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DISCOVERING SOUTHERN AND EAST AFRICA'S INDUSTRIAL OPPORTUNITIES

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STRENGTHENING TRANSATLANTIC COOPERATION

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EXECUTIVE SUMMARY

In early 2010, the German Marshall Fund of the United States (GMF) partnered with Dr. Cesar A. Hidalgo to study the industrial opportunities of five countries in eastern and southern Africa using the product space, a network connecting pairs of products that tend to be co-exported by a significant number of countries.. The purpose of this project was to contribute a new perspective to ongoing conversations about how transatlantic donors can better support trade and economic development in sub-Saharan Africa. Working with members of the Economic Policy Program at GMF, Dr. Hidalgo presented his findings to transatlantic policymakers in July 2010 in Washington, DC. A videocast highlighting the Product Space's policy applications can be accessed at http://www.gmfus.org/events/event_view?event_id=1026. The following paper is the formal discussion of the product space and its application in sub-Saharan Africa. For more information on the connections between this work and transatlantic trade and development policies, please contact Kate Ritterspach at kritterspach@gmfus.org.

Acknowledgments

This work was supported by the German Marshall Fund of the United States as well as the Macro Connections Group at the MIT Media Lab, and Empowerment Lab and Growth Lab at the Center for International Development at Harvard University. We acknowledge comments that helped shape this work from Serdar Altay, Katrin Kuhlmann, Kathryn Ritterspach, Christine Chumbler, and Emily Batt. We also acknowledge Jennifer Gala and Nicola Lightner for providing logistical support for this project. All mistakes are the authors'.

Abstract

What are Southern and East Africa's industrial opportunities? In this article we explore this question by using the product space to study the productive structure of five Southern and East African countries: Kenya, Mozambique, Rwanda, Tanzania, and Zambia. The product space is a network connecting products that tend to be exported by the same sets of countries. Since countries are more likely to develop products that are close by in the product space to the ones that they already produce, the product space can be used to help anticipate a country's industrial opportunities.

Our results suggest that the most natural avenue for future product diversification for these five Southern and East African nations resides in the agricultural sector, since all of these nations appear to have productive structures that are pre-adapted to the production of many agricultural products that none of them are currently exporting.

We conclude this paper by exploring the potential benefits of further regional economic integration through an exercise in which we pull together the productive structures of these five countries. This exercise shows that the products that become more accessible in the combined economy are once again predominantly agricultural. These results suggest that while diversification into all sectors should remain an important long-term goal of the region, the path towards increased diversification in the near future may well lie in a more empowered and diverse agricultural sector.

1 INTRODUCTION TO THE PRODUCT SPACE

Economic diversity matters because the ability of a country to support an adequate level of income is connected to its ability to produce a diverse set of goods and services (Hidalgo and Hausmann, 2009). Yet, producing a diverse set of products and services is not easy when these depend on the existence of a large number of individual economic activities.

Traditional approaches to the understanding of economic growth and development, however, have tended to assume away this diversity by supposing that the ability of a country or a region to produce different products, results not from the availability of a large number of inputs, but from the relative cost of a few aggregate and amorphous factors such as “labor” and “capital” (Acemoglu, 2009; Aghion and Howitt, 2009).

The intuition about economic development that emerges from these aggregate production models is that the mix of products that a country exports has little or no effect on that country’s economic future because production is the reflection of aggregate factors such as capital, land, and labor. This makes the particular mix of products that a country exports irrelevant because it implies that the world is such that the goods that a country makes can be seamlessly accommodated to reflect any change in the relative price of factors.

Yet, if the productive structure of a country is constrained by specific factors, or capabilities, that serve as inputs for specific sets of industries, then any theory of economic development that does not include a description of a country’s productive structure will be assuming away the most relevant part of the development puzzle.

Recent research, however, has begun to provide an alternative approach to more traditional conceptualizations of the economic growth process by demonstrating the value, difficulties, and

challenges that emerge from both the process of economic *self-discovery*¹ (Hausmann and Rodrik, 2003) and the structure of economic diversity (Hidalgo and Hausmann, 2009). Contrary to factor-based models of growth, these works assume that the production of goods results from the local convergence of a large number of nontradable inputs, or capabilities (Hidalgo and Hausmann, 2009), which are required by some industries but not others, and that are unlikely to be accumulated in the absence of the products that demand them. Ultimately this implies that the “fixed” costs required to initiate the production of a given good or service are not uniform across space, since they depend on the existence of capabilities that were accumulated by the industries that were already present at that same location. For example, consider the cost of starting the production of a new type of regional jet in two different locations, one in which no complicated machine has ever been built and another location in which a diverse number of firms are producing different types of machinery. While in both cases an attempt to start producing jets will be costly, the success of the enterprise, and the chances that it will eventually produce airplanes, are likely to be higher at the location where other machines were previously being produced.

An important consequence of assuming that products depend on a large number of capabilities, instead of a few aggregate factors, is that the ability of a country to produce a particular mix of products will depend naturally on the mix of products that it is already making. This is because in such a case, the mix of products that a country makes is a reflection of the capabilities that the country has and the products accessible for future production are most likely to be those requiring a similar mix of capabilities. This allows us to make

¹ The process by which countries discover the cost of producing a good locally (Hausmann and Rodrik 2003).

predictions about the products that a country can make in the future, since the ability of a country to produce a product in the future depends, through the local presence of capabilities, on the products that it is currently making.

Evidence of this process can be found in the structure and dynamics of the product space (Hidalgo et al., 2007), the network connecting products that tend to be co-exported by the same countries. Research exploring the structure and dynamics of the product space has demonstrated that countries are more likely to “discover” and subsequently produce and export a product that is close by in the product space to the products that it already exports. This shows that 1) the co-export of product pairs by a significant number of countries indicates which pairs of products require similar capabilities, and 2) that the process of economic diversification is path-dependant and cannot be properly understood without taking into consideration its historical nature.

Evidence of industrial path dependencies, however, is not limited to the evolution of national economies. At the regional level, Neffke et al. (2009) used longitudinal data on Swedish manufacturing plants to show that plants making products that are unrelated to other goods being produced in the region are more likely to exit, and plants that enter the region tend to produce more related varieties. At the city level, Glaeser et al. (1992) have shown that urban variety, but not specialization, encourages employment growth in cities. At the same time, at the firm level, Teece et al. (1994) have shown that firms tend to remain coherent as they diversify, meaning that firms that operate on a larger scope tend to produce related varieties, e.g. varieties that are likely to be coproduced by many firms.

The choice between aggregate and disaggregate theories also affects the way that we interpret our

world’s economic history. A good example of this is the case of South Korea and Peru. South Korea and Peru serve as illustrations for the more general development puzzle concerning the diverging fates of Latin America and East Asia. The gist of this story is that South Korea went from having half of Peru’s income to four times Peru’s income in less than 40 years, leading us to ask: How did this happen? If we look at aggregate factors we will find this question to be even more puzzling, since in 1970 Peru had almost 2.5 times more land per worker than South Korea, four times the capital per worker and a similar level of human capital, measured in average years of education.

The paradox disappears, however, if instead of looking at factors, we look at the mix of products that were exported by each of these countries. In 1970, South Korea exported three times the number of products that Peru exported, and these were products that tended to be exported by relatively more diversified countries, indicating that South Korea had a set of productive capabilities that was more diverse, and therefore superior than that of Peru.

In this paper, we bring the product space and economic diversity to the question of economic development in Southern and East Africa by presenting an exercise in which we look at the position in the product space of five countries: Kenya, Mozambique, Rwanda, Tanzania, and Zambia. Additionally, we study the collective regional position of these countries in the product space in an attempt to identify the opportunities that would be unveiled if the productive structures of these countries were to be combined. Since the capacity of a country to discover a good depends on the goods that it is already exporting, the industrial opportunities that appear as natural next steps for these countries will be different depending on whether we examine them as independent units or as a single integrated economy. In this paper,

we use the product space to help us understand whether there are rungs in the development ladder that would become within reach, were these economies to be integrated. To do so, we compare the position in the product space, and the opportunities associated with these positions for each individual country and for the combined economy. This exercise shows that most of the self-discovery opportunities available in the region, before and after integration, are concentrated in the agricultural sector, followed by the garments cluster. This motivates the need for both national governments and their development partners to develop adequate incentive structures that can help catalyze the self-discovery of the agricultural industries that are within reach for these economies but have not yet been exploited.

Data and Methods

We construct the product space using the BACI (Base pour l'Analyse du Commerce International) dataset at the HS-6 level of aggregation (Gaulier and Zignano, 2009). For the years considered (2003-2005), the data connected 5,109 different product categories to 232 countries. This represents a more than fivefold increase in the number of product categories used in previous versions of the product space, which were constructed using SITC-4 data (Hidalgo et al., 2007).

We construct the Product Space following Hidalgo et al., 2007 by calculating the frequency with which pairs of products are co-exported across all countries. We call this quantity *proximity* and interpret it as an estimate of the relative number of capabilities shared by a pair of products.

We visualize the product space by taking the average proximity between pairs of products for the years 2003-2005 and consider only proximities larger than 0.45. A proximity of 0.45 means that at least 45 percent of the countries that export

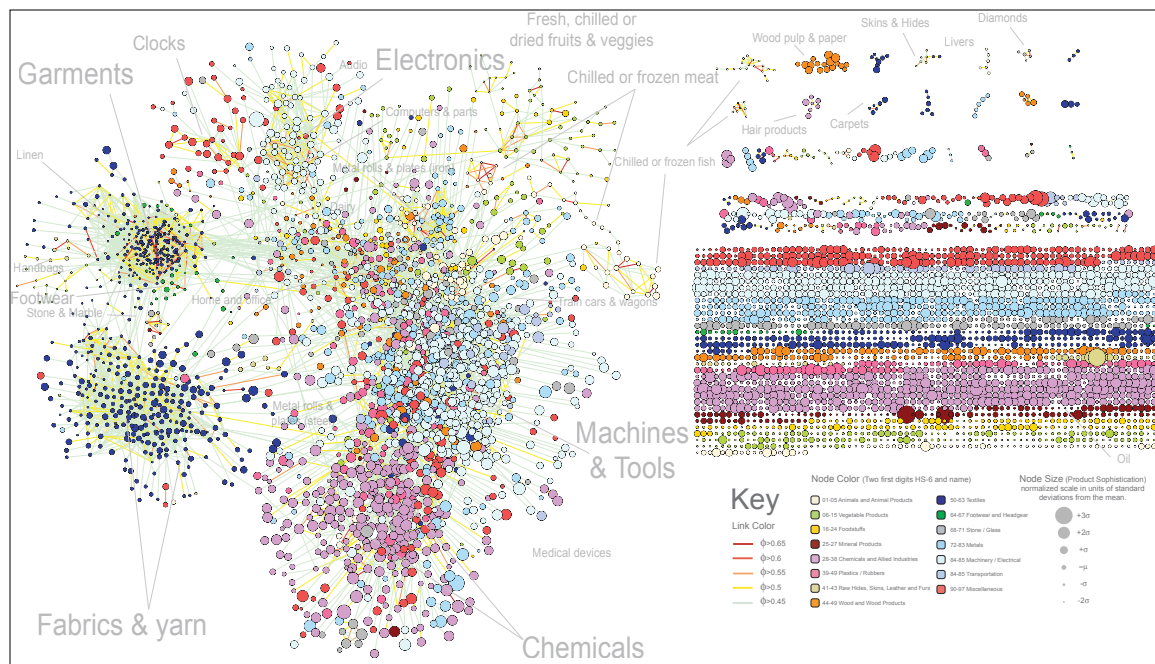
one product also export the other. This threshold was chosen because it represents the percolation threshold of the weighted network. In the visualization, products that do not have any links to any other products at a proximity of 0.45 or higher are located on the right hand side of each figure arranged in a grid.

Results: The Structure of the Product Space

In agreement with previous constructions (Hidalgo et al., 2007), we find that the product space is characterized by a core of densely interconnected products, most of which are highly sophisticated (Figure 1) and include hundreds of different varieties of chemicals and machinery, and by a periphery in which poorly connected products are located. Here we measure *sophistication* using an estimate of the number of capabilities that go into a product, following Hidalgo and Hausmann (2009). Besides the central cluster, there are other densely connected clusters in the product space including the garment sector, the textile sector, and the electronics sector.

At this level of disaggregation, we are also able to observe a clear gradient of sophistication in the textile cluster, which is visualized as an increase in node sizes from the less sophisticated varieties of textiles (e.g. cotton yarn or plain woven fabrics of cotton), located on the upper left corner of the textile cluster, to the most sophisticated textile varieties (e.g. denim or fabrics mixing different materials and colors), which are located towards the center and the bottom right corners of the textile cluster. We also note that textiles are not linked to garments, which is illustrative of a fact that has been found to be true in general: input-output relationships do not explain proximity — i.e., products do not tend to be strongly connected to other varieties up or down the value chain (Hausmann et al., 2008). This indicates

Figure 1 The 2003-2005 Product Space



See key for node color, size, and link color specification.

that proximity in the product space is driven by channels other than input-output connections.

Finally, we note the existence of a relatively sparse cluster of agricultural goods such as fruits, vegetables, leguminoses and animal products, which also includes diverse kinds of meats and fish. The fact that agricultural products cluster together, albeit weakly, suggests the existence of inter-industry spillovers in the agricultural sectors. Most raw materials and minerals, however, including oil,

are extremely peripheral in the product space and have no connections to other products at the 0.45 proximity threshold (and are thus located together with the other disconnected products at the right of the visualization). This lack of connectedness suggests a lack of productive spillovers in these sectors, and a difference in the development value of raw materials and minerals vis-a-vis agricultural products and manufactures.

2 OVERLAYING EXPORT STRUCTURE: TWO VIEWS OF THE PRODUCT SPACE AND ITS APPLICATION IN SOUTHERN AND EAST AFRICA

In this section we use the product space to examine the productive structures of Kenya, Mozambique, Rwanda, Tanzania, and Zambia. For this, we use two different views of the product space: the Revealed Comparative Advantage (RCA) view and the exports value view.

In the *RCA view*, we highlight the products for which these countries have RCA, which is a measure indicating how “good” a country is at making a product given the size of its economy and the size of that product’s market (Balassa, 1986). For each of the five countries under consideration, we provide an RCA view in which products that are exported with an $RCA \geq 1$, i.e. products that these countries are relatively good at making, are denoted by black squares with a green outer glow. Products that were exported with an $RCA \geq 0.1$, i.e. products in which these countries have a more marginal participation, are presented with squares colored according to the root categories of the HS-6 classification. Finally, products that are exported with an $RCA < 0.1$, which can be considered to be products that are effectively not being exported at all by these countries, are not highlighted and are represented by circles, just like in the original map presented in Figure 1.

The *Export Value View*, on the other hand, uses the size of nodes to represent the U.S. dollar value of a country’s exports of each product (see figure key for details). Additionally, products whose exports have increased, in nominal terms (U.S. dollars), between 2000 and 2005 are colored green, whereas products whose exports have decreased in nominal terms are colored red.

From these illustrations we can see a number of things. First, it is easy to see that the position of these five countries in the product space is peripheral, meaning that all of these countries tend to export goods that are not connected to many other products. Moreover, these goods tend to be of

relatively low sophistication, indicating that these are goods that require a fairly small and simple set of activities to be produced. From these five countries, however, Kenya appears to be an outlier, with a productive structure that is comparatively more diverse and better-connected than that of Mozambique, Rwanda, Tanzania, or Zambia.

The overall simplicity of these countries’ productive structures, and the contrast between the productive structure of Kenya and those of Mozambique, Rwanda, Tanzania, and Zambia, can be easily seen by looking at the RCA view of the product space: Kenya’s exports populate a much wider variety of nodes and expand a set of relatively more sophisticated industries (Figure 2-6). One of the most striking differences is the remarkable variety of products in the agricultural cluster that Kenya is exporting with $RCA > 1$, compared to the four other countries considered.

Furthermore, inspection of the *Volume of Exports view* of the product space shows that most of the export value comes from a very small number of industries, such as aluminum for Mozambique, copper for Zambia, coffee for Rwanda, and gold for Tanzania.² Kenya, on the other hand, has a productive structure that is relatively sophisticated and has substantial participation in other sectors such as garments, while also exporting a larger variety of agricultural goods including tea (14.6 percent of exports), fresh cut flowers (12.3 percent), unroasted coffee (4.91 percent), beans (3.74 percent), peas (1.85 percent), and pineapples (1.82 percent). Yet, upon inspection of the Volume of Exports view, we can also see that Kenya’s participation in the most sophisticated products of its export basket is quite minimal (for instance, exposure meters represent only 0.001 percent of

² For numerical values and a longer list of products see the Appendix.

Figure 2 RCA and Export Value View of the Product Space for Kenya

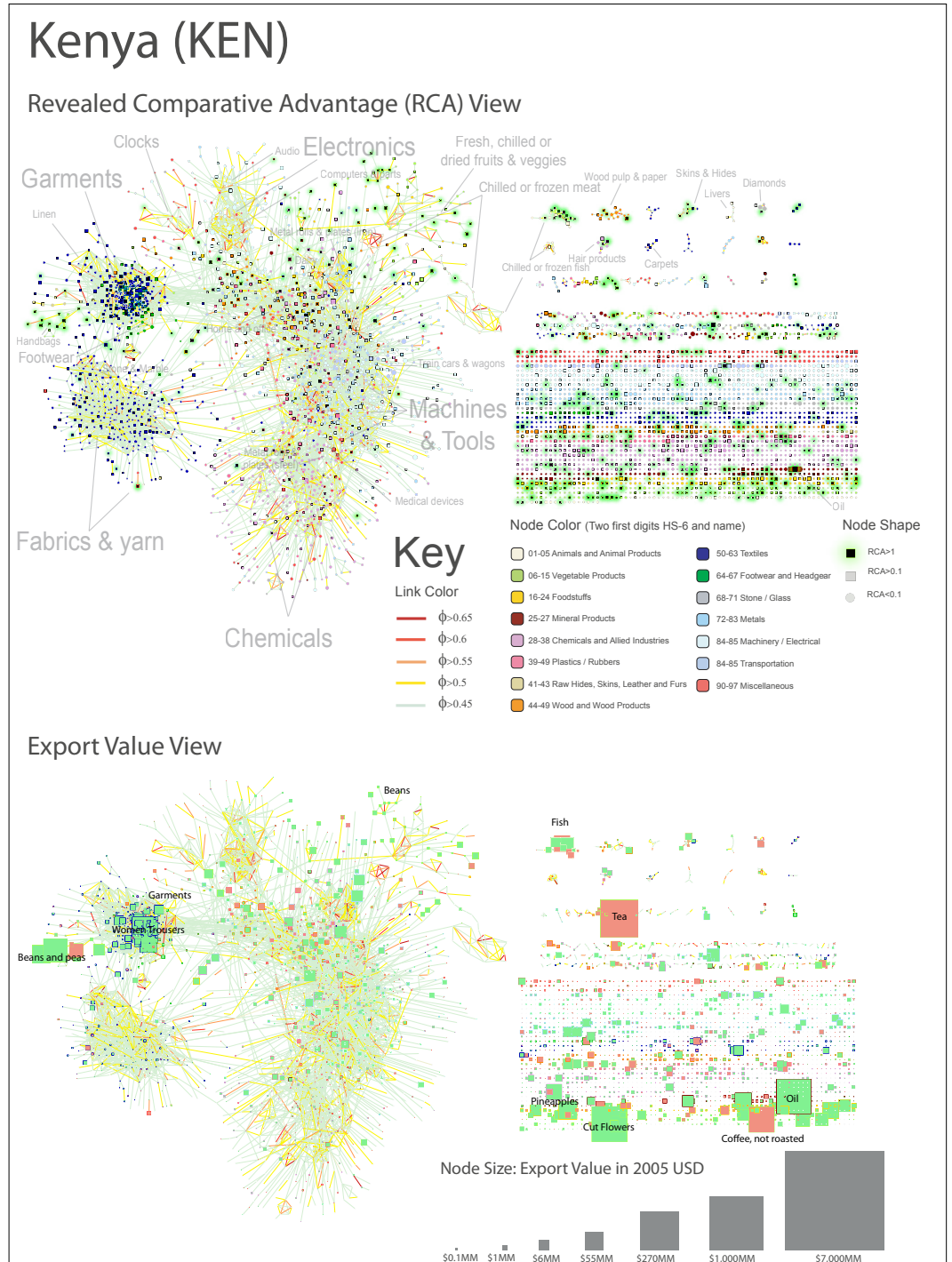


Figure 3 RCA and Export Value View of the Product Space for Mozambique

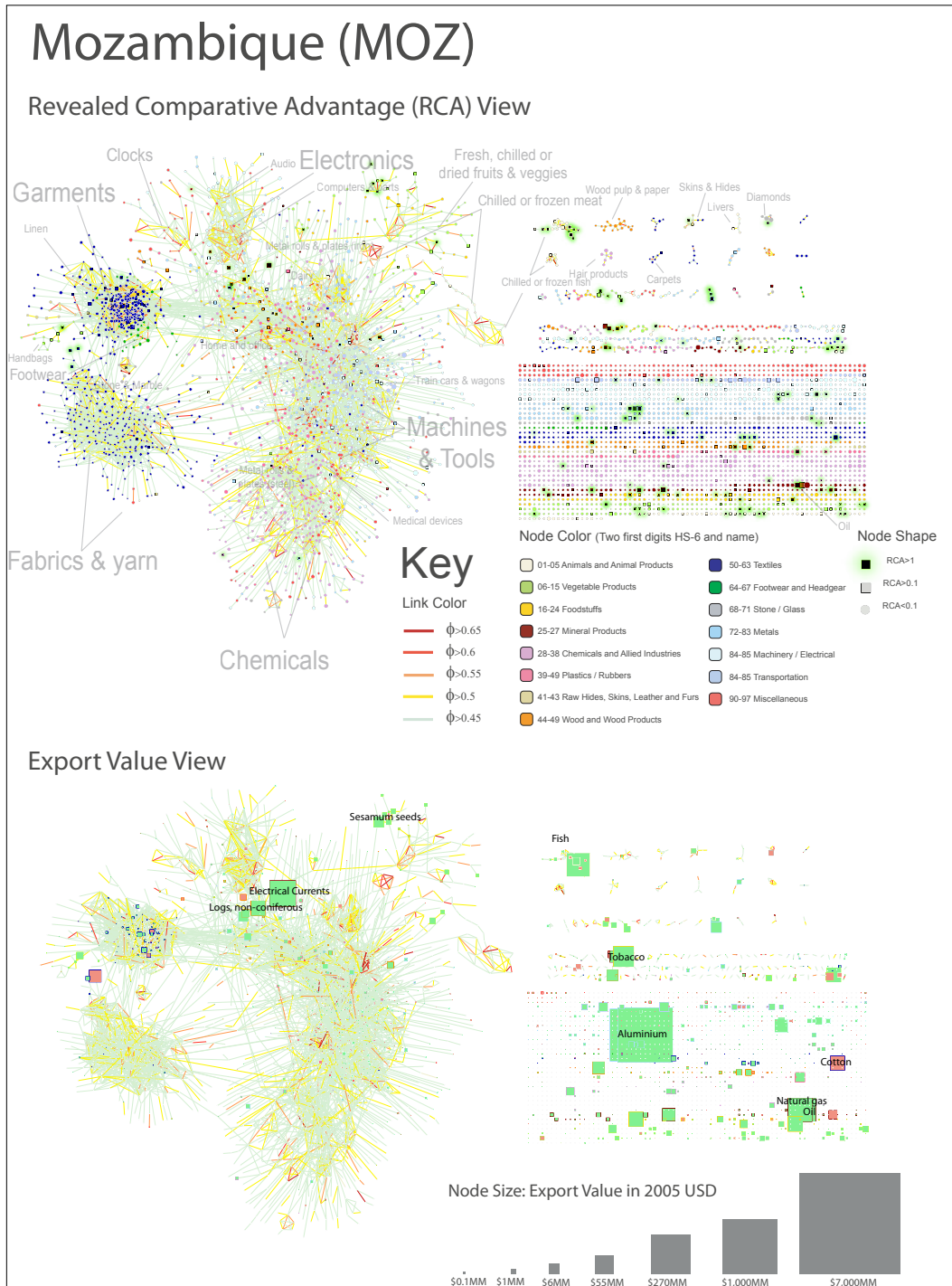


Figure 4 RCA and Export Value View of the Product Space for Rwanda

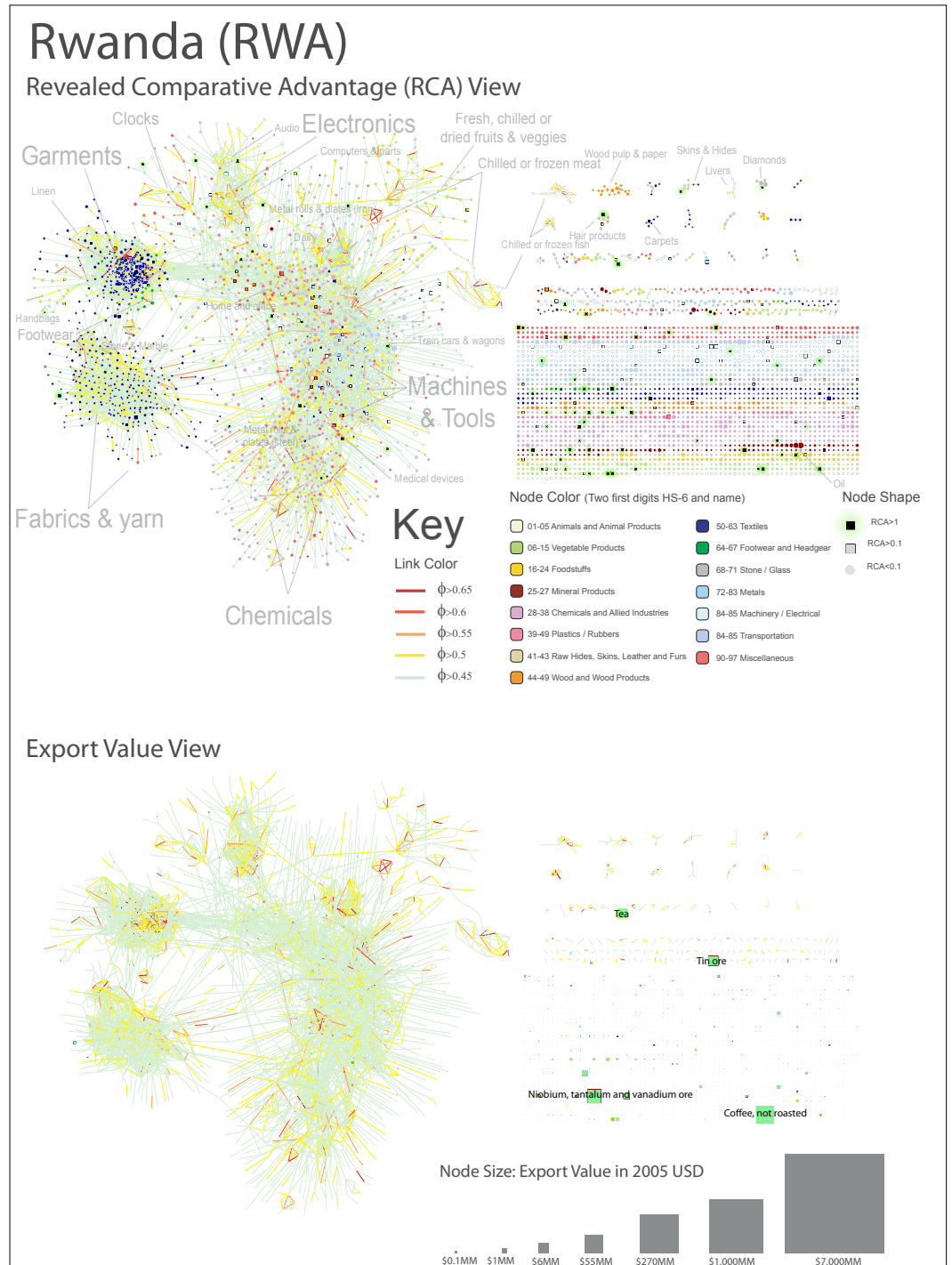


Figure 5 RCA and Export Value View of the Product Space for Tanzania

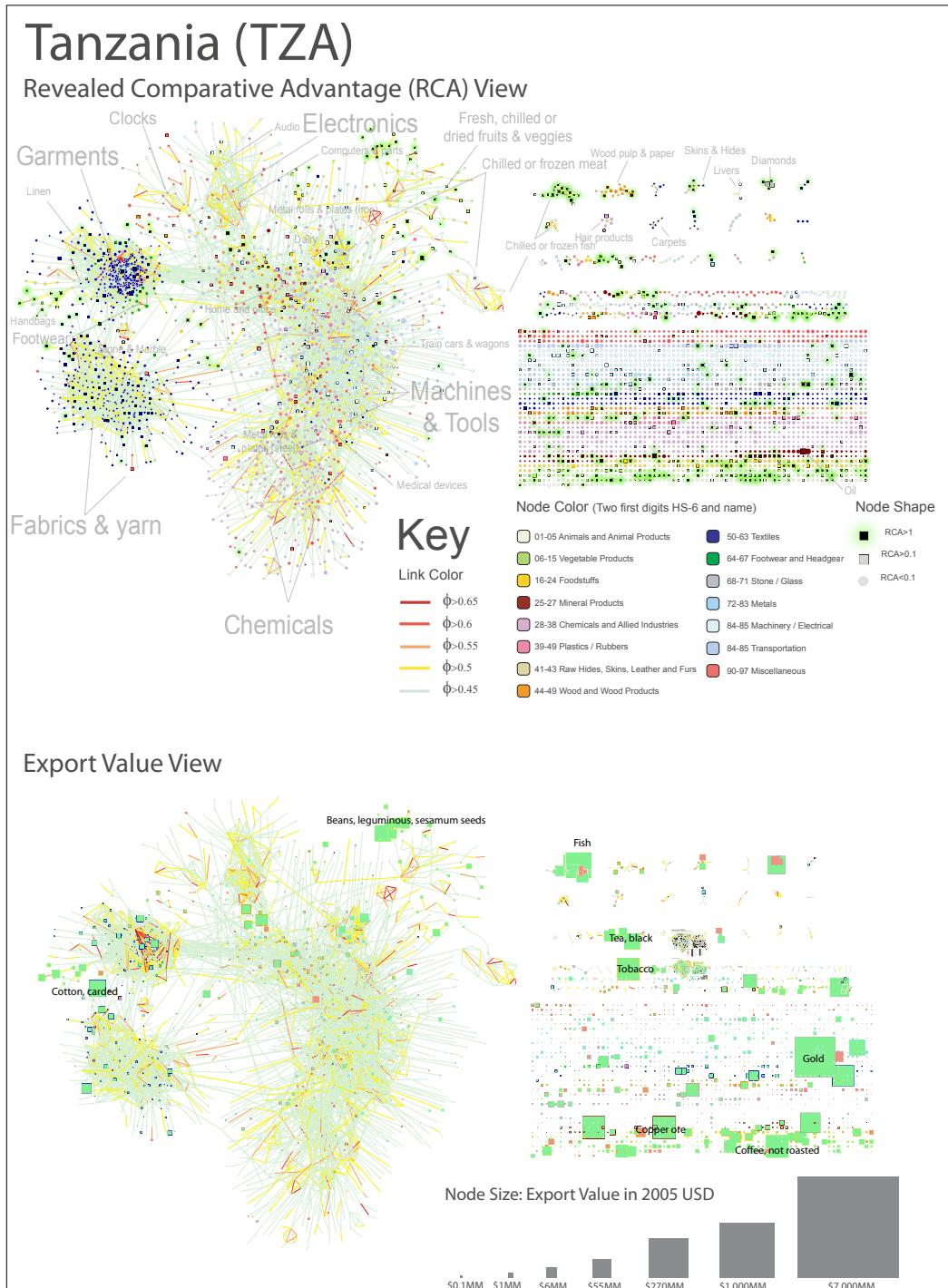
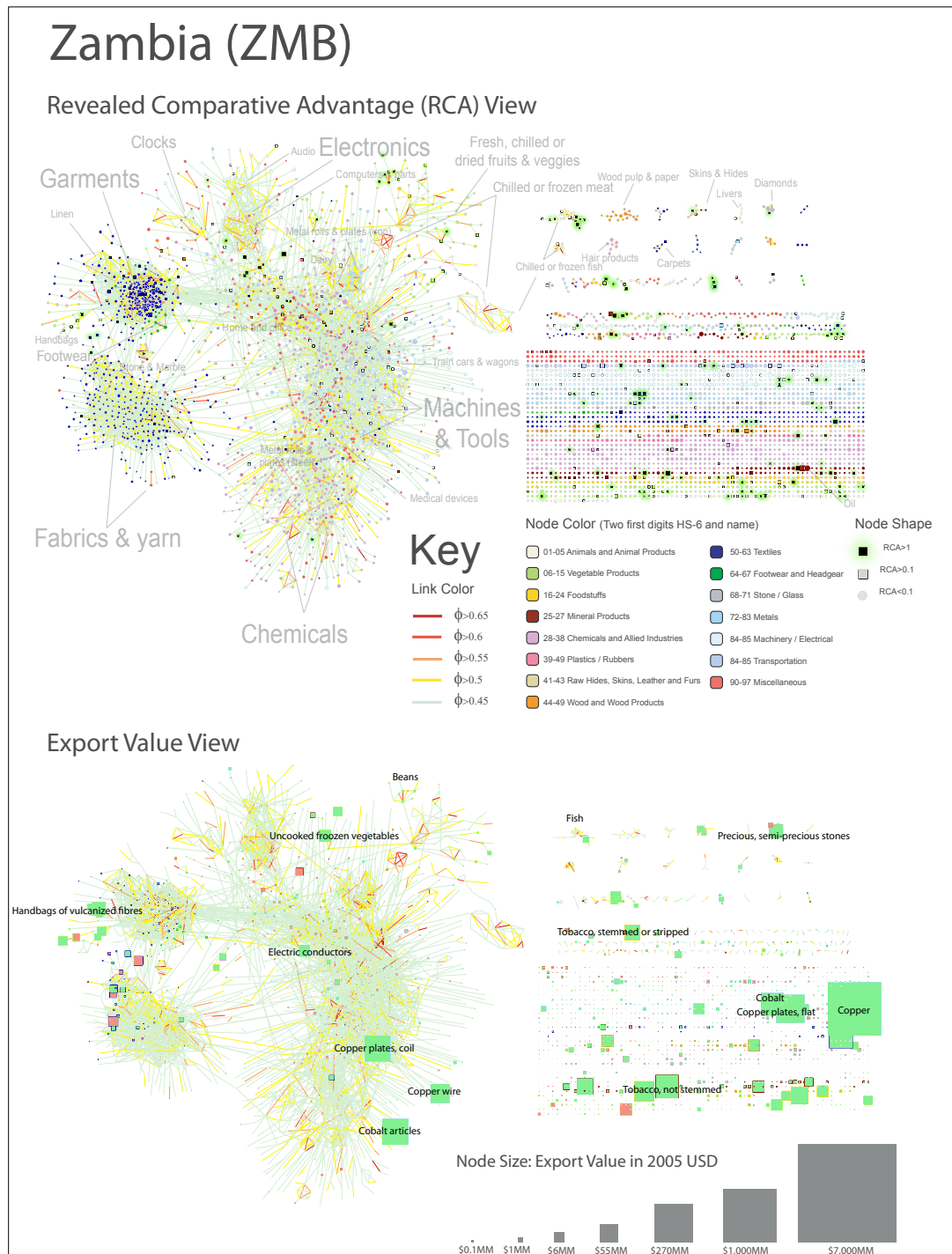


Figure 6 RCA and Export Value View of the Product Space for Zambia



Kenyan exports, hair lacquers 0.006 percent, and glucose syrup 0.057 percent).

In the appendix, we present two tables for each country showing the top 30 products exported by each of them in terms of RCA and in terms of export value.

Avenues for Diversification:

The Opportunities View of the Product Space

Since one important aspect of the process of economic development is the channel by which countries move from the products that they currently produce to products that are nearby in the Product Space (Hausmann and Klinger, 2006; Hidalgo et al., 2007), we study the industrial opportunities of these five countries by introducing a third view of the product space: *the Opportunities View*.³ The Opportunities View of the product space was constructed by representing products not currently being exported by each of these countries according to how “close” or “far” these products are to the products that they are currently producing. Products that are relatively “close” to a country’s productive structure are colored red, whereas products that are relatively far are blue (see chart for details). The distance between a product and a country’s productive structure was determined by using *density*, a measure introduced for this purpose in Hidalgo et al. (2007).

The Opportunities View of the product space shows the products that, given the country’s current productive structure, could be most easily added to the country’s export basket. We note that the Opportunities View presented in these figures shows the *relative* distance between a country’s productive structure and the products that they are not yet exporting. Hence, it shows products that are

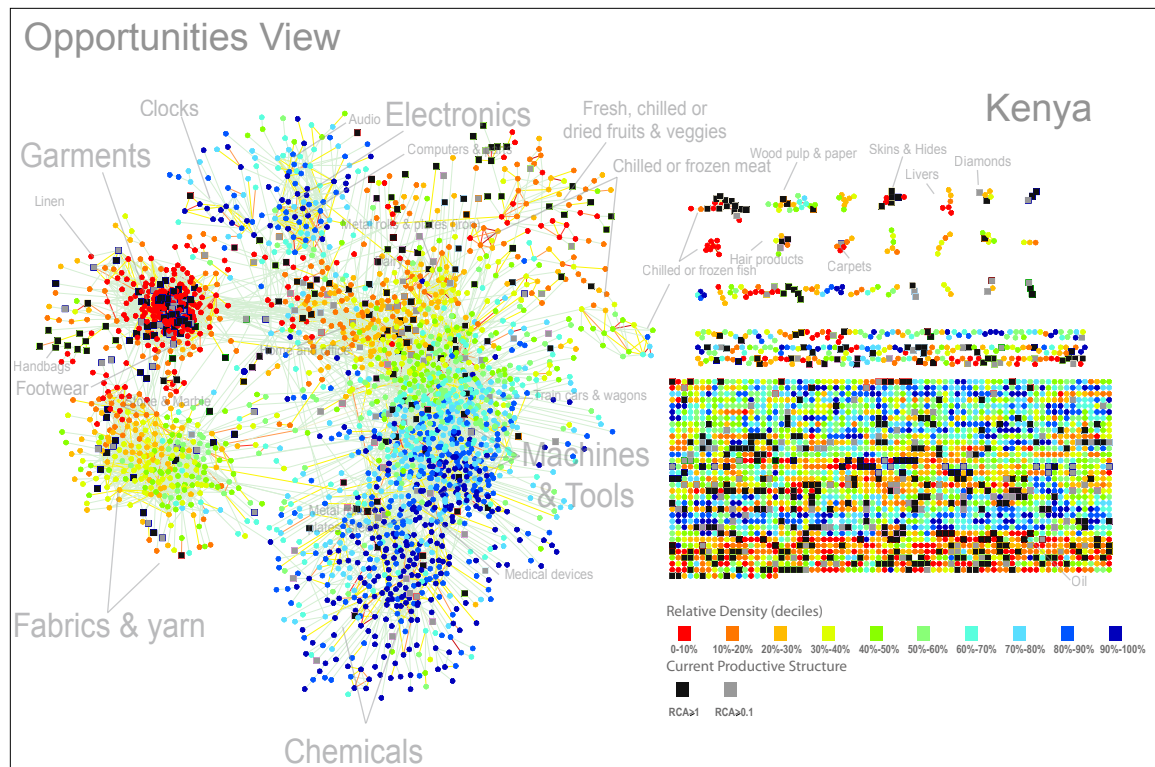
relatively close to a country’s productive structure, but that might still be far in absolute terms.

The Opportunities View of the product space also shows that given the current productive structure of these countries, most of their potential export opportunities are in the agriculture and garment clusters. In the appendix, we present tables showing the 30 products that each of these countries are currently not exporting, but that are closest to them given their current export structure. The findings presented in these tables have to be interpreted with caution, since they consider only the structure of the product space and not any other geographic constraints to production. Because of this, products that cannot be produced locally due to geographic constraints might show up in the table, such as marine products for Rwanda and Zambia. These products have been manually crossed out of the list. Nonetheless, the tables show that for most of these countries the products that are currently closest to them, and can be thought of as the natural edge of their production frontiers, are several types of fish, leguminoses such as chick-peas, and other agricultural goods such as sesame seeds, ginger, mangoes, guavas, and pineapples, among others.

For example, in the case of Kenya we find an assortment of agricultural and garment products on its production frontier. These include arrowroot, bananas, palm nuts, and tuna, but also women’s bathrobes and men’s cotton underpants. In the case of Mozambique, however, most of the opportunities we found are agricultural and include different types of beans and legumes, as well as rice and coffee. Rwanda’s industrial opportunities include sugar cane, guavas, and ginger. Those of Tanzania include sugar cane, sesame seeds, pineapples, and green tea. Many of these products also appear in the opportunity set of Zambia, which includes sesame seeds, guavas, green tea, citrus fruits, beans, onions, and pineapples, among other products (see appendix for full tables).

³ Figures 7, 8, and 9 together with ten tables in the Appendix (Tables 3, 4, 7, 8, 11, 12, 15, 16, 19, and 20).

Figure 7 Kenya's Industrial Opportunities



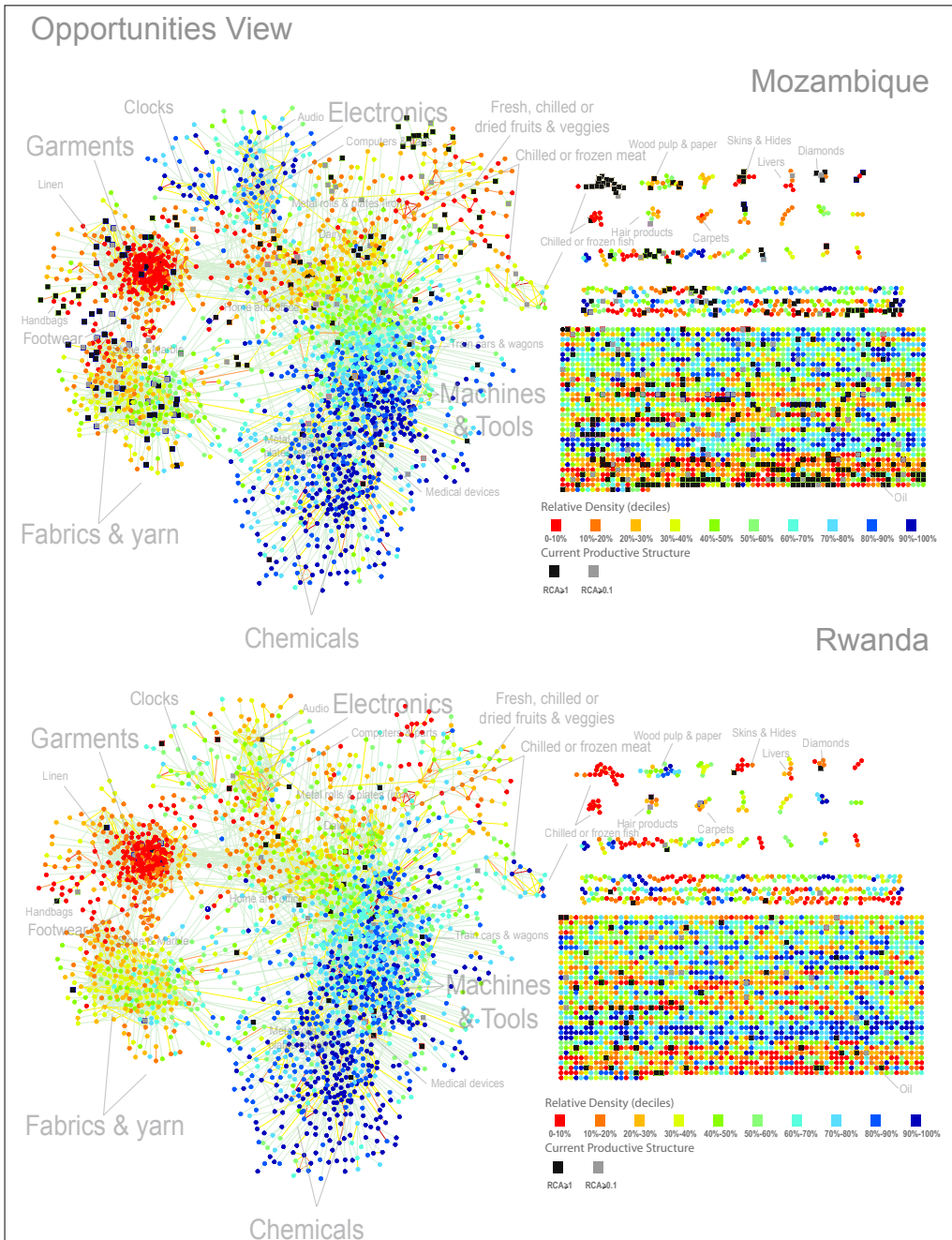
Products not being exported by Kenya are color-coded according to “density” deciles. Density is a measure of the similarity between a country’s productive structure and a product.

Each product not being exported by a country represents an individual mystery. While the fact that Tanzania does not export fresh guavas or pineapples, or Mozambique does not export rice, evidences a lack of some of the capabilities needed to make this happen, the fact that these are products that appear to be close by in the product space indicates that there is a possibility for these exports to emerge.

The fact that the products found in our analysis are of relatively low sophistication, however, is a general feature of developing economies. This can be shown by the relationship between the sophistication of products and the distance between that product and a country’s current productive

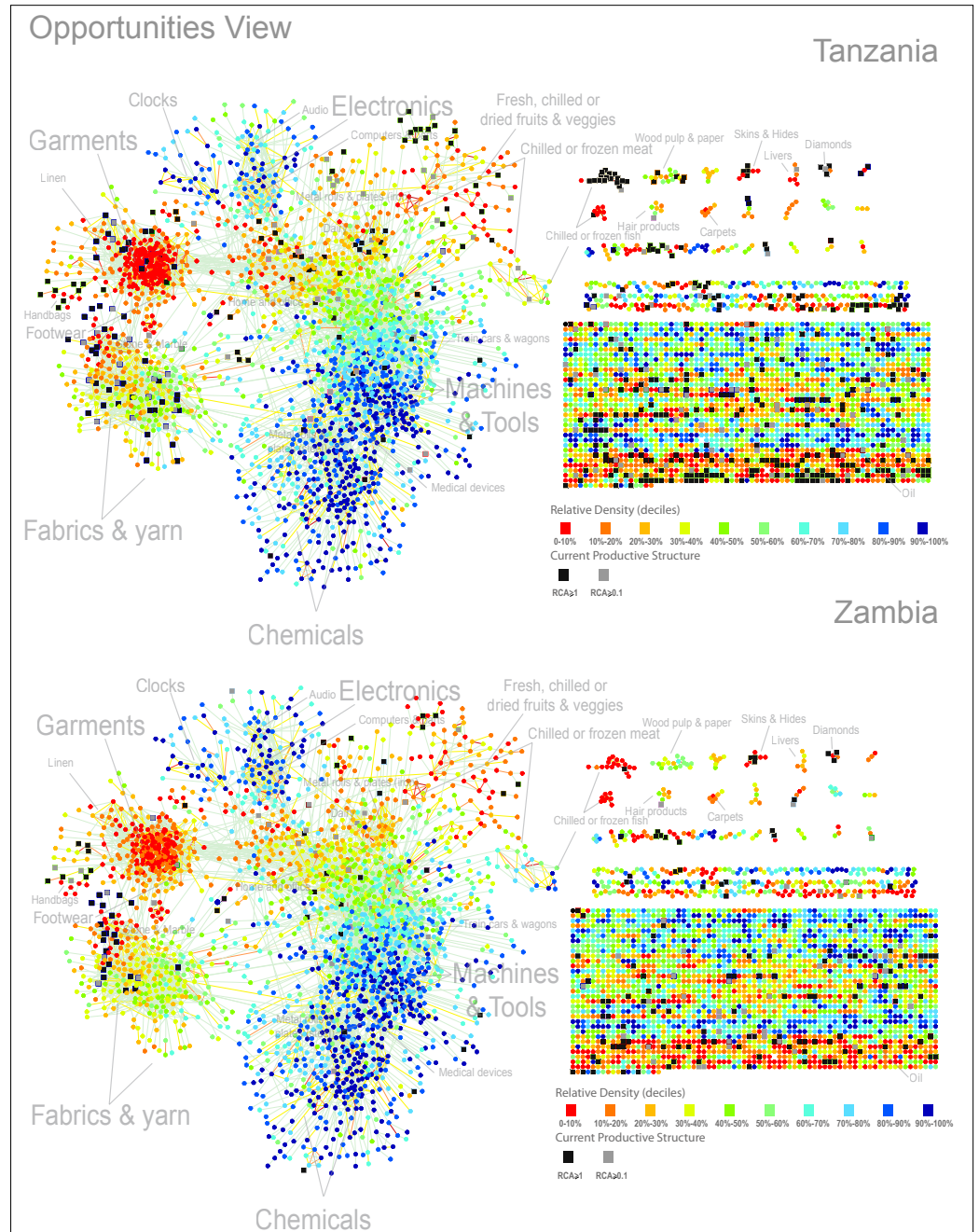
structure. Figure 10 shows this by plotting the sophistication of these products (measured in units of standard deviations from the world’s average) as a function of the *density* (ω) in the product space that each country has around each of these products. Density measures how far the productive structure of a country is from a particular product. The sophistication-density diagram for these five countries shows that these countries have higher densities — are closer — to products of relatively low sophistication. This can be seen from the negative slope of the distribution of points defined by the products not exported by these countries. This negative relationship indicates that density is

Figure 8 Mozambique's and Rwanda's Industrial Opportunities



Products not being exported by Mozambique and Rwanda are color-coded, in the respective figures, according to “density” deciles. Density is a measure of the similarity between a country’s productive structure and a product.

Figure 9 Tanzania' and Zambia's Industrial Opportunities



Products not being exported by Tanzania and Zambia are color-coded, in the respective figures, according to “density” deciles. Density is a measure of the similarity between a country’s productive structure and a product.

Figure 10 Relative “Distance” (Measured As Density) and Sophistication of all Products not Currently Being Exported by these Countries

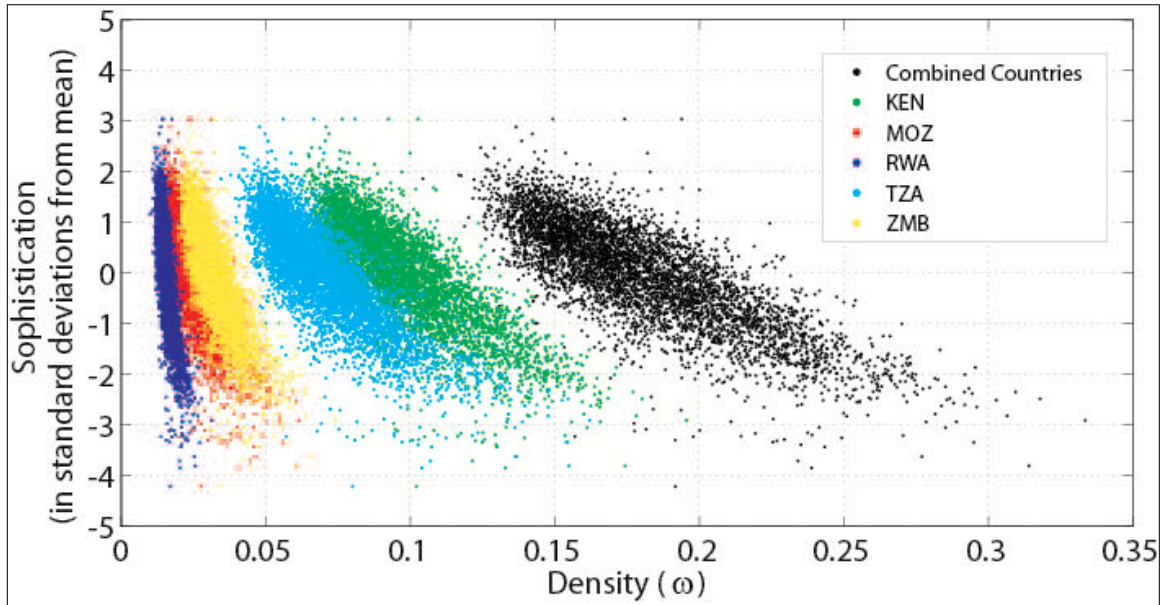


Figure 10 also shows a hypothetical economic block constructed by combining the productive structures of all five countries. Note that density is a measure that incorporates information about a country’s current productive structure, where sophistication is a characteristic of a product.

highest for products in which sophistication tends to be low.

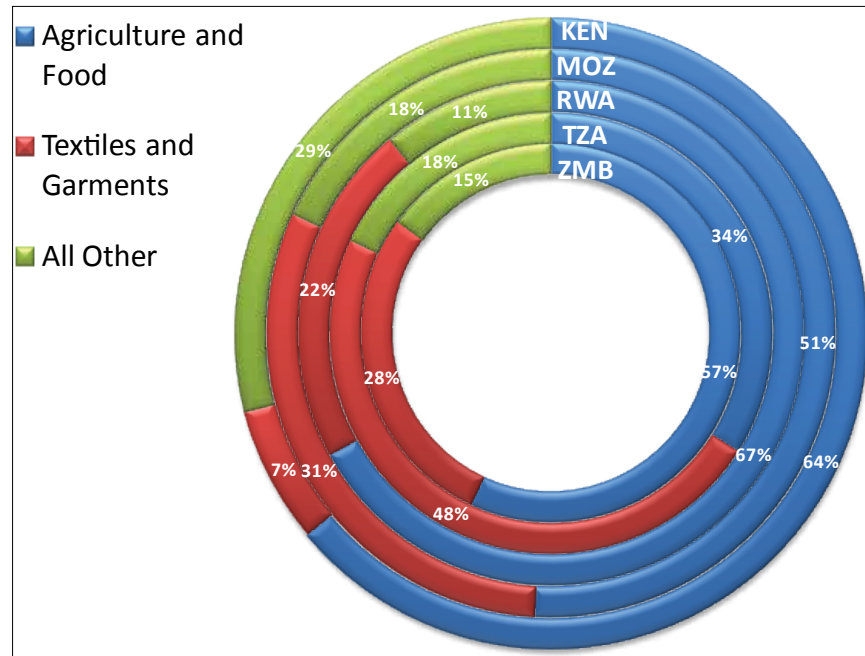
Figure 10 once again shows how Kenya stands out from the rest of the region. In absolute terms, Kenya is substantially closer than its geographical neighbors to most products, a reflection of its more diverse export structure. Figure 10 also shows that Tanzania appears relatively well-positioned in the product space compared to Rwanda, Mozambique, and Zambia, which have unsophisticated productive structures and are extremely far from all products.

Finally, Figure 10 shows the relationship between product density and sophistication for a hypothetical combination of these five economies. This integration was done considering a simple

“best case scenario” in which the RCA (Revealed Comparative Advantage) of the combined region is equal to the maximum RCA among the five countries for each product. Another scenario that could be considered would be to combine the exports of all of these countries and recalculate RCAs. For illustration purposes, however, here we concentrate on the scenario in which every product needs only to have an $RCA \geq 1$ in any of the studied countries to be considered part of the region’s combined productive structure.

The large increase in density that emerges after pulling together these five economies suggests that complementarities between their productive structures do exist, despite the large degree of

Figure 11 Decomposition of the Top 150 Products that Experienced the Largest Absolute Increase in Density after Regional Integration



similarity exhibited by their economies.⁴ This fact has compelling implications for regional integration and its benefits, even among countries with unsophisticated and similar economic profiles. The diagram, however, shows clearly that the products that are closest to these countries' combined productive structures are once again among the least sophisticated products. These results nonetheless suggest that the combination of these countries' productive structures could result in the potential enhancement of their current productive capacities, since larger product densities can be interpreted as deeper markets for all the inputs required in the production of these products. Moreover, in unpublished calculations, we find that for a large number of products, RCA coevolves with density, meaning that the level of RCA that a country can achieve depends on the number of

⁴ Data on the similarity on productive structures not shown.

related varieties that it is already exporting. In the case of these countries, this would suggest that the combination of these countries' productive structures could result not only in the creation of new export opportunities, but also in an increase in the competitiveness and export volume of existing industries.

Since increases in density are associated with increases in the probability of "discovering" a product, it is crucial to ascertain the set of products that see the largest increases in density after we combine these countries' productive structures. In the Appendix, Table 21 and Table 22 show the ranking of products that see the largest increase in density after we combine these countries' productive structures. Inspection of these tables reveals that products that see the largest increase in density are, once again, mostly agricultural. We quantified this by looking at the fraction of the top

150 products, ranked by their absolute increase in density, that belong, respectively, to the agricultural and foodstuffs category (HS-6⁵ code < 280000, which includes the three coarse categories, Animals and Animal Products, Vegetable Products, and Foodstuffs); Garments and Textiles (HS-6 code between 500000 and 680000, including the coarse categories Textiles, Footwear, and Headgear); and all other products.

⁵ The Harmonized Commodity Description and Coding System (HS) is the internationally standardized set of numbers for classifying traded products, developed and maintained by the World Customs Organization.

Figure 11 shows that, were these countries' economies to integrate, the largest increase in density would be expected in the agriculture and food sector, followed by textiles and garments. Spillovers in other categories would be relatively minor. For all countries except Rwanda, the agricultural sector represents more than half of the top 150 export opportunities that experience the greatest increase in density after integrating the economies. This shows that there are plenty of diversification opportunities for farmers in Southern and East Africa.

3 CONCLUSION

In this paper we used the product space to study the productive structures of Kenya, Mozambique, Rwanda, Tanzania, and Zambia. We found that the productive structures of these five countries are characterized by products of low sophistication that tend to be peripherally located in the product space, that is, goods that do not require a large number of inputs, or capabilities, to produce and that do not share a large number of required capabilities with many other products. Despite these limitations, we found plenty of diversification opportunities for these economies, located mostly in the agricultural sector. By doing an exercise in which we artificially remove national borders and look at the relative increases in density of products that these countries do not currently export, we found that most of the short-term benefits of economic integration for these Southern and East African nations are likely to be found in the agricultural and foodstuffs sectors, followed by textiles and garments.

The fact that many of these opportunities have not been seized points to a variety of problems that could be affecting the development of these five countries. Exporting agricultural goods requires the orchestration of a variety of economic and institutional capabilities that are probably lacking in the region. Agricultural exports do not only require proper land, climate, and sufficient knowledge of a crop's agronomy and life cycle, but also require the existence of critical pieces of infrastructure, such as cold storage chains, together with the electricity needed to power them and the roads needed to move the fresh produce quickly. Delays, which can be devastating for agricultural exports, can also emerge from poor flight frequency or irregular customs practices. Moreover, the need to comply with a variety of regulations and standards (e.g. sanitary and phytosanitary⁶) in order to bring products to most developed markets increases the difficulty of the coordination problem faced by

producers contemplating starting export activities in these countries.

The existence of these opportunities, together with the problems that are linked to them, points to the need to explore the institutional and policy considerations that could help catalyze the export of agricultural products and overcome simultaneously both infrastructural and regulatory problems. To help untie the invisible hand in Southern and East Africa, it will be crucial to think about policy solutions that could integrate infrastructure with institutions and incentives, as well as financial and insurance products that could help hedge the risks implied in the development of new agricultural products. In the optimistic scenario in which these problems could be resolved, the productive structure of these countries offers the opportunity for a diverse agricultural sector to help drive prosperity.

⁶ Animal and plant health and safety rules.

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5 APPENDIX

Table 1 Kenya's top 30 exports sorted in decreasing total exports volume
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	90240	Tea, black (fermented or partly) in packages > 3 kg	988	835	471,342	416,653	14.60%	0.180	-2.480
2	60310	Cut flowers and flower buds for bouquets, etc., fresh	114	217	133,478	350,677	12.29%	0.171	-1.860
3	271000	Oils petroleum, bituminous, distillates, except crude	4	3	214,092	331,394	11.61%	0.153	-1.243
4	620462	Womens, girls trousers and shorts, of cotton, not knit	6	28	17,204	145,831	5.11%	0.143	-1.859
5	90111	Coffee, not roasted, not decaffeinated	66	54	166,567	140,117	4.91%	0.196	-2.903
6	70820	Beans, shelled or unshelled, fresh or chilled	563	627	54,429	106,633	3.74%	0.171	-2.000
7	70810	Peas, shelled or unshelled, fresh or chilled	132	801	5,619	52,656	1.85%	0.149	-1.718
8	200820	Pineapples, otherwise prepared or preserved	209	219	39,613	51,903	1.82%	0.131	-1.986
9	160414	Tuna, skipjack, bonito, prepared/preserved, not mince	23	42	13,056	39,919	1.40%	0.149	-2.529
10	620342	Mens, boys trousers and shorts, of cotton, not knit	4	8	14,873	39,393	1.38%	0.145	-1.739
11	30420	Fish fillets, frozen	32	18	45,030	39,281	1.38%	0.157	-1.776
12	252329	Portland cement, other than white cement	18	27	17,412	39,157	1.37%	0.143	-1.349
13	60210	Cuttings and slips, not rooted	229	351	15,275	35,466	1.24%	0.159	-1.617
14	283620	Disodium carbonate	41	71	14,002	33,603	1.18%	0.100	-0.220
15	200559	Beans NES, prepared or preserved, not frozen/vinegar	230	441	9,786	29,255	1.03%	0.122	-1.011
16	70990	Vegetables, fresh or chilled NES	99	46	34,276	25,528	0.89%	0.165	-2.076
17	80440	Avocados, fresh or dried	108	89	12,992	23,353	0.82%	0.133	-0.665
18	30410	Fish fillet or meat, fresh or chilled, not liver, roe	1	28	420	21,673	0.76%	0.160	-2.063
19	721049	Flat rolled iron or non-alloy steel, coated with zinc, width >600mm, NES	0	5	825	18,996	0.67%	0.098	-0.073
20	80290	Nuts edible, fresh or dried, NES	33	85	4,090	18,180	0.64%	0.147	-2.022
21	210120	Tea and mate extracts, essences and concentrates	91	122	6,016	16,821	0.59%	0.115	-0.274
22	300490	Medicaments NES, in dosage	1	0	12,800	15,547	0.54%	0.097	0.496
23	610462	Womens, girls trousers and shorts, of cotton, knit	0	20	150	14,583	0.51%	0.146	-2.233
24	252922	Fluorspar, >97% calcium fluoride	215	169	11,867	13,669	0.48%	0.118	-1.546
25	200940	Pineapple juice, not fermented or spirited	118	104	9,774	13,462	0.47%	0.139	-1.430
26	410110	Bovine skins, whole, raw	48	56	5,924	13,386	0.47%	0.109	-1.772
27	130214	Pyrethrum, roots containing rotenone, extracts	1,485	1,647	11,608	13,258	0.46%	0.166	-2.640
28	720918	Flat-roll iron & na steel, cold-rolled, thickness less than 5mm	16	13	9,375	13,241	0.46%	0.114	-0.816
29	611020	Pullovers, cardigans etc of cotton, knit	0	3	17	12,455	0.44%	0.155	-2.245
30	121190	Plants and parts, pharmacy, perfume, insecticide use NES	13	38	3,719	12,451	0.44%	0.161	-2.209

Note that certain products, e.g. Rwandan prawns or Kenyan ivory, are listed as "export opportunities" in the appendices despite obvious geographical or political impediments to their production and export. The tables are meant to indicate relationships between capabilities, in order to be used as one tool among many in guiding production decisions.

NES = not elsewhere specified

Table 2 Kenya's top 30 exports sorted in decreasing order of RCA
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	130214	Pyrethrum, roots containing rotenone, extracts	1,485	1,647	11,608	13,258	0.46%	0.166	-2.640
2	410519	Sheep or lamb skin leather, tanned or retanned, NES	12	905	901	1,624	0.06%	0.121	-1.226
3	90240	Tea, black (fermented or partly) in packages > 3 kg	988	835	471,342	416,653	14.60%	0.180	-2.480
4	70810	Peas, shelled or unshelled, fresh or chilled	132	801	5,619	52,656	1.85%	0.149	-1.718
5	530490	Sisal and agave, processed but not spun, tow and waste	608	765	1,884	3,981	0.14%	0.126	-1.809
6	70820	Beans, shelled or unshelled, fresh or chilled	563	627	54,429	106,633	3.74%	0.171	-2.000
7	530410	Sisal and agave, raw	780	577	8,225	9,223	0.32%	0.162	-2.620
8	200559	Beans NES, prepared or preserved, not frozen/vinegar	230	441	9,786	29,255	1.03%	0.122	-1.011
9	60210	Cuttings and slips, not rooted	229	351	15,275	35,466	1.24%	0.159	-1.617
10	200820	Pineapples, otherwise prepared or preserved	209	219	39,613	51,903	1.82%	0.131	-1.986
11	60310	Cut flowers and flower buds for bouquets, etc., fresh	114	217	133,478	350,677	12.29%	0.171	-1.860
12	410612	Goat or kid skin leather, otherwise pre-tanned	126	190	4,308	9,487	0.33%	0.143	-2.761
13	252922	Fluorspar, >97% calcium fluoride	215	169	11,867	13,669	0.48%	0.118	-1.546
14	410310	Goat or kid hides and skins, raw, NES	49	166	525	2,672	0.09%	0.152	-2.175
15	150430	Marine mammal fats, oils, etc. not chemically modified	0	138	0	334	0.01%	0.109	-0.141
16	30377	Sea bass, frozen, whole	7	137	112	1,316	0.05%	0.123	-1.324
17	252230	Hydraulic lime	102	125	569	799	0.03%	0.122	-0.709
18	210120	Tea and mate extracts, essences and concentrates	91	122	6,016	16,821	0.59%	0.115	-0.274
19	271410	Bituminous or oil shale and tar sands	1	118	11	1,050	0.04%	0.114	-0.055
20	200940	Pineapple juice, not fermented or spirited	118	104	9,774	13,462	0.47%	0.139	-1.430
21	30569	Fish NES, salted or in brine, not dried or smoked	35	102	1,981	7,560	0.26%	0.150	-1.588
22	721041	Flat rolled iron or non-alloy steel, coat/zinc, corrugated, w >600m, NES	56	91	4,110	8,449	0.30%	0.121	-1.763
23	80440	Avocados, fresh or dried	108	89	12,992	23,353	0.82%	0.133	-0.665
24	80290	Nuts edible, fresh or dried, NES	33	85	4,090	18,180	0.64%	0.147	-2.022
25	210230	Baking powders, prepared	37	81	758	2,000	0.07%	0.118	-0.759
26	110720	Malt, roasted	38	73	1,011	1,910	0.07%	0.101	0.345
27	410512	Sheep or lamb skin leather, otherwise pre-tanned	20	73	1,828	5,262	0.18%	0.130	-2.232
28	283620	Disodium carbonate	41	71	14,002	33,603	1.18%	0.100	-0.220
29	410110	Bovine skins, whole, raw	48	56	5,924	13,386	0.47%	0.109	-1.772
30	90111	Coffee, not roasted, not decaffeinated	66	54	166,567	140,117	4.91%	0.196	-2.903

NES = not elsewhere specified

Table 3 Kenya's top 30 export opportunities (products currently with an RCA<0.1, sorted by density).
No sophistication filter was applied.
 (Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	71490	Arrowroot, salep, etc fresh or dried and sago pith	0.16	0.03	9.2	1.9	0.00%	0.166	-2.564
2	30232	Tuna (yellowfin) fresh or chilled, whole	0.00	0.00	0.0	0.0	0.00%	0.155	-2.082
3	180200	Cocoa shells, husks, skins and waste	0.00	0.00	0.0	0.0	0.00%	0.154	-3.339
4	80300	Bananas, including plantains, fresh or dried	0.07	0.01	114.3	18.6	0.00%	0.153	-1.842
5	30239	Tuna NES, fresh or chilled, whole	0.00	0.00	0.5	0.0	0.00%	0.152	-2.040
6	410520	Sheep or lamb skin leather, NES	0.02	0.01	7.6	3.0	0.00%	0.150	-1.446
7	110100	Wheat or meslin flour	5.65	0.03	2,768.1	19.2	0.00%	0.149	-1.696
8	30342	Tuna (yellowfin) frozen, whole	0.00	0.00	0.0	0.0	0.00%	0.148	-2.424
9	120799	Oil seeds and oleaginous fruits, NES	0.58	0.01	26.5	1.0	0.00%	0.148	-1.920
10	30219	Salmonidae, not trout or salmon, fresh or chilled whole	0.12	0.00	4.3	0.0	0.00%	0.147	-2.017
11	30375	Dogfish and other sharks, frozen, whole	0.00	0.00	0.0	0.0	0.00%	0.147	-2.097
12	410320	Reptile skins, raw	3.30	0.02	99.7	0.8	0.00%	0.147	-2.122
13	610891	Womens, girls bathrobe, dressing gowns, of knit cotton	0.00	0.01	0.0	0.9	0.00%	0.146	-1.975
14	630532	Sacks and bags of flexible materials knitted or crocheted	0.51	0.00	80.8	0.0	0.00%	0.145	-1.283
15	30329	Salmonidae, NES, frozen, whole	0.00	0.00	0.0	0.0	0.00%	0.145	-1.970
16	30549	Smoked fish and fillets other than herrings or salmon	0.00	0.00	0.0	0.0	0.00%	0.144	-1.911
17	520291	Garnetted stock of cotton	0.00	0.01	0.0	0.1	0.00%	0.144	-1.630
18	611010	Pullovers, cardigans etc of wool or hair, knit	0.02	0.01	30.0	9.5	0.00%	0.144	-1.326
19	620891	Womens, girls panties, bathrobes etc, cotton, not knit	0.01	0.03	1.1	5.1	0.00%	0.144	-1.589
20	30623	Shrimps and prawns, not frozen	7.21	0.05	848.6	7.4	0.00%	0.144	-1.879
21	120720	Cotton seeds	0.03	0.00	2.1	0.1	0.00%	0.143	-2.022
22	240210	Cigars, cheroots and cigarillos, containing tobacco	0.08	0.06	23.7	24.0	0.00%	0.143	-1.413
23	121292	Sugar cane	9.44	0.00	15.3	0.0	0.00%	0.142	-1.253
24	120710	Palm nuts and kernels	3.23	0.00	26.6	0.0	0.00%	0.142	-2.472
25	170390	Molasses, except cane molasses	0.05	0.10	2.1	5.4	0.00%	0.141	-0.640
26	80711	Melons and papayas, fresh	0.17	0.03	19.8	5.4	0.00%	0.141	-1.406
27	621210	Brassieres and parts thereof	0.00	0.00	0.0	0.5	0.00%	0.141	-1.280
28	610711	Mens, boys underpants or briefs, of cotton, knit	0.02	0.02	13.9	15.9	0.00%	0.141	-1.467
29	90300	Mate	2.13	0.00	38.2	0.0	0.00%	0.141	-2.464
30	410140	Equine hides and skins, raw	2.37	0.00	49.7	0.0	0.00%	0.141	-0.569

NES = not elsewhere specified

Table 4 Kenya's top 30 export opportunities: products currently with an RCA<0.1, sorted by density and sophistication larger than the world's average
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	230620	Linseed oil-cake and other solid residues	0.00	0.00	0.0	0.0	0.00%	0.125	0.271
2	470200	Chemical wood pulp, dissolving grades	0.00	0.00	0.0	1.7	0.00%	0.124	0.987
3	470100	Mechanical wood pulp	0.00	0.00	0.0	0.0	0.00%	0.123	0.176
4	310420	Potassium chloride, in packs >10 kg	0.01	0.00	9.4	0.0	0.00%	0.121	0.117
5	440392	Logs, beech (<i>Fagus</i> spp)	0.00	0.00	0.0	0.0	0.00%	0.120	0.226
6	940390	Furniture parts NES	0.06	0.02	94.2	38.2	0.00%	0.116	0.201
7	150100	Lard, other pig fat and poultry fat, rendered	0.05	0.00	2.7	0.0	0.00%	0.116	0.675
8	210330	Mustard flour or meal and prepared mustard	0.02	0.03	0.8	1.3	0.00%	0.115	0.260
9	360690	Pyrophoric alloys, firelighters, etc	0.00	0.00	0.0	0.0	0.00%	0.115	0.321
10	721491	Other bars and rods of iron or non-alloy steel, not further worked than forged, hot-rolled, hot-drawn or hot-extruded	0.00	0.00	0.0	0.1	0.00%	0.115	0.604
11	731413	Cloth, grill etc iron or steel, expand metal, iron or steel	0.00	0.00	0.0	0.0	0.00%	0.113	0.685
12	780411	Lead foil of a thickness <2mm	0.00	0.02	0.0	0.2	0.00%	0.113	0.458
13	281512	Sodium hydroxide (caustic soda) in aqueous solution	0.01	0.01	2.9	9.5	0.00%	0.113	0.058
14	330290	Mixed odoriferous substances—industrial use NES	0.01	0.00	5.0	5.2	0.00%	0.113	0.443
15	280120	Iodine	0.01	0.02	0.7	1.9	0.00%	0.112	0.055
16	280450	Boron, tellurium	0.07	0.00	0.4	0.0	0.00%	0.112	0.000
17	392520	Plastic doors and windows and frames thereof	0.04	0.00	10.0	0.1	0.00%	0.112	0.286
18	870540	Mobile concrete mixers	0.04	0.00	3.0	0.0	0.00%	0.112	0.059
19	731210	Stranded steel wire/cable/etc, no electric insulation	0.02	0.03	14.5	35.8	0.00%	0.112	0.166
20	841850	Refrigerator/freezer chests/cabinets/showcases	0.05	0.03	24.1	28.3	0.00%	0.112	0.005
21	841840	Freezers of the upright type, < 900 litre capacity	0.00	0.01	0.7	3.5	0.00%	0.111	0.086
22	310221	Ammonium sulphate, in packs >10 kg	0.78	0.05	124.9	14.4	0.00%	0.111	0.147
23	701110	Glass envelopes (bulbs and tubes) for electric lighting	0.06	0.00	5.2	0.4	0.00%	0.111	0.561
24	790112	Zinc, not alloyed, unwrought, <99% pure	0.28	0.10	120.7	42.2	0.00%	0.110	0.011
25	441840	Shuttering for concrete constructional work, of wood	0.39	0.00	20.2	0.0	0.00%	0.110	0.135
26	310240	Ammonium nitrate limestone etc mixes, pack >10 kg	0.08	0.03	16.8	9.9	0.00%	0.110	0.472
27	200120	Onions prepared or preserved by vinegar	0.08	0.00	0.4	0.0	0.00%	0.110	0.031
28	441600	Wooden casks, barrels, vats, tubs, etc.	0.01	0.00	0.9	0.1	0.00%	0.110	0.031
29	271114	Ethylene, propylene, butylene, butadiene, liquefied	0.00	0.00	0.0	0.2	0.00%	0.109	0.257
30	721550	Bars & rods, iron & na steel nesoi	0.06	0.00	8.8	0.0	0.00%	0.109	0.122

NES = not elsewhere specified

Table 5 Mozambique's top 30 exports sorted in decreasing total exports volume
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	760110	Aluminium unwrought, not alloyed	25.05	172.79	29,037.7	1,146,047.4	35.26%	0.026	-1.063
2	760200	Waste or scrap, aluminium	1.39	420.73	454.9	1,021,251.2	31.42%	0.040	-1.187
3	271600	Electrical energy	65.25	16.66	58,743.7	141,800.4	4.36%	0.035	-0.381
4	271111	Natural gas, liquefied	0.00	8.00	1.0	110,743.0	3.41%	0.046	-2.509
5	760120	Aluminium unwrought, alloyed	64.00	20.00	60,155.0	110,703.0	3.41%	0.027	-0.450
6	30613	Shrimps and prawns, frozen	127.91	34.07	101,335.4	102,134.5	3.14%	0.055	-2.934
7	271000	Oils petroleum, bituminous, distillates, except crude	0.79	0.80	10,873.3	93,370.3	2.87%	0.047	-1.243
8	240120	Tobacco, unmanufactured, stemmed or stripped	24.00	39.00	9,386.0	67,668.0	2.08%	0.051	-2.276
9	170111	Raw sugar, cane	29.35	14.06	10,347.7	28,701.0	0.88%	0.042	-2.820
10	440399	Logs, non-coniferous NES	88.79	27.15	16,627.0	26,975.7	0.83%	0.037	-2.446
11	240110	Tobacco, unmanufactured, not stemmed or stripped	24.00	42.00	3,434.0	26,560.0	0.82%	0.040	-2.434
12	520100	Cotton, not carded or combed	52.69	8.56	31,067.1	26,232.0	0.81%	0.031	-2.429
13	80131	Cashew nuts, in shell	991.00	169.00	22,149.0	25,042.0	0.77%	0.061	-3.803
14	840710	Aircraft engines, spark-ignition	0.08	41.40	5.5	19,385.2	0.60%	0.027	-1.180
15	260111	Iron ore, concentrate, not iron pyrites, unagglomerate	0.00	3.00	0.0	18,674.0	0.57%	0.039	-1.440
16	520300	Cotton, carded or combed	958.56	223.76	18,901.6	16,493.1	0.51%	0.040	-1.893
17	490700	Documents of title (bonds etc), unused stamps etc	0.00	34.00	3.0	16,470.0	0.51%	0.032	-1.162
18	270119	Coal except anthracite or bituminous, not agglomerate	12.00	5.00	3,562.0	14,469.0	0.45%	0.033	-1.297
19	440320	Logs, poles, coniferous not treated or painted	6.79	6.38	2,195.8	11,652.5	0.36%	0.037	-0.232
20	720449	Ferrous waste or scrap, NES	3.00	2.00	941.0	10,952.0	0.34%	0.043	-1.365
21	120740	Sesamum seeds	17.58	34.63	816.8	9,166.1	0.28%	0.055	-2.817
22	731100	Containers for compressed/liquefied gas, iron or steel	1.19	16.42	94.7	8,929.7	0.27%	0.033	-0.600
23	392310	Boxes, cases, crates etc. of plastic	0.00	4.00	3.0	8,380.0	0.26%	0.027	-0.248
24	871130	Motorcycles, spark ignition engine of 250-500 cc	0.01	16.88	0.5	7,263.9	0.22%	0.020	0.566
25	880240	Fixed wing aircraft, unladen weight > 15,000 kg	0.00	0.00	0.0	6,423.0	0.20%	0.033	-0.246
26	251611	Granite, crude or roughly trimmed	150.70	20.11	8,161.5	6,205.1	0.19%	0.035	-1.086
27	720429	Waste or scrap, of alloy steel, other than stainless	7.73	14.97	317.0	5,354.6	0.16%	0.044	-1.624
28	80132	Cashew nuts, shelled	194.59	11.38	13,749.0	4,830.8	0.15%	0.050	-2.936
29	440799	Lumber, non-coniferous NES	11.62	3.60	3,297.2	4,725.8	0.15%	0.039	-2.229
30	310560	Fertilizers containing phosphorus and potassium, <=10kg	0.00	60.00	0.0	4,599.0	0.14%	0.029	-0.292

NES = not elsewhere specified

Table 6 Mozambique's top 30 exports sorted in decreasing order of RCA
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	760200	Waste or scrap, aluminium	1.39	420.73	454.9	1,021,251.2	31.42%	0.040	-1.187
2	520300	Cotton, carded or combed	958.56	223.76	18,901.6	16,493.1	0.51%	0.040	-1.893
3	530390	Jute and other bast fibres, not spun, NES, tow, waste	0.00	202.56	0.0	992.0	0.03%	0.028	-1.656
4	760110	Aluminium unwrought, not alloyed	25.05	172.79	29,037.7	1,146,047.4	35.26%	0.026	-1.063
5	80131	Fruit dried nesoi, mixtures of nuts or dried fruit	991.00	169.00	22,149.0	25,042.0	0.77%	0.061	-3.803
6	120730	Castor oil seeds	0.00	127.57	0.0	301.4	0.01%	0.043	-2.458
7	560729	Twine NES, cordage, ropes and cables, of sisal	193.00	105.55	631.7	1,337.3	0.04%	0.037	-1.799
8	530490	Sisal and agave, processed but not spun, tow and waste	240.00	104.00	203.0	618.0	0.02%	0.035	-1.809
9	282630	Sodium hexafluoroaluminate (synthetic cryolite)	0.00	63.23	0.0	1,267.0	0.04%	0.026	0.127
10	310560	Fertilizers containing phosphorus and potassium, <=10kg	0.00	60.00	0.0	4,599.0	0.14%	0.029	-0.292
11	240110	Tobacco, unmanufactured, not stemmed or stripped	24.00	42.00	3,434.0	26,560.0	0.82%	0.040	-2.434
12	840710	Aircraft engines, spark-ignition	0.08	41.40	5.5	19,385.2	0.60%	0.027	-1.180
13	681130	Tubes, pipes etc of asbestos or cellulose fibre cement	0.00	41.00	0.0	416.0	0.01%	0.034	-0.331
14	240120	Tobacco, unmanufactured, stemmed or stripped	24.00	39.00	9,386.0	67,668.0	2.08%	0.051	-2.276
15	120740	Sesamum seeds	17.58	34.63	816.8	9,166.1	0.28%	0.055	-2.817
16	30613	Shrimps and prawns, frozen	127.91	34.07	101,335.4	102,134.5	3.14%	0.055	-2.934
17	490700	Documents of title (bonds etc), unused stamps etc	0.00	34.00	3.0	16,470.0	0.51%	0.032	-1.162
18	170310	Cane molasses	21.28	27.97	548.3	4,289.7	0.13%	0.037	-2.415
19	440399	Logs, non-coniferous NES	88.79	27.15	16,627.0	26,975.7	0.83%	0.037	-2.446
20	410320	Reptile skins, raw	4.00	25.00	35.0	1,181.0	0.04%	0.048	-2.122
21	120720	Cotton seeds	39.43	22.40	722.0	1,776.5	0.05%	0.051	-2.022
22	30219	Salmonidae, not trout or salmon, fresh or chilled whole	0.28	21.47	2.7	1,444.7	0.04%	0.048	-2.017
23	110220	Maize (corn) flour	0.00	21.05	0.0	1,096.3	0.03%	0.042	-1.451
24	230610	Cotton seed oil-cake and other solid residues	94.13	20.62	546.1	513.5	0.02%	0.042	-2.431
25	251611	Granite, crude or roughly trimmed	150.70	20.11	8,161.5	6,205.1	0.19%	0.035	-1.086
26	760120	Aluminium unwrought, alloyed	64.00	20.00	60,155.0	110,703.0	3.41%	0.027	-0.450
27	30559	Dried fish, other than cod, not smoked	31.79	17.10	1,810.7	3,991.2	0.12%	0.051	-2.498
28	871130	Motorcycles, spark ignition engine of 250-500 cc	0.01	16.88	0.5	7,263.9	0.22%	0.020	0.566
29	271600	Electrical energy	65.25	16.66	58,743.7	141,800.4	4.36%	0.035	-0.381
30	230230	Wheat bran, sharps, other residues	66.70	16.43	1,181.9	1,850.9	0.06%	0.040	-2.071

NES = not elsewhere specified

Table 7 Mozambique's top 30 export opportunities (products currently with an RCA<0.1, sorted by density). No sophistication filter was applied.
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	90111	Coffee, not roasted, not decaffeinated	0.00	0.00	0.0	0.0	0.00%	0.061	-2.903
2	180200	Cocoa shells, husks, skins and waste	0.00	0.00	0.0	0.0	0.00%	0.056	-3.339
3	71490	Arrowroot, salep, etc fresh or dried and sago pith	0.00	0.00	0.0	0.0	0.00%	0.051	-2.564
4	130214	Pyrethrum, roots containing rotenone, extracts	0.00	0.00	0.0	0.0	0.00%	0.050	-2.640
5	70820	Beans, shelled or unshelled, fresh or chilled	13.00	0.00	340.0	0.0	0.00%	0.049	-2.000
6	30410	Fish fillet or meat, fresh or chilled, not liver, roe	0.01	0.00	0.9	0.0	0.00%	0.048	-2.063
7	30329	Salmonidae, NES, frozen, whole	36.75	0.00	564.0	0.0	0.00%	0.047	-1.970
8	100640	Rice, broken	1.36	0.00	58.1	0.0	0.00%	0.047	-2.195
9	440420	Poles, piles etc, non-coniferous, pointed, not sawn	0.04	0.00	0.1	0.0	0.00%	0.047	-1.659
10	30490	Fish meat and mince, except liver, roe and fillets, frozen	0.79	0.00	72.0	1.1	0.00%	0.047	-1.980
11	120999	Seed, fruits and spores for sowing, NES	0.00	0.06	0.0	5.1	0.00%	0.047	-1.773
12	30110	Ornamental fish, live	0.00	0.00	0.0	1	0.00%	0.047	-2.540
13	260500	Cobalt ores and concentrates	0.00	0.00	0.0	0.0	0.00%	0.046	-3.619
14	90220	Tea, green (unfermented) in packages > 3 kg	0.00	0.00	0.0	0.0	0.00%	0.046	-2.780
15	440726	Wood sawn or chipped length, sliced etc, over 6mm thick	0.00	0.00	0.0	0.0	0.00%	0.046	-1.623
16	30420	Fish fillets, frozen	0.00	0.00	0.0	0.0	0.00%	0.046	-1.776
17	71320	Chickpeas, dried, shelled	0.00	0.00	0.0	0.0	0.00%	0.046	-2.260
18	91030	Turmeric (curcuma)	0.00	0.00	0.0	0.0	0.00%	0.046	-3.049
19	90190	Coffee husks and skins (nonfood)	0.00	0.00	0.0	0.0	0.00%	0.046	-2.416
20	410229	Sheep or lamb skins, raw, except pickled, no wool	0.00	0.00	0.0	0.0	0.00%	0.045	-1.829
21	70890	Legumes except peas and beans, fresh or chilled	0.00	0.00	0.0	0.0	0.00%	0.045	-1.973
22	520291	Garnetted stock of cotton	0.00	0.00	0.0	0.0	0.00%	0.045	-1.630
23	30232	Tuna (yellowfin) fresh or chilled, whole	0.00	0.00	0.0	0.0	0.00%	0.045	-2.082
24	261610	Silver ores and concentrates	0.00	0.00	0.0	0.0	0.00%	0.045	-1.716
25	260300	Copper ores and concentrates	0.00	0.00	0.0	0.0	0.00%	0.044	-2.290
26	30339	Flatfish except halibut, plaice or sole, frozen, whole	0.00	0.00	0.0	0.0	0.00%	0.044	-2.145
27	140420	Cotton linters	0.00	0.00	0.0	0.0	0.00%	0.044	-1.934
28	81090	Fruits, fresh NES	0.22	0.00	10.6	0.0	0.00%	0.044	-1.649
29	410140	Equine hides and skins, raw	0.00	0.00	0.0	0.0	0.00%	0.044	-0.569
30	30549	Smoked fish and fillets other than herrings or salmon	1.33	0.09	16.3	7.7	0.00%	0.044	-1.911

NES = not elsewhere specified

Table 8 Mozambique's top 30 export opportunities: products currently with an RCA<0.1, sorted by density and sophistication larger than the world's average
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	230620	Linseed oil-cake and other solid residues	0.28	0.00	1.3	0.0	0.00%	0.039	0.271
2	440392	Logs, Beech (Fagus spp)	0.05	0.00	2.1	0.0	0.00%	0.039	0.226
3	720441	Waste from the mechanical working of iron or steel NES	0.00	0.00	0.0	0.0	0.00%	0.037	0.343
4	470100	Mechanical wood pulp	0.00	0.00	0.0	0.0	0.00%	0.036	0.176
5	470200	Chemical wood pulp, dissolving grades	0.00	0.00	0.0	0.0	0.00%	0.036	0.987
6	252330	Aluminous cement	0.00	0.00	0.0	0.0	0.00%	0.035	0.138
7	210420	Homogenised composite food preparations	0.00	0.00	0.0	0.0	0.00%	0.035	0.114
8	340211	Anionic surface-active agents	0.00	0.00	0.1	0.0	0.00%	0.034	0.320
9	710900	Base metals or silver, clad with gold, semi-manufactured	0.00	0.00	0.0	0.0	0.00%	0.034	0.201
10	310420	Potassium chloride, in packs >10 kg	0.00	0.00	16.0	0.0	0.00%	0.034	0.117
11	721050	Flat rolled iron or non-alloy steel, coated chromium/oxides, w> 600 mm	0.00	0.00	0.0	0.0	0.00%	0.034	0.532
12	760310	Powders, aluminium, of non-lamellar structure	0.00	0.00	0.0	0.0	0.00%	0.033	0.596
13	260120	Roasted iron pyrites	0.00	0.00	0.0	0.0	0.00%	0.033	0.339
14	780411	Lead foil of a thickness <2mm	0.20	0.00	0.3	0.0	0.00%	0.033	0.458
15	170211	Lactose and lactose syrup, containing by weight 99% or more lactose	0.00	0.00	0.0	0.0	0.00%	0.033	0.896
16	441019	Particle board and similar board, of wood, whether or not agglomerated	0.00	0.00	0.0	0.0	0.00%	0.033	0.336
17	360690	Pyrophoric alloys, firelighters, etc	0.00	0.00	0.0	0.0	0.00%	0.032	0.321
18	310250	Sodium nitrate, in packs >10 kg	0.00	0.00	0.0	0.0	0.00%	0.032	0.135
19	760429	Bars, rods and other profiles, aluminium alloyed	0.00	0.00	0.0	1.8	0.00%	0.032	0.031
20	280120	Iodine	0.00	0.00	0.0	0.0	0.00%	0.032	0.055
21	440391	Logs, oak (Quercus spp)	0.00	0.00	0.0	0.0	0.00%	0.032	0.109
22	281512	Sodium hydroxide (caustic soda) in aqueous solution	0.00	0.00	0.0	0.0	0.00%	0.032	0.058
23	150100	Lard, other pig fat and poultry fat, rendered	0.00	0.00	0.0	0.0	0.00%	0.032	0.675
24	731413	Endless bands of iron or steel wire (excl. stainless), for machinery	0.00	0.00	0.0	0.0	0.00%	0.032	0.685
25	721491	Other bars and rods of iron or non-alloy steel, not further worked than forged, hot-rolled, hot-drawn or hot-extruded	0.00	0.00	1.0	0.0	0.00%	0.032	0.604
26	280450	Boron, tellurium	0.00	0.00	0.0	0.0	0.00%	0.032	0.000
27	210330	Mustard flour or meal and prepared mustard	0.00	0.00	0.0	0.0	0.00%	0.031	0.260
28	262050	Ash or residues containing mainly vanadium	0.00	0.00	0.0	0.0	0.00%	0.031	0.540
29	253020	Kieserite, epsomite (natural magnesium sulphates)	0.00	0.00	0.0	0.0	0.00%	0.031	3.046
30	760521	Wire, aluminium alloy, t > 7mm	0.00	0.00	0.0	0.0	0.00%	0.031	0.127

NES = not elsewhere specified

Table 9 Rwanda's top 30 exports sorted in decreasing total exports volume
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	90111	Coffee, not roasted, not decaffeinated	441.420	521.979	31,385.240	44,265.468	47.83%	0.031	-2.903
2	261590	Niobium, tantalum and vanadium ores and concentrates	3,732.507	6,318.243	9,909.444	21,613.942	23.35%	0.024	-2.509
3	260900	Tin ores and concentrates	2,289.474	4,808.945	3,373.093	8,464.817	9.15%	0.021	-3.384
4	90240	Tea, black (fermented or partly) in packages > 3 kg	139.879	473.359	1,872.195	7,663.409	8.28%	0.028	-2.480
5	261100	Tungsten ores and concentrates	1,548.912	2,181.792	333.257	2,094.625	2.26%	0.023	-2.543
6	310530	Diammonium phosphate, in packs >10 kg	0	76.155	0	1,848.254	2.00%	0.018	-0.860
7	60310	Cut flowers and flower buds for bouquets, etc., fresh	20.861	8.665	685.165	455.000	0.49%	0.027	-1.860
8	282590	Metal bases, oxides, hydroxides, peroxides, NES	0	50.383	0	363.905	0.39%	0.016	1.110
9	810390	Tantalum and articles thereof NES	0	156.221	0	319.853	0.35%	0.015	0.329
10	410310	Goat or kid hides and skins, raw, NES	45.374	539.217	13.654	281.198	0.30%	0.023	-2.175
11	262090	Ash or residues containing metals, metal compounds NES	0	22.817	0	258.032	0.28%	0.019	-0.168
12	60290	Live plants, including their roots, and mushroom spawn	8.669	5.854	204.213	250.265	0.27%	0.018	-1.083
13	551311	Woven plain >85% polyester+cotton, <170g/m2 unbl/blch	0.720	33.479	6.252	241.447	0.26%	0.017	-1.530
14	410612	Goat or kid skin leather, otherwise pre-tanned	0	121.332	0	196.526	0.21%	0.023	-2.761
15	220210	Beverage waters, sweetened or flavored	0	3.923	0	154.440	0.17%	0.019	-0.829
16	410210	Sheep or lamb skins, raw, wool on, except Persian etc	17.352	27.180	65.025	144.578	0.16%	0.021	-1.532
17	330499	Beauty, makeup and suntan preparations NES	0.241	1.277	12.488	140.127	0.15%	0.018	-0.296
18	460210	Basketwork, wickerwork products of vegetable material	3.114	10.798	19.149	120.901	0.13%	0.022	-2.607
19	410110	Bovine skins, whole, raw	7.550	15.021	26.005	117.158	0.13%	0.017	-1.772
20	252329	Portland cement, other than white cement	0	2.446	0	113.951	0.12%	0.020	-1.349
21	80300	Bananas, including plantains, fresh or dried	2.781	1.381	125.645	97.739	0.11%	0.026	-1.842
22	842940	Tamping machines and road rollers, self-propelled	0	6.924	0	95.229	0.10%	0.021	-0.367
23	293921	Quinine, salts, in bulk	107.079	231.961	51.600	87.942	0.10%	0.016	-1.315
24	410422	Bovine leather, otherwise pre-tanned except whole skin	0	3.598	0	87.033	0.09%	0.021	-1.433
25	442010	Statuettes and other ornaments of wood	10.560	15.266	53.490	86.392	0.09%	0.021	-3.045
26	90121	Coffee, roasted, not decaffeinated	0	3.986	0	86.290	0.09%	0.019	-0.532
27	843149	Parts of cranes, work-trucks, shovels, constr machine	0.166	0.617	9.839	84.000	0.09%	0.015	0.972
28	261790	Ores and concentrates NES	0	75.911	0	80.882	0.09%	0.020	-1.253
29	950691	Physical exercise, gymnasium and athletics equipment	0.096	1.875	1.917	76.978	0.08%	0.019	0.391
30	282810	Commercial and other calcium hypochlorite	0	52.639	0	69.011	0.07%	0.016	-1.293

NES = not elsewhere specified

Table 10 Rwanda's top 30 exports sorted in decreasing order of RCA
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	261590	Niobium, tantalum and vanadium ores and concentrates	3,732.507	6,318.243	9,909.444	21,613.942	23.35%	0.024	-2.509
2	260900	Tin ores and concentrates	2,289.474	4,808.945	3,373.093	8,464.817	9.15%	0.021	-3.384
3	261100	Tungsten ores and concentrates	1,548.912	2,181.792	333.257	2,094.625	2.26%	0.023	-2.543
4	410310	Goat or kid hides and skins, raw, NES	45.374	539.217	13.654	281.198	0.30%	0.023	-2.175
5	90111	Coffee, not roasted, not decaffeinated	441.420	521.979	31,385.240	44,265.468	47.83%	0.031	-2.903
6	90240	Tea, black (fermented or partly) in packages > 3 kg	139.879	473.359	1,872.195	7,663.409	8.28%	0.028	-2.480
7	293921	Quinine, salts, in bulk	107.079	231.961	51.600	87.942	0.10%	0.016	-1.315
8	110620	Flour or meal of sago, starchy roots or tubers	0	201.766	0	32.776	0.04%	0.023	-2.198
9	810390	Tantalum and articles thereof NES	0	156.221	0	319.853	0.35%	0.015	0.329
10	410612	Goat or kid skin leather, otherwise pre-tanned	0	121.332	0	196.526	0.21%	0.023	-2.761
11	310530	Diammonium phosphate, in packs >10 kg	0	76.155	0	1,848.254	2.00%	0.018	-0.860
12	261790	Ores and concentrates NES	0	75.911	0	80.882	0.09%	0.020	-1.253
13	282810	Commercial and other calcium hypochlorite	0	52.639	0	69.011	0.07%	0.016	-1.293
14	282590	Metal bases, oxides, hydroxides, peroxides, NES	0	50.383	0	363.905	0.39%	0.016	1.110
15	551311	Woven plain >85% polyester+cotton, <170g/m2 unbl/blch	0.720	33.479	6.252	241.447	0.26%	0.017	-1.530
16	410210	Sheep or lamb skins, raw, wool on, except Persian etc	17.352	27.180	65.025	144.578	0.16%	0.021	-1.532
17	262090	Ash or residues containing metals, metal compounds NES	0	22.817	0	258.032	0.28%	0.019	-0.168
18	710310	Precious, semi-precious stones unworked, partly worked	0.419	16.554	1.000	53.065	0.06%	0.022	-2.370
19	442010	Statuettes and other ornaments of wood	10.560	15.266	53.490	86.392	0.09%	0.021	-3.045
20	410110	Bovine skins, whole, raw	7.550	15.021	26.005	117.158	0.13%	0.017	-1.772
21	840120	Machinery and apparatus for isotopic separation and parts	0	11.983	0	18.403	0.02%	0.017	0.142
22	110819	Starches except wheat, maize, potato, manioc	0	11.588	0	9.400	0.01%	0.020	-1.483
23	320120	Wattle tanning extract	0	11.410	0	7.517	0.01%	0.023	-2.101
24	460210	Basketwork, wickerwork products of vegetable material	3.114	10.798	19.149	120.901	0.13%	0.022	-2.607
25	60310	Cut flowers and flower buds for bouquets, etc., fresh	20.861	8.665	685.165	455.000	0.49%	0.027	-1.860
26	410620	Goat or kid skin leather, NES	0	7.252	0	47.605	0.05%	0.023	-2.305
27	842940	Tamping machines and road rollers, self-propelled	0	6.924	0	95.229	0.10%	0.021	-0.367
28	721041	Flat rolled iron or non-alloy steel, coat/zinc, corrugated, w >600m, NES	0	6.211	0	18.667	0.02%	0.019	-1.763
29	60290	Live plants, including their roots, and mushroom spawn	8.669	5.854	204.213	250.265	0.27%	0.018	-1.083
30	830220	Castors of base metal	0	5.809	0	22.632	0.02%	0.015	0.439

NES = not elsewhere specified

Table 11 Rwanda's top 30 export opportunities (products currently with an RCA<0.1, sorted by density). No sophistication filter was applied.

(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	120792	Shea nuts (karite nuts)	0	0	0	0	0.00%	0.034	-0.997
2	140210	Kapok	0	0	0	0	0.00%	0.027	-1.732
3	180200	Cocoa shells, husks, skins, and waste	0	0	0	0	0.00%	0.027	-3.339
4	71490	Arrowroot, salep, etc fresh or dried and sago pith	0	0	0	0	0.00%	0.027	-2.564
5	120740	Sesamum seeds	0	0	0	0	0.00%	0.027	-2.817
6	121292	Sugar cane	0	0	0	0	0.00%	0.026	-1.253
7	80131	Cashew nuts, in shell	0	0	0	0	0.00%	0.026	-3.803
8	80450	Guavas, mangoes, and mangosteens, fresh or dried	0.250	0	1.113	0	0.00%	0.025	-2.467
9	260500	Cobalt ores and concentrates	0	0	0	0	0.00%	0.025	-3.619
10	80119	Coconuts, fresh	0	0	0	0	0.00%	0.025	-1.983
11	91030	Turmeric (curcuma)	0	0	0	0	0.00%	0.025	-3.049
12	90220	Tea, green (unfermented) in packages > 3 kg	0	0	0	0	0.00%	0.025	-2.780
13	91010	Ginger	0	0	0	0	0.00%	0.025	-2.802
14	30110	Ornamental fish, live	0	0	0	0	0.00%	0.025	-2.540
15	30611	Rock lobster and other sea-crawfish, frozen	0	0	0	0	0.00%	0.025	-2.345
16	71331	Urd, mung, black, or green gram beans dried shelled	0	0	0	0	0.00%	0.025	-2.344
17	71339	Beans dried, shelled, NES	0	0	0	0	0.00%	0.025	-2.374
18	151190	Palm oil or fractions simply refined	0	0	0	0	0.00%	0.024	-2.087
19	30612	Lobsters (Homarus) frozen	0	0	0	0	0.00%	0.024	-2.508
20	240120	Tobacco, unmanufactured, stemmed or stripped	0	0	0	0	0.00%	0.024	-2.276
21	30559	Dried fish, other than cod, not smoked	0	0	0	0	0.00%	0.024	-2.498
22	90411	Pepper of the genus Piper, whole	0	0	0	0	0.00%	0.024	-2.136
23	30613	Shrimps and prawns, frozen	0	0	0	0	0.00%	0.024	-2.934
24	121190	Plants and parts, pharmacy, perfume, insecticide use NES	0	0	0	0	0.00%	0.024	-2.209
25	80430	Pineapples, fresh or dried	0	0	0	0	0.00%	0.024	-2.252
26	71390	Leguminous vegetables dried, shelled	0	0	0	0	0.00%	0.024	-2.598
27	70820	Beans, shelled or unshelled, fresh or chilled	0	0	0	0	0.00%	0.024	-2.000
28	121299	Vegetable products NES for human consumption	0	0	0	0	0.00%	0.024	-2.395
29	10120	Asses, mules, and hinnies, live	0	0	0	0	0.00%	0.024	-2.269
30	30232	Tuna (yellowfin) fresh or chilled, whole	0	0	0	0	0.00%	0.024	-2.082

NES = not elsewhere specified

Table 12 Rwanda's top 30 export opportunities: products currently with an RCA<0.1, sorted by density and sophistication larger than the world's average
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	470200	Chemical wood pulp, dissolving grades	0	0	0	0	0.00%	0.020	0.987
2	470100	Mechanical wood pulp	0	0	0	0	0.00%	0.020	0.176
3	710900	Base metals or silver, clad with gold, semi-manufactured	0	0	0	0	0.00%	0.019	0.201
4	440392	Logs, beech (Fagus spp)	0	0	0	0	0.00%	0.019	0.226
5	340211	Anionic surface-active agents	0	0	0	0	0.00%	0.019	0.320
6	330690	Oral and dental hygiene preparations, except dentifrice	0	0	0	0	0.00%	0.019	0.016
7	230620	Linseed oil-cake and other solid residues	0	0	0	0	0.00%	0.018	0.271
8	721050	Flat rolled iron or non-alloy steel, coated chromium/oxides, w> 600 mm	0	0	0	0	0.00%	0.018	0.532
9	310420	Potassium chloride, in packs >10 kg	0	0	0	0	0.00%	0.018	0.117
10	710420	Synthetic precious, semi-precious stone, rough shaped	0	0	0	0	0.00%	0.018	0.563
11	482190	Paper labels of all kinds, not printed	0	0	0	0	0.00%	0.018	0.118
12	701110	Glass envelopes (bulbs and tubes) for electric lighting	0	0	0	0	0.00%	0.018	0.561
13	330790	Perfumery, cosmetic, or toilet preparations, NES	0	0	0	0	0.00%	0.018	0.069
14	210420	Homogenised composite food preparations	0	0	0	0	0.00%	0.018	0.114
15	252330	Aluminous cement	0	0	0	0	0.00%	0.018	0.138
16	850490	Parts of electrical transformers and inductors	0	0	0	0	0.00%	0.018	0.290
17	851840	Audio-frequency electric amplifiers	0	0	0	0	0.00%	0.018	0.044
18	711011	Platinum unwrought or in powder form	0	0	0	0	0.00%	0.018	1.024
19	960810	Ball point pens	0	0	0	0	0.00%	0.018	0.012
20	720441	Waste from the mechanical working of iron or steel NES	0	0	0	0	0.00%	0.018	0.343
21	440391	Logs, oak (Quercus spp)	0	0	0	0	0.00%	0.018	0.109
22	391731	Plastic tube, pipe or hose, flexible, mbp > 27.6 MPa	0	0	0	0	0.00%	0.018	0.127
23	940390	Furniture parts NES	0	0	0	0	0.00%	0.018	0.201
24	721070	Flat rolled iron or non-alloy steel, painted/plastic coated, width>600mm	0	0	0	0	0.00%	0.018	0.157
25	851910	Coin or disc-operated record-players	0	0	0	0	0.00%	0.018	0.108
26	400211	Styrene-butadiene rubber (SBR/XSBR) latex	0	0	0	0	0.00%	0.018	0.921
27	731812	Screws, wood, iron, or steel, except coach screws	0	0	0	0	0.00%	0.018	0.524
28	680410	Stones for milling, grinding, or pulping	0	0	0	0	0.00%	0.018	0.504
29	441019	Particle board and similar board, of wood, whether or not agglomerated	0	0	0	0	0.00%	0.018	0.336
30	253020	Kieserite, epsomite (natural magnesium sulphates)	0	0	0	0	0.00%	0.018	3.046

NES = not elsewhere specified

Table 13 Tanzania's top 30 exports sorted in decreasing total exports volume

(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	710812	Gold in unwrought forms non-monetary	19.473	63.600	74,146.556	465,258.414	22.31%	0.071	-2.073
2	30410	Fish fillet or meat, fresh or chilled, not liver, roe	436.734	239.780	96,804.085	136,719.924	6.56%	0.123	-2.063
3	710813	Gold, semi-manufactured forms, non-monetary	49.444	35.157	39,502.466	95,192.694	4.57%	0.108	-1.311
4	260300	Copper ores and concentrates	2.415	27.752	2,185.277	94,275.943	4.52%	0.119	-2.290
5	261690	Precious metal ores and concentrates except silver	0	355.004	0	90,838.979	4.36%	0.108	-1.519
6	90111	Coffee, not roasted, not decaffeinated	73.393	46.771	86,999.365	89,352.349	4.29%	0.162	-2.903
7	240120	Tobacco, unmanufactured, stemmed, or stripped	60.989	76.440	41,412.921	84,280.083	4.04%	0.135	-2.276
8	520100	Cotton, not carded or combed	37.465	39.795	37,874.562	78,252.209	3.75%	0.089	-2.429
9	30420	Fish fillets, frozen	67.190	42.130	44,735.772	67,518.478	3.24%	0.125	-1.776
10	271000	Oils petroleum, bituminous, distillates, except crude	0.380	0.852	8,987.884	64,032.609	3.07%	0.116	-1.243
11	80131	Cashew nuts, in shell	1,234.137	589.460	47,274.752	56,067.319	2.69%	0.155	-3.803
12	710310	Precious, semi-precious stones unworked, partly worked	464.712	654.792	18,508.376	47,284.979	2.27%	0.109	-2.370
13	520300	Cotton, carded or combed	166.600	855.640	5,632.822	40,454.759	1.94%	0.109	-1.893
14	740311	Copper cathodes and sections of cathodes unwrought	10.141	6.554	17,007.888	33,374.129	1.60%	0.090	-1.755
15	90240	Tea, black (fermented or partly) in packages > 3 kg	122.693	89.533	27,378.083	32,653.450	1.57%	0.155	-2.480
16	120740	Sesamum seeds	126.669	190.604	10,091.234	32,358.892	1.55%	0.148	-2.817
17	710210	Diamonds, unsorted	1.201	41.565	747.658	20,696.185	0.99%	0.101	-2.349
18	240130	Tobacco refuse	75.186	387.327	1,907.303	19,767.561	0.95%	0.123	-1.996
19	401511	Rubber surgical gloves	0	99.949	0	19,722.650	0.95%	0.085	-1.590
20	60310	Cut flowers and flower buds for bouquets, etc., fresh	21.707	14.314	11,886.204	16,932.153	0.81%	0.136	-1.860
21	90700	Cloves (whole fruit, cloves and stems)	527.588	626.175	10,231.191	16,353.198	0.78%	0.123	-2.037
22	30613	Shrimps and prawns, frozen	8.170	7.525	11,097.559	14,470.303	0.69%	0.139	-2.934
23	170111	Raw sugar, cane	13.489	10.348	8,153.496	13,551.803	0.65%	0.111	-2.820
24	180100	Cocoa beans, whole or broken, raw or roasted	6.826	14.351	2,365.567	13,201.016	0.63%	0.104	-3.843
25	440399	Logs, non-coniferous NES	4.974	19.062	1,597.191	12,149.712	0.58%	0.092	-2.446
26	71320	Chickpeas, dried, shelled	33.398	112.256	1,501.998	10,700.275	0.51%	0.131	-2.260
27	701092	Glass containers and bottles	28.763	8.752	5,492.255	9,906.864	0.48%	0.077	-0.763
28	30759	Octopus, frozen, dried, salted, or in brine	19.805	45.781	1,946.672	9,419.017	0.45%	0.117	-2.299
29	530410	Sisal and agave, raw	1,296.095	797.110	6,391.748	9,305.071	0.45%	0.140	-2.620
30	100590	Maize except seed corn	0.741	4.135	859.514	9,045.029	0.43%	0.105	-1.416

NES = not elsewhere specified

Table 14 Tanzania's top 30 exports sorted in decreasing order of RCA

(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	430190	Raw furskin pieces (e.g. heads, tails, paws)	962.863	1,301.696	420.751	1,130.724	0.05%	0.075	-0.585
2	520300	Cotton, carded or combed	166.599	855.640	5,632.822	40,454.759	1.94%	0.109	-1.893
3	530410	Sisal and agave, raw	1,296.094	797.110	6,391.748	9,305.071	0.45%	0.140	-2.620
4	710310	Precious, semi-precious stones unworked, partly worked	464.711	654.792	18,508.376	47,284.979	2.27%	0.109	-2.370
5	90700	Cloves (whole fruit, cloves, and stems)	527.587	626.175	10,231.191	16,353.198	0.78%	0.123	-2.037
6	80131	Cashew nuts, in shell	1,234.137	589.460	47,274.752	56,067.319	2.69%	0.155	-3.803
7	551634	Woven fabric <85% artificial staple+wool/hair, printed	0	568.640	0	905.844	0.04%	0.072	-1.072
8	530490	Sisal and agave, processed but not spun, tow and waste	705.185	414.540	1,022.461	1,575.902	0.08%	0.101	-1.809
9	120760	Safflower seeds	0.017	402.745	0.059	1,211.794	0.06%	0.092	-0.375
10	240130	Tobacco refuse	75.185	387.327	1,907.303	19,767.561	0.95%	0.123	-1.996
11	261690	Precious metal ores and concentrates except silver	0	355.004	0	90,838.979	4.36%	0.108	-1.519
12	560729	Twine NES, cordage, ropes, and cables, of sisal	192.967	297.709	1,082.944	2,419.428	0.12%	0.102	-1.799
13	230610	Cotton seed oil-cake and other solid residues	45.106	255.320	448.705	4,078.128	0.20%	0.116	-2.431
14	30410	Fish fillet or meat, fresh or chilled, not liver, roe	436.733	239.780	96,804.085	136,719.924	6.56%	0.123	-2.063
15	210130	Chicory and other coffee substitutes, roasted and product	93.077	237.811	696.616	3,703.794	0.18%	0.085	-0.929
16	120740	Sesamum seeds	126.668	190.604	10,091.234	32,358.892	1.55%	0.148	-2.817
17	50710	Ivory, unworked or simply prepared, powder and waste	392.327	174.738	292.139	261.247	0.01%	0.116	-1.617
18	560721	Binder or baler twine, of sisal or agave	194.540	172.119	1,852.945	2,357.286	0.11%	0.082	-1.889
19	152190	Beeswax, other insect waxes and spermaceti	323.515	167.443	2,228.906	2,196.159	0.11%	0.089	-1.652
20	320120	Wattle tanning extract	202.931	162.394	1,547.139	2,410.154	0.12%	0.113	-2.101
21	410310	Goat or kid hides and skins, raw, NES	54.123	147.445	271.531	1,732.191	0.08%	0.116	-2.175
22	630491	Textile furnishing articles NES, knit or crochet	82.706	142.935	1,276.556	8,570.336	0.41%	0.092	-1.627
23	120730	Castor oil seeds	107.470	126.501	253.395	191.742	0.01%	0.123	-2.458
24	110210	Rye flour	0.052	112.447	0.084	590.522	0.03%	0.081	0.277
25	71320	Chickpeas, dried, shelled	33.397	112.256	1,501.998	10,700.275	0.51%	0.131	-2.260
26	60210	Cuttings and slips, not rooted	77.321	108.093	2,411.615	7,970.199	0.38%	0.117	-1.617
27	71390	Leguminous vegetables dried, shelled	5.089	105.932	72.954	6,906.243	0.33%	0.144	-2.598
28	401511	Rubber surgical gloves	0	99.949	0	19,722.650	0.95%	0.085	-1.590
29	50900	Sponges, natural, of animal origin	0	98.545	0	342.117	0.02%	0.087	-1.299
30	71339	Beans dried, shelled, NES	2.661	91.552	72.073	6,515.029	0.31%	0.142	-2.374

NES = not elsewhere specified

Table 15 Tanzania's top 30 export opportunities (products currently with an RCA<0.1, sorted by density). No sophistication filter was applied.

(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	120792	Shea nuts (karite nuts)	0	0	0	0	0.00%	0.034	-0.997
2	140210	Kapok	0	0	0	0	0.00%	0.027	-1.732
3	180200	Cocoa shells, husks, skins, and waste	0	0	0	0	0.00%	0.027	-3.339
4	71490	Arrowroot, salep, etc fresh or dried and sago pith	0	0	0	0	0.00%	0.027	-2.564
5	120740	Sesamum seeds	0	0	0	0	0.00%	0.027	-2.817
6	121292	Sugar cane	0	0	0	0	0.00%	0.026	-1.253
7	80131	Cashew nuts, in shell	0	0	0	0	0.00%	0.026	-3.803
8	80450	Guavas, mangoes, and mangosteens, fresh or dried	0.251	0	1.114	0	0.00%	0.025	-2.467
9	260500	Cobalt ores and concentrates	0	0	0	0	0.00%	0.025	-3.619
10	80119	Coconuts, fresh	0	0	0	0	0.00%	0.025	-1.983
11	91030	Turmeric (curcuma)	0	0	0	0	0.00%	0.025	-3.049
12	90220	Tea, green (unfermented) in packages > 3 kg	0	0	0	0	0.00%	0.025	-2.780
13	91010	Ginger	0	0	0	0	0.00%	0.025	-2.802
14	30110	Ornamental fish, live	0	0	0	0	0.00%	0.025	-2.540
15	30611	Rock lobster and other sea crawfish, frozen	0	0	0	0	0.00%	0.025	-2.345
16	71331	Urd, mung, black, or green gram beans dried shelled	0	0	0	0	0.00%	0.025	-2.344
17	71339	Beans dried, shelled, NES	0	0	0	0	0.00%	0.025	-2.374
18	151190	Palm oil or fractions simply refined	0	0	0	0	0.00%	0.024	-2.087
19	30612	Lobsters (Homarus) frozen	0	0	0	0	0.00%	0.024	-2.508
20	240120	Tobacco, unmanufactured, stemmed, or stripped	0	0	0	0	0.00%	0.024	-2.276
21	30559	Dried fish, other than cod, not smoked	0	0	0	0	0.00%	0.024	-2.498
22	90411	Pepper of the genus Piper, whole	0	0	0	0	0.00%	0.024	-2.136
23	30613	Shrimps and prawns, frozen	0	0	0	0	0.00%	0.024	-2.934
24	121190	Plants and parts, pharmacy, perfume, insecticide use NES	0	0	0	0	0.00%	0.024	-2.209
25	80430	Pineapples, fresh or dried	0	0	0	0	0.00%	0.024	-2.252
26	71390	Leguminous vegetables dried, shelled	0	0	0	0	0.00%	0.024	-2.598
27	70820	Beans, shelled or unshelled, fresh or chilled	0	0	0	0	0.00%	0.024	-2.000
28	121299	Vegetable products NES for human consumption	0	0	0	0	0.00%	0.024	-2.395
29	10120	Asses, mules, and hinnies, live	0	0	0	0	0.00%	0.024	-2.269
30	30232	Tuna (yellowfin) fresh or chilled, whole	0.000	0.000	0.000	0.000	0.00%	0.024	-2.082

NES = not elsewhere specified

Table 16 Tanzania's top 30 export opportunities: products currently with an RCA<0.1, sorted by density and sophistication larger than the world's average

(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	110210	Rye flour	0.052	112.447	0.084	590.522	0.03%	0.081	0.277
2	320210	Synthetic organic tanning substances	0.868	22.387	30.578	1,886.482	0.09%	0.089	0.354
3	741991	Articles of copper, cast/moulded/stamped, nfw	0	10.571	0	726.667	0.03%	0.067	0.253
4	711049	Iridium, osmium, and ruthenium, semi-manufactured	0	8.668	0	51.065	0.00%	0.060	1.036
5	780420	Lead powders and flakes	0	7.782	0	24.023	0.00%	0.069	0.219
6	844140	Machines for moulding articles in pulp, paper, board	0	7.504	0	242.418	0.01%	0.057	1.005
7	721810	Ingots and other primary forms, stainless steel	0	5.764	0	300.225	0.01%	0.067	0.431
8	591110	Textile fabric for card clothing, technical use	0	5.681	0	340.306	0.02%	0.065	0.509
9	490600	Plans and drawings for architectural etc use	0	4.809	0	209.804	0.01%	0.072	0.540
10	900669	Photographic flashlight apparatus, NES	0.004	4.018	0.040	42.657	0.00%	0.058	0.426
11	722230	Stainless steel bar or rod NES	0	3.495	0	420.609	0.02%	0.064	0.045
12	900640	Instant print cameras	0	3.490	0	69.984	0.00%	0.052	0.770
13	330690	Oral and dental hygiene preparations, except dentifrice	0.298	3.388	14.192	455.448	0.02%	0.087	0.016
14	480910	Paper, carbon or similar width >36 cm	0.010	3.318	0.041	35.595	0.00%	0.068	0.083
15	480439	Paper, kraft, <150g/m2, uncoated, NES	0	3.302	0	639.005	0.03%	0.075	0.791
16	731412	Woven cloth, endless bands for machinery, of stainless steel	0	3.125	0	33.506	0.00%	0.078	0.505
17	470693	Semi-chemical pulps of other fibrous material	14.972	2.984	94.590	46.166	0.00%	0.073	0.119
18	130213	Hop extract	0	2.705	0	86.377	0.00%	0.061	0.241
19	844520	Textile yarn spinning machines	0	2.615	0	417.619	0.02%	0.052	0.757
20	722219	Bars and rods of stainless steel, only hot-rolled, only hot-drawn	0.006	2.439	0.198	178.810	0.01%	0.062	0.785
21	720925	Flat-rolled products of iron or non-alloy steel, not in coils, not further worked than cold-rolled	0	2.273	0	64.127	0.00%	0.080	0.439
22	481710	Envelopes of paper	0.234	2.016	18.588	340.523	0.02%	0.074	0.389
23	720917	Flat-rolled products of iron or non-alloy steel of a thickness of 0.5mm or more but not exceeding 5mm	0	2.002	0	2,964.375	0.14%	0.079	0.076
24	430180	Raw furskins of other animals, whole	15.655	1.931	154.634	65.846	0.00%	0.075	0.022
25	846299	Metal shaping presses, NES	0	1.863	0	525.306	0.03%	0.064	0.804
26	210330	Mustard flour or meal and prepared mustard	3.837	1.797	61.785	64.128	0.00%	0.086	0.260
27	283220	Sulphites of metals other than sodium	0	1.754	0	16.757	0.00%	0.073	0.326
28	470620	Flat-rolled products of iron or non-alloy steel, of a width of less than 5mm	0	1.531	0	24.290	0.00%	0.074	0.014
29	320490	Synthetic organic products used as luminophores	0.002	1.349	0.066	78.703	0.00%	0.063	0.438
30	230330	Brewing or distilling dregs and waste	0	1.211	0	50.290	0.00%	0.078	0.400

NES = not elsewhere specified

Table 17 Zambia's top 30 exports sorted in decreasing total exports volume

(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	740311	Copper cathodes and sections of cathodes unwrought	146.87	179.74	218,274.66	1,160,623.22	43.90%	0.045	-1.755
2	740919	Plate, sheet, strip, refined copper, flat, t > 0.15mm	623.48	754.25	49,565.74	188,332.05	7.12%	0.034	-0.100
3	740911	Plate, sheet, strip, refined copper, coil, t > 0.15mm	0.42	284.05	59.47	146,676.20	5.55%	0.025	0.497
4	810590	Cobalt, articles thereof, NES	1,665.33	1,018.91	44,084.37	146,580.67	5.54%	0.032	-0.909
5	520100	Cotton, not carded or combed	16.82	45.36	15,064.99	113,100.81	4.28%	0.043	-2.429
6	260300	Copper ores and concentrates	21.33	24.61	17,099.50	105,992.60	4.01%	0.056	-2.290
7	810510	Cobalt, unwrought, matte, waste or scrap, powders	494.40	230.00	86,488.35	101,319.13	3.83%	0.041	-1.330
8	240110	Tobacco, unmanufactured, not stemmed or stripped	41.76	134.43	9,192.46	68,413.66	2.59%	0.049	-2.434
9	740811	Wire of refined copper > 6mm wide	24.73	26.77	11,622.02	61,706.57	2.33%	0.035	-0.233
10	170111	Raw sugar, cane	38.29	26.76	20,508.14	44,446.28	1.68%	0.049	-2.820
11	261800	Granulated slag (slag sand) from iron, steel industry	0.00	409.21	0.00	36,992.24	1.40%	0.043	0.372
12	240120	Tobacco, unmanufactured, stemmed, or stripped	18.71	22.19	11,255.32	31,030.37	1.17%	0.064	-2.276
13	710310	Precious, semi-precious stones unworked, partly worked	408.77	272.34	14,425.79	24,939.10	0.94%	0.052	-2.370
14	420229	Handbags, of vulcanised fibre or paperboard	0.00	268.61	0.09	22,599.98	0.85%	0.037	-1.081
15	60310	Cut flowers and flower buds for bouquets, etc., fresh	35.16	11.26	17,059.02	16,895.66	0.64%	0.062	-1.860
16	740200	Unrefined copper, copper anodes, electrolytic refined	70.12	18.14	13,645.10	16,849.42	0.64%	0.051	-1.102
17	71090	Frozen vegetable mixtures, uncooked, boiled, or steamed	10.47	124.39	430.46	15,878.16	0.60%	0.043	-0.707
18	490700	Documents of title (bonds etc), unused stamps etc	11.48	39.77	1,576.59	15,686.61	0.59%	0.037	-1.162
19	854459	Electric conductors, 80-1,000 volts, no connectors	5.20	6.96	3,317.57	15,652.76	0.59%	0.035	-0.128
20	252329	Portland cement, other than white cement	16.47	11.03	6,556.89	14,680.22	0.56%	0.048	-1.349
21	440710	Lumber, coniferous (softwood) thickness < 6 mm	0.05	2.50	107.61	14,247.60	0.54%	0.044	-0.368
22	90111	Coffee, not roasted, not decaffeinated	8.70	5.73	9,134.40	13,884.54	0.53%	0.074	-2.903
23	210690	Food preparations NES	0.10	3.04	108.71	13,116.36	0.50%	0.039	-0.497
24	750210	Nickel unwrought, not alloyed	0.93	4.63	811.15	12,475.47	0.47%	0.048	-0.298
25	100510	Maize (corn) seed	24.16	21.95	3,143.33	9,733.24	0.37%	0.047	-0.692
26	740710	Bars, rods, and profiles of refined copper	20.06	21.93	1,930.38	8,816.52	0.33%	0.034	-0.156
27	520532	Cotton yarn >85% multiple uncomb 714-232 dtex, not retail	147.85	79.16	10,293.31	8,813.72	0.33%	0.046	-1.820
28	170199	Refined sugar, in solid form, NES, pure sucrose	0.59	3.89	322.43	8,539.35	0.32%	0.049	-1.025
29	740819	Wire of refined copper < 6mm wide	14.24	19.32	2,003.39	8,165.84	0.31%	0.038	-0.039
30	520512	Cotton yarn >85% single uncombed 714-232 dtex, not retail	64.70	16.55	11,222.85	7,680.89	0.29%	0.047	-1.761

NES = not elsewhere specified

Table 18 Zambia's top 30 exports sorted in decreasing order of RCA
(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	810590	Cobalt, articles thereof, NES	1,665.33	1,018.91	44,084.37	146,580.67	5.54%	0.032	-0.909
2	740919	Plate, sheet, strip, refined copper, flat, t > 0.15mm	623.48	754.25	49,565.74	188,332.05	7.12%	0.034	-0.100
3	261800	Granulated slag (slag sand) from iron, steel industry	0.00	409.21	0.00	36,992.24	1.40%	0.043	0.372
4	740911	Plate, sheet, strip, refined copper, coil, t > 0.15mm	0.42	284.05	59.47	146,676.20	5.55%	0.025	0.497
5	710310	Precious, semi-precious stones unworked, partly worked	408.77	272.34	14,425.79	24,939.10	0.94%	0.052	-2.370
6	420229	Handbags, of vulcanised fibre or paperboard	0.00	268.61	0.09	22,599.98	0.85%	0.037	-1.081
7	252230	Hydraulic lime	307.12	261.47	708.09	1,552.03	0.06%	0.041	-0.709
8	810510	Cobalt, unwrought, matte, waste or scrap, powders	494.40	230.00	86,488.35	101,319.13	3.83%	0.041	-1.330
9	520533	Cotton yarn >85% multiple uncomb 232-192 dtex, not retail	297.24	220.47	3,786.79	4,511.70	0.17%	0.046	-1.090
10	60240	Roses	567.38	179.86	7,224.76	7,482.75	0.28%	0.050	-1.296
11	740311	Copper cathodes and sections of cathodes unwrought	146.87	179.74	218,274.66	1,160,623.22	43.90%	0.045	-1.755
12	240110	Tobacco, unmanufactured, not stemmed or stripped	41.76	134.43	9,192.46	68,413.66	2.59%	0.049	-2.434
13	71090	Frozen vegetable mixtures, uncooked, boiled or steamed	10.47	124.39	430.46	15,878.16	0.60%	0.043	-0.707
14	420340	Clothing accessories NES, of leather or composition	0.00	122.34	0.01	3,767.95	0.14%	0.037	-1.020
15	70810	Peas, shelled or unshelled, fresh or chilled	87.07	120.42	1,540.02	7,338.21	0.28%	0.052	-1.718
16	120720	Cotton seeds	47.98	115.77	1,334.91	7,467.00	0.28%	0.062	-2.022
17	410320	Reptile skins, raw	52.45	87.19	655.74	3,348.78	0.13%	0.058	-2.122
18	520532	Cotton yarn >85% multiple uncomb 714-232 dtex, not retail	147.85	79.16	10,293.31	8,813.72	0.33%	0.046	-1.820
19	262030	Ash or residues containing mainly copper	8.56	48.18	119.63	2,744.05	0.10%	0.038	-0.981
20	240130	Tobacco refuse	8.84	47.81	198.61	3,094.24	0.12%	0.058	-1.996
21	520100	Cotton, not carded or combed	16.82	45.36	15,064.99	113,100.81	4.28%	0.043	-2.429
22	740120	Cement copper (precipitated copper)	10.65	42.38	27.14	450.09	0.02%	0.034	-1.146
23	490700	Documents of title (bonds etc), unused stamps etc	11.48	39.77	1,576.59	15,686.61	0.59%	0.037	-1.162
24	790310	Zinc dust	0.74	39.15	10.97	1,611.28	0.06%	0.040	-0.747
25	260500	Cobalt ores and concentrates	1,319.40	34.09	25,389.66	3,778.67	0.14%	0.066	-3.619
26	846019	Surface grinding machines accurate to 0.01mm NES	0.00	33.40	0.00	2,152.46	0.08%	0.028	0.081
27	310229	Ammonium sulphate-nitrate mix, double salts, pack>10k	9.03	28.93	65.30	1,108.63	0.04%	0.045	-0.702
28	410729	Reptile leather, other than vegetable pre-tanned	12.79	27.63	182.67	1,339.72	0.05%	0.037	-1.863
29	740811	Wire of refined copper > 6mm wide	24.73	26.77	11,622.02	61,706.57	2.33%	0.035	-0.233
30	170111	Raw sugar, cane	38.29	26.76	20,508.14	44,446.28	1.68%	0.049	-2.820

NES = not elsewhere specified

Table 19 Zambia's top 30 export opportunities: products currently with an RCA<0.1, sorted by density and sophistication larger than the world's average.

(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	120740	Sesamum seeds	0.00	0.00	0.00	0.00	0.00%	0.064	-2.817
2	80131	Cashew nuts, in shell	0.01	0.00	0.28	0.00	0.00%	0.061	-3.803
3	30611	Rock lobster and other sea-crawfish, frozen	0.00	0.00	0.00	0.00	0.00%	0.059	-2.345
4	260600	Aluminium ores and concentrates	0.24	0.00	29.64	0.00	0.00%	0.059	-2.092
5	30612	Lobsters (Homarus) frozen	0.00	0.00	0.00	0.00	0.00%	0.058	-2.508
6	130214	Pyrethrum, roots containing rotenone, extracts	0.00	0.00	0.00	0.00	0.00%	0.058	-2.640
7	180200	Cocoa shells, husks, skins, and waste	0.00	0.00	0.00	0.00	0.00%	0.058	-3.339
8	80450	Guavas, mangoes, and mangosteens, fresh or dried	0.09	0.02	5.69	5.53	0.00%	0.057	-2.467
9	30613	Shrimps and prawns, frozen	0.00	0.00	0.00	1.25	0.00%	0.056	-2.934
10	91030	Turmeric (curcuma)	0.00	0.00	0.00	0.00	0.00%	0.056	-3.049
11	120792	Shea nuts (karite nuts)	0.00	0.00	0.00	0.00	0.00%	0.055	-0.997
12	271000	Oils petroleum, bituminous, distillates, except crude	0.06	0.07	1,311.85	6,809.32	0.26%	0.055	-1.243
13	10420	Goats, live	0.01	0.00	0.08	0.10	0.00%	0.055	-2.099
14	261610	Silver ores and concentrates	0.20	0.00	7.24	0.00	0.00%	0.054	-1.716
15	81090	Fruits, fresh NES	1.89	0.10	137.96	23.72	0.00%	0.054	-1.649
16	121190	Plants and parts, pharmacy, perfume, insecticide use NES	0.00	0.00	0.00	0.00	0.00%	0.054	-2.209
17	90220	Tea, green (unfermented) in packages > 3 kg	0.93	0.02	26.46	1.22	0.00%	0.054	-2.780
18	71490	Arrowroot, salep, etc fresh or dried and sago pith	0.00	0.02	0.00	0.98	0.00%	0.054	-2.564
19	90411	Pepper of the genus Piper, whole	0.48	0.00	57.75	0.00	0.00%	0.054	-2.136
20	80590	Citrus fruits, fresh or dried, NES	0.16	0.01	0.98	0.06	0.00%	0.053	-1.674
21	151311	Coconut (copra) oil crude	0.00	0.00	0.00	0.00	0.00%	0.053	-3.205
22	80132	Cashew nuts, shelled	0.00	0.00	0.00	0.00	0.00%	0.053	-2.936
23	261000	Chromium ores and concentrates	0.00	0.00	0.00	0.00	0.00%	0.053	-1.881
24	70310	Onions and shallots, fresh or chilled	0.05	0.00	4.91	0.16	0.00%	0.053	-1.699
25	71332	Beans, small red (Adzuki) dried, shelled	0.00	0.00	0.00	0.04	0.00%	0.052	-2.345
26	30621	Rock lobster and other sea-crawfish not frozen	0.00	0.00	0.00	0.00	0.00%	0.052	-2.239
27	410520	Sheep or lamb skin leather, NES	0.00	0.00	0.00	0.00	0.00%	0.052	-1.446
28	30379	Fish NES, frozen, whole	0.00	0.00	0.00	0.16	0.00%	0.052	-2.111
29	71310	Peas dried, shelled	0.00	0.00	0.00	0.01	0.00%	0.052	-1.892
30	261100	Tungsten ores and concentrates	0.00	0.00	0.00	0.00	0.00%	0.052	-2.543

NES = not elsewhere specified

Table 20 Zambia's top 30 export opportunities: products currently with an RCA<0.1, sorted by density and sophistication larger than the world's average.

(Exports in thousands of U.S. dollars, sophistication in standard deviations of world's average. See text for explanation for the variables density and sophistication)

RANK	Product Code (HS-6)	Product Name	RCA 2000	RCA 2005	Exports 2000	Exports 2005	Export Share 2005	Density	Sophistication
1	230620	Linseed oil-cake and other solid residues	0.00	0.00	0.00	0.00	0.00%	0.048	0.271
2	440392	Logs, beech (Fagus spp)	0.00	0.00	0.00	0.00	0.00%	0.044	0.226
3	210420	Homogenised composite food preparations	0.69	0.07	12.84	4.94	0.00%	0.043	0.114
4	720441	Waste from the mechanical working of iron or steel NES	0.04	0.01	3.06	3.14	0.00%	0.043	0.343
5	310420	Potassium chloride, in packs >10 kg	0.00	0.00	0.00	0.00	0.00%	0.042	0.117
6	252330	Aluminous cement	0.54	0.09	12.70	6.01	0.00%	0.042	0.138
7	470200	Chemical wood pulp, dissolving grades	0.00	0.00	0.00	0.00	0.00%	0.041	0.987
8	710900	Base metals or silver, clad with gold, semi-manufactured	349.87	0.00	1,455.64	0.00	0.00%	0.041	0.201
9	721050	Flat rolled iron or non-alloy steel, coated chromium/oxides, w> 600 mm	0.00	0.00	0.00	0.00	0.00%	0.041	0.532
10	260120	Roasted iron pyrites	0.00	0.00	0.00	0.00	0.00%	0.041	0.339
11	810600	Bismuth, articles thereof, waste or scrap	0.00	0.00	0.00	0.00	0.00%	0.040	0.151
12	320210	Synthetic organic tanning substances	0.45	0.00	14.09	0.00	0.26%	0.039	0.354
13	731413	Endless bands of iron or steel wire (excl. stainless), for machinery	0.00	0.00	0.00	0.00	0.00%	0.039	0.685
14	740313	Billets, copper, unwrought	0.00	0.01	0.00	1.76	0.00%	0.039	0.875
15	721491	Other bars and rods of iron or non-alloy steel, not further worked than forged, hot-rolled, hot-drawn or hot-extruded	0.00	0.00	0.00	0.06	0.00%	0.039	0.604
16	310240	Ammonium nitrate limestone etc mixes, pack >10 kg	0.00	0.01	0.00	3.30	0.00%	0.039	0.472
17	360690	Pyrophoric alloys, firelighters, etc	0.00	0.00	0.00	0.00	0.00%	0.039	0.321
18	720712	Semi-finished bars, iron or non-alloy steel <0.25%C, rectangular, NES	0.00	0.00	0.00	0.00	0.00%	0.039	0.358
19	482190	Paper labels of all kinds, not printed	0.00	0.06	0.06	11.32	0.00%	0.038	0.118
20	281830	Aluminium hydroxide	0.00	0.00	0.00	0.00	0.00%	0.038	0.001
21	780411	Lead foil of a thickness <2mm	0.00	0.00	0.00	0.00	0.00%	0.038	0.458
22	210220	Yeasts, inactive, dead unicellular organisms NES	0.00	0.00	0.00	0.02	0.00%	0.038	0.440
23	760429	Bars, rods and other profiles, aluminium alloyed	0.00	0.00	0.00	3.13	0.00%	0.038	0.032
24	210330	Mustard flour or meal and prepared mustard	0.00	0.00	0.00	0.00	0.00%	0.038	0.260
25	310250	Sodium nitrate, in packs >10 kg	0.07	0.00	0.61	0.00	0.00%	0.038	0.135
26	281512	Sodium hydroxide (caustic soda) in aqueous solution	0.00	0.00	0.00	0.00	0.00%	0.038	0.058
27	310221	Ammonium sulphate, in packs >10 kg	0.00	0.00	0.00	0.00	0.00%	0.038	0.147
28	150100	Lard, other pig fat and poultry fat, rendered	0.00	0.00	0.00	0.00	0.00%	0.038	0.675
29	720915	Flat rolled iron or stool not in coils	0.00	0.00	0.00	0.00	0.00%	0.038	0.437
30	730719	Pipe fittings of malleable iron or steel, cast	0.00	0.01	0.00	4.96	0.00%	0.038	0.462

NES = not elsewhere specified

Table 21 Ranking of products not currently being significantly exported (rca<0.5) that see the largest increases in density after comparing with the productive structure of the combined region

Kenya		Mozambique		Rwanda	
HS-6 code	Product Name	HS-6 code	Product Name	HS-6 code	Product Name
260500	Cobalt ores and concentrates	130214	Pyrethrum, roots containing rotenone, extracts	130214	Pyrethrum, roots containing rotenone, extracts
846911	N/A	260500	Cobalt ores and concentrates	260500	Cobalt ores and concentrates
180100	Cocoa beans, whole or broken, raw or roasted	320120	Wattle tanning extract	440349	N/A
440349	N/A	90111	Coffee, not roasted, not decaffeinated	170111	Raw sugar, cane
710210	Diamonds, unsorted	180100	Cocoa beans, whole or broken, raw or roasted	180100	Cocoa beans, whole or broken, raw or roasted
230650	Coconut or copra oil-cake and other solid residues	846911	N/A	80131	N/A
440729	N/A	260900	Tin ores and concentrates	530310	Jute and other textile bast fibres, raw or retted
90300	Mate	60310	Cut flowers and flower buds for bouquets, etc., fresh	846911	N/A
260300	Copper ores and concentrates	442010	Statuettes and other ornaments of wood	120740	Sesamum seeds
630510	Sacks and bags, packing, of jute or other bast fibres	410612	Goat or kid skin leather, otherwise pre-tanned	440724	N/A
180200	Cocoa shells, husks, skins, and waste	71320	Chickpeas, dried, shelled	151311	Coconut (copra) oil crude
120720	Cotton seeds	90220	Tea, green (unfermented) in packages > 3 kg	240110	Tobacco, unmanufactured, not stemmed or stripped
91020	Saffron	91030	Turmeric (curcuma)	30611	Rock-lobster and other sea-crawfish, frozen
100820	Millet	70820	Beans, shelled or unshelled, fresh or chilled	71390	Leguminous vegetables dried, shelled
230610	Cotton seed oil-cake and other solid residues	410512	Sheep or lamb skin leather, otherwise pre-tanned	71339	Beans dried, shelled, NES
140420	Cotton linters	151110	Palm oil, crude	30612	Lobsters (Homarus)-frozen
440399	Logs, non-coniferous NES	261100	Tungsten ores and concentrates	530410	Sisal and agave, raw
270900	Petroleum oils, oils from bituminous minerals, crude	80450	Guavas, mangoes, and mangosteens, fresh or dried	10420	Goats, live
251020	Natural calcium phosphates, ground	271490	Bitumen and asphalt, asphaltites and asphaltic rocks	520100	Cotton, not carded or combed
280522	Strontium and barium	160414	Tuna, skipjack, bonito, prepared/preserved, not mince	240120	Tobacco, unmanufactured, stemmed or stripped
710812	Gold in unwrought forms non-monetary	30110	Ornamental fish, live	71331	Urd, mung, black, or green gram beans dried shelled
50790	Whalebone, horns, etc unworked or simply prepared NES	70990	Vegetables, fresh or chilled NES	440729	N/A
50710	Ivory, unworked or simply prepared, powder and waste	90700	Cloves (whole fruit, cloves and stems)	71320	Chickpeas, dried, shelled
740311	Copper cathodes and sections of cathodes unwrought	630510	Sacks and bags, packing, of jute or other bast fibres	170310	Cane molasses
441850	Shingles and shakes, of wood	90190	N/A	91030	Turmeric (curcuma)
970500	Collections and collectors pieces	410229	Sheep or lamb skins, raw, except pickled, no wool	90220	Tea, green (unfermented) in packages > 3 kg
151229	Cotton-seed or fractions simply refined	60210	Cuttings and slips, not rooted	70820	Beans, shelled or unshelled, fresh or chilled

		Tanzania			Zambia
	HS-6 code	Product Name	HS-6 code	Product Name	
	151311	Coconut (copra) oil crude	130214	Pyrethrum, roots containing rotenone, extracts	
	151110	Palm oil, crude	440349	N/A	
	271490	Bitumen and asphalt, asphaltites and asphaltic rocks	180100	Cocoa beans, whole or broken, raw or roasted	
	80430	Pineapples, fresh or dried	80131	N/A	
	160414	Tuna, skipjack, bonito, prepared/preserved, not mince	846911	N/A	
	440724	N/A	530310	Jute and other textile bast fibres, raw or retted	
	80450	Guavas, mangoes and mangosteens, fresh or dried	260900	Tin ores and concentrates	
	80720	Papaws (papayas), fresh	151311	Coconut (copra) oil crude	
	720430	Waste or scrap, of tinned iron or steel	120740	Sesamum seeds	
	200820	Pineapples, otherwise prepared or preserved	442010	Statuettes and other ornaments of wood	
	610343	Mens, boys trousers, shorts, of synthetic fibres, knit	30611	Rock-lobster and other sea-crawfish, frozen	
	610462	Womens, girls trousers and shorts, of cotton, knit	530410	Sisal and agave, raw	
	121299	Vegetable products NES for human consumption	440724	N/A	
	611020	Pullovers, cardigans etc of cotton, knit	71390	Leguminous vegetables dried, shelled	
	610610	Womens, girls blouses and shirts, of cotton, knit	261590	Niobium, tantalum and vanadium ores and concentrates	
	81090	Fruits, fresh NES	10420	Goats, live	
	610220	Womens, girls overcoats, etc, of cotton, knit	30612	Lobsters (Homarus)-frozen	
	611130	Babies garments, accessories of synthetic fibres, knit	410612	Goat or kid skin leather, otherwise pre-tanned	
	611420	Garments NES, of cotton, knit	90220	Tea, green (unfermented) in packages > 3 kg	
	610452	Womens, girls skirts, of cotton, knit	440729	N/A	
	510111	Greasy shorn wool, not carded or combed	151110	Palm oil, crude	
	71490	Arrowroot, salep, etc fresh or dried and sago pith	91030	Turmeric (curcuma)	
	610463	Womens, girls trousers, shorts, synthetic fibres, knit	230650	Coconut or copra oil-cake and other solid residues	
	620462	Womens, girls trousers and shorts, of cotton, not knit	90700	Cloves (whole fruit, cloves and stems)	
	270900	Petroleum oils, oils from bituminous minerals, crude	30621	Rock-lobster and other sea-crawfish not frozen	
	220710	Undenatured ethyl alcohol > 80% by volume	160414	Tuna, skipjack, bonito, prepared/preserved, not mince	
	620791	Mens, boys dressing gowns, etc cotton, not knit	30410	Fish fillet or meat, fresh or chilled, not liver, roe	

Table 21 Ranking of products not currently being significantly exported (rca<0.5) that see the largest increases in density after comparing with the productive structure of the combined region (continued)

Kenya		Mozambique		Rwanda	
HS-6 code	Product Name	HS-6 code	Product Name	HS-6 code	Product Name
260200	Manganese ores, concentrates, iron ores >20% Manganese	80430	Pineapples, fresh or dried	30613	Shrimps and prawns, frozen
410320	Reptile skins, raw	90830	Cardamoms	151110	Palm oil, crude
91010	Ginger	30410	Fish fillet or meat, fresh or chilled, not liver, roe	30559	Dried fish, other than cod, not smoked
750511	Bars, rods and profiles, nickel, not alloyed	140410	Raw vegetable materials for dyeing or tanning	80450	Guavas, mangoes and mangosteens, fresh or dried
170191	Refined sugar, in solid form, flavored or colored	90112	Coffee, not roasted, decaffeinated	271490	Bitumen and asphalt, asphaltites and asphaltic rocks
110100	Wheat or meslin flour	640220	Footwear, rubber, plastic, straps fix to sole by plug	30110	Ornamental fish, live
440799	Lumber, non-coniferous NES	71490	Arrowroot, salep, etc fresh or dried and sago pith	270900	Petroleum oils, oils from bituminous minerals, crude
120210	Ground-nuts in shell not roasted or cooked	81090	Fruits, fresh NES	30621	Rock lobster and other sea crawfish not frozen
71490	Arrowroot, salep, etc fresh or dried and sago pith	121190	Plants and parts, pharmacy, perfume, insecticide use NES	70990	Vegetables, fresh or chilled NES
80119	N/A	270900	Petroleum oils, oils from bituminous minerals, crude	160414	Tuna, skipjack, bonito, prepared/preserved, not mince
261210	Uranium ores and concentrates	60390	Cut flowers and flower buds for bouquets, dried, etc.	71332	Beans, small red (Adzuki) dried, shelled
230230	Wheat bran, sharps, other residues	410310	Goat or kid hides and skins, raw, NES	30410	Fish fillet or meat, fresh or chilled, not liver, roe
271111	Natural gas, liquefied	121299	Vegetable products NES for human consumption	230650	Coconut or copra oil-cake and other solid residues
90920	Coriander seeds	80720	Papaws (papayas), fresh	240130	Tobacco refuse
30490	Fish meat and mince, except liver, roe and fillets, frozen	30379	Fish NES, frozen, whole	71490	Arrowroot, salep, etc fresh or dried and sago pith
120220	Ground-nuts shelled, not roasted or cooked	70890	Legumes except peas and beans, fresh or chilled	90700	Cloves (whole fruit, cloves and stems)
120799	Oil seeds and oleaginous fruits, NES	410429	Bovine and equine leather, tanned or retanned, NES	60210	Cuttings and slips, not rooted
30219	Salmonidae, not trout or salmon, fresh or chilled whole	240290	Cigars, cheroots, cigarettes, with tobacco substitute	90190	N/A
261690	Precious metal ores and concentrates except silver	610343	Mens, boys trousers, shorts, of synthetic fibres, knit	410229	Sheep or lamb skins, raw, except pickled, no wool
250621	Quartzite, crude or roughly trimmed	610462	Womens, girls trousers and shorts, of cotton, knit	100700	Grain sorghum
30549	Smoked fish and fillets other than herrings or salmon	340119	Soaps for purposes other than toilet soap, solid	30379	Fish NES, frozen, whole
110620	Flour or meal of sago, starchy roots or tubers	80119	N/A	10600	Animals, live, except farm animals
90411	Pepper of the genus Piper, whole	410790	Leather, of animals NES	80430	Pineapples, fresh or dried
100610	Rice in the husk (paddy or rough)	611020	Pullovers, cardigans etc of cotton, knit	151190	Palm oil or fractions simply refined
630533	N/A	80590	Citrus fruits, fresh or dried, NES	121190	Plants and parts, pharmacy, perfume, insecticide use NES
230120	Flour or meal, pellet, fish, etc, for animal feed	510111	Greasy shorn wool, not carded or combed	140410	Raw vegetable materials for dyeing or tanning

		Tanzania		Zambia	
	HS-6 code	Product Name	HS-6 code	Product Name	
	610520	Mens, boys shirts, of manmade fibres, knit	30613	Shrimps and prawns, frozen	
	620463	Womens, girls trousers, shorts, synth fibres, not knit	261100	Tungsten ores and concentrates	
	610342	Mens, boys trousers and shorts, of cotton, knit	80450	Guavas, mangoes, and mangosteens, fresh or dried	
	620343	Mens, boys trousers shorts, synthetic fibre, not knit	410512	Sheep or lamb skin leather, otherwise pre-tanned	
	620530	Mens, boys shirts, of manmade fibres, not knit	71490	Arrowroot, salep, etc fresh or dried and sago pith	
	460210	Basketwork, wickerwork products of vegetable material	71332	Beans, small red (Adzuki) dried, shelled	
	611120	Babies garments, accessories of cotton, knit	80430	Pineapples, fresh or dried	
	610230	Womens, girls overcoats, etc, manmade fibres, knit	151190	Palm oil or fractions simply refined	
	611030	Pullovers, cardigans etc of manmade fibres, knit	720430	Waste or scrap, of tinned iron or steel	
	620920	Babies garments, accessories of cotton, not knit	271490	Bitumen and asphalt, asphaltites and asphaltic rocks	
	620342	Mens, boys trousers and shorts, of cotton, not knit	30379	Fish NES, frozen, whole	
	460290	Basketwork and wickerwork products, nonvegetable	60210	Cuttings and slips, not rooted	
	610120	Mens, boys overcoats, etc, of cotton, knit	270900	Petroleum oils, oils from bituminous minerals, crude	
	610130	Mens, boys overcoats, etc, of manmade fibres, knit	90830	Cardamoms	
	90230	Tea, black (fermented or partly) in packages < 3 kg	630510	Sacks and bags, packing, of jute or other bast fibres	
	620711	Mens, boys underpants or briefs, of cotton, not knit	80132	N/A	
	80300	Bananas, including plantains, fresh or dried	100700	Grain sorghum	
	620640	Womens, girls blouses, shirts, manmade fibre, not knit	121190	Plants and parts, pharmacy, perfume, insecticide use NES	
	620520	Mens, boys shirts, of cotton, not knit	610510	Mens, boys shirts, of cotton, knit	
	91099	Spices NES	121299	Vegetable products NES for human consumption	
	610891	Womens, girls bathrobe, dressing gowns, of knit cotton	80119	N/A	
	140490	Vegetable products NES	81090	Fruits, fresh NES	
	70930	Aubergines (eggplants), fresh or chilled	30269	Fish NES, fresh or chilled, whole	
	510129	Degreased wool NES, not carded, combed or carbonized	140410	Raw vegetable materials for dyeing or tanning	
	640590	Footwear, NES	71333	Kidney beans and white pea beans dried shelled	
	200940	Pineapple juice, not fermented or spirited	560721	Binder or baler twine, of sisal or agave	

Table 21 Ranking of products not currently being significantly exported ($rca < 0.5$) that see the largest increases in density after comparing with the productive structure of the combined region (continued)

Kenya		Mozambique		Rwanda	
HS-6 code	Product Name	HS-6 code	Product Name	HS-6 code	Product Name
110610	Flour or meal of dried legumes	610610	Womens, girls blouses and shirts, of cotton, knit	71333	Kidney beans and white pea beans dried shelled
252400	Asbestos	410210	Sheep or lamb skins, raw, wool on, except Persian etc	70890	Legumes except peas and beans, fresh or chilled
271112	Propane, liquefied	130190	Natural gum, resin, gum-resin, balsam, not gum arabic	90830	Cardamoms
710813	Gold, semi-manufactured forms, non-monetary	30420	Fish fillets, frozen	80132	N/A
230220	Rice bran, sharps, other residues	610220	Womens, girls overcoats, etc, of cotton, knit	80720	Papaws (papayas), fresh
200891	Palm hearts, otherwise prepared or preserved	90300	Mate	410429	Bovine and equine leather, tanned or retanned, NES
80300	Bananas, including plantains, fresh or dried	611130	Babies garments, accessories of synthetic fibres, knit	440399	Logs, non-coniferous NES
260111	Iron ore, concentrate, not iron pyrites, unagglomerate	630190	Blankets (except electric) and travel rugs, material NES	610510	Mens, boys shirts, of cotton, knit
520210	Cotton yarn waste (including thread waste)	611420	Garments NES, of cotton, knit	80119	N/A
842920	Graders and levellers, self-propelled	200820	Pineapples, otherwise prepared or preserved	560721	Binder or baler twine, of sisal or agave
710229	Diamonds industrial, worked	260300	Copper ores and concentrates	340119	Soaps for purposes other than toilet soap, solid
250629	Quartzite, slabs etc.	610452	Womens, girls skirts, of cotton, knit	260300	Copper ores and concentrates
760110	Aluminium unwrought, not alloyed	610463	Womens, girls trousers, shorts, synthetic fibres, knit	90300	Mate
30749	Cuttle fish, squid, frozen, dried, salted, or in brine	60240	Roses	30269	Fish NES, fresh or chilled, whole
521051	Plain weave cotton, <85% +manmade fibre, <200g print	91010	Ginger	60390	Cut flowers and flower buds for bouquets, dried, etc.
230810	Acorns and horse-chestnuts for animal feed	252329	Portland cement, other than white cement	121299	Vegetable products NES for human consumption
30329	Salmonidae, NES, frozen, whole	610910	T-shirts, singlets, and other vests, of cotton, knit	230610	Cotton seed oil-cake and other solid residues
30375	Dogfish and other sharks, frozen, whole	120999	Seed, fruits and spores for sowing, NES	240290	Cigars, cheroots, cigarettes, with tobacco substitute
100620	Rice, husked (brown)	220710	Undenatured ethyl alcohol > 80% by volume	630533	N/A
90820	Mace	252010	Gypsum, anhydride	80590	Citrus fruits, fresh or dried, NES
71420	Sweet potatoes, fresh or dried	460290	Basketwork and wickerwork products, nonvegetable	510111	Greasy shorn wool, not carded or combed
100590	Maize except seed corn	251020	Natural calcium phosphates, ground	50800	Coral, seashell, cuttle bone, etc., unworked, powder, waste
360500	Matches	70810	Peas, shelled or unshelled, fresh or chilled	610462	Womens, girls trousers and shorts, of cotton, knit
870520	Mobile drilling derricks	620462	Womens, girls trousers and shorts, of cotton, not knit	610343	Mens, boys trousers, shorts, of synthetic fibres, knit
721420	Bar/rod, iron or non-alloy steel, indented or twisted, NES	460210	Basketwork, wickerwork products of vegetable material	30420	Fish fillets, frozen
400129	Natural rubber in other forms	610230	Womens, girls overcoats, etc, manmade fibres, knit	110100	Wheat or meslin flour

Tanzania		Zambia	
HS-6 code	Product Name	HS-6 code	Product Name
611212	Track suits, synthetic fibres, knit	440399	Logs, non-coniferous NES
91040	Thyme and bay leaves	60390	Cut flowers and flower buds for bouquets, dried, etc.
620799	Mens, boys dressing gowns, material NES, not knit	30420	Fish fillets, frozen
200899	Fruit, edible plants NES otherwise prepared/preserved	50800	Coral, seashell, cuttle bone, etc, unworked, powder, waste
621143	Womens, girls garments NES, manmade fibres, not knit	610343	Mens, boys trousers, shorts, of synthetic fibres, knit
151329	Palm kernel and babassu oil, fractions, simply refined	510111	Greasy shorn wool, not carded or combed
621142	Womens, girls garments NES, of cotton, not knit	91010	Ginger
400110	Natural rubber latex, including prevulcanised	340119	Soaps for purposes other than toilet soap, solid
510119	Greasy wool (other than shorn) not carded or combed	30619	Crustaceans NES, frozen
610442	Womens, girls dresses, of cotton, knit	610462	Womens, girls trousers and shorts, of cotton, knit
440200	Wood charcoal (including shell or nut charcoal)	30799	Aquatic invertebrates NES, frozen or preserved
220840	Rum and tafia	611020	Pullovers, cardigans etc of cotton, knit
610791	Mens, boys bathrobes, dressing gowns etc cotton, knit	610610	Womens, girls blouses and shirts, of cotton, knit
610349	Mens, boys trousers and shorts, of material NES, knit	610220	Womens, girls overcoats, etc, of cotton, knit
410422	Bovine leather, otherwise pre-tanned except whole skin	130190	Natural gum, resin, gum-resin, balsam, not gum arabic
121292	Sugar cane	460210	Basketwork, wickerwork products of vegetable material
310520	Nitrogen-phosphorus-potassium fertilizers, pack >10kg	410210	Sheep or lamb skins, raw, wool on, except Persian etc
610590	Mens, boys shirts, of materials NES, knit	90300	Mate
620452	Womens, girls skirts, of cotton, not knit	30339	Flatfish except halibut, plaice or sole, frozen, whole
620721	Mens, boys nightshirts or pyjamas, cotton, not knit	611130	Babies garments, accessories of synthetic fibres, knit
611430	Garments NES, of manmade fibres, knit	80590	Citrus fruits, fresh or dried, NES
330190	Essential oils, terpenic by-products etc., NES	200820	Pineapples, otherwise prepared or preserved
30232	Tuna (yellowfin) fresh or chilled, whole	610452	Womens, girls skirts, of cotton, knit
91050	Curry	610463	Womens, girls trousers, shorts, synthetic fibres, knit
460120	Mats, matting, and screens, vegetable plaiting material	611420	Garments NES, of cotton, knit
610792	Mens, boys bathrobes, dressing gown manmade fibre knit	30569	Fish NES, salted, or in brine, not dried or smoked

Table 21 Ranking of products not currently being significantly exported (rca<0.5) that see the largest increases in density after comparing with the productive structure of the combined region (continued)

Kenya		Mozambique		Rwanda	
HS-6 code	Product Name	HS-6 code	Product Name	HS-6 code	Product Name
400122	Technically specified natural rubber (TSNR)	620791	Mens, boys dressing gowns, etc cotton, not knit	90420	Capsicum or Pimenta, dried, crushed or ground
81290	Fruits and nuts, provisionally preserved NES	610520	Mens, boys shirts, of manmade fibres, knit	120720	Cotton seeds
320110	Quebracho tanning extract	410110	Bovine skins, whole, raw	30799	Aquatic invertebrates NES, frozen or preserved
440690	Ties, railway or tramway, impregnated wood	410129	Hide sections, bovine, NES, fresh or wet-salted	91010	Ginger
440310	Poles, treated or painted with preservatives	70310	Onions and shallots, fresh or chilled	611020	Pullovers, cardigans etc of cotton, knit
20442	Sheep cuts, bone in, frozen	611120	Babies garments, accessories of cotton, knit	130190	Natural gum, resin, gum-resin, balsam, not gum arabic
30232	Tuna (yellowfin) fresh or chilled, whole	620343	Mens, boys trousers shorts, synthetic fibre, not knit	610610	Womens, girls blouses and shirts, of cotton, knit
71410	Manioc (cassava), fresh or dried	620530	Mens, boys shirts, of manmade fibres, not knit	610220	Womens, girls overcoats, etc, of cotton, knit
80121	N/A	620463	Womens, girls trousers, shorts, synth fibres, not knit	120999	Seed, fruits and spores for sowing, NES
410221	Sheep or lamb skins, pickled, without wool	520532	Cotton yarn >85% multiple uncomb 714-232 dtex, not retail	220710	Undenatured ethyl alcohol > 80% by volume
780200	Lead waste or scrap	140490	Vegetable products NES	71310	Peas dried, shelled
630590	Sacks and bags, packing, of materials NES	620920	Babies garments, accessories of cotton, not knit	611130	Babies garments, accessories of synthetic fibres, knit
220190	Ice, snow, and potable water not sweetened or flavored	80300	Bananas, including plantains, fresh or dried	610463	Womens, girls trousers, shorts, synthetic fibres, knit
30530	Fish fillets, dried, salted, or in brine, not smoked	410121	Bovine hides, whole, fresh or wet-salted	50790	Whalebone, horns, etc unworked or simply prepared NES
520291	Garnetted stock of cotton	30339	Flatfish except halibut, plaice or sole, frozen, whole	60240	Roses
90412	Pepper of the genus Piper, crushed or ground	610342	Mens, boys trousers and shorts, of cotton, knit	30619	Crustaceans NES, frozen
310210	Urea, including aqueous solution in packs >10 kg	30232	Tuna (yellowfin) fresh or chilled, whole	610452	Womens, girls skirts, of cotton, knit
120890	Flour or meal of oil seed, fruit, except mustard, soy	520522	Cotton yarn >85% single combed 714-232 dtex, not retail	610910	T-shirts, singlets and other vests, of cotton, knit
110319	Cereal groats or meal except wheat, maize, rice, oats	30549	Smoked fish and fillets other than herrings or salmon	611420	Garments NES, of cotton, knit
520513	Cotton yarn >85% single uncombed 232-192 dtex, not retail	70960	Peppers (Capsicum, Pimenta) fresh or chilled	252010	Gypsum, anhydride
30231	Tuna (albacore, longfin) fresh or chilled, whole	410390	Raw hide/skins except bovine/ equine/sheep/goat/reptile	30759	Octopus, frozen, dried, salted or in brine
152190	Beeswax, other insect waxes, and spermaceti	620711	Mens, boys underpants or briefs, of cotton, not knit	30339	Flatfish except halibut, plaice or sole, frozen, whole
80111	N/A	610130	Mens, boys overcoats, etc, of manmade fibres, knit	520299	Cotton waste, except garnetted stock
560811	Made up fishing nets, of manmade textile materials	611030	Pullovers, cardigans etc of manmade fibres, knit	30375	Dogfish and other sharks, frozen, whole
271119	Petroleum gases and gaseous hydrocarbons NES, liquefied	620342	Mens, boys trousers and shorts, of cotton, not knit	80290	Nuts edible, fresh or dried, NES

Tanzania		Zambia	
HS-6 code	Product Name	HS-6 code	Product Name
620590	Mens, boys shirts, of material NES, not knit	71310	Peas dried, shelled
621490	Shawls, scarves, etc, of material NES, not knit	610910	T-shirts, singlets and other vests, of cotton, knit
840710	Aircraft engines, spark-ignition	30759	Octopus, frozen, dried, salted or in brine
610620	Womens, girls blouses and shirts, manmade fibre, knit	180200	Cocoa shells, husks, skins and waste
610832	Womens, girls nightdress or pyjama manmade fibre, knit	30232	Tuna (yellowfin) fresh or chilled, whole
151790	Edible mix and preparations of animal and veg fat, oil NES	610230	Womens, girls overcoats, etc, manmade fibres, knit
170199	Refined sugar, in solid form, NES, pure sucrose	80300	Bananas, including plantains, fresh or dried
701093	N/A	80290	Nuts edible, fresh or dried, NES
261790	Ores and concentrates NES	220710	Undenatured ethyl alcohol > 80% by volume
30375	Dogfish and other sharks, frozen, whole	410129	Hide sections, bovine, NES, fresh or wet-salted
151620	Veg fats, oils or fractions hydrogenated, esterified	30549	Smoked fish and fillets other than herrings or salmon
30342	Tuna (yellowfin) frozen, whole	620462	Womens, girls trousers and shorts, of cotton, not knit
71290	Vegetables NES and mixtures, dried, not further prepared	620463	Womens, girls trousers, shorts, synth fibres, not knit
71420	Sweet potatoes, fresh or dried	30375	Dogfish and other sharks, frozen, whole
620821	Womens, girls nightdress, pyjamas, of cotton, not knit	140490	Vegetable products NES
620349	Mens, boys trousers and shorts, material NES, not knit	610520	Mens, boys shirts, of manmade fibres, knit
460199	Products of non-vegetable plaiting materials	620343	Mens, boys trousers shorts, synthetic fibre, not knit
151710	Margarine, except liquid margarine	761511	N/A
721420	Bar/rod, iron or non-alloy steel, indented or twisted, NES	620791	Mens, boys dressing gowns, etc cotton, not knit
610892	Women/girl bathrobe, dressing gown, knit manmade fibre	230120	Flour or meal, pellet, fish, etc, for animal feed
481930	Sacks and bags, of paper, having a width > 40 cm	620530	Mens, boys shirts, of manmade fibres, not knit
680229	Cut or sawn slabs of stone NES	252010	Gypsum, anhydride
610469	Womens, girls trousers and shorts, material NES, knit	410121	Bovine hides, whole, fresh or wet-salted
611190	Babies garments, accessories of material NES, knit	611120	Babies garments, accessories of cotton, knit
611211	Track suits, of cotton, knit	70310	Onions and shallots, fresh or chilled

Table 21 Ranking of products not currently being significantly exported ($rca < 0.5$) that see the largest increases in density after comparing with the productive structure of the combined region (continued)

Kenya		Mozambique		Rwanda	
HS-6 code	Product Name	HS-6 code	Product Name	HS-6 code	Product Name
30622	Lobsters (Homarus), not frozen	630590	Sacks and bags, packing, of materials NES	410129	Hide sections, bovine, NES, fresh or wet-salted
721410	Bar/rod, iron or non-alloy steel, forged	30375	Dogfish and other sharks, frozen, whole	70310	Onions and shallots, fresh or chilled
960110	Worked ivory, articles of ivory	610120	Mens, boys overcoats, etc, of cotton, knit	30569	Fish NES, salted or in brine, not dried or smoked
854810	N/A	120210	Ground-nuts in shell not roasted or cooked	30232	Tuna (yellowfin) fresh or chilled, whole
401511	Rubber surgical gloves	330129	Essential oils, NES	70810	Peas, shelled or unshelled, fresh or chilled
520523	Cotton yarn >85% single combed 232-192 dtex, not retail	180200	Cocoa shells, husks, skins, and waste	251020	Natural calcium phosphates, ground
260112	Iron ore, concentrate, not iron pyrites, agglomerated	120799	Oil seeds and oleaginous fruits, NES	200820	Pineapples, otherwise prepared or preserved
80520	Mandarin, clementine, and citrus hybrids, fresh or dried	560710	Twine, cordage, ropes, and cables, of jute, bast fibre	610230	Womens, girls overcoats, etc, manmade fibres, knit
40229	Milk and cream powder sweetened < 1.5% fat	520512	Cotton yarn >85% single uncombed 714-232 dtex, not retail	180200	Cocoa shells, husks, skins and waste
81400	Peel of citrus fruit or melons	91099	Spices NES	30549	Smoked fish and fillets other than herrings or salmon
30342	Tuna (yellowfin) frozen, whole	610990	T-shirts, singlets etc, of material NES, knit	120799	Oil seeds and oleaginous fruits, NES
40900	Honey, natural	170410	Chewing gum containing sugar, except medicinal	620343	Mens, boys trousers shorts, synthetic fibre, not knit
110313	Maize (corn) groats or meal	610891	Womens, girls bathrobe, dressing gowns, of knit cotton	620462	Womens, girls trousers and shorts, of cotton, not knit
100830	Canary seed	90210	Tea, green (unfermented) in packages < 3 kg	120210	Ground-nuts in shell not roasted or cooked
80510	Oranges, fresh or dried	620640	Womens, girls blouses, shirts, manmade fibre, not knit	761511	N/A
252310	Cement clinkers	440420	Poles, piles etc, non-coniferous, pointed, not sawn	620791	Mens, boys dressing gowns, etc cotton, not knit
20230	Bovine cuts boneless, frozen	100820	Millet	410390	Raw hide/skins except bovine/equine/sheep/goat/reptile
80410	Dates, fresh or dried	621142	Womens, girls garments NES, of cotton, not knit	560729	Twine NES, cordage, ropes and cables, of sisal
400121	Natural rubber in smoked sheets	640590	Footwear, NES	440799	Lumber, non-coniferous NES
30349	Tunas NES, frozen, whole	510129	Degreased wool NES, not carded, combed or carbonized	51000	Ambergris, civet, musk, etc for pharmaceutical use
110311	Wheat meal	440200	Wood charcoal (including shell or nut charcoal)	70960	Peppers (Capsicum, Pimenta) fresh or chilled
10599	Poultry, live except domestic fowls, > 185 grams	482020	School, etc, exercise books	140490	Vegetable products NES
530390	Jute and other bast fibres, not spun, NES, tow, waste	410422	Bovine leather, otherwise pre-tanned except whole skin	230230	Wheat bran, sharps, other residues
440831	N/A	140420	Cotton linters	610520	Mens, boys shirts, of manmade fibres, knit
30739	Mussels, frozen, dried, salted, or in brine	170191	Refined sugar, in solid form, flavored or colored	90411	Pepper of the genus Piper, whole

Tanzania		Zambia	
HS-6 code	Product Name	HS-6 code	Product Name
620453	Womens, girls skirts, synthetic fibres, not knit	51000	Ambergris, civet, musk, etc for pharmaceutical use
620292	Womens, girls anoraks etc of cotton, not knit	620920	Babies garments, accessories of cotton, not knit
610453	Womens, girls skirts, synthetic fibres, knit	90210	Tea, green (unfermented) in packages < 3 kg
620469	Womens, girls trousers, shorts, material NES, not knit	90230	Tea, black (fermented or partly) in packages < 3 kg
970600	Antiques older than 100 years	610130	Mens, boys overcoats, etc, of manmade fibres, knit
280440	Oxygen	330129	Essential oils, NES
80711	N/A	610342	Mens, boys trousers and shorts, of cotton, knit
620333	Mens, boys jackets, blazers, synthetic fibre, not knit	30342	Tuna (yellowfin) frozen, whole
620891	Womens, girls panties, bathrobes etc, cotton, not knit	560710	Twine, cordage, ropes and cables, of jute, bast fibre
220210	Beverage waters, sweetened or flavored	251020	Natural calcium phosphates, ground
30239	Tuna NES, fresh or chilled, whole	610120	Mens, boys overcoats, etc, of cotton, knit
200980	Single fruit, veg juice NES, not fermented or spirited	611030	Pullovers, cardigans etc of manmade fibres, knit
680299	Worked monumental or building stone NES	620342	Mens, boys trousers and shorts, of cotton, not knit
200990	Mixtures of juices not fermented or spirited	30490	Fish meat and mince, except liver, roe and fillets, frozen
610831	Womens, girls nightdress or pyjamas, of cotton, knit	120799	Oil seeds and oleaginous fruits, NES
91091	Mixtures of spices	620711	Mens, boys underpants or briefs, of cotton, not knit
621132	Mens, boys garments NES, of cotton, not knit	620640	Womens, girls blouses, shirts, manmade fibre, not knit
610432	Womens, girls jackets and blazers, of cotton, knit	91099	Spices NES
610711	Mens, boys underpants or briefs, of cotton, knit	90411	Pepper of the genus Piper, whole
630120	Blankets (non-electric) and travelling rug, wool or hair	610990	T-shirts, singlets etc, of material NES, knit
281121	Carbon dioxide	230230	Wheat bran, sharps, other residues
620341	Mens, boys trousers and shorts, wool or hair, not knit	220840	Rum and tafia
30219	Salmonidae, not trout or salmon, fresh or chilled whole	120210	Ground-nuts in shell not roasted or cooked
620690	Womens, girls blouses and shirts, material NES, not knit	621142	Womens, girls garments NES, of cotton, not knit
271112	Propane, liquefied	110620	Flour or meal of sago, starchy roots or tubers

Table 21 Ranking of products not currently being significantly exported (rca<0.5) that see the largest increases in density after comparing with the productive structure of the combined region (continued)

Kenya		Mozambique		Rwanda	
HS-6 code	Product Name	HS-6 code	Product Name	HS-6 code	Product Name
230210	Maize bran, sharps, other residues	30342	Tuna (yellowfin) frozen, whole	620463	Womens, girls trousers, shorts, synth fibres, not knit
260600	Aluminium ores and concentrates	810510	Cobalt, unwrought, matte, waste or scrap, powders	440420	Poles, piles etc, non-coniferous, pointed, not sawn
261000	Chromium ores and concentrates	200940	Pineapple juice, not fermented or spirited	611120	Babies garments, accessories of cotton, knit
440920	Non-conifer wood continuously shaped along any edges	230120	Flour or meal, pellet, fish, etc, for animal feed	520532	Cotton yarn >85% multiple uncomb 714-232 dtex, not retail
30614	Crabs, frozen	740311	Copper cathodes and sections of cathodes unwrought	230120	Flour or meal, pellet, fish, etc, for animal feed
30239	Tuna NES, fresh or chilled, whole	610442	Womens, girls dresses, of cotton, knit	620530	Mens, boys shirts, of manmade fibres, not knit
440839	N/A	620799	Mens, boys dressing gowns, material NES, not knit	100820	Millet
261610	Silver ores and concentrates	30490	Fish meat and mince, except liver, roe and fillets, frozen	280522	Strontium and barium
731300	Wire for fencing, including barbed wire	91020	Saffron	120220	Ground-nuts shelled, not roasted or cooked
440610	Ties, railway or tramway, wood not impregnated	110620	Flour or meal of sago, starchy roots or tubers	620920	Babies garments, accessories of cotton, not knit
551341	Woven plain >85% polyester + cotton, <170g/m2 printed	520210	Cotton yarn waste (including thread waste)	620342	Mens, boys trousers and shorts, of cotton, not knit
200190	Veg, fruit, nuts NES prepared or preserved by vinegar	340111	Soaps, for toilet use, solid	710812	Gold in unwrought forms, non-monetary
100190	Wheat except durum wheat, and meslin	620590	Mens, boys shirts, of material NES, not knit	110220	Maize (corn) flour
710221	Diamonds, industrial, unworked or simply sawn, cleaved	400110	Natural rubber latex, including prevulcanised	610342	Mens, boys trousers and shorts, of cotton, knit
441214	N/A	621143	Womens, girls garments NES, manmade fibres, not knit	30342	Tuna (yellowfin) frozen, whole
251690	Monumental or building stone NES, porphyry and basalt	71420	Sweet potatoes, fresh or dried	140420	Cotton linters
510121	Degreased shorn wool, not carded, combed or carbonize	710812	Gold in unwrought forms non-monetary	520522	Cotton yarn >85% single combed 714-232 dtex, not retail
200980	Single fruit, veg juice NES, not fermented or spirited	81290	Fruits and nuts, provisionally preserved NES	30490	Fish meat and mince, except liver, roe and fillets, frozen
271113	Butanes, liquefied	610792	Mens, boys bathrobes, dressing gown manmade fibre knit	630590	Sacks and bags, packing, of materials NES
440110	Fuel wood	90920	Coriander seeds	170410	Chewing gum containing sugar, except medicinal
630539	Sacks and bags, packing, of other manmade yarn	620821	Womens, girls nightdress, pyjamas, of cotton, not knit	560710	Twine, cordage, ropes and cables, of jute, bast fibre

NES = not elsewhere specified

Tanzania		Zambia	
HS-6 code	Product Name	HS-6 code	Product Name
251690	Monumental or building stone NES, porphyry and basalt	630590	Sacks and bags, packing, of materials NES
380810	Insecticides, packaged for retail sale	720410	Waste or scrap, of cast iron
620630	Womens, girls blouses and shirts, of cotton, not knit	620520	Mens, boys shirts, of cotton, not knit
252922	Fluorspar, >97% calcium fluoride	71410	Manioc (cassava), fresh or dried
610821	Womens, girls briefs or panties, of cotton, knit	440200	Wood charcoal (including shell or nut charcoal)
730690	Tube/pipe/hollow profile, iron/steel, riveted/open sea	30239	Tuna NES, fresh or chilled, whole
253090	Mineral substances, NES	621143	Womens, girls garments NES, manmade fibres, not knit
731300	Wire for fencing, including barbed wire	30749	Cuttle fish, squid, frozen, dried, salted or in brine
310390	Phosphatic fertilizers, mixes, NES, pack >10kg	620799	Mens, boys dressing gowns, material NES, not knit
40229	Milk and cream powder sweetened < 1.5% fat	400129	Natural rubber in other forms
230120	Flour or meal, pellet, fish, etc, for animal feed	482020	School, etc, exercise books
251512	Marble and travertine in blocks etc.	620590	Mens, boys shirts, of material NES, not knit
490700	Documents of title (bonds etc), unused stamps etc	610891	Womens, girls bathrobe, dressing gowns, of knit cotton
610422	Womens, girls ensembles, of cotton, knit	610442	Womens, girls dresses, of cotton, knit
200190	Veg, fruit, nuts NES prepared or preserved by vinegar	100820	Millet
360500	Matches	710812	Gold in unwrought forms, non-monetary
250900	Chalk	200940	Pineapple juice, not fermented or spirited
610443	Womens, girls dresses, of synthetic fibres, knit	51191	Fish, shellfish, and crustaceans (non-food)
262019	Ash or residues containing mainly zinc (not spelter)	151590	Veg fats, oils NES, fractions, not chemically modified
620990	Babies garments, accessories of material NES, not knit	91020	Saffron
630291	Toilet or kitchen linen, of cotton, NES	710210	Diamonds, unsorted

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