospects group" goat skins has the lowest income elasticity and sheep skins has the highest elasticity. We were unable to compute income elasticities for uranium, platinum, and industrial diamonds due to a failure of most countries to report quantities for imports.

*** Analysis of the underlying statistics lead us to shift raw cotton from the "strong negative prospects" group into the "static growth prospects" category. The collapse of Asian markets for cotton due to the regional financial crisis had a major adverse impact on overall demand for this good. In contrast, EU and North American imports of raw cotton were essentially static.

Source: Tabulations based on trade statistics reported to COMTRADE by countries listed in the notes to Table 1.

Box 3. Are There "Dynamic" African Exports?

An important question is whether there are "dynamic" or relatively fast growing products that Africa may export competitively. If so, how do the fast growing products compare with the regions' "traditional" products? Are the dynamic products largely composed of non-oil primary commodities, or do manufactures, which historically have had higher growth rates, appear among these items.

For an assessment, the following three-step procedure was employed. First, a list was compiled of all four-digit SITC Rev. 2 products where 1999 global imports from Africa where at least $25 million. This "cut-off" was established to distinguish between situations where regional trade might be the result of special "irregular" circumstances, as opposed to where a permanent trade base was established. In order to provide further supportive evidence on this last point, we next eliminated all products where SSA exports failed to exceed $1 million in each year from 1995 to 1998. This procedure produced a list of 183 products for further analysis. Next, we calculated 1990-99 global import growth rates for these goods from both Africa and all exporting countries, and ranked the products in descending order of the global trade growth rates. All products with above average global trade growth rates were retained for further analysis. This procedure made it possible to differentiate between four different groups of dynamic products.

- **Competitive-dynamic products**. World trade in these items grew at above average rates while the rate of growth of imports from Africa actually exceeded the global average. The 33 four-digit products listed below fall in this category and accounted for $4.25 billion or 9.3 percent of Africa's 1999 non-oil exports. With the exception of six products, all are classified as manufactured goods. Four textile and clothing products (with combined African exports of $1.09 billion) appear in the list, as do six groups of "parts and components" of specific goods with a combined African trade of $909 million. Trade in parts and components generally reflects international production sharing, a fast growing global activity, in which various stages of the fabrication of a good are undertaken in different countries.

	1999 Global Imports ($mill.)		1990-99 Import Growth Rate	
Export Product (SITC No.)	From Africa	World	From Africa	World
Radio-telegraphic equipment (7643)	31.2	43,648.4	50.0	22.6
Filtering machinery (7436)	404.5	9,878.8	47.6	8.5
Wine of grapes (1121)	232.1	13,637.5	35.8	6.1
Insulated electric wire (7731)	73.0	32,167.7	33.9	11.4
Salts of metallic acids (5233)	50.3	2,186.7	33.0	8.7
Pneumatic tires (6251)	53.1	11,090.1	31.6	5.9
Chemical preparations (5989)	119.9	31,307.0	30.3	6.9
Industrial diamonds (2771)*	401.0	918.2	27.4	8.6
Chairs and parts (8211)	327.8	22,773.5	26.9	9.4
Cosmetics and perfumes (5530)	30.7	18,715.8	23.6	10.1
Other electric machinery (7788)	59.3	42,310.2	22.6	9.9
Ores of precious metals (2890)	294.2	2,896.4	19.9	8.0
Parts of office machinery (7599)	67.9	121,824.5	19.7	13.1
Parts of motor vehicles (7849)	326.2	125,628.8	19.6	6.7
Medicaments (5417)	27.1	67,369.7	17.6	15.3
Electric switches & relays (7721)	35.3	55,711.8	17.0	9.0
Parts of power generators (7149)	33.0	23,596.6	16.8	7.2
Miscellaneous articles (8939)	38.6	41,456.9	15.7	8.6
Pepper and pimento (0751)	32.9	1,326.5	15.5	11.0
Parts of telecommunications (7649)	32.8	61,102.2	15.1	11.2

Box 3. Continued

Export Product (SITC No.)	1999 Global Imports ($mill.) From Africa	1999 Global Imports ($mill.) World	1990-99 Import Growth Rate From Africa	1990-99 Import Growth Rate World
Specialized machinery (7284)	44.5	47,184.5	15.0	5.9
Trousers (8423)	330.1	16,303.2	14.4	7.4
Cotton under garments (8462)	382.1	23,443.1	13.6	13.3
Reaction engines (7144)	90.4	14,203.9	13.6	10.7
Other textile outer garments (8439)	196.2	23,123.5	13.2	6.1
Internal combustion engine parts (7139)	50.2	22,599.0	13.2	8.5
Zoo animals (9410)	41.4	504.3	12.7	6.9
Edible products nes (0980)	25.8	14,689.1	12.6	9.2
Parts of furniture (8219)	121.9	28,985.7	12.5	6.7
Parts of tobacco leaf or stem (1213)*	33.6	159.8	11.7	8.2
Builders carpentry products (6353)	58.4	7,497.6	9.2	8.3
Gas turbines nes (7148)	30.8	4,401.6	8.8	7.4
Men's shirts (8441)	181.0	10,644.6	8.1	6.0
Total of Above	4,257.3	943,287.2	19.1	11.0

*Also classified as a traditional export.

- **Dynamic Products**. African exports of these goods grew faster than world trade, but slower than global trade in the item. Although African import shares for these goods declined over the decade, their above average growth rates worked against Africa's longer-term marginalization in world trade. Altogether, 3 four-digit products, namely, knitted outer garments, cotton seed, and men's' jerseys with combined African exports of $517 million fell in this category.[16]

- **Static dynamic products**. Global trade in these products grew at an above average rate, yet imports from Africa grew less rapidly than world trade. The four products falling in this category accounted for $3,042 million in trade or 6.6 percent of all African non-oil exports. Platinum dominates this group with 1999 African exports of $2.7 billion. Other static-dynamic products include printing paper, miscellaneous base metals, and toys and games.

- **Declining dynamic products**. Global trade in these goods grew at an above average pace, yet the annual rates of growth of imports from Africa were negative. In 1999, Africa's exports of the three products in the group (palm oil, vegetable tanning extracts, and safety glass) totaled $105 million.

A point of interest concerns the recent African origins of the competitive-dynamic product exports. The underlying data show that most of these goods originated in the southern cone of Africa. SACU accounted for 71 percent of all exports, followed by Mauritius (16 percent), and Madagascar and Zimbabwe (3 percent each). However, all SSA countries , with the exception of Reunion and Rwanda recorded some competitive-dynamic product exports. How Africa was able to establish an export base for such items is a question of considerable importance.

As was the case with our analysis of variations in global demand for a specific country's products (Table 3), it was of interest to determine if significant differences exist in the SSA countries average income elasticities. That is, are some SSA countries relatively fortunate in that

[16] To test the sensitivity of the list of dynamic products to our 1999 $25 million trade cut-off, this value was reduced to $20 million and the resulting new product list examined. This lower limit only added five products to the "competitive-dynamic" group, namely, electronic micro-circuits, tapes and valves for pipes, plastic polymers, wood manufactures for domestic use, and bed linen. Only one item, corsets and brassieres, would have been added to the "dynamic" products list. The composition of the two other groups was unchanged.

they export a "basket" of products with relatively high income elasticities, while others are unfortunate in that their products elasticities are relatively low.

Table 6 provides evidence bearing on this point. Shown here are average trade weighted and unweighted elasticity estimates for the large and mid-sized African countries. To help identify the sources of cross-country variation in these statistics, the table also identifies the largest traditional product exported by each country and shows its estimated income elasticity. As an example, saw logs are the largest traditional product exported by Cameroon and 0.28 is this items estimated income elasticity. Annex 1 provides similar statistics for a group of smaller African countries.

Considerable variation occurs in the national averages as the income elasticities for four countries, all of which are mid-sized exporters, are negative. This is consistent with our previous finding (Table 3) of below average demand growth for the mid-size countries exports. The collapse of East Asian markets for cotton in the late 1990s largely accounts for Benin, Mali, and Togo's negative averages, while cotton, sugar, sheep and goat skins are responsible for Sudan's negative elasticity. In contrast, there are several African countries, like Cote d'Ivoire, Ghana, Guinea and Madagascar where the average income elasticities are close to, or exceed, unity. Frequently, these results are attributable to a few products like fish, fruit, shellfish, and cocoa beans. Zambia and the Democratic Republic of the Congo have average elasticities exceeding unity almost entirely due to the high share of beryllium and titanium in their total exports. However, It should again be noted that export *revenue* prospects may differ substantially from demand prospects if major changes are occurring in competitive market shares.

Table 6 shows rather wide differences sometimes exist between the average trade-income change ratio for individual large and mid-sized African exporters. The average ratio for all large African countries (0.75) is more than four times that for mid-sized countries (0.16). Although the discrepancy is smaller, the income elasticity for the larger countries (0.63) is also considerably higher. One possible explanation for the differences is that the mid-sized countries typically export a smaller number of products on average (16 as opposed to 21 for the larger exporters) and may, therefore, be more strongly affected by a few poorly performing items. Second, four of the mid-sized countries (Ethiopia, Malawi, Mali and Uganda) are land-locked which probably precludes exports of some relatively high growth products like shellfish and fish preparations.

Differences in the average income elasticities for their traditional products could produce significant differences in what African countries should expect from their exports of these goods. Specifically, the expectations of the 27 large and mid-sized countries could be classified as follows;

• *Negative traditional product export expectations* (4 countries). Included in this group are; Benin, Mali, Sudan and Togo. Average traditional product income elasticities are negative which implies significant reductions in real export earnings. However, future prospects will be strongly influenced by a recovery in demand for cotton.

• *Positive slow growth expectations* (17 countries). Average income elasticities are positive, but below unity. This implies that traditional exports should grow, but at a rate lower than income growth in major markets. The average income elasticity for these countries is about 0.5 which suggests their traditional exports should grow at a rate one-half that of income in major consuming markets. If past trends persist, this implies an export growth rate about one-quarter of that for world trade.

• *Favorable export expectations* (6 countries). Average income elasticities for these countries exceed unity, and range to over 2 in the case of Madagascar. About 65 percent of Madagascar's 1999 exports consisted of shellfish, prepared fish, and fresh fruit which were all high elasticity products. Zambia and the Democratic Republic of the Congo prospects depend almost entirely on market developments for beryllium and titanium. Recent concerns have been expressed about the potential cancer causing properties of this metal which could have a negative impact on demand.

Table 6. Average Income Elasticities and Trade-Income Ratios for Individual African Country Traditional Products

	Trade-Income Ratio		Income Elasticity		
African Exporter	Trade Weighted	Unweighted	Trade Weighted	Unweighted	Largest Export Product (Elasticity)
LARGER EXPORTERS					
Angola	0.79	0.02	0.85	-0.02	Shellfish (1.00)
Cameroon	0.44	0.63	0.36	0.58	Saw Logs (0.28)
Congo, Dem. Rep.	1.36	0.83	1.36	0.66	Beryllium & Titanium (3.76)
Congo, Rep.	0.83	0.63	0.65	0.43	Saw Logs (0.28)
Cote d'Ivoire	1.05	0.49	0.94	0.22	Cocoa Beans (1.67)
Gabon	-0.85	-0.07	0.34	0.17	Saw Logs (0.28)
Ghana	1.53	1.47	1.13	1.07	Cocoa Beans (1.67)
Kenya	0.37	0.45	1.04	1.06	Tea (0.10)
Liberia	0.57	0.38	0.77	0.81	Saw Logs (0.28)
Mauritius	-0.04	-0.56	0.59	0.00	Raw Sugar (-0.92)
Nigeria	1.00	0.92	0.41	0.28	Cocoa Beans (1.67)
SACU	0.76	0.70	0.32	0.49	Non-Monetary Gold (-1.21)
Zambia	1.33	0.34	1.27	0.71	Unwrought Copper (0.41)
Zimbabwe	0.66	0.50	0.48	0.23	Stripped Tobacco (1.10)
All Above Countries	0.75	0.69	0.63	0.50	
MID-SIZE EXPORTERS					
Benin	-1.27	0.27	-1.55	0.17	Raw Cotton (-2.00)
Ethiopia	0.17	-0.22	0.41	-0.38	Coffee Beans (0.64)
Guinea	0.46	0.92	1.09	1.32	Coffee Beans (0.64)
Madagascar	1.22	0.55	2.26	1.05	Shellfish (1.00)
Malawi	0.89	0.26	0.85	0.12	Stripped Tobacco (1.10)
Mali	-1.62	0.00	-1.94	-0.22	Raw Cotton (-2.00)
Mauritania	0.28	0.40	0.14	0.29	Iron Ore (-0.43)
Mozambique	0.37	0.71	0.02	0.33	Shellfish (1.00)
Senegal	0.36	0.50	0.28	0.36	Shellfish (1.00)
Sudan	-0.26	-0.30	-0.52	-0.59	Sesame Seeds (0.48)
Tanzania	0.31	0.68	0.38	0.58	Coffee Beans (0.64)
Togo	-1.02	0.16	-1.06	0.15	Raw Cotton (-2.00)
Uganda	0.19	0.29	0.51	0.11	Coffee Beans (0.64)
All Above Countries	0.16	0.29	0.36	0.32	

Source: Estimates based on the combined reported imports of the EU(15), North America and Japan.

D. Recent Changes in the Direction of Trade

Key Observations

Over the last decade the relative importance of developing countries as markets for traditional products increased significantly. Although the region's financial crisis had a major negative impact on demand over 1997-99, East Asian imports of traditional products had been growing faster than any other regional group. As global suppliers of traditional products Sub-Saharan Africa ranks behind developing countries in Latin America and East Asia in relative importance. This accents the need for Sub-Saharan countries to implement reforms that will enable them to remain globally competitive for these goods.

Expectations for Africa's traditional exports can be influenced by changes in the direction of global trade in these goods. Are industrial countries still the major consumers of these products, or have developing countries grown in relative importance? If shifts in the geographic pattern of demand occurred do they have positive or negative implications for Africa. For example, the liner conferences North-South routes generally link Africa to Europe, or to a lessor extent with North America.[17] If the major growth in demand for traditional products is in other regions, transport constraints could make it difficult for Africa to capitalize on the new opportunities. Other important considerations are whether there are important differences in the growth in demand for traditional products across markets (if so, why), is there evidence that some markets may be under performing their potential, or are the origins of these exports changing.[18]

Table 7 provides empirical evidence bearing on these points. Shown here are global imports of each traditional product group for selected years over 1990-99, as well as the share of this exchange imported by specific countries or country groups. Similar statistics for all traditional products combined are shown in the lower half of the table along with data on global imports of all non-oil primary products. The objective here is to determine if the geographic pattern of trade in traditional products differs from that of most commodities.

Table 7 shows developed countries were of declining relative importance as markets for traditional products over the decade. In 1990, 78 percent of all exports went to developed countries, but by 1997 this share had declined by almost 12 percentage points. The 1998-99 statistics seemingly suggest a recovery in these markets, but the 4 percentage point increase (to 70.1 percent) is due largely to the impact of the regional financial crisis on East Asian demand.

[17] However, the nature and directional effects of individual African countries transport constraints may vary. For example, a recent World Bank (2001, p. 54) assessment of Ghana's export prospects noted " Ghanaian producers have good access to most European and Middle Eastern markets and only indirect access to North/South American markets. Presently, only one small ocean carrier and one air carrier provide infrequent direct freight service to the North American market. A second water carrier has recently announced plans to offer direct service from the US East Coast to the West Coast of Africa, but the return trip to the United States is a long haul through East Asia.

[18] If one measures developed country imports on a per capita basis there are some relatively large differences between countries. Japanese imports of traditional products per capita were $210 in 1999, while those in Europe were slightly lower ($200). In North America and developed Oceania per capita imports were $120. The differences seem, at least in part, attributable to differences in resource endowments rather than trade barriers. That is, North America has superior endowments of timber, ores, minerals, and agricultural land than Europe or Japan so local production is competitive with many of the natural resource based traditional products produced abroad.

From 1997 to 1999, East Asia's global market shares for gold and diamonds, as well for fibers and agricultural materials, fell by more than 10 points while the other traditional product groups, with the exception of hides and leather, also experienced reductions.[19]

A comparison of the geographic import shares for the traditional and all non-oil commodities suggests that no major dissimilarities exist between the two. Developed countries accounted for 78 to 80 percent of global imports of the two groups in 1990. These markets then declined in relative importance for both commodity groups although the reduction was somewhat larger for traditional products. Conversely, in 1990 imports of developing countries accounted for about 20 percent of world trade in both traditional and all non-oil products and these markets grew in importance over the decade. In short, the relative importance and direction of changes in demand for both product groups in developed and developing countries appears to be closely related. These findings reinforce the previous conclusion that characteristics of traditional products are basically similar to other non-oil commodities.

Question of interest also concern the origins of global trade in traditional products and whether Africa was changing in relative importance as a global supplier of these goods. Table 8 provides relevant information for the last decade by reporting global export values and also shows the share of global exports from different country groups. These groups differ somewhat from those in Table 7 to more accurately reflect the importance of producer, as opposed to consumer countries. As before, similar statistics for all non-oil primary commodities are included for comparison.

[19] The magnitude of the East Asian demand reduction is clearly evident in the underlying import value statistics. In 1997, East Asia's imports of traditional products totaled $49.8 billion, yet by 1999 imports fell to $33.8 billion - a reduction of 32 percent in only two years. During this period, East Asia's imports contracted in nine of the ten traditional product groups, but the largest declines occurred for fibers and agricultural materials, and gold and diamonds.

Table 7. The Geographic Pattern for Global Imports of Traditional Products

Traditional Product Group	Year	World Imports ($ mill.)	Share of Traditional Imports by Developed Countries (%) * Total	Europe	North America	Japan	Oceania	Share of Traditional Imports by Other Countries (%)** Total	Other Europe	Latin America	Middle East & Africa	South Asia	East Asia
Tropical Beverage Products	1990	13,362	90.5	58.7	24.5	6.1	1.2	9.5	0.9	0.8	3.4	1.4	3.1
	1995	21,828	88.8	59.6	21.3	6.5	1.4	11.2	3.0	1.3	2.6	0.9	3.4
	1997	22,007	89.7	56.1	25.7	6.6	1.4	10.3	2.8	1.5	2.1	0.9	3.0
	1998	21,530	89.0	55.9	25.1	6.4	1.5	11.0	3.1	1.4	2.3	1.3	2.9
	1999	18,114	88.5	55.1	25.3	6.6	1.6	11.5	3.2	1.7	2.5	1.3	2.7
Non-Ferrous Metals & Ores	1990	40,189	85.7	49.0	14.5	21.9	0.2	14.3	1.4	1.3	0.3	0.8	10.5
	1995	56,956	73.7	40.1	16.6	16.6	0.4	26.3	1.6	2.2	0.4	1.1	21.1
	1997	53,505	73.7	39.2	18.4	15.8	0.3	26.3	1.9	2.4	0.4	1.1	20.5
	1998	49,647	76.9	40.6	22.1	13.9	0.3	23.1	1.9	2.9	0.5	0.7	17.0
	1999	49,408	76.1	37.9	23.7	14.2	0.3	23.9	1.9	2.5	0.5	0.7	18.3
Ferrous Metals & Ores	1990	10,638	78.5	56.8	12.7	8.6	0.4	21.5	3.7	1.8	0.9	0.8	14.3
	1995	14,631	72.5	50.5	11.5	10.2	0.4	27.5	3.6	1.6	0.7	0.7	20.8
	1997	14,150	65.0	45.1	10.3	9.0	0.6	35.0	3.8	2.6	0.6	0.6	27.5
	1998	13,522	67.0	48.8	10.5	7.4	0.4	33.0	4.2	2.9	0.9	0.4	24.6
	1999	11,224	65.4	45.5	11.9	7.6	0.4	34.6	3.9	2.7	0.7	0.5	26.8
Fresh & Preserved Seafood	1990	15,709	92.2	35.4	20.9	34.5	1.4	7.8	0.2	0.7	0.6	0.0	6.4
	1995	23,657	89.2	31.3	19.1	37.6	1.2	10.8	0.3	1.2	0.5	0.0	8.8
	1997	22,998	88.4	32.6	22.2	32.4	1.2	11.6	0.4	1.4	0.6	0.0	9.2
	1998	22,443	89.7	37.3	23.4	27.7	1.3	10.3	0.4	1.6	0.6	0.0	7.6
	1999	23,033	89.1	34.3	24.8	28.6	1.4	10.9	0.4	1.5	0.6	0.0	8.4
Other Foodsfuffs	1990	11,234	79.3	49.8	20.0	8.6	0.9	20.7	1.2	2.7	2.3	0.4	14.1
	1995	14,057	72.7	47.3	15.9	8.6	0.9	27.3	1.0	3.9	2.7	0.6	19.1
	1997	14,222	74.3	47.1	19.2	7.3	0.8	25.7	1.0	3.6	3.0	1.7	16.4
	1998	13,928	76.3	50.3	18.7	6.4	0.8	23.7	1.2	4.0	1.8	1.7	15.1
	1999	12,887	78.8	50.8	20.4	6.7	0.9	21.2	1.2	3.6	1.8	1.9	12.6
Hides and Leather Products	1990	2,349	70.0	56.7	8.0	4.7	0.6	30.0	3.1	1.7	1.5	1.4	22.3
	1995	2,451	61.2	51.6	5.8	3.4	0.4	38.8	10.0	1.9	1.3	2.0	23.6
	1997	2,190	59.2	49.9	4.9	4.0	0.4	40.8	9.6	3.1	1.2	1.5	25.5
	1998	1,736	61.5	51.8	5.8	3.6	0.3	38.5	5.8	3.1	1.5	1.7	26.4
	1999	1,381	58.6	46.5	6.4	5.2	0.4	41.4	5.5	3.3	1.7	2.1	28.9
Minerals and Products	1990	21,584	73.8	40.3	3.5	29.6	0.5	26.2	3.2	4.2	0.7	3.5	14.6
	1995	22,681	65.6	31.9	3.5	29.8	0.4	34.4	3.7	5.0	1.1	4.9	19.7
	1997	24,594	60.4	28.8	3.9	28.1	0.4	39.6	5.4	5.5	2.6	5.4	20.7
	1998	23,065	63.5	30.1	4.9	27.0	0.5	37.5	4.5	5.3	2.8	5.1	19.9
	1999	20,442	62.9	30.0	5.2	27.2	0.5	37.1	3.2	5.3	2.6	6.0	19.9

Table 7. Continued

Traditional Product Group	Year	World Imports ($ mill.)	Share of Traditional Imports by Developed Countries (%) * Total	Europe	North America	Japan	Oceania	Share of Traditional Imports by Other Countries (%)** Total	Other Europe	Latin America	Middle East & Africa	South Asia	East Asia
Lumber and Products	1990	12,774	73.8	44.8	6.0	21.9	1.0	26.2	1.0	1.2	1.8	2.6	19.6
	1995	17,021	66.4	41.3	6.0	18.2	0.8	33.6	0.8	1.6	2.3	1.8	27.1
	1997	15,810	64.0	38.2	7.8	17.2	0.8	36.0	1.1	2.1	2.3	2.9	27.6
	1998	13,720	67.3	47.3	9.5	9.8	0.7	32.7	1.3	2.6	2.5	3.1	23.2
	1999	14,868	64.4	42.2	9.8	10.5	0.8	36.6	1.2	2.3	2.3	3.0	27.9
Fibers & Agricultural Materials	1990	11,301	56.4	38.4	3.3	14.1	0.6	43.6	3.5	3.7	2.1	1.1	33.1
	1995	14,649	42.4	30.3	2.7	8.7	0.6	57.6	6.8	8.5	2.6	3.3	36.5
	1997	15,384	43.1	29.8	5.6	7.2	0.5	56.9	9.6	12.2	1.9	2.1	31.1
	1998	13,235	45.8	32.8	4.3	8.3	0.5	54.2	10.2	12.8	1.9	3.4	24.8
	1999	10,703	52.0	35.8	6.7	9.0	0.5	48.0	9.7	10.8	2.1	6.4	19.0
Gold & Industrial Diamonds	1990	18,908	68.7	38.4	9.3	19.1	1.9	31.3	0.3	0.2	0.9	0.2	29.7
	1995	26,347	56.3	31.5	10.3	12.4	2.1	43.7	0.2	0.4	0.9	3.7	38.6
	1997	32,625	40.6	22.1	12.5	4.2	1.8	59.4	0.2	0.7	0.9	11.4	46.2
	1998	31,092	52.1	27.9	14.9	2.9	6.4	47.9	0.2	1.1	0.8	16.0	29.8
	1999	25,935	49.0	25.7	14.3	4.0	5.0	51.0	0.2	1.8	0.9	20.8	27.4
All Traditional Products	1990	159,745	78.0	45.1	12.4	19.7	0.8	22.0	1.6	1.7	1.1	1.2	15.2
	1995	216,068	70.4	39.6	12.8	17.1	0.9	29.6	2.1	2.5	1.2	1.8	21.2
	1997	219,395	66.2	36.3	14.6	14.5	0.8	33.8	2.6	3.0	1.3	3.2	22.7
	1998	205,692	70.0	39.6	16.2	12.6	1.6	30.0	2.5	3.3	1.3	3.9	18.0
	1999	189,667	70.1	37.9	17.4	13.5	1.3	29.9	2.2	3.0	1.3	4.6	17.8
All Non-Oil Primary Commodities	1990	530,019	80.0	52.9	12.9	13.4	0.8	20.0	1.8	3.1	2.2	1.2	11.6
	1995	730,957	74.2	47.7	12.5	13.2	0.9	25.8	2.2	4.3	2.3	1.4	15.8
	1997	719,294	72.7	45.5	14.3	12.1	0.9	27.3	2.5	5.2	2.2	1.5	15.8
	1998	687,195	74.7	48.1	15.1	10.6	0.9	25.3	2.5	5.6	2.3	1.6	13.3
	1999	668,749	75.1	46.5	16.2	11.4	0.9	24.9	2.2	5.1	2.2	1.8	13.6

*****The country composition of the groups listed below is as follows; Developed Europe - all members of the EEC 12 plus Austria, Finland, Iceland, Norway, Sweden, Switzerland and Greenland; North America - Canada and the United States; Oceania - Australia and New Zealand.

**The country composition of the groups listed below is as follows; Other Europe - Cyprus, Hungary, Malta, Poland, Romania and Turkey; Latin America - Argentina, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay and Venezuela; Middle East and Africa - Algeria, Egypt, Israel, Kenya, Mauritius, South Africa and Tunisia; South Asia - Bangladesh, India, Nepal and Pakistan; East Asia - China, Hong Kong (China), Indonesia, Rep. of Korea, Macao (China), Malaysia, Philippines, Singapore, Taiwan (China) and Thailand.

Note: See the notes to Table 2 for the product composition of each traditional product groups.

Source: Tabulations based on trade statistics reported to COMTRADE by countries listed in the notes to Table 1.

Table 8. The Origins of Global Exports of Traditional Products

Traditional Product	Year	World Trade ($ mill.)	Developed Countries' Export Share (%) Total	Europe	North America	Japan & Oceania	Developing Countries' Export Share (%) Total	SSA Countries	Middle East*	Latin America	South Asia	East Asia	Other Countries
Tropical Beverage Products	1990	13,246	14.4	13.4	0.9	0.1	85.6	25.2	0.0	41.4	3.8	13.1	2.0
	1995	21,626	15.8	14.5	1.1	0.2	84.2	24.5	0.1	41.7	3.3	14.4	0.2
	1997	21,795	15.4	14.1	1.2	0.1	84.6	22.2	0.1	44.5	3.6	14.0	0.3
	1998	21,310	15.9	14.1	1.7	0.2	84.1	25.8	0.1	39.8	3.7	14.3	0.3
	1999	17,954	17.4	15.3	2.0	0.2	83.6	26.0	0.1	37.6	3.7	14.8	0.4
Non-Ferrous Metals & Ores	1990	40,105	52.8	26.5	16.8	9.5	47.2	16.1	2.0	15.4	0.4	3.2	10.1
	1995	56,862	45.5	21.3	16.3	7.9	54.5	8.8	2.6	17.2	0.6	5.2	20.1
	1997	53,423	43.9	20.7	14.6	8.6	56.1	10.8	2.5	17.1	0.6	4.9	20.2
	1998	49,551	45.9	21.7	14.6	9.6	54.1	10.7	2.6	15.2	0.4	4.9	20.3
	1999	49,327	43.6	20.8	13.5	9.3	56.4	11.2	2.5	14.6	0.6	5.0	22.5
Ferrous Metals & Ores	1990	13,483	43.1	19.6	4.8	18.6	56.9	12.8	0.6	27.4	5.4	3.3	7.4
	1995	17,369	39.5	17.8	3.2	18.5	60.5	12.9	0.4	23.2	4.7	7.0	12.2
	1997	17,024	41.3	15.9	3.4	21.9	58.7	12.6	0.3	24.7	4.8	5.8	10.5
	1998	16,253	41.0	16.1	4.0	20.9	59.0	13.5	0.3	24.4	5.1	5.2	9.5
	1999	13,787	40.2	14.1	3.4	22.7	59.8	14.4	0.3	25.5	5.1	5.1	9.4
Fresh & Preserved Seafood	1990	15,441	33.5	17.8	10.4	5.3	66.5	4.8	3.6	10.6	5.0	38.3	4.2
	1995	23,326	29.8	14.6	10.4	4.8	70.2	5.3	3.6	12.6	6.2	37.5	4.9
	1997	22,655	29.0	15.0	9.4	4.6	71.0	5.4	3.7	14.9	6.6	35.6	4.7
	1998	22,116	29.3	16.0	9.1	4.2	70.7	5.8	3.7	15.8	6.3	34.7	4.5
	1999	22,711	31.2	16.0	10.9	4.3	68.8	5.4	3.7	15.0	6.1	33.5	5.1
Other Foodsfuffs	1990	11,175	44.6	26.4	6.9	11.3	55.4	12.2	2.5	23.9	1.3	13.0	2.6
	1995	13,986	42.6	24.2	7.0	11.5	57.4	10.9	2.1	26.2	1.0	14.4	2.8
	1997	14,131	42.6	24.6	6.9	11.1	57.4	10.7	2.4	27.3	1.5	12.8	2.6
	1998	13,844	43.7	26.5	6.8	10.4	56.3	11.6	2.6	27.2	1.6	10.6	2.8
	1999	12,796	42.2	25.6	7.8	8.8	57.8	10.9	2.9	29.8	1.6	9.8	2.7
Hides and Leather Products	1990	2,345	38.9	22.1	2.6	14.2	61.1	8.8	6.7	4.0	14.1	20.3	7.1
	1995	2,450	36.4	21.8	2.3	12.3	63.6	12.7	10.5	2.3	13.6	19.5	5.0
	1997	2,188	36.9	20.6	3.4	12.9	63.1	15.4	7.6	2.0	14.4	18.5	5.1
	1998	1,734	35.5	22.1	3.8	9.5	64.5	15.6	5.9	2.6	16.0	19.4	5.0
	1999	1,380	35.7	22.0	4.8	8.9	64.3	16.7	6.0	2.8	14.7	18.9	5.1
Minerals and Products	1990	21,118	68.2	4.9	36.3	27.0	31.8	8.7	4.9	2.5	0.0	3.3	12.3
	1995	22,664	61.7	2.1	28.9	30.7	38.3	11.3	3.3	3.9	0.2	10.9	8.7
	1997	24,574	59.7	1.8	25.0	32.8	40.3	10.8	3.9	4.7	0.2	12.2	8.6
	1998	23,045	58.0	1.9	23.8	32.4	42.0	10.1	4.2	4.7	0.1	12.7	10.2
	1999	20,422	56.4	2.0	20.3	34.1	43.6	10.6	4.1	5.8	0.1	14.6	8.5

Table 8. Continued

Traditional Product	Year	World Trade ($ mill.)	Developed Countries' Export Shares (%) Total	Europe	North America	Japan & Oceania	Developing Countries' Export Shares (%) Total	SSA Countries	Middle East*	Latin America	South Asia	East Asia	Other Countries
Lumber and Products	1990	12,709	30.8	13.8	16.6	0.3	69.2	13.8	0.1	3.5	0.4	46.1	5.4
	1995	16,902	31.1	12.9	17.7	0.5	68.9	13.8	0.1	5.4	0.3	40.2	9.1
	1997	15,706	34.1	12.7	20.7	0.8	65.9	14.4	0.1	5.7	0.3	36.8	8.5
	1998	13,614	38.1	15.9	21.5	0.8	61.9	15.7	0.1	6.3	0.4	27.3	12.0
	1999	14,745	37.9	16.4	20.6	0.8	62.1	13.5	0.1	5.4	0.3	31.3	11.5
Fibers & Agricultural Materials	1990	11,230	49.8	6.0	38.7	5.1	50.2	14.7	2.6	15.3	8.2	4.0	5.4
	1995	14,562	50.2	7.2	38.0	4.9	49.8	13.7	3.4	13.6	1.7	2.4	15.0
	1997	15,295	45.3	7.6	31.1	6.5	54.7	16.1	3.9	13.3	4.1	2.8	12.6
	1998	13,150	49.0	7.4	33.4	8.3	50.9	17.9	4.5	12.3	2.5	3.2	10.4
	1999	10,626	45.4	10.6	27.7	7.1	54.6	19.5	4.6	12.9	1.9	5.0	10.6
Gold & Industrial Diamonds	1990	18,894	71.3	44.2	17.4	9.7	28.7	13.4	1.3	3.0	0.1	7.1	3.8
	1995	26,330	66.3	34.1	19.2	13.0	33.7	16.0	0.5	4.2	0.1	9.8	3.2
	1997	32,605	63.4	37.0	15.2	11.2	36.6	14.5	2.6	3.9	0.0	14.2	1.4
	1998	31,073	64.4	36.6	16.7	11.1	35.6	11.6	1.7	4.2	0.1	16.0	1.9
	1999	25,918	65.4	40.9	15.0	9.5	34.6	14.4	2.6	4.5	0.3	10.0	2.9
All Traditional Products	1990	158,745	48.4	20.7	17.1	10.6	51.6	13.5	2.2	14.4	2.3	12.3	6.9
	1995	216,068	43.5	17.7	15.6	10.2	56.5	12.4	2.0	15.9	1.9	14.2	10.1
	1997	219,395	43.2	18.1	14.1	11.0	56.8	12.9	2.3	16.3	2.1	14.0	9.1
	1998	205,692	44.2	18.9	14.2	11.1	55.8	12.9	2.3	15.7	2.0	13.5	9.3
	1999	189,667	43.3	19.3	13.2	10.7	56.7	13.2	2.4	15.4	2.0	13.5	10.2
All Non-Oil Primary Commodities	1990	524,486	66.8	40.3	19.9	6.7	33.2	4.3	1.5	10.9	1.1	10.2	5.1
	1995	723,608	63.9	37.4	20.4	6.1	36.1	3.6	1.5	11.6	1.1	12.1	6.2
	1997	711,434	62.7	35.9	20.0	6.8	37.3	3.9	1.5	13.0	1.4	11.7	5.9
	1998	679,373	62.9	37.4	19.1	6.5	37.1	4.0	1.4	12.8	1.3	11.3	6.1
	1999	661,334	62.7	36.9	19.1	6.6	37.3	3.9	1.5	12.5	1.3	11.6	6.5

* Also includes North Africa.

Source: Tabulations based on trade statistics reported to COMTRADE by countries listed in the notes to Table 1.

While the geographic patterns of import demand for traditional and all non-oil commodities were very similar, Table 8 shows large differences sometimes occur in the origin of these exports. Developing countries supply about 57 percent of world exports of traditional products, but their share for all non-oil commodities is about 20 percentage points lower. In part, the differences originate in the tropical beverages group, since the conditions required for their production generally do not occur in OECD countries. However, non-African developing countries also supply a disproportionately high share (over 50 percent) of other traditional product groups including seafood, hides and leather, and lumber and wood products.

Finally, the export shares show Africa is not as relatively important a supplier of traditional products as might be expected. Africa originates about 13 percent of these goods global exports, which is about the same as East Asia, but 2 percentage points lower than Latin America's share.[20] The traditional product shares for all three developing country regional groups fall below those for the European Union or North America. However, the data do show that Africa is far more dependent on the traditional products, as opposed to other non-oil commodities, than any other regional group. For Africa, the traditional product share is more than three times higher than that for all non-oil commodities, yet for the other country groups the differences are normally within several percentage points. These points have important policy implications. Africa is not the major global supplier for most of the region's traditional exports. As such, Africa's export prospects will be highly dependent on the region's capacity to remain internationally competitive for these goods.

IV. PRICE TRENDS AND PROSPECTS

Although most forecasts and analyses of price trends for non-oil primary commodities fail to include many of Africa's traditional products, some relevant data are available. The World Bank (2000) published statistics on current and constant prices for about 40 primary commodities, including 13 traditional products. UNCTAD (2000) also provides statistics on prices for a somewhat larger number of commodities, although no price projections are included. However, in cases where price data are not collected for a traditional product import unit values derived from UN COMTRADE can be used as a proxy.[21] These three sources allow one to empirically address issues such as those relating to the general outlook for primary commodity and traditional product prices, whether past trends and future prospects for traditional products differ from those of other commodities, and whether price instability has become more, or less, of a problem than in the past.

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[20] Under UNCTAD's auspices, major efforts were made to negotiate commodity agreements for specific products, like cocoa or coffee, that would establish production controls, and also buy or sell the commodity from buffer stocks to dampen cyclical changes in demand and prices. The relatively wide geographic dispersion of the origins of traditional products could make the operation of such agreements more difficult, if they ever are concluded. Some regions (say Latin America) may experience production shortfalls in a specific year due to climatic conditions, while others (say in Africa) generate a production surplus. This could cause significant differences in opinions concerning appropriate actions of the buffer stock managers.

[21] Price and unit value statistics may differ over time due if goods vary in their physical characteristics or quality standards. Commodity price data compiled by the World Bank and UNCTAD attempt to hold product specifications constant. Also, import unit values are generally expressed on a cost-insurance-freight basis while published commodity prices are normally in free-on-bard terms. A major attraction of unit values is that they can be computed for a wide range of products, while the available commodity price series have limited coverage.

A. Secular Price Trends

Key Observations

The recent record provides no indication that the longer-term deterioration in traditional product prices have been reversed. Over 1990-99, average real prices for all traditional products declined by about 24 percent. In a few cases, like coffee and lumber, where some modest improvement occurred, real prices still remain well below their 1980 levels. In addition, long term price projections by the World Bank reinforce the basically negative outlook for traditional products and most commodities. With the sole exception of coffee, 2010 real prices for traditional products are projected to be lower, often substantially so, than they were in 1990.

Table 9 provides information relevant to such questions by showing statistics on the level of "real" prices in 1980, 1990, 1998 and 1999 for 12 broad commodity groups along with aggregate information for Africa's traditional products. Real prices are derived by deflating nominal prices in a specific year by the unit value index of manufactures (MUV) exported by France, Germany, Japan and the United States. The data are expressed in terms of constant 1990 prices, and percentage changes over 1980-99 and 1990-99 are also reported. To facilitate comparisons of trends, values of the MUV index are also shown.

Clearly there is little or no evidence in Table 9 that contradicts the general pessimistic expectations many have for longer-term primary commodity prices. Over the last two decades real prices for all non-oil commodities fell by more than 50 percent. Although approximately two-thirds of the overall decline occurred during the 1980s, non-oil commodity prices fell, on average, by 15 percent over the last decade. During 1990-99 three commodity groups, namely, other foods (a group consisting of bananas, beef, oranges, shrimp and sugar), other raw materials (cotton, rubber and tobacco), and metals and minerals experienced real price declines that were almost double those for all non-energy commodities.[22]

[22] These relatively large price declines were often attributable to one commodity in the group. The decline in the other raw materials group is primarily due to cotton prices which, by end 1999, fell to about one-half their level in early 1997. Sugar played a major role in the price decline for the other foods group. In commenting on the recent market environment for sugar the World Bank (2000, p. 52) observed "Another year or surplus production adds to the sugar mountain and sends prices to 14 year lows." Gold and copper had a major influence on falling prices for the minerals and metals group. Concerns about continued central bank sales of gold stocks exerted downward pressure on prices, which fell by almost $100 per ounce from March 1997 to March 1999.

Table 9. Average Prices for Major Groups of Primary Commodities in Selected Years (1990 = 100)

Commodity Group	Average Annual Real Prices (1990 = 100)* 1980	1990	1998	1999	Percentage Price Change (%) 1980-1999	1990-1999
All Non-Energy Commodities	174.3	100.0	95.1	85.0	-51.2	-15.0
Agriculture	191.8	100.0	103.5	89.6	-53.2	-10.4
Beverages	252.0	100.0	134.9	104.0	-58.7	4.0
Food	193.4	100.0	100.7	84.5	-56.3	-15.5
Fats and Oils	206.5	100.0	127.5	101.4	-50.9	1.4
Grains	186.5	100.0	87.2	83.4	-55.3	-16.6
Other Foods**	186.6	100.0	80.8	71.3	-61.8	-28.7
Raw Materials	145.2	100.0	83.8	85.5	-41.1	-14.5
Timber	109.7	100.0	87.3	107.9	-1.6	7.9
Other Raw Materials***	169.5	100.0	81.4	70.2	-58.6	-29.8
Fertilizers	179.0	100.0	117.2	110.1	-38.5	10.1
Metals and Minerals	130.8	100.0	72.4	71.2	-45.6	-28.8
Memo Item						
African Traditional Products	124.4	100.0	78.0	76.1	-38.8	-23.9
Manufactures Unit Value Index	72.0	100.0	104.2	103.6	43.9	3.6

* Real prices are derived by dividing nominal prices in a specific year by the unit value index of manufactures exported by France, Germany, Japan, United Kingdom and the United States to developing countries.
** Items included in this group are; bananas, beef, oranges, shrimp and sugar.
*** Items included in this group are; cotton, rubber and tobacco.

Source: Based on World Bank (2000, p. 82) Price indices for the traditional products were computed by the authors using the statistics reported in Table 10.

Two other points concerning Table 9 should be noted. First, over the last decade real prices for African traditional products fell by 24 percent which was more than the 15 percentage point decline in all non-energy commodity prices. However, over the full 1980-99 period prices for the two groups fell by a roughly similar magnitude. Over this longer term the evidence indicates no substantial differences between traditional product and other commodity price trends. Second, Table 9 suggests a significant erosion occurred in the terms of trade for all commodity groups occurred over the last two decades as the manufactures export unit value (MUV) index increased by about 44 percent which was far greater than the change in nominal prices for most commodities.

Are the average traditional product price changes reported in the memo item for Table 9 fairly representative, or are there important differences in trends for individual items? Table 10 addresses this point by showing statistics on the level of real prices for each traditional product, and their percentage change, over the last two decades. The products are ranked in terms of the descending order of their price changes during the 1990s, while similar information on all non-energy commodity prices has also been included to provide a standard for comparison. To properly interpret these statistics, it should be noted that the 1990 numbers reflect actual nominal prices for that year, while in all other years nominal prices were deflated by the MUV index on a 1990 base. As such, the statistics reflect real price changes relative to their 1990 level.

Table 10. Average Real Prices of African Traditional Exports in Selected Years

Traditional Product	Average Real Prices Relative To 1990*				Percentage Price Change (%)	
	1980	1990	1998	1999	1980-1999	1990-1999
Products of Melted Metal Ores**	0.022	0.024	0.028	0.033	50.0	37.5
Coffee Green or Roasted**	450.6	118.2	174.9	143.8	-68.1	21.1
Sisal and Agave Fiber	1.04	0.69	0.79	0.80	-23.1	16.1
Lumber Shaped**	550.2	533.0	464.7	580.2	5.5	8.9
Natural Calcium Phosphates	64.9	40.5	41.3	42.5	-34.5	2.5
Parts of Tobacco Leaf or Stem**	0.72	0.64	0.62	0.64	-11.8	-0.5
Non-Monetary Gold	844.7	383.5	282.3	269.2	-68.1	-4.6
Tobacco Stripped**	3,161	3,392	3,204	2,922	1.4	-5.5
Shellfish	3.64	4.02	4.03	3.77	3.7	-6.1
Cocoa Butter and Powder	7.24	2.98	2.98	2.78	-61.6	-6.7
Cotton Seeds**	0.36	0.22	0.20	0.20	-43.9	-7.9
Asbestos Simply Worked	0.67	0.52	0.53	0.47	-29.1	-9.0
Iron Ore Not Agglomerated	39.0	32.5	29.8	26.6	-31.8	-10.7
Nonferrous Metal Wastes	1.51	1.01	0.78	0.88	41.3	-12.1
Groundnut Oil	1,193.0	963.7	872.8	760.6	-36.2	-12.9
Cocoa Beans**	361.7	126.7	160.9	109.6	-69.7	-13.5
Tea	230.5	205.8	196.4	177.6	-23.3	-13.7
Prepared or Preserved Fish**	4.14	3.48	3.37	2.98	-27.9	-14.3
Beryllium and Titanium**	15.56	6.33	5.27	5.37	-65.4	-15.0
ALL NON-OIL COMMODITIES	**174.8**	**100.0**	**95.1**	**85.0**	**-51.2**	**-15.0**
Chemical Wood Pulp	0.77	0.89	0.76	0.75	-3.2	-15.4
Aluminum, Unwrought**	2,023	1,639	1,303	1,341	-35.6	-20.5
Other Coal Not Agglomerated	59.88	41.67	33.00	32.03	-44.9	-20.8
Saw and Veneer Logs	349.7	343.5	274.9	260.9	-25.7	-24.3
Prepared or Preserved Fruit	1.32	1.24	1.06	0.93	-29.8	-25.3
Sesame Seeds	1.50	1.35	0.91	0.98	-34.4	-27.1
Other Nonferrous Ores	0.90	0.44	0.37	0.32	-64.7	-27.6
Ferrous Alloys**	1.25	0.96	0.87	0.68	-47.5	-31.6
Raw Beet or Cane Sugar	87.8	27.2	18.9	13.3	-78.5	-31.8
Natural Gums and Resins	2.65	2.25	1.46	1.42	-46.5	-36.9
Raw Cotton	286.5	181.9	138.7	113.1	-60.5	-37.8
Raw Goat and Kid Skins	12.18	5.85	4.34	3.54	-70.9	-39.4
Copper Unwrought	3,032	2,661	1,588	1,519	-49.9	-42.9
Sheep Skins Without Wool	5.68	5.90	5.36	3.35	-43.1	-45.2
Manganese Ore, Concentrated	0.10	0.14	0.09	0.07	-30.5	-50.0
Other Leathers	25.23	24.99	13.59	12.07	52.3	-51.7

* The data reported below show actual 1990 nominal prices for each traditional product, while in other years nominal prices have been deflated by the MUV index.

** Estimates of income elasticities identified this product as having relatively favorable demand growth prospects (Table 5).

Source: Price data for coffee, tea, natural phosphates, sisal, shaped lumber, stripped tobacco, cocoa, iron ore, aluminum, cotton, non-monetary gold, saw logs, copper alloys, manganese ore and sugar are from World Bank (2000) or UNCTAD (2000). Other statistics are based on unit values computed from UN COMTRADE. Prices for cocoa, coffee and tea are expressed in US cents per kilo, while those for groundnut oil, aluminum, copper and natural phosphates are in US$ per metric ton. Prices for saw logs are in US$ per cubic meter, while gold is in US$ per troy ounce. All other prices are reported in US ($000) per ton.

Perhaps the most important point reflected in Table 10 is the fact that real prices for 30 of the traditional products (86 percent of the group total) closed the last decade lower than they were in 1990, while only 4 products (shaped lumber, sisal, coffee and products of melted metal ores) experienced real price increases. Slag, which is widely used in agriculture as a soil conditioner, is a major component of the latter group. Many traditional products experienced what may be considered major declines during the 1990s, with prices for almost one half the items falling by 20 percent or more. A basically negative picture also emerges for the extended 1980-99 period as prices declined for over 80 percent of the traditional products. The data tentatively suggest that products previously identifies as having relatively favorable demand growth prospects (see Table 5) generally experienced relatively smaller price declines. These products are identified by an asterisk in the table.

Analysis of statistics for traditional product groups can provide another perspective on recent real price changes for these goods. Table 11 shows that only the tropical beverage group experienced an overall positive real price change over the last decade, which was largely due to a 23 percent increase in coffee prices. The data also show real prices for lumber essentially were flat over the decade. The price decline for the hides and skins group (-48.3 percent) was by far the steepest decline reflected in the table and was three times that for all traditional products average. Two components of this group, namely, goat and sheep skins, had previously been classified as having "strong negative demand growth" prospects based on their estimated negative income elasticities.

The memo item in Table 11 provides more aggregate information on commodity price changes as these indices incorporate data on prices for both the traditional products and other commodities. Again, they reinforce the impression that price changes for traditional products are basically similar to the broader commodity indices. The index of all metal and mineral prices declined by 29 percent over 1990-99, which was only slightly more than the decline registered by the two traditional minerals and non-ferrous metals groups. The more aggregate raw materials index, shown in the memo item, fell by 14 percent which was about the same magnitude of decline reflected in the traditional lumber and fibers groups. Box 4 provides graphic evidence on recent non-energy commodity current and constant price trends.

Table 11. Recent Prices for Major Groups of Traditional

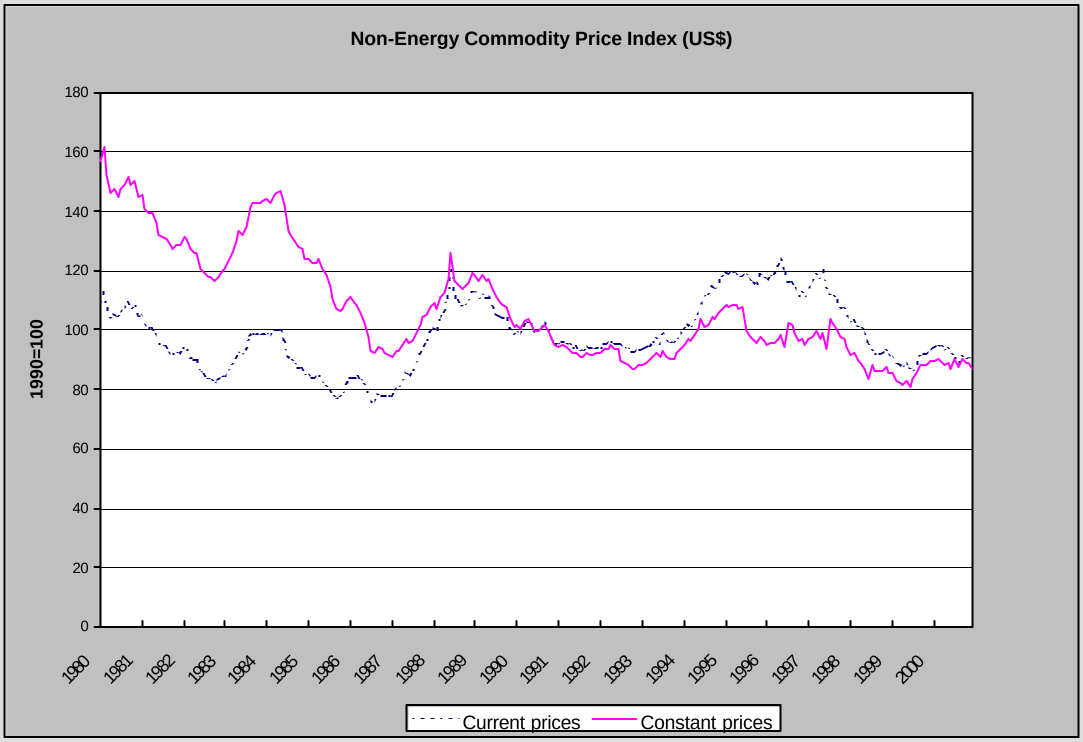
	Average Annual Prices (1990 = 100)				Percentage Price Change (%)	
Traditional Product Group*	1980	1990	1998	1999	1980-1999	1990-1999
Tropical Beverage Products	321.4	100.0	135.7	108.8	-66.1	8.8
Lumber and Products	102.9	100.0	85.4	100.8	-2.0	0.8
Fresh and Preserved Seafood	99.3	100.0	99.2	91.3	-8.1	-8.7
Fibers & Agricultural Materials	94.9	100.0	94.1	85.5	-9.9	-14.5
Ferrous Metals and Ores	120.3	100.0	91.4	81.5	-32.3	-18.5
Minerals and Products	144.9	100.0	80.9	78.9	-45.5	-21.1
ALL TRADITIONAL PRODUCTS	**124.4**	**100.0**	**78.0**	**76.1**	**-38.8**	**-23.9**
Other Foodstuffs	152.6	100.0	87.0	74.1	-51.4	-25.9
Gold and Diamonds	220.3	100.0	73.6	70.2	-68.1	-29.8
Non-Ferrous Metals and Ores	118.6	100.0	69.4	69.3	-41.6	-30.7
Hides and Leather Products	101.1	100.0	56.9	48.9	-51.6	-51.1
Memo Item						
All Non-Oil Commodities	174.3	100.0	95.1	85.0	-51.2	15.0
All Foods	193.4	100.0	100.7	84.5	-56.3	-14.5
All Raw Materials	145.2	100.0	83.8	85.1	-41.1	-14.5
Metals and Minerals	130.8	100.0	72.4	71.2	-45.6	-28.8

* See the notes to Table 2 for a list of items in the product groups.

Source: Based on the statistics reported in Table 10.

Box 4. Recent Trends in Non-Energy Commodity Prices

The figure shown below is intended to provide graphic evidence relating to recent trends in commodity prices over the last two decades. The intention here is to show how the more recent 1990-99 price changes related to those for a longer interval. The figure establishes 1990 as a base period (1990=100) and shows the level of current prices for all non-energy commodities in each year. In addition, constant prices for these goods are also reported. Constant prices were derived by deflating current non-energy commodity prices in each year by the unit value index of manufactures (MUV) exported by France, Germany, Japan, United Kingdom and the United States. The MUV index is expressed in terms of US dollars and is derived by converting prices of the first four countries exports into dollars at average annual exchange rates.



Two important trends are evident in the figure with the first relating to the importance of commodity price instability. As shown, current non-energy commodity prices experienced three full cyclical swings over the full interval, in 1982-86, 1987-91, and 1993-98. Average prices experienced their greatest variation in the first period where the difference between the highest and lowest annual prices was about 50 percent.

Second, although the downward trend in constant prices continued in the last decade the figure provides some indication that the rate of decline may have slowed. However, this may have been almost exclusively due to the practice of expressing the MUV index in terms of US dollars, and the unusual strength of the dollar against other currencies in the mid- to late 1990s.

When viewed from the perspective of individual African countries there is considerable variation in the real prices they received for their traditional exports (Table 12). Three countries, namely, Angola, Ethiopia and Madagascar saw real prices for their exports increase over the last decade, although in 1999 they were still down sharply from 1980 levels. Mauritius was one of the hardest hit countries due to sugar, which accounts for about 90 percent of traditional exports. The 50 percent decline for Benin, the second largest in the table, is largely due to cotton.

Table 12. Estimates of Real Price Changes for African Traditional Products (1990 = 100)

	Estimated Level of Real Prices (1990 = 100)				Percentage Change (%)	
Exporting Country	1980	1990	1998	1999	1980-1999	1990-1999
LARGER COUNTRIES						
Angola	255.0	100.0	118.0	101.3	-60.3	1.3
Kenya	156.3	100.0	194.5	92.5	-40.8	-7.5
Cameroon	128.9	100.0	88.7	92.1	-28.6	-7.9
Ghana	148.9	100.0	89.6	87.8	-41.0	-12.2
Nigeria	152.0	100.0	91.8	87.6	-42.4	-12.4
Zimbabwe	96.7	100.0	93.0	84.8	-12.3	-15.2
Cote d'Ivoire	257.3	100.0	111.7	84.4	-67.2	-15.6
Gabon	101.9	100.0	80.3	77.3	-24.1	-22.7
Liberia	109.2	100.0	81.9	76.7	-29.7	-23.3
SACU	156.1	100.0	71.7	70.3	-55.0	-29.7
Congo, Republic	123.1	100.0	69.2	67.5	-45.2	-32.5
Congo, Democratic Republic	138.8	100.0	69.6	66.8	-50.0	-33.2
Zambia	113.3	100.0	62.3	59.2	-47.7	-40.8
Mauritius	305.7	100.0	70.5	52.4	-82.8	-47.6
All Larger Countries	160.2	100.0	92.3	78.6	-50.9	-21.4
MID-SIZE COUNTRIES						
Ethiopia	369.7	100.0	144.4	118.7	-67.9	18.7
Madagascar	284.9	100.0	122.2	104.0	-63.5	4.0
Uganda	214.8	100.0	115.3	99.4	-53.7	-0.6
Guinea	186.1	100.0	98.1	87.3	-53.1	-12.7
Malawi	93.9	100.0	94.5	86.2	-8.2	-13.8
Tanzania	111.4	100.0	92.7	84.0	-24.6	-16.0
Mauritania	117.8	100.0	92.3	82.8	-29.7	-17.2
Senegal	125.1	100.0	90.6	79.2	-36.7	-20.8
Togo	194.5	100.0	92.8	77.6	-60.1	-22.4
Mozambique	113.8	100.0	79.3	73.5	-35.4	-26.5
Sudan	156.1	100.0	77.8	64.1	-58.9	-35.9
Mali	157.4	100.0	76.2	62.2	-60.5	-37.8
Benin	105.5	100.0	56.2	49.5	-53.0	-50.5
All Mid-Size Countries	171.6	100.0	94.8	77.1	-55.1	-22.9
All Above Countries	165.7	100.0	93.5	77.9	-53.0	-22.1

Source: Based on World Bank (2000, p. 82)

B. Recent Price Instability for Traditional Products

Key Observations

Traditional product price instability appears to be a major problem for exporters. Average annual price changes for these goods generally exceeded those for the all non-oil commodity price index, while one-half the traditional products experienced average price changes that were at least 50 percent greater. However, annual data clearly understate instability problems since traditional product prices often experienced sizable consecutive year directional changes. Over a three year period, consistent directional price shocks as high a 101 percent occurred, while changes of 150 percent were observed in the four consecutive year

data. These major price swings are generally associated with a "collapse" of traditional product prices as, over 80 percent of the time, they were in a downward direction.

While the previous analysis strongly indicated Africa should have negative expectations concerning trends in traditional product prices, a second important consideration is price instability and its impact on economic variables such as the level of export earnings and the terms of trade. Abrupt changes in the terms of trade may have an especially strong impact on the macroeconomic performance and incomes of commodity exporting developing countries. In an IMF report, Cashin and Patillo (2000) cite an example involving arabica coffee which is the dominant export of Ethiopia. The slump in world coffee prices in 1986-87 resulted in a 40 percent fall in Ethiopia's terms of trade. Because imports were about 15 percent of Ethiopia's national expenditure, this adverse movement in the terms of trade resulted in a decline of about 6 percent in real income.

This example raises an important question. What does the recent record reveal regarding the stability of traditional product prices and how does it compare with that for other types of goods? Relevant empirical information may be derived from three measures of price instability. The first is the average absolute percentage change in prices, which is expressed as,

$$(5) \quad I = [\Sigma(\left| U_t - U_{t-1} \right| \div U_{t-1}) \div N - 1] * 100$$

where U_t is the unit value for the good in year t and N is the number of years used for the calculation of the index. Absolute values are used to avoid the problem of positive and negative changes canceling each other out. However, if prices were subject to a significant predictable trend, say consistently rising, or falling, by 15 percent per year, equation (5) would overstate the degree of "unexpected" instability. For this reason, a linear trend was fitted to the annual price data and the coefficient of determination (R^2) used as measure of "unanticipated" instability. That is, the higher the coefficient the lower the level of unanticipated variation. Finally, the percentage difference in prices at the beginning and end of the last decade is employed as a measure of secular price instability.

Table 13 summarizes the 1990-99 results when these price instability indices were computed for each traditional product. For comparison, similar statistics are shown for the all non-oil commodities index and for the manufactures export unit value index. Two points are evident from the data,

- Compared to both the MUV and the all non-oil commodity index, many traditional products experienced a relatively high degree of instability. Gold, coffee and nonferrous ores had average annual price changes of over 20 percent, which was more than four times higher than the MUV index. Even relative to the non-oil commodity index, traditional products generally experienced a relatively high degree of instability. Twenty three (66 percent) experienced a higher level of instability, and in 16 cases the average annual instability was more than 50 percent greater.[23]

• As evidenced by the R^2 measure, few traditional products experienced "predictable" price variation. More than one-half the products had an R^2 of 0.10 or less, and a time trend explained 50 percent or more of the annual variation in prices for only 6 traditional commodities (saw logs, manganese ore, products of melted ores, sisal, fruit, and coal).

It could be argued that the annual indices reported in Table 13 may understate the true magnitude of instability for a primary commodity. Consistent *directional* changes for a commodity may occur over a period longer than a year, or start in (say) the middle of one year and end in the middle of the next, and this would not be accurately reflected in annual data. For this reason, Table 14 reports the maximum positive and negative percentage price change that occurred for each traditional product over consecutive three and four year intervals during the last decade. As an example, the average annual variation in prices for other nonferrous ores was 24.7 percent, but in one consecutive three year period (1990 to 1992) prices fell by more than one-third. However, for the consecutive four year period from 1992 to 1995 prices rose by 150 percent. Price changes of these magnitudes clearly would constitute major terms of trade shocks.

[23] This result was not entirely unexpected since, at any given point in time, prices for specific commodities included in the general non-oil commodity index may be changing in different directions. This would tend to reduce the overall fluctuations in the index. UNCTAD counted on a less than perfect co-variation in commodity prices to reduce financial requirements of the common fund.

Table 13. Price Instability Indices for Individual Traditional Products

	Range in 1990-99 Unit Values ($000 per ton)			Price Instability Indices	
Traditional Product	High	Low	Percent (%) Difference	R^2	Ave Annual % Change
Other Nonferrous Ores	0.55	0.22	150.0	0.06	24.7
Coffee Green or Roasted	3.68	1.57	134.4	0.34	22.5
Non-Monetary Gold	4.50	1.61	179.5	0.30	20.8
Sheep Skins Without Wool	7.83	3.35	133.7	0.00	16.1
Other Leathers	24.99	12.50	99.9	0.43	15.8
Ferrous Alloys	1.08	0.66	63.6	0.03	15.2
Raw Goat and Kid Skins	5.85	3.28	78.4	0.09	14.6
Groundnut Oil	1.12	0.74	51.4	0.00	14.2
Sesame Seeds	1.35	0.95	42.1	0.28	13.9
Raw Cotton	2.05	1.30	57.7	0.01	13.9
Saw and Veneer Logs	0.17	0.09	88.9	0.76	13.8
Copper Alloys Unwrought	2.92	1.60	82.5	0.31	13.6
Aluminum Alloys Unwrought	2.03	1.31	55.0	0.03	13.1
Manganese Ore, Concentrated	0.16	0.07	128.6	0.89	12.5
Natural Gums and Resins	3.12	1.47	112.2	0.26	12.4
Metaliferous Nonferrous Wastes	1.01	0.73	38.4	0.04	12.2
Products of Melted Metal Ores	0.05	0.03	66.7	0.67	10.3
Cotton Seeds	0.26	0.15	73.3	0.02	10.3
Sisal or Agave Fibers	0.74	0.47	57.4	0.53	10.0
Cocoa Beans, Raw or Roasted	1.65	1.15	43.4	0.30	9.6
Beryllium and Titanium	6.70	5.01	33.7	0.01	9.6
Chemical Wood Pulp	0.90	0.66	36.4	0.00	9.0
Cocoa Butter and Paste	3.28	2.42	35.5	0.14	8.3
All Non-Oil Commodities	**112.1**	**78.9**	**42.0**	**0.01**	**8.1**
Raw Beet and Cane Sugar	0.68	0.55	23.6	0.02	7.6
Shell Fish, Fresh or Frozen	4.58	3.59	27.6	0.08	7.2
Fruit, Fresh or Dried	1.24	0.96	29.2	0.56	7.2
Other Coal Not Agglomerated	0.05	0.04	25.0	0.69	7.1
Lumber Shaped Non-Conifer	0.80	0.61	31.1	0.02	6.8
Parts of Tobacco Leaf or Stems	5.85	3.28	78.4	0.00	6.7
Tobacco Stripped	5.55	4.42	25.6	0.28	6.7
Iron Ore Not Agglomerated	0.03	0.02	50.0	0.46	6.4
Prepared or Preserved Fish	3.57	3.09	15.5	0.08	6.2
Asbestos Simply Worked	0.60	0.49	22.4	0.10	6.1
Tea	1.12	0.74	12.8	0.14	5.3
Natural Calcium Phosphates	0.53	0.43	23.2	0.08	4.0
Memo Item*					
Manufactures Export Unit Value	110.1	94.0	17.1	0.06	4.6

* UNCTAD reports that the MUV index rose from 97.6 in 1993 to 110.1 in 1995 (1990 = 100) and then fell from the 1995 level to 94 in 1999.

Source: Based on import unit value statistics computed from COMTRADE data.

Two important points are evident in these statistics. First, the annual data clearly understate the potential importance of secular price changes for traditional product. Over a three year period, average maximum consecutive year price changes were almost 28 percent, for the four year period they averaged 33 percent. The latter was about three times the variation in the annual price data. Second, the statistics suggest that the shocks are more likely to be associated with a *collapse* of traditional product prices as over 80 percent of the four year changes were in a downward direction.

Table 14. Average Annual and Maximum Consecutive Year Changes in Traditional Product Prices During 1990-99

	1990-99 Range in Unit Values			Average Annual Price	Maximum Consecutive Year Price Change Over:	
Traditional Product	High	Low	Percentage Difference	Change (%)	Three Years	Four Years
Other Nonferrous Ores	0.55	0.22	150.0	24.7	-34.1	150.0
Coffee Green or Roasted	3.68	1.57	134.4	22.5	-28.3	-37.8
Non-Monetary Gold	4.50	1.61	179.5	20.8	101.1	*
Sheep Skins Without Wool	7.83	3.35	133.7	16.1	22.3	*
Other Leathers	24.99	12.50	99.9	15.8	-35.5	-49.7
Ferrous Alloys	1.08	0.66	63.6	15.2	-27.5	-31.3
Raw Goat and Kid Skins	5.85	3.28	78.4	14.6	-23.6	-43.9
Groundnut Oil	1.12	0.74	51.4	14.2	-31.5	-19.2
Sesame Seeds	1.35	0.95	42.1	13.9	-26.9	-31.1
Raw Cotton	2.05	1.30	57.7	13.9	-29.7	-28.2
Saw and Veneer Logs	0.17	0.09	88.9	13.8	-20.0	-33.3
Copper Alloys Unwrought	2.92	1.60	82.5	13.6	-25.6	-32.8
Aluminum Alloys Unwrought	2.03	1.31	55.0	13.1	-23.6	-20.7
Manganese Ore, Concentrated	0.16	0.07	128.6	12.5	60.0	*
Natural Gums and Resins	3.12	1.47	112.2	12.4	-38.0	-48.1
Metaliferous Nonferrous Wastes	1.01	0.73	38.4	12.2	-17.8	-27.7
Products of Melted Metal Ores	0.05	0.03	66.7	10.3	50.0	66.7
Cotton Seeds	0.26	0.15	73.3	10.3	-19.2	-18.2
Sisal or Agave Fibers	0.74	0.47	57.4	10.0	34.0	48.0
Cocoa Beans, Raw or Roasted	1.65	1.15	43.4	9.6	36.5	*
Beryllium and Titanium	6.70	5.01	33.7	9.6	-15.3	-18.1
Chemical Wood Pulp	0.90	0.66	36.4	9.0	-21.3	-22.5
Cocoa Butter and Paste	3.28	2.42	35.5	8.3	35.5	-18.8
All Non-Oil Commodities	**112.1**	**78.9**	**42.0**	**8.1**	-33.2	-29.6
Raw Beet and Cane Sugar	0.68	0.55	23.6	7.6	20.8	31.3
Shell Fish, Fresh or Frozen	4.58	3.59	27.6	7.2	27.6	-10.7
Fruit, Fresh or Dried	1.24	0.96	29.2	7.2	-17.1	-17.7
Other Coal Not Agglomerated	0.05	0.04	25.0	7.1	-16.7	-20.0
Lumber Shaped Non-Conifer	0.80	0.61	31.1	6.8	-12.5	-20.0
Parts of Tobacco Leaf or Stems	5.85	3.28	78.4	6.7	27.9	*
Tobacco Stripped	5.55	4.42	25.6	6.7	-11.2	16.6
Iron Ore Not Agglomerated	0.03	0.02	50.0	6.4	-33.3	*
Prepared or Preserved Fish	3.57	3.09	15.5	6.2	-9.0	*
Asbestos Simply Worked	0.60	0.49	22.4	6.1	15.4	-16.9
Tea	1.12	0.74	12.8	5.3	9.2	*
Natural Calcium Phosphates	0.53	0.43	23.2	4.0	-10.4	-11.9
AVERAGE PRICE CHANGE**				11.2	27.7	33.0
Memo Item						
Manufactures Export Unit Value	110.1	94.0	17.1	4.6	12.9	-14.6

* No consecutive yearly directional change occurred for this product over a four year period during 1990-1999.

** The averages shown in this row are only for traditional product prices.

Source: Based on import unit value statistics computed from COMTRADE data.

C. Price Formation for Primary and Processed Traditional Products

Key Observations

Shifting the composition of exports from unprocessed to processed traditional products may reduce price and export earnings instability if demand for processed traditional products like chocolate, tobacco manufactures, or ferrous metals is relatively stable, or if "administered" pricing is used for these goods. The supporting evidence for this proposition is strongest for traditional products where further processing is normally labor intensive, but no similar pattern occurs for foodstuffs and most metals. Over the last decade there is little evidence that prices for processed traditional products were rising faster, or falling less, than those for unprocessed products. However, prices for processed traditional products often incorporate a substantial "mark up" over those exported in raw form.

For countries who view the reduction of export price instability as an important objective, a relevant question is whether this could be accomplished by further local processing of traditional exports. The markets for some processed traditional products, like chocolate, coffee extracts, plywood and veneers, or cotton thread and fabric may be more stable, particularly if administrative pricing is employed, or the demand for these goods is less volatile. A related question is whether major differences exist in longer term trends in primary and processed traditional product prices. That is, does the evidence suggest the spread between primary and processed traditional product prices is growing.

To derive relevant empirical information, a review of the SITC Revision 2 system was undertaken with the objective of identifying groups that were primary or processed traditional products. These efforts resulted in the identification of a primary and processed stage for 21 traditional commodities, and in several cases the SITC also included an intermediate stage product. As an example, cocoa beans and chocolate are the primary and final stages of the cocoa processing chain, while cocoa powder and butter constitute intermediate stage products. Annex 3 provides details on the SITC based processing chains for traditional products.

Annual import statistics for the primary and processed stages of each chain were drawn from UN COMTRADE for the last 1990-99 period and unit values were computed. Next, the two measures of price instability (equation 5 and the R^2 measure) were calculated along with the percentage change in the primary and processed traditional product's prices over the last decade.

Table 15 reports statistics for these indices. Using plus and minus symbols the table has been "coded" to quickly indicate where further processing of a traditional product leads to greater stability or secular price increases (+), while a negative (-) symbol indicates prices have fluctuated less (or risen more) for the unprocessed traditional product. For example, both the average annual change and R^2 measure indicates prices for jute fabrics, the final stage product in the chain, are more stable than those for jute fibers. However, over the last decade the price increase for fibers exceeded that for fabrics. These comparisons reveal three points,

- First, the general association between further traditional product processing and increased price stability does not appear to be as strong as might have been thought. Average annual final stage price changes were lower for roughly one-half (11 of 21) of the processed products, and the R^2 measure suggests the price changes for 70 percent of the processed goods was more predictable.

- Second, the relationship between further processing and price stability appears strongest within the paper, wood, leather and fibers groups where only one chain (sisal) recorded a lower instability index for the primary as opposed to processed stage. Part of the explanation for the stronger relationship in these sectors may be that the processing function for the final stage good is labor intensive. With, relatively stable, wages accounting a high share of production costs this may dampen pressures for frequent price changes.

- Third, and quite unexpected, is the fact that secular 1990-99 changes in primary stage prices fell less, or rose more, than their processed stage counterparts in 14 of the traditional product chains. In several cases, the differences were sizable. For example, jute prices declined by about 4 percent while prices for jute fabrics (the final stage item) fell by almost 13 percent. One possible explanation for this general pattern is that the 1990s was a period of downward pressure on both primary and processed traditional products. Primary commodities are typically produced with low value added coefficients that may have little room for contraction before production must halt. In contrast, there may be more scope for price reductions for processed products with their relatively higher value added.[24]

[24] Some evidence to this effect is reflected in the price margins between primary and processed traditional products. For iron, manganese and aluminum the 1999 ratio of primary to final stage prices ranges between 0.02 and 0.05. For asbestos it is 0.07, while the ratio for copper is 0.13. Price ratios for timber, wool and leather range between 0.07 and 0.11. Considerably high primary-processed product price ratios are observed within the food products group.

Table 15. Instability and Longer-Term Price Changes for Primary and Processes Traditional Exports

	Alternative Measures of Annual Price Instability								
	Average Annual Percentage Change (%)*			The R^2 Index			Secular Price Changes 1988-89 to 1998-99 (%)		
Processing Chain	Primary Stage	Final Stage	Stability More (+) or Less (-)	Primary Stage	Final Stage	Stability More (+) or Less (-)	Primary Stage	Final Stage	Trend Growth More (+) or Less (-)
FOOD & TOBACCO									
Fruit	7.56	7.58	-	0.01	0.37	+	6.5	-7.0	-
Fish	8.28	8.73	-	0.20	0.01	-	2.2	16.0	+
Shellfish	7.18	6.48	+	0.08	0.14	+	7.6	-4.6	-
Sugar	7.65	9.57	-	0.01	0.30	+	-4.7	2.9	+
Cocoa	9.57	6.45	+	0.30	0.17	-	2.9	-1.2	-
Tobacco	5.54	6.67	-	0.23	0.28	+	15.6	-3.5	-
Cotton Seed	10.31	12.89	-	0.02	0.09	+	5.0	1.0	-
Groundnuts	6.49	14.20	-	0.30	0.00	-	-1.2	-1.6	-
PAPER AND WOOD									
Paper	10.41	8.58	+	0.34	0.47	+	-15.5	-12.6	+
Lumber	13.79	6.75	+	0.76	0.77	+	-37.8	-24.2	+
FIBERS AND LEATHER									
Cotton	13.87	8.27	+	0.01	0.47	+	-10.6	-13.9	-
Jute	9.28	8.08	+	0.04	0.13	+	-3.8	-12.7	-
Sisal	10.00	8.23	+	0.53	0.15	-	21.8	-11.0	-
Wool	17.69	11.63	+	0.19	0.67	+	-43.2	-36.8	+
Leather	11.52	7.28	+	0.07	0.32	+	-29.6	-7.4	+
MINERALS & METALS									
Asbestos	6.10	6.15	-	0.10	0.25	+	-0.3	-2.1	-
Iron	6.37	10.06	+	0.46	0.27	-	-3.6	-21.7	-
Copper	18.58	9.50	+	0.18	0.34	+	-46.9	-27.6	+
Aluminum	7.41	8.92	-	0.21	0.34	+	-9.0	-19.8	-
Manganese	12.46	13.55	-	0.89	0.31	-	-36.1	-39.7	-
ENERGY PRODUCTS									
Petroleum	16.29	12.65	+	0.30	0.22	-	-25.4	-46.5	-

* In order to identify individual stages of a processing chain for traditional products, it was sometimes necessary to operate at a somewhat higher SITC level than that used for the actual identification of these goods. For example, the primary stage of the fruit processing chain is SITC 057 (fresh fruit), while SITC 0579 is the (less aggregate) designation of the traditional product. This was necessary because the four-digit SITC traditional product code could not be directly linked to a higher processed stage. Differences in SITC levels cause of the unit values shown below to differ from those reported in Tables 13 and 14.

Source: Authors' estimates.

D. The Outlook for Traditional Product Prices

Key Observations

Long term price projections by the World Bank provide some indication of likely future trends for traditional products. These price forecasts reinforce the basically negative outlook. With the sole exception of coffee, 2010 real prices for traditional products are projected to be lower, often substantially so, than they were in 1990. Even from a depressed 1999 base period, the Bank anticipates a further deterioration in real prices for more than one half the traditional products, which ranged up to 16 or 17 percent in the case of tobacco, groundnut oil and gold. This adverse price outlook for most traditional products accents the need for Africa to adopt policies that would allow the region to remain efficient low-cost suppliers of these goods.

The general impression from statistics on recent global demand and price changes for Africa's traditional exports is clearly negative. Aggregate demand growth in major markets for almost two-thirds of the products was essentially static or negative (Table 5), while real prices for most of these goods were declining. This raises an important question. Is the future outlook for traditional products basically for a continuation of past trends, or is there some reason why a more optimistic view is warranted.

Longer term price projections by the World Bank (2000) provide some indication as to likely future developments. Essentially, the Bank projected prices for about 50 primary commodities through the year 2010 and also provided statistics on recent price trends for these goods. One problem, however, is that the Bank's forecasts only cover 13 traditional products, and an additional 7 commodities that are also exported by Sub-Saharan Africa. Table 13 summarizes the Bank's forecasts for real prices of these products through the current decade.[25]

Essentially, these price projections reinforce the general negative outlook for Africa's traditional products. With the sole exception of coffee, 2010 real prices for all traditional products are projected to be lower, often substantially so, than they were in 1990. Even from a depressed 1999 base period, the Bank anticipates a further deterioration in prices for more than one half the traditional products. These range upward to 16 or 17 percent in the case of tobacco, groundnut oil and gold. A roughly similar pattern is projected for other African commodity exports where real prices for 5 of the 7 products in 2010 are projected to be lower than their level in either 1990 or 1999. In short, the Bank's projections do not anticipate a reversal in the long term deterioration in traditional and other commodity prices.

[25] The World Bank (2000, p. 80) publishes related statistics that suggest considerable uncertainty is often associated with its projections. For example, from a 1990 base of 100, cocoa prices in 2005 are forecast to be 125 with a *70 percent confidence interval* (our italics) ranging from 69 to 183. The width of this interval indicates that cocoa prices may be either substantially higher, or substantially lower, than their level (109.6) in 1999.

Table 16. 1990 Constant and Projected Prices for Traditional

Commodity	price/unit	Prices in 1990 Dollars 1980	1990	1999	Projected Prices 2001	2005	2010	1990-2010 Projected % Change
TRADITIONAL PRODUCTS								
Coffee, Robusta	cents/kilo	450.6	118.2	143.8	103.8	136.5	138.7	17.3
Cocoa	cents/kilo	361.7	126.7	109.6	96.5	125.5	125.9	-0.1
Logs, Cameroon	$/cum	349.7	343.5	260.0	284.9	284.5	310.9	-9.5
Aluminum	$/mt	2,023	1,639	1,314	1,471	1,506	1,406	-14.2
Natural Phosphates	$/mt	64.9	40.5	42.5	40.4	36.9	34.1	-15.8
Tea	cents/kilo	230.5	205.8	177.6	171.9	163.2	155.5	-24.4
Iron Ore	cents/dmtu	39.0	32.5	26.6	27.1	26.8	24.4	-24.9
Cotton	cents/kilo	286.5	181.9	113.1	119.6	132.8	133.8	-26.4
Tobacco	$/mt	3,162	3,392	2,922	2,849	2,719	2,443	-28.0
Copper	$/mt	3,032	2,661	1,519	1,746	1,841	1,777	-33.2
Groundnut Oil	$/mt	1,193.0	963.7	760.6	735.3	686.1	629.2	-34.7
Sugar	cents/kilo	87.8	27.7	13.3	13.1	16.7	17.8	-35.8
Gold	$/troy oz	844.7	383.5	269.2	257.4	230.1	222.1	-42.1
OTHER PRODUCTS								
Coconut Oil	$/mt	936.1	336.5	711.8	574.5	518.8	481.2	43.0
Palm Oil	$/mt	810.9	289.8	421.0	321.7	355.6	340.5	17.5
Soybean Oil	$/mt	830.2	447.3	412.6	376.8	384.9	388.6	-13.1
Tin	cents/kilo	2,330.5	608.5	521.8	514.7	493.7	451.6	-25.8
Zinc	cents/kilo	105.8	151.4	103.9	106.6	100.4	92.5	-38.9
Lead	cents/kilo	125.8	81.1	48.5	48.3	50.2	47.4	-41.6
Nickel	$/mt	9,056	8,864	5,805	7,353	5,021	5,034	-43.2
Memo Item								
All Non-Energy Commodities	1990 dollars	174.3	100.0	85.0	86.7	90.1	86.3	-13.7
Manufactures Unit Value Index	1990 dollars	72.0	100.0	103.6	106.2	119.5	135.1	35.1

Source: Adapted from World Bank (2000).

E. Implications of the Competitive Situation

Key Observations

Changes in Africa's ability to compete in global markets have the potential to substantially alter what the region should expect from its traditional products. If Africa's global market shares for these products experienced substantial erosion this would make the already poor demand and price related expectations worse. However, the overall competitive changes that occurred over the last decade were generally so small that their general influence was negligible. This is not the case, however, for one or two individual traditional products (like copper) where a significant erosion of global market shares occurred.

The preceding analysis contained very little that was positive concerning recent trends and future prospects for traditional products. Real prices for these goods fell by about 24 percent over the last decade and were about 40 percent below their 1980 levels. Available World Bank forecasts are also generally pessimistic with predicted real prices in 2010 generally lower than their, already depressed, 1999 base. However, there is one factor, namely, changes in the African countries ability to compete that could potentially alter expectations for traditional products. If Africa is generally losing global market shares for these goods it could make the already dim outlook worse, just as increasing market shares have the potential to improve the general outlook.

Relevant information concerning this point can be derived using an approach that quantifies the effects of market share changes on exports. This "competitive effects index" for product j (ΔC_j) is expressed as,

(6) $\Delta C_j = (s_{a,t} - s_{a,o}) * I_{g,t}$

where $s_{a,t}$ and $s_{a,o}$ represent Africa's global market share for the good in base year o and end year t, while $I_{g,t}$ represents global imports of the traditional product in year t. The index indicates the dollar value of export gains or losses associated with a country, or group of countries, market share changes. Summing equation (6) over all traditional products will indicate whether their competitive position improved or worsened, and what was the magnitude of the associated change in the value of exports. The values for the index can be computed for each traditional product using the statistics presented in Table 1.

When these computations are made the overall the outlook is slightly negative. Competitive share changes resulted in an overall decrease in 1999 exports of about $570 million, which is only about a one-half a percentage point reduction in exports. Competitive changes have the potential to alter general expectations for traditional products, but they have not significantly done so in total. However, this is not the case for several traditional products like copper, platinum, and groundnut oil where substantial market share loses will further aggravate unfavorable price prospects if they continue. In contrast, African prospects for a few products like cocoa, sisal and sesame seeds have been enhanced by competitive share gains.

V. OVERALL EXPORT PROSPECTS

Key Observations

An "export growth prospects" index is used to empirically assess what African countries should expect from their traditional and non-traditional exports. The index facilitates comparisons of prospects for any given exporter with those of other regional or non-regional countries, or with the general growth in world trade. Numeric values for the index show Africa should expect its traditional exports growth to fall well short of that for world trade. The index also suggests the growth prospects for Africa's non-traditional exports are often more favorable. However, non-traditional exports probably could not significantly improve the general short-term outlook for Africa's exports since they normally constitute a small share of most Africa countries' trade. Short to medium-term prospects will be strongly affected by the SSA countries ability to become relatively low cost producers of traditional products and to remove any anti-export biases in their domestic regulations.

A key question relating to rational expectations for future exports concerns how well the current trade profile of a country positions it among relatively high growth products. The preceding analysis showed that many African traditional exports had negative characteristics, such as low income elasticities of demand and below average global trade growth rates. However, although traditional products constitute a high share of most SSA countries total exports (see Appendix Table 2) variation occurs across countries in their importance relative to non-traditional goods. This observation poses an important question. Are the prospects for nontraditional products significantly different that they could alter what African countries should expect from their total exports.

This point can be addressed through the use of an index that provides summary information on a country's trade growth prospects. The index allows any African country to compare its export prospects to those of other regional or non-regional exporters, or to the general growth in world trade. The index also makes it possible to assess the likely influence of policy induced changes in the "basket" of goods exported on trade growth rates. For example, it could help indicate what influence a shift in exports from primary to processed commodities might have on export growth. Similarly, it could help determine how efforts to increase trade in specific products like (say) those manufactures in which the country has an established competitive export base, could influence exports.[26]

[26] The simulations assume policy makers have some prior knowledge of what products could be competitively exported. This information might come from a country's actual export experience with related products, or from specially designed surveys of enterprises engaged in a country's commerce. See the World Bank (2001b) for a useful application of this approach.

Table 17. The Trade Prospects Index For Three Groups of African Exports

African Exporter	GROUP I Current Export Structure*	GROUP II All Traditional Products*	GROUP III Non-Traditional Exports Only *	DIFFERENCE Group III Versus Group II
LARGER COUNTRIES				
Mauritius	1.18	0.53	1.41	0.88
Kenya	0.55	0.35	0.84	0.49
Ghana	0.62	0.50	0.91	0.41
Liberia	0.50	0.13	0.54	0.41
Gabon	0.46	0.45	0.77	0.32
Cameroon	0.46	0.44	0.65	0.21
Nigeria	0.62	0.60	0.78	0.18
SACU	0.81	0.76	0.94	0.18
Congo, Democratic Rep.	0.70	0.60	0.73	0.13
Cote d'Ivoire	0.46	0.44	0.55	0.11
Angola	0.62	0.60	0.67	0.07
Zambia	0.64	0.64	0.66	0.02
Congo, Republic	0.57	0.58	0.55	-0.03
Zimbabwe	0.58	0.61	0.53	-0.08
Average of Above	0.63	0.52	0.75	0.23
MID-SIZE COUNTRIES				
Mali	0.29	0.24	0.87	0.63
Madagascar	0.90	0.60	1.12	0.52
Uganda	0.42	0.36	0.80	0.44
Senegal	0.56	0.38	0.81	0.43
Ethiopia	0.40	0.35	0.73	0.38
Mauritania	0.56	0.52	0.88	0.36
Togo	0.19	0.15	0.50	0.35
Mozambique	0.57	0.47	0.73	0.26
Benin	0.47	0.45	0.68	0.23
Tanzania	0.57	0.47	0.66	0.19
Malawi	0.74	0.73	0.81	0.08
Guinea	0.39	0.44	0.38	-0.06
Sudan	0.50	0.63	0.11	-0.52
Average of Above	0.50	0.45	0.70	0.25

*Group I shows growth prospects index values computed using actual 1999 shares of all traditional and non-traditional exports. Group II shows the growth prospects index for traditional products, while Group III reflects growth prospects for non-traditional products.

Source: Authors' estimates.

The export growth prospects index first establishes a concordance between the share of each four-digit SITC product (i) in an African country's (j's) exports, and the recent world trade growth rate for that product. That is, if S_{ij} is the current share of product i in country j's total exports, and R_i is the rate of growth of i in world trade, the export prospects index (P_j) is defined as,

(7) $$P_j = [\Sigma S_{ij} \times R_j]/R_w$$

where R_w is the rate of growth of world trade in all products. It should be noted that the index only reflects the influence of global demand growth and assumes no changes occur in a country's competitive position. Countries with an index above unity may be thought of as having above average export growth prospects, while the reverse is true for those with indices below unity. Furthermore, because the index is measured relative to the growth rate of world trade it shows how relatively favorable, or unfavorable, are a country's export prospects compared to world trade.[27] For example, an index value of 0.50 suggests a country's exports should grow at one-half the rate of world trade. An index value of 1.50 suggests the exports should grow 50 percent faster.

Table 17 shows export growth prospects index values for the African countries computed for three different groups of exports. Group I employs 1999 shares for all of a country's four-digit SITC (Rev. 2) traditional and non-traditional exports and, therefore, shows what might be expected from its complete export profile.[28] The second group index is for traditional exports. Comparisons of these results with those for Group I will show whether traditional products make a higher, or lower, contribution than average to export growth. In preparation for this simulation, the current trade shares for all traditional products were proportionately upward adjusted so their sum was one hundred percent. Group III assumes that only non-traditional products (that is, all other products aside from the traditional goods) are exported. Comparison of the results for Groups II and III will help indicate how important are relative differences in the prospects for traditional and non-traditional products. For this reason, a fourth column was included in Table 17 showing differences in the indices generated for Groups II and III. Positive values indicate the growth prospects for nontraditional products are superior to those for traditional exports. For policy purposes this information could be useful for identifying products that might be targeted for export promotion.

In several ways the results could have been anticipated from the earlier analysis. Traditional products (Group II) have growth prospects that are significantly lower than those for world trade. The average index for the larger countries (0.52) suggests that their exports could grow at a rate slightly higher than one-half that of world trade, while the mid-size countries face slightly lower growth prospects. However, comparisons of the cross group results reflects several important points:

- With the exception of only four countries, the growth prospects index for product Group III is higher than that for Group II, and often substantially so. This implies that the established nontraditional exports have more favorable growth prospects than traditional goods. For the larger countries, growth prospects for non-traditional products are about 45 percent higher than those for traditional exports while the spread is even greater for the mid-size countries.

- Mauritius clearly differs from other SSA countries in that its development of non-traditional exports affords the possibility of growth prospects that are far more favorable than other African countries. Mauritius overall index of 1.18 (Group I) indicates its nontraditional exports more than compensate for the relatively low growth prospects of its traditional products (largely sugar).

[27] Several caveats should be noted. First, use of this measure is justified by correlations showing longer-term relative growth rates for trade in most products are stable. As such, a basic assumption of the index is the continuation of past trends. As an example, rank correlations between the 1980 to 1989 and 1990 to 1999 export growth rates of all four-digit SITC products were statistically significant at the 99 confidence level. Second, information provided by the index differs from a measures based on the rate of growth in a country's total exports over a given period. The latter may be biased by changes in the relative importance of products, while the growth prospects index is based on the relevant importance of products in the most recent period. Third, the measure assumes no changes occur in the level of trade. A policy induced shift in structure toward faster growing products may not be advantageous if the level of trade declines. Finally, the index can provide information on the likely influence of a policy induced change in the composition of exports on trade growth rates, but it provides no information concerning the costs, or feasibility, of implementing the trade changes.

[28] Since price instability for some commodities may bias estimates of their share in a country's total exports in a given year, export data for the 1997-1999 period have been pooled to limit the influence of any unusual annual fluctuations. Similarly, in the computation of individual four-digit product world trade growth rates pooled 1987 to 1989 and 1997 to 1999 were employed.

Mauritius is the only African country whose total exports appear to have the potential to grow faster than world trade.

• Although they have not yet had a major impact on overall trade prospects, Table 17 indicates several African countries have developed some non-traditional exports that could potentially have a important positive influence on export growth. Non-traditional exports of Madagascar have an average trade prospects index exceeding unity, while the indices for Kenya, Mali and Uganda are well above their "all product" averages (Group I). This raises two important questions. What non-traditional products have these countries developed to improve their growth prospects, are there general similarities in their production characteristics. Analysis of these countries' 1999 export profiles reveals the following points:

Mauritius. The development of an important non-traditional export base centered on textile and clothing products which accounted for more than 60 percent of 1999 exports. This country's textile and clothing export base continues to diversify and now covers 14 different four-digit SITC product groups. Recently, non-traditional exports have expanded to include several "niche" products like spectacle frames, clock movements and parts, and children's' toys.

Madagascar. The non-traditional product base has similarities to that of Madagascar. Textiles and clothing accounted for 38 percent of all 1999 exports, and covered 11 different four digit SITC groups. Another relatively high global growth non-traditional product, spices, accounted for 8 percent of total 1999 exports.

Kenya. Textile and clothing products are of relatively minor importance as they account for less than 4 percent of total 1999 exports. However, previous Multifiber Arrangement restrictions placed on Kenya may have "frozen" textile and clothing exports at artificially low levels. Currently, the most important high growth non-traditional export is "cut flowers" which accounts for about 11 percent of all exports. This one item is largely responsible for the relatively high Group III results.

Mali. The non-traditional trade base is very small, and cotton accounts for 83 percent of all exports. However, a few textile and clothing products, works of African art, and microcircuits appear in this country's non-traditional exports. Mali appears to have made some fledgling progress in utilizing its relatively large domestic cotton production to move upstream into thread, fabric and clothing exports. Given the importance of raw cotton and other fibers in many SSA countries exports, an effort to determine what factors constrain further processing along these lines is warranted.

VI. POLICY IMPLICATIONS

Key Observations

This study's policy message for Africa is two fold. First, Africa must diversify away from traditional products or continue to experience serious negative trade effects including; (i) declining or relatively low growth in global demand for these goods, (ii) falling real prices for traditional products, (iii) very unstable prices and export earnings, (iv) a continued marginalization in world trade, and (v) diminished growth and industrialization prospects. However, there is no evidence that any general diversification is occurring. Domestic and international policy initiates must assign a far greater importance to the need for diversifying Africa's exports.

Second, it is unlikely that major shifts in the composition of exports can occur in the short to medium-term. As such, the removal of general anti-export biases in African countries' domestic policies, as well as initiatives to promote more competitive (low cost) prices for traditional exports, still require immediate attention. Future markets for traditional products will be highly competitive and African countries failing to implement policies promoting production efficiencies and lower costs should expect to experience major competitive export losses for these key items.

If, at this point, we return to the question posed in the title of this study "What Can Africa Expect from its Traditional Exports" the answers seemingly are quite clear. Africa can expect to experience serious negative trade effects including; (i) declining or relatively low growth in global demand for these goods, (ii) falling real prices for traditional products and other similar commodities, (iii) unstable prices and export revenues, (iv) a continual declining role in world trade, and (v) diminished growth and industrialization prospects. The policy prescription for these problems is also quite clear. Diversify away from traditional products. The importance of this policy prescription is further strengthened by a recent World Bank study showing a strong positive relation exists between export diversification and national growth rates (David de Ferranti et. al 2001).

Unfortunately, what is not clear are the appropriate policy measures that should be adopted to implement this policy prescription. Available statistics show African countries have made little or no recent progress in diversifying their exports. In fact, Ng and Yeats (2000, pp. 22-23) found that "no major changes in the diversification of African exports occurred in the 1990s, indeed several statistical indices suggest some African countries' exports became more concentrated". One approach that has been suggested for diversification involves the further local processing of domestically produced primary commodities (see UNCTAD 1975, Roemer 1979, Yeats 1981 or, more recently, de Ferranti et. al. 2001). Although proposal advocating the use of these "natural resource based" industrialization and diversification strategies date back to (at least) the early 1970s, Africa has clearly made little related progress along these lines. African anti-competitive, anti-open, domestic policies were, no doubt, a key reason for this failure (Ng and Yeats 1997). [29]

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[29] An interesting question is whether World Bank policies might do more to promote diversification. Brownbridge and Harrigan (1996) examined changes in the export profiles of African countries that were involved in World Bank structural adjustment programs (SAPs). They observe (p. 419) that, over a decade, sixty percent of the recipients exported a smaller number of products at the end of the period than at the beginning. The authors concluded that "The emphasis placed by structural adjustment programs on price reforms to boost exports is likely to be of greater benefit to the traditional primary commodity exports than to non-traditional exports, since the latter often

While this study's objective was not to formulate a strategy for African export diversification, a recent World Bank (2001b) report made such an initiative for Ghana. Several points regarding this effort should be noted. First, the Bank report utilized surveys of local domestic and foreign firms engaged in various export activities to identify specific types of non-traditional products Ghana might export successfully. Second, the Bank study extended the survey approach to determine what were the impediments facing these potential exports.[30] These procedures appear to have considerable merit and, if applied in other selected Sub-Saharan African countries could provide a useful overview of the region's prospects and problems in diversifying exports.

Box 5. Trade Restrictions Facing Primary and Processed Traditional Products

The essentially negative conclusions concerning what should be expected from Africa's traditional exports might be altered if there was a marked improvement in international demand for these goods. The key question, however, is what factor(s) might produce such a significant positive demand increase? An acceleration of income growth in the major consuming countries would likely have only modest effects, given the relatively low income elasticities for most of these goods (see Table 4). It also seems unlikely that competition from synthetics will abate, thereby raising relative demand for traditional products. However, there is the possibility that a lowering of government imposed trade barriers against traditional products might have a positive impact on demand, particularly if these barriers occur frequently and are high.

Although recent analyses show OECD trade barriers facing Africa are generally low (Amjadi *et. al.*, 1996), there are specific situations where they are of major importance. For example, OECD tariff files show African, and other developing countries, face import duties of 170 percent on sugar exports to Japan, and over 40 percent in the European Union. Similarly, US tariffs on unprocessed, or partially processed, tobacco (another traditional product) range from 27 to 39 percent. Constraints associated with the Multifiber Arrangement and high escalating tariffs clearly have a negative impact on the further processing of some African natural fibers, like cotton, into thread, textiles and clothing. Identification of these OECD trade barriers could have a positive impact on demand for some specific primary and processed African traditional products.

As far as specific policy initiatives are concerned recent EU proposals for a general "blanket" liberalization of all trade barriers facing least developed countries' exports is particularly attractive. This "Everything but Arms" proposal would eliminate government imposed trade restrictions on all least developed countries (most of which are located in Africa) exports with the exception of armaments. See UNCTAD and Commonwealth Secretariat (2001).

While most previous analyses of trade barriers facing developing countries focused on restrictions in developed countries, there are several reasons why this practice should change. First, developing countries have been growing steadily in relative importance, as evidenced by the fact that almost one-third of all traditional product exports went to these markets in 1999 (see Table 7). Second, real income levels of many developing countries, particularly those in East Asia, have grown faster than the original OECD members, while the global economic importance of OPEC countries has increased dramatically since the first early 1970 petroleum price increase. Clearly, the current situation requires that the

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face other severe constraints such as inadequate technological, managerial, technical and marketing skills, infrastructure, and lack of finance. Remedying these constraints has not been addressed in most SAPs in Sub-Saharan Africa."

[30] Just as trade barriers in non-regional markets may constrain some African exports, particularly those of textiles, clothing, and products that compete with temperate zone agriculture, the Bank survey uncovered similar problems in regional markets. For example, the report notes that "Several problems constrain Ghana's ability to take full advantage of regional trade opportunities; (i) lack of implementation of the ECOWAS trade agreements, which result in discriminatory treatment of Ghanaian exports; (ii) transport logistics including innumerable check-points within neighboring countries; and (iii) an inefficient import regime, particularly regarding duty drawbacks. Box 4 provides summary information on average tariffs least developed African countries face in industrial and developing countries markets.

Box 5 Continued

more advanced non-OECD countries accept some responsibility for improving the trade and economic prospects of Sub-Saharan Africa, as well as the highly indebted least developed countries in other geographic regions.[31]

As far as the opening of markets is concerned, the tariff averages shown below suggest other developing countries may have considerably greater scope for improving market access conditions for Africa than do industrial nations. These statistics reflect average tariffs facing exports of selected product groups from *least developed* countries, most of which are located in Africa. As indicated, the average duties outside industrial countries are often set at relatively high levels. In non-industrial markets, tariffs facing least developed country exports for 39 (56 percent) of the product groups exceed 10 percent, and they exceed 15 percent for almost one-quarter of the groups. On average, the average tariffs in the non-industrial countries are roughly on a par with import duties in OECD countries prior to the conclusion of the 1968 Kennedy Round of Multilateral Trade Negotiations.

Product	Industrial Countries	East Asia	South Asia	Other Europe & Central Asia	Middle East & North Africa	Latin America
Agriculture & Fish	2.1	14.0	28.3	11.9	7.6	14.8
Crustaceans	0.7	9.4	16.4	14.3	15.1	30.0
Other fish	1.8	22.7	13.8	9.6	12.8	14.6
Fruit and Nuts	0.1	6.4	38.0	8.9	13.0	17.0
Coffee	0.0	0.9	35.0	7.4	16.3	12.7
Oil seeds & grains	0.4	14.1	33.4	5.8	8.1	11.2
Other agriculture	5.1	3.2	13.0	18.4	29.2	16.8
Minerals and Fuels	0.0	4.5	6.5	0.7	14.4	5.9
Metal ores	0.0	1.3	5.0	0.0	12.0	0.0
Petroleum	0.0	4.5	30.0	3.9	20.0	6.0
Manufactures	4.4	2.4	24.7	8.0	12.6	10.3
Rubber and leather	2.8	1.4	13.0	13.8	12.7	11.5
Wood and products	0.4	2.0	7.7	3.2	11.5	18.1
Cotton products	0.3	2.0	4.5	0.0	11.9	8.4

Given the relative size of these non-industrial country markets, and the magnitude of the tariffs which they impose on imports, it is clear that a selective trade barrier liberalization could potentially generate an important stimulus to demand for traditional products. What is not widely recognized, however, is that an appropriate instrument has been negotiated and ratified by developing countries for implementing the required liberalization.

In the mid-1980s, developing countries negotiated and ratified, under the auspices of the United Nations Conference on Trade and Development (UNCTAD), an agreement referred to as the “Global System of Trade Preferences” (GSTP) among developing countries. The GSTP called for the exchange of trade preferences among all developing countries to help correct a number of perceived trade problems including the concentration of many developing countries exports and their inability to penetrate new markets. In spite of the fact that major financial, time and other resources were devoted to the negotiations, surveys by World Bank staff failed to identify and developing country which has implemented the GSTP.

[31] The World Bank (2001a, pp. 192-193) classifies countries into four income categories depending on their level of GDP per capita. This classification accents the magnitude of the gap that exists between many countries in Africa and others that are often called “developing” countries. For example, 38 “low income” African countries like Kenya, Tanzania, Uganda and others has 1999 GDP per capita levels under $755, while upper “middle income” countries like Saudi Arabia, Brazil, Chile, Mexico and others had per capita income levels that ranged upward to $9,265. Non-original OECD countries like Hong Kong, Singapore and Taiwan (China), and 27 other countries had GDP per capita ratios in excess of $9,265. Clearly, these higher income countries are in a position to make some contribution toward improvement of African trade and economic prospects.

Box 5. Continued

This situation presents UNCTAD with a unique opportunity to both oversee initial first steps in the actual implementation of the GSTP, and also to accomplish a needed liberalization of trade barriers facing African and other least developed countries' exports. Specifically, medium and high income non-industrial countries should now taken the lead and unilaterally extend GSTP preferences to Africa, just as the OECD countries unilaterally extended GSP preferences to developing countries in the early 1970s. Furthermore, this proposed initial step in implementing the GSTP might be accompanied by an agreed timetable for broadening the preferences to include other developing countries.

Second, this report identified a number of "dynamic" non-traditional products that Africa has been able to export competitively (see Box 3). Given the negative outlook for traditional exports, a further inquiry as to how Africa has been able to establish a successful competitive presence for these fast growing products clearly seems warranted.

The impediments to diversification of exports which the Bank's Ghana report identifies, and areas where corrective reforms are required, are very broad and encompass a wide range of financial, tax, customs, legal, transport, educational policies, all of which are aimed at improving the commercial environment within Ghana. The report emphasis the development of export processing zones processing zones as a preliminary first step toward export diversification (p. 68), and discusses the types of tax and financial incentives needed to attract foreign investment to these zones. Third, the reports focus strongly suggest that internal constraints and disincentives, which can only be corrected by Ghanaian action, lie at the center of obstacles to successful export diversification efforts.[32] This focus is consistent with those of other recent investigations that improvements in the internal domestic and commercial environment hold the key to improved African trade and economic performance. The nature of these improvements are such that they can only be implemented by the African countries, themselves, and not by outsiders.

[32] The report (p. 37) accents the importance of Lome Convention preferences in the EU and opportunities recently extended under the U.S. Africa Growth and Opportunity Act for Africa as improving Ghana's competitive position in these major markets.

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Annex 1
Traditional Products and the Export Prospects of the Smaller Sub-Saharan African Countries

Key Observation

Four products, namely, cotton, saw logs, fish and coffee account for three quarters of the small African countries traditional product exports, and their trade performance will largely be determined by these commodities. World Bank projections anticipate real prices for these commodities, except for coffee, remaining below their 1990 level. Aggregate income elasticity estimates suggest demand prospects for the small countries' exports fall below those of both the large and mid-size exporters. With one or two exceptions the smaller countries do not appear to be developing an export base in the types of non-traditional products that could improve growth prospects.

While this report's main text examined the trade prospects of larger and mid-sized African countries, there are several relatively small countries that may be disadvantaged by their size, and the fact that many are either islands or land-locked. Total exports for these smaller countries are generally under $250 million, but may be as low as $10 to $25 million in the case of Cape Verde, Eritrea, or Sao Tome & Principe. These countries are treated separately since previous studies indicate a relationship may exist between country size and trade concentration (Khalaf 1974).[33] That is, smaller countries might be expected, *ceterus paribus*, to be more heavily dependent on a relatively fewer exports than larger ones.

Annex Table 1 provides summary statistics on the 15 smaller African countries 1999 non-oil exports of traditional products.[34] Excluding the three petroleum producers (Equatorial Guinea, Guinea-Bissau and Niger) the relative importance of non-energy traditional products in their total exports is apparent. Traditional products account for more than one-half the total exports of 7 of the 12 countries, and their share reaches 90 percent, or more, for Rwanda and Burundi. In several cases, one traditional product dominates a country's total exports. For example, almost 60 percent of Rwanda's exports consist of coffee, cotton accounts for 61 percent of Burkina Faso's exports, while fish preparations comprise 69 percent of the Seychelles exports.

[33] In general, this study's statistics support the proposition. South Africa, the largest SSA country measured by either trade or GDP, exports all 38 traditional products (see Appendix Table 3), while very small countries like Cape Verde, Chad, or Sao Tome & Principe export 5 or fewer items. On average, the large African countries export 21 traditional commodities as opposed to 16 for the mid-sized countries, and under 9 for the smaller countries. Once countries reach a certain threshold of development, however, the relationship between country size and trade concentration seems to weaken. This is evidenced by the fact that some relatively small countries, like Singapore, have a relatively diversified export base.

[34] In 1999, total exports of Equatorial Guinea and Niger exceeded the $250 million limit used to define "small" countries. They have been included here since, for most of the last decade, their exports were under this value and only recently increased dramatically due to a surge in petroleum exports.

Annex Table 1. The 1999 Traditional Product Export Profile of Smaller African Countries.

Exporter	Largest Traditional Exports (Share of Total Exports)	Traditional Exports Number	Traditional Exports Share of All Exports (%)*
Burkina Faso	Raw Cotton (61), Raw Sugar (9)	14	87
Burundi	Coffee Beans (69), Non-Monetary Gold (14)	12	95
Cape Verde	Shellfish (2)	4	2
Cent. African Rep.	Raw Cotton (7), Saw Logs (6)	14	22
Chad	Raw Cotton (82), Natural Resins & Gums (13)	5	95
Djibouti	Non-Monetary Gold (18), Sheep Skins (8)	10	38
Equatorial Guinea	Saw Logs (14)	6	15 (90)
Eritrea	Non-Monetary Gold (46), Natural Resins & Gums (6)	9	58
Gambia	Shellfish (25)	11	26
Guinea-Bissau	Shellfish (9), Raw Cotton (3)	8	15 (52)
Niger	Raw Cotton (1)	10	2 (58)
Rwanda	Coffee Beans (59), Tea (17)	10	90
Sao Tome & Principe	Cocoa Beans (31), Shellfish (8)	3	40 (51)
Seychelles	Prepared Fish (68)	9	69
Somalia	Natural Resins & Gums (21), Sesame Seeds (12)	9	56

* Numbers in parentheses include petroleum exports.

Source: Tabulations based on trade statistics reported to COMTRADE by countries listed in the notes to Table 1.

Annex Table 2 provides a different perspective on these countries exports. Shown here are the combined total 1999 values of the 15 largest traditional products and the number of small countries that export each item. Combined, these 15 products account for about 99 percent of all traditional product exports, but five commodities, namely, cotton, saw logs, prepared fish, coffee, and shellfish are of primary importance accounting for more than 80 percent of the small countries' total exports. The relatively high shares for fish, shellfish and coffee has potentially favorable implications since the previous analysis (Table 5) showed these items had relatively high income elasticities. On the negative side, 47 percent of the combined exports of these countries consist of cotton and saw logs which appeared to have static growth prospects.

Although the instability indices are not shown, traditional product price volatility is clearly a potential problem for the smaller countries. Annex Table 2 indicates that 10 of their 15 major export products experienced 1990-99 annual price changes that exceeded those for the all non-oil commodity average. In addition, 9 of the 15 products experienced a three year consecutive directional price that exceeded 25 percent, often by a considerable margin.

Annex Table 2. Major Traditional Product Exports of the Smaller African Countries in 1999

Traditional Product	Number of Exporters	Share of Traditional Exports (%)	Cumulative Share (%)	Exports ($000)
2631 Raw Cotton*	7	29.6	29.6	191,119
2472 Saw Logs*	8	17.4	47.0	112,245
0371 Prepared Fish	2	16.0	63.0	103,181
0711 Coffee Beans*	10	13.3	76.3	85,680
0360 Shellfish	13	4.8	81.0	30,676
9710 Non-Monetary Gold*	7	4.3	85.3	27,669
2922 Natural Resins and Gums*	7	2.5	87.7	18,843
0741 Tea	7	2.2	90.0	14,390
0611 Raw Sugar*	1	2.1	92.1	13,811
2483 Shaped Lumber	7	1.8	93.9	11,552
0721 Cocoa Beans*	5	1.6	95.5	10,430
2225 Sesame Seeds*	6	1.6	97.1	10,339
2879 Other Nonferrous Ores*	3	0.8	98.0	5,396
6116 Ferro-Alloys*	5	0.8	98.7	4,903
2223 Cotton Seeds*	1	0.4	99.1	2,394
All Above Items	15	99.1	99.1	639,628
All Traditional Products	15	100.0	100.0	645,504

* During the last decade average annual price instability for this product exceeded that for the all non-oil commodity price index.

Source: Tabulations based on trade statistics reported to COMTRADE by countries listed in the notes to Table 1.

Annex Table 3 employs the traditional product income elasticity estimates to compute trade weighted and unweighted average elasticities for each country. Considerable variation is observed in the aggregate price adjusted elasticities due to the specific traditional products exported. Prepared fish has one of the highest income elasticities of any traditional product and this one commodity largely accounts for the high (2.10) aggregate estimate for the Seychelles. In contrast, raw cotton dominates Burkina Faso's exports and the depressed demand for cotton over the last decade largely explains the negative aggregate elasticity for this country. Taken together, the aggregated weighted and unweighted elasticity estimates suggest the outlook for the smaller countries as a group falls below that for the large and mid-size exporters.

Annex Table 3. Average Income Elasticities for Traditional Products Exported by the Smaller African Countries

	Price Adjusted Income Elasticity Estimates	
Exporter	Trade Weighted Average All Traditional Exports	Unweighted Average
Burkina Faso	-1.49	-0.38
Burundi	0.28	-0.35
Cape Verde	0.97	0.52
Cent. African Rep.	-0.26	-0.01
Chad	-1.66	-0.80
Djibouti	-0.69	0.33
Equatorial Guinea	0.34	0.81
Eritrea	-1.00	0.03
Gambia	1.04	0.75
Guinea-Bissau	0.50	0.62
Niger	0.79	0.66
Rwanda	0.28	-0.35
Sao Tome & Principe	1.51	1.10
Seychelles	2.10	1.56
Somalia	-0.44	-0.71
All Above Countries	0.15	0.25
Memo Item		
Large African Countries	0.63	0.50
Mid-Size Countries	0.36	0.32

Source: Tabulations based on trade statistics reported to COMTRADE by countries listed in the notes to Table 1.

Future prospects for the smaller countries will be influenced by two factors; trends in real prices for the relatively few products that dominate their exports (mainly cotton and saw logs which account for almost one-half of their traditional exports), and their capacity to expand into faster growing non-traditional product lines. Regarding the first point, World Bank projections anticipate real prices for these commodities remaining below their 1990 level. Second, the available evidence does not indicate the smaller African countries have been any more successful in diversifying and developing an export base in non-traditional products that could enhance growth prospects (see Appendix Table 1). Cape Verde is the sole exception as almost 40 percent of its 1999 exports consisted of footwear and clothing products..

Annex 2
Prospects for the Petroleum Exporting Sub-Saharan African Countries

Key Observation

Several characteristics of Africa's petroleum trade differs substantially from other traditional products. About 95 percent of the region's oil exports originate in only six countries, while most other African countries are net oil importers. As such, a positive price outlook would be beneficial for the relatively few producers, but would have adverse consequences for most Sub-Saharan African countries. Over the last decade the level of annual instability in petroleum prices was about double that for the all non-oil commodity index and constant dollar prices for oil were about 25 percent lower in 1999 than in 1990. World Bank forecasts call for a continued deterioration in real petroleum prices through 2010.

For several reasons the main text focused on non-energy traditional products. Petroleum is treated separately since oil exports are of major importance to a relatively few countries like Angola, Republic of Congo, Gabon and Nigeria. Second, petroleum constituted about one-third of Sub-Saharan Africa's exports in 1999 (as opposed to about 40 percent in 1990), so its inclusion with the non-energy products would have made it difficult to properly assess prospects for the latter in aggregate statistics. Third, petroleum also differs from the traditional products in that exports are subject to some degree of control by a commodity cartel (OPEC) and its prospects depend on how effectively the cartel functions. Perhaps the most important point, however, is that petroleum differs significantly from most traditional products in that the majority of African countries are net oil importers. As such, depressed global demand and prices for oil may have adverse implications for the relatively few producer countries, but have favorable implications for the majority of energy importing African countries.

Annex Table 4 provides empirical evidence relating to the first of these four points, that is, the very high concentration of regional oil exports from a relatively few SSA countries. Shown here are both the 1995 and 1999 value and regional share of all petroleum exports by the major producer countries. As indicated, Nigeria and Angola originated over 70 percent of all Sub-Saharan Africa's oil exports in 1999, while four other countries (Gabon, Democratic Republic of the Congo, Cameroon, and Equatorial Guinea) increase the regional export share to almost 95 percent.

Annex Table 4. Major African Exporters of Petroleum in 1995 and 1999

	Value of Petroleum Exports ($million)		Share of African Petroleum Exports (%)	
Exporting Country	1995	1999	1995	1999
Nigeria	11,549	10,791	60.7	52.2
Angola	3,460	4,156	18.2	20.1
Gabon	1,920	1,859	10.4	9.0
Congo, Dem. Republic	905	1,504	4.8	7.2
Cameroon	586	711	0.1	3.4
Equatorial Guinea	31	516	0.1	2.5
All Above Countries	18,451	19,537	97.3	94.4

Source: UN COMTRADE import statistics as reported by the countries listed in the notes to Table 1.

In contrast, Annex Table 5 shows how important petroleum is in the import profiles of other African countries. Shown here are the 1995 and 1999 values of oil imports for all countries that have reported their recent trade statistics to UN COMTRADE, and the share of petroleum in total imports.[35] While there is considerable variation in the data, in 1999 the share of petroleum in the total imports of two-thirds of these countries exceeded 10 percent, and for over one-fifth of the countries it exceeded 20 percent. Given the nature of their foreign exchange constraints, higher petroleum prices would have a negative impact on the capacity of these Sub-Saharan countries to import capital equipment required for industrialization and growth.

[35] While the trade statistics in this study are generally based on data reported to UN COMTRADE by the 72 countries listed in the notes to Table 1, Annex Table 6 draw on statistics for all African countries that reported recent trade data to the United Nations. This alternative data source was employed since, unlike most traditional products, there appears to be significant African intra-trade in oil and this exchange would not be accurately reflected in the 72 partner countries' data.

Annex Table 5. Selected African Importers of Petroleum Products in 1995 and 1999

	Petroleum Imports ($000)		Oil Imports as a Percent of All Imports (%)	
Importing Country	1995	1999	1995	1999
Benin	67,145	128,919	9.3	19.3
Central African Republic	22,755	15,297	8.5	8.1
Cote d'Ivoire	466,586	820,380	18.9	25.2
Cameroon	27,260	212,010	2.5	15.6
Cape Verde	39,890	10,921	12.2	5.0
Ethiopia	126,363	123,057	11.1	11.1
Ghana	353,639	466,070	6.0	15.5
Guinea	155,817	76,179	19.0	10.2
Kenya	408,150	432,393	14.5	15.5
Madagascar	76,495	121,986	13.9	24.1
Mali	119,471	162,197	15.4	20.7
Mozambique	58,741	82,256	8.0	7.1
Mauritania	96,948	138,953	21.3	28.2
Mauritius	121,909	141,455	6.0	6.2
Malawi	53,336	66,312	10.7	9.5
Niger	44,005	53,021	12.8	13.6
Sudan	162,244	127,180	13.7	10.1
Senegal	122,051	153,417	10.0	9.6
Togo	166,257	265,410	29.9	39.7
Tanzania	8,619	126,436	0.5	8.0
Uganda	17,917	124,480	1.7	12.3
South Africa	2,194,163	2,349,673	8.2	9.7
Zambia	88,664	102,475	12.5	12.5
Zimbabwe	234,012	241,733	8.8	11.4

Source: African countries import statistics as reported to UN COMTRADE. Data are for 1995 and 1999 or the closest years available. The African countries listed above are those that reported recent trade statistics to UN COMTRADE.

Over the last decade, petroleum prices were characterized by a relatively high level of instability. As reflected in import unit value statistics crude petroleum prices experienced average annual price changes of about 17 percent during the 1990s which was more than twice the average (8.1 percent) for all non-oil commodities. During the decade quantity imports of crude petroleum by the major OECD countries grew by about [8] percent less than real GDP due in part to conservation efforts. The effects of these efforts, plus the introduction of new sources of supply, were factors in World Bank forecasts for relatively flat current dollar, and declining 1990 constant dollar prices for petroleum through 2010. (Annex Table 6).

Annex Table 6. Actual, Constant 1990 Dollar, and Projected Prices for Crude Petroleum

	Actual or Constant Price Values				Projected Values or Prices		
Price or Price Measure*	1980	1990	1998	1999	2001	2005	2010
Current dollar spot crude price	36.87	22.88	13.07	18.07	21.00	18.00	19.00
Constant dollar spot crude price	51.22	22.88	12.54	17.45	19.30	15.06	14.06
Manufactures unit value index**	71.98	100.0	104.19	103.56	108.80	119.51	135.09

*Petroleum prices are in US$ per barrel. Constant prices are on a 1990 base of 100.

**The manufactures unit value (MUV) index measures the US dollar value of manufactured goods exported by France, Germany, Japan, UK and US weighted proportionately by these countries' exports to developing countries.

Source: Authors' estimates.

Annex 3
Elements of Traditional Product Commodity Processing Chains

Annex Table 7 provides information on the 27 commodity processing chains utilized in section IV of this study. In their construction, an attempt was made to identify a primary, intermediate, and final stage for each chain. In addition, the table shows SITC Revision 2 number to help identify the specific product in each stage. For example, the annex table shows the cocoa chain has three stages with cocoa beans (SITC 0721) representing the primary stage product. Cocoa powder (SITC 0722) and cocoa butter and paste (SITC 0723) experienced some processing and are classified as intermediate stage products, while chocolate and other food preparations containing cocoa (SITC 073) represent a higher level of processing activity.

Since the chains defined in the annex table are based on the established SITC system, they may have certain associated limitations. Some of the stages may be at a relatively high level of aggregation with the result that the underlying product composition in the group can vary. For example, the SITC based primary and processed stages of the fruit and vegetable chains may contain different proportions of (say) temperate and tropical products, so actual unit value data may not accurately price changes for the same item at different levels of processing. A second potential problem concerns leakage from the chains, in that a specific commodity can experience further fabrication, but this would not be recorded if it were outside the main elements of the chain. For example, cotton fabric is classified as a higher stage of processing than cotton yarn, but some yarn may be used as a direct input into other processed products (like tires and other rubberized materials). This would tend to understate the actual level of further processing that was occurring. Similarly, some copper products may be lost from the analysis if they are used in the manufacture of (say) electronic equipment. As a result, analysis of trade changes in a SITC defined processing chain may understate the actual level and nature of processing which is occurring. Finally, a given SITC group may contain products which are at different levels of fabrication, but no distinction is made between them. As an example, most SITC vegetable oil groups do not distinguish between crude and refined oil although different levels of processing are involved.

Several of the commodities listed in Annex Table 7 have end uses at the primary stage, and this can cause complications. Vegetables, fruits, fish and shellfish are examples of commodities where the primary stage item can be consumed directly. In fact, consumer preferences may favor the unprocessed stage of this produce and be willing to pay a "premium" for these goods. For such reasons relative price trends between primary and processed foodstuffs may differ from those observed in other processing chains.

A final point is that the SITC did not always permit identification of a distinct primary, intermediate, and final stage product so, in cases, no intermediate stage product is identified (see the fruit and vegetable chains, for example). This contrasts with the a few other commodities (like aluminum) where the level of detail in the SITC identifies a primary stage, two intermediate stages (alumina and unwrought aluminum), and a final good. Similarly, in the lumber chain a distinction is made between two intermediate stage goods, that is, sawn logs and plywood, which have clearly experienced different levels of fabrication. As a result of these variations in detail, significant differences may exist in the level of product processing and value added that occurs between primary and final stage products in various processing chains.

Annex Table 7. Components of Specific Traditional Product Commodity Processing Chains and Their SITC Revision 2 Commodity Classifications

Processing Chain	Primary Stage Product	Intermediate Stages	Final Stage Goods
FOOD & TOBACCO			
Fruit	057 Fresh Fruit	none identified	058 Preserved Fruit
Fish	0341 Fresh Fish	none identified	0343 and 0344 Fish Fillets
Shellfish	036 Fresh Shellfish	none identified	037 Prepared Shellfish
Sugar	0611 Raw Beet and Cane Sugar	0612 Refined Sugar	0620 Sugar Confection
Cocoa	0721 Cocoa Beans	0722 and 0723 Cocoa Powder and Butter	073 Chocolate and Food Preparations with Cocoa
Tobacco	1211 Tobacco Not Stripped	1212 Tobacco Stripped	122 Tobacco Manufactured
Cotton Seed	2223 Cotton Seeds	none identified	4233 Cotton Seed Oil
Groundnuts	2221 Groundnuts	none identified	4234 Groundnut Oil
PAPER, WOOD & RUBBER			
Paper	251 Paper Pulp	641 Paper and Board (intermediate stage 2)	642 Manufactures of Paper
Lumber	2472 Raw Nonconifer Logs	2483 Nonconifer Logs Sawn (intermediate stage 1) 6341 Wood Sawn Lengthwise (intermediate stage 1) 6342 Plywood and Veneers (intermediate stage 2)	635 Manufactures of Wood 82192 Furniture of Wood
FIBERS AND LEATHER			
Cotton	2631 Cotton Not Carded 2634 Cotton Carded	6513 Cotton Yarn (intermediate stage 1) 652 Woven Cotton Fabrics (intermediate stage 2)	84232, 84242,84293 Men's Cotton Suits, Cotton Trousers and Jackets 84322, 84332, 84342,84351 Women's Cotton Outer Garments, Cotton Suits, Dresses, Skirts and Blouses
Jute	2640 Jute Fibers	none identified	6545 Fabrics of Jute
Sisal	2654 Sisal and Other Agave Fibers	none identified	6542 Sisal and Agave Yarns
Wool	2681 Wool Greasy 2682 Wool Degreased 2687 Wool Carded or Combed	6512 Yarn of Wool (intermediate stage 1) 6542 Wool Fabrics (intermediate stage 2)	84221,84231,84241,84292 Men's Wool Suits, Trousers, Jackets and Outer Garments 84321, 84331, 84341 Women's Wool Suites, Dresses and Skirts
Leather	211 Raw Hides and Skins (Except Furskins)	611 Leather	612 Manufactures of Leather
MINERALS & METALS			
Asbestos	2784 Asbestos	none identified	6638 Manufactures of Asbestos
Iron	2815 Iron Ore	671 Pig Iron (intermediate stage 1) 672 Ingots and Primary Forms (intermediate stage 2)	673 Iron and Steel Bars and Shapes 674 Iron and Steel Plates
Copper	2871 Copper Ores	6821 Unwrought Copper	6822 Worked Copper and Copper Alloys

Annex Table 7. Continued

Processing Chain	Primary Stage Product	Intermediate Stages	Final Stage Goods
Aluminum	28731 Aluminum Ores	28732 Alumina (intermediate stage 1) 6841 Unwrought Aluminum Alloys (intermediate stage 2)	6842 Worked Aluminum Alloys
Manganese	2877 Manganese Ores and Concentrates	none identified	6821 Manganese Unwrought
Platinum	28901 Precious Metal Ores (Excluding Gold)	none identified	6812 Platinum Metals
ENERGY PRODUCTS			
Petroleum	333 Crude Petroleum Oils	none identified	334 Refined Petroleum Products

Source: Processing chain stages as identified in groups contained in Revision 2 of the Standard International Trade Classification System.

Appendix Table 1. The Major Exports of Individual Sub-Saharan African Countries in 1999

Country/SITC/Product	Exports ($000)	Export Share (%)	Cum. Share (%)
ANGOLA			
3330 Petroleum Oils	4,069,077	85.2	85.2
6672 Diamonds Unworked	551,130	11.5	96.7
3344 Fuel Oil, nes	70,009	1.5	98.2
0360 Crustaceans	18,521	0.4	98.6
3413 Petroleum Gases	14,538	0.3	98.9
3341 Motor Spirits	11,187	0.2	99.1
9310 Unidentified Goods**	5,903	0.1	99.2
0711 Coffee Beans	5,511	0.1	99.3
0342 Fish Frozen	5,418	0.1	99.5
7149 Engine Parts	2,931	0.1	99.5
BURKINA FASO			
2631 Raw Cotton	91,474	61.1	61.1
0611 Raw Sugar	13,811	9.2	70.4
2225 Sesame Seeds	8,887	5.9	76.3
9710 Nonmonetary Gold	7,862	5.3	81.6
0545 Chilled Vegetables	5,171	3.5	85.0
6116 Other Leather	4,518	3.0	88.0
6115 Sheep Leather	4,221	2.8	90.8
2223 Cotton Seeds	2,394	1.6	92.4
8928 Printed Matter	1,084	0.7	93.2
2924 Seeds For Perfume	637	0.4	93.6
CAMEROON			
3330 Petroleum Oils	669,519	34.0	34.0
2472 Saw Logs	300,942	15.3	49.3
2483 Nonconifer Wood	208,590	10.6	59.9
0573 Bananas	172,058	8.7	68.7
0721 Cocoa Beans	122,445	6.2	74.9
6841 Unwrought Aluminum	99,468	5.1	80.0
0711 Coffee Beans	96,936	4.9	84.9
2631 Raw Cotton	79,725	4.1	89.0
0723 Cocoa Butter	38,758	2.0	90.9
2320 Natural Rubber	35,906	1.8	92.8
CENT. AFRICAN REP.			
6672 Diamonds Unworked	156,048	73.0	73.0
2631 Raw Cotton	14,256	6.7	79.6
2472 Sawlogs	13,294	6.2	85.8
2483 Nonconifer Wood	10,598	5.0	90.8
0711 Coffee Beans	8,443	3.9	94.7
1211 Tobacco Not Stripped	2,507	1.2	95.9
1222 Cigarettes	1,578	0.7	96.6
9310 Unidentified Goods**	834	0.4	97.0
7362 Metal Turning Tools	689	0.3	97.4
2922 Shellac and Resins	601	0.3	97.6
COMOROS* **			
0752 Spices	8,181	37.9	37.9
5513 Essential Oils	4,539	21.0	59.0
7722 Printed Circuits	1,887	8.7	67.7
7525 Peripheral Units	1,322	6.1	73.8
7762 Electronic Valves	1,197	5.5	79.4
7524 Digital Storage Units	580	2.7	82.1
7711 Transformers	504	2.3	84.4
7721 Fuses and Relays	309	1.4	85.8
7763 Transistors	290	1.3	87.2
7764 Microcircuits	276	1.3	88.5

Country/SITC Product	Exports ($000)	Export Share (%)	Cum. Share (%)
BENIN			
2631 Raw Cotton	119,440	70.4	70.4
2223 Cotton Seeds	19,019	11.2	81.7
0577 Edible Nuts	9,946	5.9	87.5
3330 Petroleum Oils	2,483	1.5	89.0
2483 Nonconifer Wood	1,669	1.0	90.0
0813 Vegetable Oil Cake	1,453	0.9	90.8
6521 Cotton Fabric	1,305	0.8	91.6
0360 Crustaceans	1,303	0.8	92.4
6522 Woven Cotton Fabric	1,045	0.6	93.0
2238 Oil Seeds, nes	984	0.6	93.6
BURUNDI			
0711 Coffee Beans	46,648	69.5	69.5
9710 Nonmonetary Gold	9,632	14.3	83.8
0741 Tea	5,531	8.2	92.1
6673 Precious Stones	1,575	2.3	94.4
2879 Other Nonferrous Ore	1,349	2.0	96.4
7810 Passenger Cars*	411	0.6	97.0
0341 Fresh Fish	233	0.3	97.4
0360 Crustaceans	151	0.2	97.6
8452 Knit Dresses	136	0.2	97.8
2631 Raw Cotton	127	0.2	98.0
CAPE VERDE			
6123 Parts of Footwear	5,121	23.2	23.2
7144 Reaction Engines*	4,384	19.8	43.0
7148 Turbines*	3,787	17.1	60.2
8441 Men's Textile Shirts	2,084	9.4	69.6
8510 Footwear	1,387	6.2	75.8
0342 Fish Frozen	1,041	4.7	80.5
7712 Electric Machine Parts	615	2.8	83.3
0360 Crustaceans	489	2,2	85.5
0542 Beans and Lentils	365	1.7	87.2
6793 Iron Forgings	362	1.6	88.8
CHAD			
2631 Raw Cotton	80,440	82.2	82.2
2922 Shellac and Resin	12,829	13.1	95.3
7924 Aircraft*	2,543	2.6	97.9
7929 Parts of Aircraft*	765	0.8	98.7
7169 Electric Plant Parts	212	0.2	98.9
7923 Small Aircraft*	208	0.2	99.1
2923 Plaiting Material	88	0.1	99.2
9310 Unidentified Goods**	87	0.1	99.3
5989 Chemicals, nes	68	0.1	99.4
7493 Transmission Shafts	56	0.1	99.4
CONGO, DEM. REP.			
6672 Diamonds Unworked	833,373	69.8	69.8
3330 Petroleum Oils	110,368	9.2	79.1
6899 Beryllium	81,585	6.8	85.9
2879 Other Nonferrous Ore	53,995	4.5	90.4
0711 Coffee Beans	41,234	3.5	93.9
6821 Unwrought Copper	19,307	1.6	95.5
2472 Sawlogs	13,881	1.2	96.6
2483 Nonconifer Wood	9,667	0.8	97.5
5169 Organic Chemicals, nes	2,607	0.2	97.7
2771 Industrial Diamonds	2,569	0.2	97.9

Appendix Table 1. Continued

Country/SITC/Product	Exports ($000)	Export Share (%)	Cum. Share (%)
REPUBLIC OF CONGO			
3330 Petroleum Oils	1,420,935	77.9	77.9
3344 Fuel Oil, nes	75,487	4.1	82.0
2472 Sawlogs	74,477	4.1	86.1
6672 Diamonds Unworked	62,168	3.4	89.5
3413 Petroleum Gases	49,017	2.7	92.2
2483 Nonconiferous Wood	22,037	1.2	93.4
6899 Beryllium and Titanium	20,753	1.1	94.5
6821 Unwrought Copper	13,942	0.8	95.3
0611 Raw Sugar	13,932	0.8	96.0
6341 Sawn Wood	10,410	0.6	96.6

Country/SITC Product	Exports ($000)	Export Share (%)	Cum. Share (%)
COTE d'IVOIRE			
0721 Cocoa Beans	1,445,639	43.0	43.0
0723 Cocoa Butter	309,902	9.2	52.2
2483 Nonconifer Wood	213,207	6.3	58.5
0711 Coffee Beans	196,897	5.9	64.4
0579 Fresh Fruit	149,058	4.4	68.8
0573 Bananas	144,304	4.3	73.1
2631 Raw Cotton	142,444	4.2	77.4
0371 Prepared Fish	132,003	3.9	81.3
2320 Natural Rubber	76,233	2.3	83.6
6341 Sawn Wood	66,327	2.0	85.5

Country/SITC/Product	Exports ($000)	Export Share (%)	Cum. Share (%)
DJIBOUTI			
9710 Non-Monetary Gold	2,309	17.8	17.8
5530 Toilet Preparations	1,682	13.0	30.8
2117 Sheep Skins	1,086	8.4	39.2
0571 Oranges	820	6.3	45.5
5156 Heterocyclic Items	581	4.5	50.0
6841 Unwrought Aluminum	429	3.3	53.3
0711 Coffee Beans	417	3.2	56.5
6251 Tires	353	2.7	59.3
7436 Filtering Machines	349	2.7	62.0
6115 Sheep Leather	331	2.6	64.5

Country/SITC Product	Exports ($000)	Export Share (%)	Cum. Share (%)
EQUATORIAL GUINEA			
3330 Petroleum Oils	488,327	71.0	71.0
2472 Sawlogs	97,921	14.2	85.2
0342 Fish Frozen	48,851	7.1	92.3
3345 Lubricating Oils	28,009	4.1	96.4
6341 Sawn Wood	7,980	1.2	97.5
7239 Parts of Machinery	6,764	1.0	98.5
0721 Cocoa Beans	4,287	0.6	99.2
9310 Unidentified Goods**	1,264	0.2	99.3
3413 Petroleum Gases	1,123	0.2	99.5
0711 Coffee Beans	791	0.1	99.6

Country/SITC/Product	Exports ($000)	Export Share (%)	Cum. Share (%)
ERITREA			
9710 Non-Monetary Gold	5,066	46.0	46.0
2933 Shellac	725	6.6	52.5
6114 Other Leather	488	4.4	57.0
7234 Mining Machinery*	432	3.9	60.9
9310 Unidentified Goods**	416	3.8	64.7
2117 Sheep Skins	366	3.3	68.0
0343 Fish Fillets Fresh	348	3.2	71.1
0342 Fish Frozen	334	3.0	74.2
0341 Fresh Fish	276	2.5	76.7
6130 Tanned Furskins	252	2.3	79.0

Country/SITC Product	Exports ($000)	Export Share (%)	Cum. Share (%)
ETHIOPIA			
0711 Coffee Beans	217,686	62.3	62.3
2225 Sesame Seeds	30,904	8.9	71.2
2117 Sheep Skins	16,334	4.7	75.9
0542 Beans and Lentils	13,986	4.0	79.9
7149 Engine Parts	9,189	2.6	82.5
2238 Oil Seeds, nes	8,539	2.4	85.0
0545 Other Vegetables	5,523	1.6	86.5
2631 Raw Cotton	4,990	1.4	88.0
8741 Surveying Equip.	4,824	1.4	89.4
6116 Other Leathers	4,791	1.4	90.7

Country/SITC/Product	Exports ($000)	Export Share (%)	Cum. Share (%)
GABON			
3330 Petroleum Oils	1,846,709	69.9	69.9
2472 Sawlogs	450,180	17.0	87.0
2877 Manganese Ore	150,370	5.7	92.6
7938 Floating Structures*	61,798	2.3	95.0
5241 Zinc Oxide	22,071	0.8	95.8
6341 Sawn Wood	16,779	0.6	96.5
6342 Inlaid Wood	16,307	0.6	97.1
2483 Nonconifer Wood	13,370	0.5	97.6
0360 Crustaceans	13,135	0.5	98.1
3342 Kerosene	12,329	0.5	98.5

Country/SITC Product	Exports ($000)	Export Share (%)	Cum. Share (%)
GAMBIA			
6672 Diamonds Unworked	54,436	60.7	60.7
0360 Crustaceans	22,054	24.6	85.3
0545 Other Vegetables	3,075	3.4	88.7
0342 Fish Frozen	1,799	2.0	90.7
0344 Fish Fillets Frozen	1,282	1.4	92.1
0577 Edible Nuts	827	0.9	93.0
0579 Fresh Fruit	808	0.9	93.9
8928 Printed Matter	568	0.6	94.6
0350 Dried Fish	533	0.6	95.2
0372 Crustaceans	347	0.4	95.6

Country/SITC/Product	Exports ($000)	Export Share (%)	Cum. Share (%)
GHANA			
0721 Cocoa Beans	473,633	31.3	31.3
6672 Diamonds Unworked	208,173	13.7	45.0
6841 Unwrought Aluminum	132,573	8.8	53.8
2483 Nonconifer Wood	119,786	7.9	61.7
7924 Aircraft*	116,498	7.7	69.4
0371 Prepared Fish	74,425	4.9	74.3
6341 Sawn Wood	57,878	3.8	78.1
0723 Cocoa Butter	57,679	3.8	81.9
3344 Fuel Oil, nes	27,379	1.8	83.7
0579 Fresh Fruit	24,286	1.6	85.3

Country/SITC Product	Exports ($000)	Export Share (%)	Cum. Share (%)
GUINEA			
2873 Aluminum Ore	365,172	56.1	56.1
6672 Diamonds Unworked	139,757	21.5	77.5
3330 Petroleum Oils	44,744	6.9	84.4
0711 Coffee Beans	14,672	2.3	86.7
2472 Sawlogs	11,224	1.7	88.4
2631 Raw Cotton	9,557	1.5	89.9
0342 Fish Frozen	8,182	1.3	91.1
0360 Crustaceans	7,041	1.1	92.2
0341 Fresh Fish	6,882	1.1	93.3
5225 Inorganic Bases	5,703	0.9	94.1

Appendix Table 1. Continued

Country/SITC/Product	Exports ($000)	Export Share (%)	Cum. Share (%)	Country/SITC Product	Exports ($000)	Export Share (%)	Cum. Share (%)
GUINEA-BISSAU				**KENYA**			
0577 Edible Nuts	19,910	39.3	39.3	0741 Tea	392,740	28.8	28.8
3330 Petroleum Oils	18,449	36.5	75.8	0711 Coffee Beans	187,568	13.8	42.6
0360 Crustaceans	4,520	8.9	84.7	2927 Cut Flowers	145,182	10.6	53.2
0342 Fish Frozen	2,483	4.9	89.6	0545 Other Vegetables	115,022	8.4	61.6
2631 Raw Cotton	1,315	2.6	92.2	0589 Prepared Fruit, nes	52,030	3.8	65.5
6672 Diamonds Unworked	1,289	2.5	94.8	0344 Fish Fillets Frozen	42,096	3.1	68.5
0721 Cocoa Beans	871	1.7	96.5	0565 Prepared Vegetables, nes	24,809	1.8	70.4
2472 Sawlogs	436	0.9	97.4	5232 Metallic Salts	21,414	1.6	71.9
0711 Coffee Beans	199	0.4	97.8	0579 Fresh Fruit, nes	19,169	1.4	73.3
7764 Microcircuits	153	0.3	98.1	8439 Other Outer Garments	18,954	1.4	74.7
LIBERIA				**MADAGASCAR**			
6672 Diamonds Unworked	309,372	48.0	48.0	0360 Crustaceans	102,604	13.6	13.6
7932 Ships and Boats	193,412	30.0	78.0	8451 Pullovers	102,591	13.6	27.2
2320 Natural Rubber	46,525	7.2	85.2	0752 Spices	60,021	8.0	35.2
2472 Sawlogs	35,480	5.5	90.7	0711 Coffee Beans	55,743	7.4	42.6
3330 Petroleum Oils	13,473	2.1	92.8	8423 Trousers	47,282	6.3	48.8
5982 Antiknock Preps.	10,437	1.6	94.4	0579 Fresh Fruit	42,333	5.6	54.4
3343 Gas Oils	6,704	1.0	95.5	8439 Other Outer Garments	35,632	4.7	59.2
3341 Motor Spirits	5,418	0.8	96.3	8462 Knitted Under Garments	31,219	4.1	63.3
3343 Kerosene	4,649	0.7	97.0	0371 Prepared Fish	30,494	4.0	67.3
8960 Works of Art	2,690	0.4	97.5	8441 Men's Textile Shirts	16,554	2.2	69.5
MALAWI				**MALI**			
1212 Tobacco Stripped	273,870	58.6	58.6	2631 Raw Cotton	200,643	83.0	83.0
1211 Tobacco Not Stripped	37,729	8.1	66.6	7764 Microcircuits	6,184	2.6	85.6
0741 Tea	37,437	8.0	74.6	6672 Diamonds Unworked	4,734	2.0	87.5
0611 Raw Sugar	18,696	4.0	78.6	8960 Works of Art	4,291	1.8	89.3
6584 Bed Linens	13,148	2.8	81.4	2634 Combed Cotton	2,107	0.9	90.2
8462 Knit Undergarments	11,633	2.5	83.9	6116 Other Leather	1,870	0.8	91.0
8441 Men's Textile Shirts	10,773	2.3	86.2	6115 Sheep Leather	1,601	0.7	91.6
0711 Coffee Beans	9,753	2.1	88.3	8462 Knit Undergarments	1,590	0.7	92.3
8423 Trousers	9,484	2.0	90.3	9310 Unidentified Goods**	1,539	0.6	92.9
1213 Parts of Tobacco	5,056	1.1	91.4	0548 Roots and Tubers	1,249	0.5	93.4
MAURITANIA				**MAURITIUS**			
2815 Iron Ore	250,679	50.2	50.2	0611 Raw Sugar	301,916	19.0	19.0
0360 Crustaceans	166,593	33.3	83.5	8462 Knit Undergarments	283,868	17.9	36.9
0342 Fish Frozen	25,581	5.1	88.6	8451 Pullovers	197,975	12.5	49.4
0341 Fresh Fish	20,988	4.2	92.8	8423 Trousers	150,509	9.5	58.9
7955 Office Machine Parts	9,250	1.9	94.7	8441 Men's Textile Shirts	120,510	7.6	66.5
2816 Concentrated Iron Ore	8,671	1.7	96.4	8439 Other Outer Garments	88,829	5.6	72.1
0344 Fish Fillets Frozen	2,844	0.6	97.0	8459 Knit Outergarments	49,656	3.1	74.2
0814 Fish Meal	2,012	0.4	97.4	8973 Jewelry	43,622	2.7	78.0
0350 Dried Fish	1,677	0.3	97.7	0371 Prepared Fish	42,956	2.7	80.7
0343 Fish Fillets Fresh	1,381	0.3	98.0	0342 Fish Frozen	39,479	2.5	83.1
MOZAMBIQUE				**NIGER**			
0360 Crustaceans	83,718	31.7	31.7	3330 Petroleum Oils	151,880	51.2	51.2
0577 Edible Nuts	38,033	14.4	46.1	5241 Radio-Isotopes	117,168	39.5	90.7
2631 Raw Cotton	30,121	11.4	57.5	3344 Fuel Oil, nes	7,794	2.6	93.3
2472 Sawlogs	10,277	3.9	61.4	7929 Aircraft*	3,819	1.3	94.6
7234 Mining Machines, nes	9,378	3.5	64.9	2631 Raw Cotton	3,329	1.1	95.8
2231 Copra	8,419	3.2	68.1	0224 Preserved Milk	1,222	0.4	96.2
2731 Building Stone	6,918	2.6	70.7	9310 Unidentified Goods**	844	0.3	96.4
2483 Nonconifer Wood	3,363	1.3	72.0	0548 Roots and Tubers	633	0.2	96.7
0422 Rice	3,309	1.3	73.2	7764 Microcircuits	551	0.2	96.8
6716 Ferro-Alloys	3,275	1.2	74.5	7649 Telecom Parts	462	0.2	97.0

Appendix Table 1. Continued

Country/SITC/Product	Exports ($000)	Export Share (%)	Cum. Share (%)
NIGERIA			
3330 Petroleum Oils	10,221,208	86.9	86.9
3345 Lubricating Oils	249,478	2.1	89.0
3344 Fuel Oil, nes	216,103	1.8	90.8
3413 Petroleum Gasses	211,147	1.8	92.6
0721 Cocoa Beans	209,895	1.8	94.4
3341 Motor Spirits	72,395	0.6	95.0
2472 Sawlogs	58,890	0.5	95.5
2483 Nonconifer Wood	49,752	0.4	96.0
0360 Crustaceans	49,641	0.4	96.4
6115 Sheep Leather	43,014	0.4	96.7
SAO TOME & PRINCIPE			
0721 Cocoa Beans	4,809	30.8	30.8
0342 Fish Frozen	4,082	26.1	56.9
3344 Fuel Oil, nes	1,766	11.3	68.2
0360 Crustaceans	1,288	8.2	76.4
7244 Textile Machinery	611	3.9	80.3
8743 Hydraulic Equipment	305	1.9	82.3
7943 Transmission Shafts	160	1.0	83.3
8422 Men's Suits	154	1.0	84.3
0711 Coffee Beans	132	0.8	85.1
8424 Jackets	124	0.8	85.9
SEYCHELLES			
0371 Prepared Fish	103,078	68.0	68.0
0342 Fish Frozen	19,452	12.8	80.8
0344 Fish Fillets Frozen	4,513	3.0	83.8
8720 Medical Instruments	3,316	2.2	86.0
0343 Fish Fillets Fresh	2,995	2.0	88.0
0341 Fresh Fish	2,931	1.9	89.9
6353 Works of Carpentry	2,450	1.6	91.5
0360 Crustaceans	1,943	1.3	92.8
0814 Fish Meal	1,112	0.7	93.5
8748 Measuring Equipment	815	0.5	94.1
SOMALIA			
2922 Shellac and Resins	1,571	21.4	21.4
2225 Sesame Seeds	888	12.1	33.5
2114 Goat Skins	589	8.0	41.5
2472 Sawlogs	516	7.0	48.6
8748 Measuring Equipment	472	6.4	55.0
5112 Cyclic Hydrocarbons	416	5.7	60.7
2117 Sheep Skins	391	5.3	66.0
7525 Peripheral Units	390	5.3	71.3
0342 Fish Frozen	287	3.9	75.2
2119 Hides, nes	145	2.0	77.2
SUDAN			
3330 Petroleum Oils	210,652	41.4	41.4
2225 Sesame Seeds	68,471	13.7	55.1
2631 Raw Cotton	58,477	11.5	66.6
0548 Roots and Tubers	24,343	4.8	71.4
2922 Shellac and Resins	22,958	4.5	75.9
0459 Millet or Sorghum	22,815	4.5	80.4
9410 Zoo Animals	13,579	2.7	83.0
2924 Plant Seeds for Perfume	10,814	2.1	85.2
0611 Raw Sugar	10,552	2.1	87.3
0615 Molasses	10,460	2.1	89.3

Country/SITC /Product	Exports ($000)	Export Share (%)	Cum. Share (%)
RWANDA			
0711 Coffee Beans	28,933	58.7	58.7
0741 Tea	8,573	17.4	76.1
2879 Other Nonferrous Ore	4,046	8.2	84.3
9710 Nonmonetary Gold	2,586	5.2	89.6
2876 Tin Ore	1,223	2.5	92.0
2929 Vegetable Material	541	1.1	93.1
5629 Fertilizers, nes	462	0.9	94.1
2927 Cut Flowers	404	0.8	94.9
2111 Bovine Hides	369	0.7	95.6
2926 Bulbs and Tubers	304	0.6	96.3
SENEGAL			
0360 Crustaceans	144,678	25.7	25.7
5222 Inorganic Bases	77,860	13.9	39.6
4234 Groundnut Oil	62,651	11.1	50.7
0341 Fresh Fish	52,284	9.3	60.0
2713 Natural Phosphate	33,577	6.0	66.0
0371 Prepared Fish	29,109	5.2	71.2
0344 Fish Fillets Frozen	25,594	4.6	75.7
0545 Other Vegetables	11,763	2.1	77.8
0343 Fish Fillets Fresh	11,363	2.0	79.9
0813 Vegetable Oil Cake	10,469	1.9	81.7
SIERRA LEONE			
6672 Diamonds Unworked	34,343	39.6	39.6
7810 Passenger Cars*	20,123	23.2	62.9
8510 Footwear	2,828	3.3	66.1
0721 Cocoa Beans	2,601	3.0	69.1
7431 Air Pumps	2,163	2.5	71.6
0711 Coffee Beans	1,796	2.1	73.7
2879 Other Nonferrous Ore	1,721	2.0	75.7
6652 Glassware	1,274	1.5	77.2
8211 Chairs and Parts	901	1.0	78.2
2784 Asbestos	744	0.9	79.1
SOUTH AFRICA			
9710 Nonmonetary Gold	3,207,359	12.2	12.2
6812 Platinum	2,664,459	10.1	22.3
3222 Other Coal	1,839,625	7.0	29.3
6672 Diamonds Unworked	1,267,026	4.8	34.1
6716 Ferro-Alloys	1,132,155	4.3	38.5
7810 Passenger Cars	745,834	2.8	41.3
6841 Unwrought Aluminum	732,552	2.8	44.1
9310 Unidentified Goods**	547,779	2.1	46.2
2815 Iron Ore	432,948	1.6	47.8
7436 Centrifuges	400,347	1.5	49.3
TANZANIA			
0577 Edible Nuts	118,136	21.6	21.6
0711 Coffee Beans	93,334	17.1	38.7
1212 Tobacco Striped	51,628	9.4	48.3
0344 Fish Fillets Frozen	36,147	6.6	54.8
2631 Raw Cotton	24,116	4.4	59.2
6673 Precious Stones	24,030	4.4	63.6
0741 Tea	13,937	2.6	66.1
2927 Cut Flowers	12,700	2.3	68.5
2225 Sesame Seeds	12,524	2.3	70.7
0360 Crustaceans	12,415	2.3	73.0

Appendix Table 1. Continued

Country/SITC/Product	Exports ($000)	Export Share (%)	Cum. Share (%)	Country/SITC Product	Exports ($000)	Export Share (%)	Cum. Share (%)
TOGO				**UGANDA**			
2631 Raw Cotton	68,403	31.2	31.2	0711 Coffee Beans	290,280	71.1	71.1
2713 Natural Phosphates	63,300	28.9	60.0	0344 Fish Fillets Frozen	19,285	4.7	75.9
0711 Coffee Beans	22,109	10.1	70.1	2631 Raw Cotton	15,997	3.9	79.8
6672 Diamonds Unworked	15,646	7.1	77.2	1212 Tobacco Stripped	14,258	3.5	83.3
0721 Cocoa Beans	12,456	5.7	82.9	0343 Fish Fillets Fresh	13,256	3.2	86.5
5622 Phosphatic Fertilizer	6,670	3.0	86.0	2927 Cut Flowers	9,511	2.3	88.8
2223 Cotton Seeds	4,887	2.2	88.2	1211 Tobacco Not Stripped	5,781	1.4	90.2
0360 Crustaceans	3,477	1.6	89.8	9710 Nonmonetary Gold	4,227	1.0	91.3
8999 Misc. Manufactures, nes	2,587	1.2	90.9	2111 Bovine Hides	3,054	0.7	92.0
0813 Vegetable Oil Cake	1,874	0.9	91.8	0545 Other Vegetables	3,008	0.7	92.8
ZAMBIA				**ZIMBABWE**			
6821 Refined Copper	241,620	40.5	40.5	1212 Tobacco Stripped	451,211	27.7	27.7
6899 Beryllium	129,609	21.7	62.2	6716 Ferro-Alloys	156,849	9.6	37.3
2879 Other Non-Ferrous Ore	41,685	7.0	69.2	2631 Raw Cotton	110,112	6.8	44.1
6513 Cotton Yarn	29,631	5.0	74.2	6831 Nickel Alloys	89,947	5.5	49.6
2631 Raw Cotton	19,178	3.2	77.4	1211 Tobacco Not Stripped	86,576	5.3	54.9
2927 Cut Flowers	18,348	3.1	80.5	2927 Cut Flowers	62,280	3.8	58.7
6822 Worked Copper	18,328	3.1	83.5	9710 Nonmonetary Gold	50,571	3.1	61.8
2871 Copper Ore	14,211	2.4	85.9	0611 Raw Sugar	43,109	2.6	64.5
1212 Tobacco Stripped	10,659	1.8	87.7	2784 Asbestos	33,180	2.0	66.5
6673 Precious Stones	10,447	1.8	89.4	0111 Bovine Meat	29,395	1.8	68.3

* The African country seemingly has no, or limited, domestic production capacity for this item. Trade values shown may reflect sales of used equipment or, in the case of aircraft, leasing of goods that were produced elsewhere.
** In cases where reporting trade values for a specific good would identify the specific exporter or importer UN regulations concerning confidentially allow these transactions to be classified as “unidentified goods.” Some countries appear to have also used this category to conceal arms trade.
*** We excluded the Comoros from Annex 1 since this country’s trade statistics appear to be significantly biased by shipments into, and out of, French military bases.

Source: UN COMTRADE statistics as reported by the countries listed in the notes to Table 1.

Appendix Table 2. Major African Suppliers of Individual Traditional Export Products in 1999

Product /(No. of Exporters)/Exporter*	Exports ($000)	Share (%)
0360 Crustaceans & Shellfish (39)		
All Sub-Saharan Africa	792,706	100.0
Angola	18,521	2.3
Benin	1,303	0.2
Cote d'Ivoire	8,563	1.1
Cameroon	6,780	0.9
Gabon	13,135	1.7
Ghana	18,152	2.3
Guinea	7,041	0.9
Gambia	22,054	2.8
Guinea-Bissau	4,520	0.6
Kenya	7,709	1.0
Madagascar	102,604	12.9
Mozambique	83,718	10.6
Mauritania	166,593	20.9
Mauritius	453	0.1
Nigeria	49,641	6.3
Senegal	144,678	18.2
Sao Tome & Principe	1,288	0.2
Seychelles	1,943	0.2
Togo	3,477	0.4
Tanzania	12,415	1.6
South Africa	116,782	14.7
Others	1,336	0.1
0611 Raw Beet & Cane Sugar (13)		
All Sub-Saharan Africa	630,872	100.0
Burkina Faso	13,811	2.2
Cote d'Ivoire	5,399	0.9
Madagascar	6,446	1.0
Mauritius	301,916	47.9
Malawi	18,696	3.0
Sudan	10,552	1.7
Tanzania	7,136	1.1
South Africa	208,379	33.0
Zambia	1,469	0.2
Zimbabwe	43,109	6.8
Others	13,959	2.2
0721 Cocoa Beans (21)		
All Sub-Saharan Africa	2,300,667	100.0
Cote d'Ivoire	1,445,639	62.8
Cameroon	122,445	5.3
Ghana	473,633	20.7
Guinea	5,009	0.2
Equatorial Guinea	4,287	0.2
Liberia	2,203	0.1
Madagascar	6,360	0.3
Nigeria	209,895	9.1
Sierra Leone	2,601	0.1
Sao Tome & Principe	4,809	0.2
Togo	12,456	0.5
Tanzania	2,887	0.1
Uganda	2,368	0.1
South Africa	2,513	0.1
Others	3,562	0.2
0723 Cocoa Butter and Paste (7)		
All Sub-Saharan Africa	436,411	100.0
Cote d'Ivoire	309,902	71.0
Cameroon	38,758	8.9
Ghana	57,679	13.2
Nigeria	29,695	6.8
South Africa	345	0.1
Others	32	--
1212 Tobacco Stripped (18)		
All Sub-Saharan Africa	837,173	100.0
Kenya	9,578	1.1
Mozambique	2,728	0.3
Malawi	273,870	32.7
Tanzania	51,628	6.2

Product /(No. of Exporters)Exporter*	Exports ($000)	Share (%)
0371 Prepared & Preserved Fish (18)		
All Sub-Saharan Africa	436,962	100.0
Cote d'Ivoire	132,003	30.2
Ghana	74,425	17.0
Kenya	11,874	2.7
Madagascar	30,494	7.0
Mauritius	42,956	9.8
Senegal	29,109	6.7
Seychelles	103,078	23.6
South Africa	12,608	2.9
Others	415	0.1
0579 Fresh or Dried Fruit (39)		
All Sub-Saharan Africa	541,034	100.0
Benin	465	0.1
Burkina Faso	502	0.1
Cote d'Ivoire	149,058	27.6
Cameroon	4,330	0.9
Ghana	24,286	4.5
Guinea	2,270	0.4
Gambia	808	0.1
Kenya	19,169	3.5
Madagascar	42,333	7.8
Mali	1,140	0.2
Mauritius	1,740	0.3
Sudan	1,263	0.2
Senegal	1,677	0.3
Togo	684	0.1
South Africa	284,375	52.6
Zimbabwe	5,965	1.1
Others	969	0.2
0711 Green or Roasted Coffee (35)		
All Sub-Saharan Africa	1,373,624	100.0
Angola	5,511	0.4
Burundi	46,648	3.4
Central African Republic	8,443	0.6
Cote d'Ivoire	196,897	14.3
Cameroon	96,936	7.1
Congo, Republic	10,292	0.7
Ethiopia	217,686	15.8
Ghana	6,034	0.4
Guinea	14,672	1.1
Equatorial Guinea	791	0.1
Kenya	187,568	13.7
Liberia	1,018	0.1
Madagascar	55,743	4.1
Malawi	9,753	0.7
Nigeria	751	0.1
Rwanda	28,933	2.1
Sierra Leone	1,796	0.1
Togo	22,109	1.6
Tanzania	93,334	6.8
Uganda	290,820	21.2
South Africa	4,794	0.3
Congo, Democratic Republic	41,234	3.0
Zambia	8,429	0.6
Zimbabwe	22,358	1.6
Others	1,074	0.1
0741 Tea		
All Sub-Saharan Africa	552,752	100.0
Burundi	5,531	1.0
Ghana	369	0.1
Kenya	392,740	71.0
Mauritius	351	0.1
Malawi	37,437	6.7
Rwanda	8,573	1.6
Sierra Leone	236	0.1
Tanzania	13,937	2.5
Uganda	1,738	0.3
South Africa	79,987	14.4

Appendix Table 2. Continued

Product /(No. of Exporters)/Exporter*	Exports ($000)	Share (%)
Tobacco Stripped (Continued)		
Uganda	14,258	1.7
South Africa	21,502	2.6
Zambia	10,659	1.3
Zimbabwe	451,211	53.9
Others	1,739	0.2
1213 Parts of Tobacco Leaf (9)		
All Sub-Saharan Africa	33,595	100.0
Kenya	837	2.5
Malawi	5,056	15.1
Tanzania	3,010	9.0
Uganda	453	1.3
South Africa	2,267	6.7
Zambia	187	0.6
Zimbabwe	21,770	64.8
Others	15	--
2114 Goat and Kid Skins		
All Sub-Saharan Africa	3,929	100.0
Burundi	19	0.5
Cote d'Ivoire	21	0.5
Djibouti	237	6.0
Eritrea	32	0.8
Guinea	15	0.4
Kenya	124	3.2
Mali	311	7.9
Mauritania	35	0.9
Malawi	288	7.3
Nigeria	269	6.8
Rwanda	37	0.9
Sudan	863	22.0
Senegal	140	3.7
Somalia	589	15.0
Tanzania	96	2.4
Uganda	273	6.9
South Africa	485	12.3
Zimbabwe	93	2.4
Others	2	0.1
2472 Saw Logs (29)		
All Sub-Saharan Africa	1,120,560	100.0
Angola	1,335	0.1
Central African Republic	13,294	1.2
Cote d'Ivoire	23,969	2.1
Cameroon	300,942	26.9
Congo, Republic of	74,477	6.6
Gabon	450,180	40.2
Ghana	3,168	0.3
Guinea	11,224	1.0
Equatorial Guinea	97,921	8.7
Liberia	35,480	3.2
Madagascar	1,010	0.1
Mozambique	10,277	0.9
Mauritania	1,258	0.1
Nigeria	58,890	5.3
Togo	888	0.1
Tanzania	1,057	0.1
South Africa	19,940	1.8
Congo, Democratic Republic	13,881	1.2
Others	1,369	0.1
2631 Raw Cotton (31)		
All Sub-Saharan Africa	1,149,313	100.0
Benin	119,440	10.4
Burkina Faso	91,474	8.0
Central African Republic	14,256	1.2
Cote d'Ivoire	142,444	12.4
Cameroon	79,725	6.9
Ethiopia	4,990	0.4
Ghana	3,276	0.3
Guinea	9,557	0.8

Product /(No. of Exporters)Exporter*	Exports ($000)	Share (%)
Tea (Continued)		
Zimbabwe	10,939	2.0
Others	914	0.2
2117 Sheep Skins (15)		
All Sub-Saharan Africa	56,565	100.0
Burundi	52	0.1
Burkina Faso	156	0.3
Djibouti	1,086	1.9
Eritrea	366	0.6
Ethiopia	16,334	28.9
Kenya	301	0.5
Mali	177	0.3
Nigeria	1,919	3.5
Sudan	1,409	2.5
Senegal	71	0.1
Somalia	391	0.7
Uganda	77	0.1
South Africa	34,203	60.5
Others	23	--
2223 Cotton Seed (13)		
All Sub-Saharan Africa	33,086	100.0
Benin	19,019	57.5
Burkina Faso	2,394	7.2
Cote d'Iroire	344	1.0
Ghana	2,018	6.1
Guinea	2,130	6.4
Mozambique	349	1.1
Malawi	56	0.2
Senegal	56	0.2
Togo	4,887	14.8
South Africa	120	0.4
Zambia	1,069	3.2
Zimbabwe	638	1.9
Others	6	--
2225 Sesame Seeds (20)		
All Sub-Saharan Africa	151,770	100.0
Burkina Faso	8,887	5.9
Cote d'Ivoire	271	0.2
Djibouti	291	0.2
Ethiopia	30,904	20.3
Ghana	1,268	0.8
Gambia	241	0.2
Mali	328	0.2
Mozambique	254	0.2
Nigeria	22,847	15.1
Sudan	69,471	45.7
Senegal	260	0.2
Somalia	888	0.6
Tanzania	12,524	8.3
Uganda	1,992	1.3
South Africa	1,276	0.8
Others	68	--
2483 Lumber Shaped (34)		
All Sub-Saharan Africa	670,440	100.0
Benin	1,669	0.2
Central African Republic	10,598	1.6
Cote d'Ivoire	213,270	31.8
Cameroon	208,590	31.1
Congo, Republic	22,037	3.3
Gabon	13,370	2.0
Ghana	119,786	17.9
Guinea	1,473	0.2
Equatorial Guinea	577	0.1
Liberia	439	0.1
Madagascar	3,093	0.5
Mozambique	3,363	0.5
Nigeria	49,752	7.4
Tanzania	2,026	0.3

Appendix Table 2. Continued

Product /(No. of Exporters)/Exporter*	Exports ($000)	Share (%)
Raw Cotton (Continued)		
Guinea-Bissau	1,315	0.1
Kenya	1,157	0.1
Madagascar	12,230	1.1
Mali	200,643	17.5
Mozambique	30,121	2.6
Mauritius	587	0.1
Malawi	2,775	0.2
Niger	3,329	0.3
Nigeria	9,268	0.8
Sudan	58,477	5.1
Senegal	9,746	0.8
Chad	80,440	7.0
Togo	68,403	6.0
Tanzania	24,116	2.1
Uganda	15,997	1.4
South Africa	35,749	3.1
Zambia	19,178	1.7
Zimbabwe	110,112	9.6
Others	508	--
2784 Asbestos (5)		
All Sub-Saharan Africa	50,042	100.0
Sierra Leone	744	1.5
South Africa	16,049	32.1
Zambia	59	0.1
Zimbabwe	33,180	66.3
Others	10	--
2786 Products of Melted Metal Ore (5)		
All Sub-Saharan Africa	100,098	100.0
South Africa	100,085	100.0
Others	13	--
2815 Iron Ore (6)		
All Sub-Saharan Africa	683,904	100.0
Mauritania	250,679	36.7
South Africa	432,948	63.3
Others	277	--
2860 Uranium and Thorium (1)		
All Sub-Saharan Africa	36,101	100.0
South Africa	36,101	100.0
2877 Manganese Ore (3)		
All Sub-Saharan Africa	295,358	100.0
Gabon	150,370	50.9
Ghana	18,457	6.3
South Africa	126,531	42.8
2881 Nonferrous Metal Waste (13)		
All Sub-Saharan Africa	231,984	100.0
Cote d'Ivoire	170	0.1
Congo, Republic of	218	0.1
Kenya	158	0.1
Mauritius	173	0.1
Nigeria	697	0.3
Togo	126	0.1
South Africa	223,888	96.4
Zambia	3,440	1.5
Zimbabwe	2,939	1.3
Others	175	--
3222 Other Coal (4)		
All Sub-Saharan Africa	1,842,310	100.0
Mozambique	2,517	0.1
South Africa	1,839,625	99.9
Others	168	--
4234 Groundnut Oil (5)		
All Sub-Saharan Africa	70,053	100.0
Sudan	1,991	2.8

Product /(No. of Exporters)Exporter	Exports ($000)	Share (%)
Lumber Shaped (Continued)		
South Africa	8,015	1.2
Congo, Democratic Republic	9,887	1.4
Zambia	416	0.1
Zimbabwe	1,048	0.2
Others	1,031	0.1
2516 Chemical Woodpulp (1)		
All Sub-Saharan Africa	143,526	100.0
South Africa	143,526	100.0
2654 Sisal and Agave (5)		
All Sub-Saharan Africa	22,596	100.0
Kenya	8,558	37.9
Madagascar	4,917	21.8
Tanzania	8,763	38.8
South Africa	358	1.5
Others	--	--
2713 Natural Phosphates (6)		
All Sub-Saharan Africa	162,867	100.0
Senegal	33,577	20.6
Togo	63,300	38.9
Tanzania	230	0.1
South Africa	65,755	40.4
Others	5	--
2771 Industrial Diamonds (15)		
All Sub-Saharan Africa	401,015	100.0
Congo, Republic Of	1,931	0.5
Ghana	6,909	1.7
Guinea	4,315	1.1
Tanzania	3,881	1.0
South Africa	381,058	95.0
Congo, Democratic Republic	2,569	0.6
Others	352	0.1
2879 Other Nonferrous Ores (25)		
All Sub-Saharan Africa	481,238	100.0
Burundi	1,349	0.3
Congo, Republic of	6,126	1.3
Ethiopia	3,330	0.7
Madagascar	2,505	0.5
Nigeria	8,087	1.7
Rwanda	4,046	0.8
Sudan	2,464	0.5
Sierra Leone	1,721	0.4
Uganda	898	0.2
South Africa	354,493	73.6
Congo, Democratic Republic	53,995	11.2
Zambia	41,685	8.7
Zimbabwe	276	0.1
Others	263	--
2922 Natural Gum and Resins (20)		
All Sub-Saharan Africa	52,821	100.0
Central African Republic	601	1.1
Cameroon	831	1.6
Eritrea	725	1.4
Ethiopia	1,973	3.7
Kenya	928	1.8
Mali	212	0.4
Niger	93	0.2
Nigeria	6,563	12.4
Sudan	22,958	43.5
Senegal	2,341	4.4
Somalia	1,571	3.0
Chad	12,829	24.3
Tanzania	389	0.7
South Africa	119	0.2
Zimbabwe	585	1.1
Others	103	0.2

Appendix Table 2. Continued

Product /(No. of Exporters)/Exporter*	Exports ($000)	Share (%)
Groundnut Oil (Continued)		
Senegal	62,651	89.5
South Africa	5,388	7.7
Others	23	--
6116 Other Leathers (27)		
All Sub-Saharan Africa	170,116	100.0
Benin	573	0.3
Burkina Faso	4,518	2.7
Cote d'Ivoire	187	0.1
Comoros	396	0.2
Djibouti	95	0.1
Eritrea	171	0.1
Ethiopia	4,791	2.8
Kenya	3,056	1.8
Mali	1,870	1.1
Nigeria	40,761	23.9
Sudan	1,320	0.8
Senegal	975	0.6
Somalia	118	0.1
Uganda	126	0.1
South Africa	100,413	58.9
Zambia	258	0.2
Zimbabwe	10,327	6.1
Others	161	0.1
9710 Non-Monetary Gold (29)		
All Sub-Saharan Africa	3,320,456	100.0
Burundi	9,632	0.3
Burkina Faso	7,862	0.2
Cote d'Ivoire	20,765	0.6
Congo, Republic of	3,518	0.1
Djibouti	2,309	0.1
Eritrea	5,066	0.2
Rwanda	2,586	0.1
Uganda	4,227	0.1
South Africa	3,207,359	96.6
Congo, Democratic Republic	1,992	0.1
Zimbabwe	50,571	1.5
Others	4,569	0.1

Product /(No. of Exporters)Exporter	Exports ($000)	Share (%)
6716 Ferro-Alloys (12)		
All Sub-Saharan Africa	1,295,162	100.0
Mozambique	3,275	0.3
South Africa	1,132,155	87.4
Zambia	2,231	0.2
Zimbabwe	156,849	12.1
Others	652	--
6812 Platinum (9)		
All Sub-Saharan Africa	2,666,308	100.0
South Africa	2,664,459	99.9
Others	1,849	0.1
6821 Copper Alloys (12)		
All Sub-Saharan Africa	495,539	100.0
Congo, Republic of	13,942	2.8
Kenya	336	0.1
Mozambique	2,199	0.4
Tanzania	9,569	1.9
South Africa	194,725	39.3
Congo, Democratic Republic	19,307	3.9
Zambia	241,620	48.8
Zimbabwe	13,517	2.7
Others	324	0.1
6841 Unwrought Aluminum (9)		
All Sub-Saharan Africa	990,300	100.0
Cameroon	99,468	10.0
Ghana	132,573	13.4
Nigeria	24,388	2.5
South Africa	732,553	74.0
Others	1,318	0.1
6899 Beryllium and Titanium (10)		
All Sub-Saharan Africa	341,821	100.0
Congo, Republic of	20,753	6.1
Tanzania	1,569	0.5
Uganda	337	0.1
South Africa	107,498	31.4
Congo, Democratic Republic	81,585	23.9
Zambia	129,609	37.9
Zimbabwe	374	0.1
Others	96	--

* Figures in parenthese show the total number of Sub-Saharan African countries who exported the traditional product in 1999. Individual country exports of the product are not listed unless their exports acounted for at least one-tenth of one percent of the product total.

Source: UN COMTRADE statistics as reported by the countries listed in the notes to Table 1.

Appendix Table 3. The 1999 Value of Individual African Countries Traditional Exports and Their Share of All Goods Exported

Exporter /(No. of Products)/Product*	Exports ($000)	Share of All Exports (%)
Angola (6)		
0360 Shellfish	18,521	0.4
0711 Coffee Beans	5,561	0.1
All Traditional Products	25,511	0.5
Benin (12)		
0360 Shellfish	1,303	0.8
0579 Fresh or Dried Fruit	465	0.3
2223 Cotton Seeds	19,019	11.2
2472 Saw Logs	214	0.1
2483 Shaped Lumber	1,669	1.0
2631 Raw Cotton	119,440	70.4
6116 Other Leathers	573	0.3
All Traditional Products	142,771	84.2
Burkina Faso (14)		
0579 Fresh or Dried Fruit	502	0.3
0611 Raw Sugar	13,811	9.2
2117 Sheep Skins Without Wool	156	0.1
2223 Cotton Seeds	2,394	1.6
2225 Sesame Seeds	8,887	5.5
2631 Raw Cotton	91,474	61.1
6116 Other Leathers	4,518	3.0
6812 Platinum	220	0.2
9710 Non-Monetary Gold	7,862	5.3
All Traditional Products	129,641	86.8
Burundi (12)		
0360 Shellfish	151	0.2
0711 Coffee Beans	46,648	69.5
0741 Tea	5,531	8.2
2631 Raw Cotton	127	0.2
2879 Other Nonferrous Ores	1,349	2.0
9710 Non-Monetary Gold	9,632	14.4
All Traditional Products	63,558	94.7
Cameroon (14)		
0360 Shellfish	6,780	0.3
0579 Fresh or Dried Fruit	4,330	0.2
0711 Coffee Beans	96,936	4.9
0721 Cocoa Beans	122,445	6.2
0723 Cocoa Butter	38,758	2.0
2472 Saw Logs	300,942	15.3
2483 Lumber Shaped	208,590	10.6
2631 Raw Cotton	79,725	4.1
All Traditional Products	860,533	43.8
Cape Verde (4)		
0360 Shellfish	489	2.2
All Traditional Products	508	2.3
Central African Republic (14)		
0711 Coffee Beans	8,443	4.0
2472 Saw Logs	13,294	6.2
2483 Lumber Shaped	10,598	5.0
2631 Raw Cotton	14,256	6.7
2922 Natural Gums and Resins	601	0.3
6841 Aluminum Alloys Unwrought	378	0.2
All Traditional Products	48,023	22.5
Chad (5)		
2631 Raw Cotton	80,550	82.2
2922 Natural Gums and Resins	12,829	13.1
All Traditional Products	93,326	95.4
Comoros (2)	81	0.4
0360 Shellfish	66	0.3
0711 Coffee Beans	147	0.7
All Traditional Products		
Congo Democratic Republic (14)		
0711 Coffee Beans	41,234	3.5
0721 Cocoa Beans	2,513	0.2
2472 Saw Logs	13,881	1.2
2483 Shaped Lumber	9,667	0.8
2771 Industrial Diamonds	2,569	0.2
2879 Other Nonferrous Ores	53,995	4.5
6821 Copper Alloys Unwrought	19,307	1.6
6899 Base Metals nes	81,585	6.8
9710 Non-Monetary Gold	1,992	0.2
All Traditional Products	227,137	19.0
Congo Republic (14)		
0611 Raw Sugar	13,932	0.8
0711 Coffee Beans	10,292	0.6
0721 Cocoa Beans	1,069	0.1
2472 Saw Logs	74,477	4.1
2483 Shaped Lumber	22,037	1.2
2771 Industrial Diamonds	1,931	0.1
2879 Other Nonferrous Ores	6,126	0.3
6821 Copper Alloys Unwrought	13,942	0.8
6899 Base Metals nes	20,753	1.1
9710 Non-Monetary Gold	3,518	0.2
All Traditional Products	168,445	9.2
Cote d'Ivoire (24)		
0360 Shellfish	8,563	0.3
0371 Preserved Fish	132,003	3.9
0579 Fresh Fruit	149,058	4.4
0611 Raw Sugar	5,399	0.2
0711 Coffee Beans	196,897	5.9
0721 Cocoa Beans	1,445,639	43.0
0723 Cocoa Butter and Paste	309,902	9.2
2472 Saw Logs	23,969	0.7
2483 Lumber Shaped	213,207	6.3
2631 Raw Cotton	142,444	4.2
9710 Non-Monetary Gold	20,765	0.6
All Traditional Products	2,648,940	78.8
Djibouti (10)		
0360 Shellfish	30	0.2
0579 Fresh Fruit	84	0.7
0711 Coffee Beans	417	3.2
2114 Goat and Kid Skins	237	1.8
2117 Sheep Skins	1,086	8.4
2225 Sesame Seeds	291	2.3
6116 Other Leathers	95	0.7
6716 Ferro-Alloys	52	0.4
6841 Aluminum Alloys Unwrought	429	3.3
9710 Non-Monetary Gold	2,309	17.8
All Traditional Products	5,029	38.8
Equatorial Guinea (6)		
0711 Coffee Beans	791	0.1
0721 Cocoa Beans	4,287	0.6
2472 Saw Logs	97,291	14.2
All Traditional Products	103,814	15.1
Eritrea (8)		
0360 Shellfish	28	0.3
0579 Fresh Fruit	37	0.3
2114 Goat and Kid Skins	32	0.3
2117 Sheep Skins	366	3.3
2922 Natural Gums and Resins	725	6.6
6116 Other Leathers	171	1.6
9710 Non-Monetary Gold	5,066	46.0
All Traditional Products	6,425	58.3
Ethiopia (12)		
0711 Coffee Beans	217,686	62.4

Appendix Table 3. Continued

Exporter /(No. of Products)/Product*	Exports ($000)	Share of All Exports (%)
Gabon (12)		
0360 Shellfish	13,135	0.5
2472 Saw Logs	450,180	17.0
2483 Shaped Lumber	12,370	0.5
Manganese Ore	150,370	5.7
All Traditional Products	627,875	23.8
Gambia (11)		
Shellfish	22,054	24.6
0579 Fresh Fruit	808	0.9
2225 Sesame Seeds	241	0.3
2483 Shaped Lumber	175	0.2
2631 Raw Cotton	178	0.2
All Traditional Products	23,553	26.3
Ghana (24)		
0360 Shellfish	18,152	1.2
0371 Prepared Fish	74,425	4.9
0579 Fresh Fruit	24,286	1.6
0721 Cocoa Beans	473,633	31.3
0723 Cocoa Butter and Paste	57,679	3.8
2223 Cotton Seeds	2,018	0.1
2472 Saw Logs	3,168	0.2
2483 Lumber Shaped	119,786	7.9
2631 Raw Cotton	3,276	0.2
2771 Industrial Diamonds	6,909	0.5
6841 Aluminum Alloys Unwrought	132,573	1.2
All Traditional Products	943,559	8.8
Guinea (16)		
0360 Shellfish	7,041	1.1
0579 Fresh Fruit	2,270	0.4
0711 Coffee Beans	14,672	2.3
0721 Cocoa Beans	5,009	0.8
2223 Cotton Seeds	2,130	0.3
2472 Saw Logs	11,224	1.7
2483 Lumber Shaped	1,473	0.2
2631 Raw Cotton	9,557	1.5
2771 Industrial Diamonds	4,315	0.7
All Traditional Products	57,948	8.9
Guinea-Bissau (8)	4,520	8.9
0360 Shellfish	103	0.2
0371 Prepared Fish	199	0.4
o711 Coffee Beans	871	1.7
0721 Cocoa Beans	436	0.9
2472 Lumber Shaped	87	0.2
2631 Raw Cotton	1,315	2.6
All Traditional Products	7,535	14.9
Kenya (2)		
0360 Shellfish	7,709	0.6
0371 Prepared Fish	11,874	0.9
0579 Fresh Fruit	19,169	1.4
0711 Coffee Beans	187,568	13.8
0741 Tea	392,740	28.8
1212 Tobacco Stripped	9,578	0.7
1213 Parts of Tobacco Leaf or Stem	837	0.1
2654 Sisal and Agave Fibers	8,558	0.6
6116 Other Leathers	3,056	0.22
All Traditional Products	644,224	47.2
Liberia (13)		
0711 Coffee Beans	1,018	0.2
0721 Cocoa Beans	2,203	0.3
2472 Saw Logs	35,480	5.5
All Traditional Products	39,470	6.1
Madagascar (19)		
0360 Shellfish	102,604	13.6
0371 Prepared Fish	30,494	4.0

Exporter /(No. of Products)/Product*	Exports ($000)	Share of All Exports (%)
Ethiopia (Continued)		
2117 Sheep Skins	16,334	4.7
2225 Sesame Seeds	30,904	8.9
2631 Raw Cotton	4,990	1.4
2879 Other Nonferrous Ores	3,330	1.0
2922 Natural Gums and Resins	1,973	0.6
6116 Other Leathers	4,791	1.4
All Traditional Products	280,252	80.3
Malawi (13)		
0611 Raw Sugar	18,696	4.0
0711 Coffee Beans	9,753	2.1
0741 Tea	37,437	8.0
1212 Tobacco Stripped	273,870	58.6
1213 Parts of Tobacco Leaf or Stem	5,056	1.1
2631 Raw Cotton	2,775	0.6
All Traditional Products	348,269	74.5
Mali (13)		
0579 Fresh Fruit	1,140	0.4
2114 Goat and Kid Skins	311	0.1
2225 Sesame Seeds	328	0.1
2631 Raw Cotton	200,643	83.0
6116 Other Leathers	1,870	0.8
9710 Non-Monetary Gold	600	0.3
All Traditional Products	205,312	85.0
Mauritania (16)		
0360 Shellfish	166,593	33.3
2472 Saw Logs	1,258	0.3
2815 Iron Ore	250,679	50.2
All Traditional Products	418,687	83.8
Mauritius (16)		
0371 Prepared Fish	42,956	2.7
0611 Raw Sugar	301,916	19.0
All Traditional Products	350,613	22.1
Mozambique (19)		
0360 Shellfish	83,718	31.7
1212 Tobacco Stripped	2,728	1.0
2223 Cotton Seeds	349	0.1
2225 Sesame Seeds	254	0.1
2472 Saw Logs	10,277	3.9
2483 Shaped Lumber	3,363	1.3
2631 Raw Cotton	30,121	11.4
3222 Other Coal	2,517	1.0
6716 Ferro-Alloys	3,275	1.2
6821 Copper Alloys Unwrought	2,199	0.8
All Traditional Products	139,002	52.6
Niger (10)		
0721 Cocoa Beans	408	0.1
2631 Raw Cotton	3,329	1.1
6841 Aluminum Alloys Unwrought	320	0.1
All Traditional Products	4,443	1.5
Nigeria (22)		
0360 Shellfish	49,641	0.4
0721 Cocoa Beans	209,895	1.8
0723 Cocoa Butter and Paste	29,695	0.3
2225 Sesame Seeds	22,847	0.2
2472 Saw Logs	58,890	0.5
2483 Shaped Lumber	49,752	0.4
6116 Other Leathers	40,761	0.4
6841 Aluminium Alloys Unwrought	24,388	0.2
All Traditional Products	51,647	4.4
Rwanda (10)		
0711 Coffee Beans	28,933	58.7
0741 Tea	8,573	17.4

Appendix Table 3. Continued

Exporter /(No. of Products)/Product*	Exports ($000)	Share of All Exports (%)
Madagascar (Continued)		
0579 Fresh Fruit	42,333	5.6
0611 Raw Sugar	6,446	0.9
0711 Coffee Beans	55,743	7.4
0721 Cocoa Beans	6,350	0.8
2472 Saw Logs	1,010	0.1
2483 Shaped Lumber	3,093	0.4
2631 Raw Cotton	12,230	1.6
2654 Sisal and Agave Fibers	4,917	0.7
2879 Other Nonferrous Ores	2,505	0.3
All Traditional Products	268,569	35.6
Sao Tome and Principe (3)		
0360 Shellfish	1,288	8.2
0711 Coffee Beans	132	0.8
0721 Cocoa Beans	4,809	30.8
All Traditional Products	6,229	39.9
Senegal (18)		
0360 Shellfish	144,678	25.7
0371 Prepared Fish	29,109	5.2
0579 Fresh Fruit	1,677	0.3
2631 Raw Cotton	9,746	1.7
2713 Natural Phosphates	33,577	6.0
2922 Natural Gums and Resins	2,341	0.4
4234 Groundnut Oil	62,651	11.1
6116 Other Leathers	975	0.2
All Traditional Products	285,617	50.8
Seychelles (7)		
0360 Shellfish	1,943	1.3
0371 Prepared Fish	103,078	68.0
All Traditional Products	105,082	69.3
Sierra Leone (15)		
0711 Coffee Beans	1,796	2.1
0721 Cocoa Beans	2,601	3.0
0741 Tea	286	0.3
1212 Parts of Tobacco Leaf or Stem	213	0.3
2483 Shaped Lumber	88	0.1
2771 Industrial Diamonds	162	0.2
2784 Asbestos	744	0.9
2879 Other Nonferrous Ores	1,721	2.0
6716 Ferro-Alloys	366	0.4
All Traditional Products	8,045	9.3
Somalia (9)		
0360 Shellfish	17	0.2
2114 Goat and Kid Skins	589	8.0
2117 Sheep Skins	391	5.3
2225 Sesame Seeds	888	12.1
2472 Saw Logs	516	7.0
2922 Natural Gums and Resins	1,571	21.4
6116 Other Leathers	118	1.6
All Traditional Products	4,091	55.8
Togo (12)		
0360 Shellfish	3,477	1.6
0579 Fresh Fruit	684	0.3
0711 Coffee Beans	22,109	10.1
0721 Cocoa Beans	12,456	5.7
2223 Cotton Seeds	4,887	2.2
2472 Saw Logs	888	0.4
2483 Shaped Lumber	276	0.1
2631 Raw Cotton	68,403	31.2
2713 Natural Phosphates	63,300	28.9
All Traditional Products	176,786	80.6
Zambia (23)		
0611 Raw Sugar	1,469	0.3
0711 Coffee Beans	8,429	1.4

Exporter /(No. of Products)/Product*	Exports ($000)	Share of All Exports (%)
Rwanda (Continued)		
2483 Shaped Lumber	90	0.2
2879 Other Nonferrous Ores	4,046	8.2
9710 Non-Monetary Gold	2,586	5.3
All Traditional Products	44,324	89.9
South Africa (38)		
0360 Shellfish	116,782	0.4
0579 Fresh Fruit	284,375	1.1
0611 Raw Sugar	208,379	0.8
0741 Tea	79,987	0.3
2117 Sheep Skins	34,203	0.1
2472 Saw Logs	19,940	0.1
2516 Wood Pulp	143,526	0.6
2631 Raw Cotton	35,749	0.1
2713 Natural Phosphates	65,755	0.3
2771 Industrial Diamonds	381,058	1.5
2786 Products of Melted Metal Ores	100,085	0.4
2815 Iron Ore	432,948	1.7
2860 Uranium and Thorium	36,101	0.1
2877 Manganese Ore	126,531	0.5
2879 Other Nonferrous Ores	354,493	1.4
2881 Metaliferrous Nonferrous Waste	223,888	0.9
3222 Other Coal	1,839,625	7.0
6116 Other Leathers	100,413	0.4
6716 Ferro-Alloys	1,132,155	4.3
6812 Platinum	2,664,459	10.1
6821 Copper Alloys Unwrought	194,725	0.7
6841 Aluminium Alloys Unwrought	732,552	2.8
6899 Base Metals nes	107,498	0.4
9710 Non-Monetary Gold	3,207,359	12.2
All Traditional Products	12,696,537	48.3
Sudan (13)		
0579 Fresh Fruit	1,263	0.3
0611 Raw Sugar	10,552	2.1
2114 Goat Skins	863	0.2
2117 Sheep Skins	1,409	0.3
2225 Sesame Seeds	69,471	12.7
2631 Raw Cotton	58,477	11.5
2879 Other Nonferrous Ores	2,464	0.5
2922 Natural Gums and Resins	22,958	4.5
4234 Groundnut Oil	1,991	0.4
6116 Other Leathers	1,320	0.3
All Traditional Products	170,861	33.6
Tanzania (26)		
0360 Shellfish	12,415	2.3
0611 Raw Sugar	7,136	1.3
0711 Coffee Beans	93,334	17.1
0721 Cocoa Beans	2,887	0.5
0741 Tea	13,937	2.6
1212 Tobacco Stripped	51,628	9.5
1213 Parts of Tobacco Leaf or Stem	3,010	0.6
2225 Sesame Seeds	12,524	2.3
2472 Saw Logs	1,057	0.2
2483 Shaped Lumber	2,026	0.4
2631 Raw Cotton	24,116	4.4
2654 Sisal and Agave Fibers	8,763	1.6
2771 Industrial Diamonds	3,881	0.7
6821 Copper Alloys Unwrought	9,569	1.8
6899 Base Metals nes	1,569	0.3
All Traditional Products	248,945	45.6
Uganda (20)		
0711 Coffee Beans	290,820	71.1
0721 Cocoa Beans	2,368	0.6
0741 Tea	1,738	0.4
1212 Tobacco Stripped	14,258	3.5
1213 Parts of Tobacco Leaf or Stem	453	0.1
2225 Sessame Seeds	1922	0.5

Appendix Table 3. Continued

Exporter /(No. of Products)/Product*	Exports ($000)	Share of All Exports (%)
Zambia (Continued)		
1212 Tobacco Stripped	10,659	1.8
2223 Cotton Seeds	1,069	0.2
2631 Raw Cotton	19,178	3.2
2879 Other Nonferrous Ores	41,685	7.0
2881 Metalifferous Nonferrous Waste	3,440	0.6
6716 Ferro-Alloys	2,231	0.4
6821 Copper Alloys Unwrought	241,620	40.5
6899 Base Metals nes	129,609	21.7
All Traditional Products	460,874	77.2
Zimbabwe (26)		
0579 Fresh Fruit	5,965	0.4
0611 Raw Sugar	43,109	2.7
0711 Coffee Beans	22,358	1.4
0741 Tea	10,939	0.7
1212 Tobacco Stripped	451,211	27.7
1213 Parts of Tobacco Leaf or Stem	21,770	1.3
2631 Raw Cotton	110,112	6.8
2784 Asbestos	33,180	2.0
2881 Metalifferous Nonferrous Waste	2,939	0.2
6116 Other Leathers	10,327	0.6
6716 Ferro-Alloys	156,849	9.6
6821 Copper Alloys Unwrought	13,517	0.8
9710 Non-Monetary Gold	50,571	3.1
All Traditional Products	936,028	57.5

Exporter /(No. of Products)/Product*	Exports ($000)	Share of All Exports (%)
Uganda (Continued)		
2631 Raw Cotton	15,997	3.9
2879 Other Nonferrous Ores	898	0.2
9710 Nonmonetary Gold	4,227	1.0
All Traditional Products	334,206	81.8

* Traditional products are not listed below unless they account for at least one-tenth of one percent of total exports.

Source: UN COMTRADE statistics as reported by the countries listed in the notes to Table 1.