What can Africa contribute to global meat demand: Opportunities and constraints

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Abstract

Global meat demand and prices are currently at unprecedented levels. Buoyed by high GDP growth, globalization, higher incomes, and increased urbanization (particularly in the developing world), diets are rapidly diversifying away from traditional staple commodities and towards high-value products, including meat. With this increased demand for meat arises new opportunities for alternative suppliers, including those from Africa. While Africa has been constrained in the past in world markets by low productivity, animal diseases, and high global standards for animal health and food safety, growing demand and new, alternative policy mechanisms for facilitating the meat trade provide hope for many that Africa may be able to take advantage of the present situation and assert itself as an important player in global meat markets.

This paper outlines Africa's role in global meat markets and highlights current constraints and opportunities for African suppliers. At present, Africa remains a small player in global meat markets, with the overwhelming majority of meat exports from Africa either serving nearby regional markets or high-value markets in the European Union that take advantage of preferential tariffs. African producers remain shielded from global competition by high tariffs that have prevented cost-saving efficiency measures and make Africa a high-cost producer relative to other global competitors, particularly Argentina, Brazil, and India. Moreover, many African countries do not have the scale in which to compete or diversify product offerings to alternative markets. Animal diseases and rising SPS standards further dampen Africa's ability to engage in world markets. On the other hand, there are a number of success stories from Africa in niche markets that may provide avenues for innovative producers. Furthermore, commodity-based approaches offer hope to African producers, though their success will depend largely on whether Africa can compete with other competitors in a truly open market. At the end of the day, African producers and governments will need to invest heavily in market development, productivity measures, feed resources, and infrastructure to bring production costs down and facilitate marketing. Greater regional integration, particularly within SADC, could further bring about cost efficiencies and greater scale with which to compete.

Introduction

Global meat demand and prices are currently at unprecedentedly high levels. Buoyed by high GDP growth, globalization, higher incomes, and increased urbanization (particularly in the developing world), diets are rapidly diversifying away from traditional staple commodities and towards high-value products, including meat. Delgado et al. (1999), in their seminal report on the "livestock revolution," projected rapid demand growth for livestock products that will predominately come from the developing world. Their projections suggest that meeting increased demand in developing countries by 2020 will necessitate per capita meat production rising by 38 percent while per capita milk production will have to increase by 54 percent (Delgado et al 1999). Rosegrant (2002) forecasts that between 1997 and 2020, consumption for livestock products for the developing world will increase by 3.9 percent annually for poultry, 2.4 percent for pork, 2.9 percent for beef, and 2.9 percent for milk. This growth is much higher compared to projected consumption growth in developed countries (1.5 percent per annum for poultry, 0.4 percent for pork, and 0.5 percent for beef. Most recently, Rosegrant and Thornton (2008) presented updated findings based on integrated economic models of food demand and livestock supply. They project that annual meat demand per capita will rise by 82 percent (to 51 kg/person) in East Asia by 2050, while demand growth from Africa is projected to double to 22 kg/person. This will necessitate a rise in cereals of 553 million tons, an increase in cattle supply of 1.1 billion head, and an additional 1 billion head of sheep and goats by 2050 (Rosegrant and Thornton, 2008). FAO (2003) is more sanguine about the growth prospects for livestock products, but nonetheless projects a 25 percent rise in meat consumption between 1997/99 and 2030, with the fastest growth occurring in developing countries (particularly Asia) and in poultry meat.

At the same time, demand for cereals for food, feed, and biofuels has been rising rapidly and in recent years has outstripped increases in production, leading to escalating prices. Von Braun (2007) reports that between 2000 and 2006, global cereal demand rose by 8 percent, while prices have more than doubled

between 2000 and 2008. This rise in grain prices has correspondingly led to high prices for livestock products, including a tripling of butter and milk prices and a doubling of poultry prices between 2000 and 2008 (von Braun 2007). Rosegrant and Thornton (2008) remark that with higher prices comes the potential for increased food insecurity, while the rapid expansion of livestock production could exacerbate food safety problems and animal diseases and place increased pressure on natural resources.

With this increased demand for meat arises new opportunities for alternative sources of supply. An important question from a development context is whether African producers can benefit from these new opportunities, in terms of domestic markets, regional markets within Africa, and elsewhere in the developed and developing world. Historically, Africa has been constrained in world markets by low productivity, animal diseases, and high global standards for animal health and food safety that have precluded large-scale exports. However, growing meat demand and an increased re-think in policy circles about alternative mechanisms for facilitating the meat trade that are more sensitive to smallholder conditions and constraints provide hope for many that Africa may be able to take advantage of the present situation and assert itself as a major player in global meat markets (Scoones and Wollmer 2008).

In this paper, I will first characterize the global meat situation from an African perspective, highlighting current markets in which Africa is, or could be, a significant actor. From this analysis of the supply and demand situation, I will address various constraints and challenges African suppliers face, paying close attention to issues of competitiveness, prices, productivity, and government policies. I will then conclude by identifying areas in which Africa may be able to contribute to the global meat demand and how this process may be facilitated from the standpoint of private investment and government support.

Africa and the global meat trade

In this section, I will provide a broad overview of Africa's role in the global meat trade (exports and imports). The data used was generated from FAO (http://faostat.fao.org) and UN Comtrade (http://comtrade.un.org). Two important caveats underpin the analysis in this section. First, one should be aware that the comparison between data sources can be highly problematic, given differences in the definition of commodity aggregates and the frequency of reporting by trading partners. Indeed, reporting by African countries is often quite erratic, necessitating the use of older time series data to facilitate general comparisons. Second, meat markets are notoriously heterogeneous, with significant differences in prices based on product types, quality levels, etc. However, publicly available data only provides price data in broad aggregates, making detailed comparisons impossible. Nonetheless, these broad comparisons are useful in highlighting some of the "big picture" issues, even if some of the nuances are missing.

At present, Africa remains a relatively small player in global export markets for meat products. In Figure 1, the export value (in thousand USD) of various types of meat exports from Africa is illustrated for the period 1999-2003, the most recent five-year period in which complete data was available. By category, beef exports (bone-in and boneless) were by far the largest source of export revenues for Africa, totalling nearly US$100 million in 2003. The value of beef exports during 1999-2003 experienced an erratic trend, peaking at over US$130 million in 2001, while falling below US$80 million the year after. Unsurprisingly, game meat exports from Africa are also strong, with exports approaching nearly US$40 million in 2003 and rising strongly from their value in 1999. Likewise, sheep meat exports have been rising rapidly, climbing from about US$20 million in 1999 to over US$35 million in 2003. On the other hand, exports of other types of meat (chicken meat, goat meat, and pig meat) were relatively small and static in value terms, with values all below US$20 million during 1999-2003 (figure 1).

As a share of global exports, Africa's contribution is quite small, as highlighted in figure 2. With the exception of game meat, where Africa's share of global game meat exports steadily rose from 6 percent in 1999 to nearly 12 percent in 2003, and goat meat, where Africa's share declined from 9 percent in 1999 to around 5 percent in 2003, Africa comprises only about 1 percent of global meat exports for items such as beef, pork, and chicken. Moreover, for these products, Africa's share has barely budged.

Figure 3 illustrates Africa's exports from a regional perspective. For beef, chicken, and game exports, the overwhelming majority of products come from Southern Africa, notably South Africa, Namibia, and Botswana. Goat and pig meat exports are derived predominately from East Africa, while sheep meat exports come mainly from Northern Africa (mainly Sudan). Tables 1 through 6 break down export values and market destinations from major African exporters for these meat products based on export data reported by UN Comtrade in the most recent year available (2006). Table 1 provides export data by destination for beef exports from Botswana, Namibia, and South Africa, distinguishing between fresh and frozen beef. Both Botswana and Namibia export to a relatively small set of markets, with Botswana's exports overwhelmingly destined either for the European Union (particularly for fresh beef) or South Africa (particularly for frozen).

In 2006, most of Namibia's exports went to South Africa, with small volumes to markets in the European Union and regionally within Africa. By contrast, while the value of South Africa's exports are much smaller than either Botswana or Namibia, it exports small volumes to a large number of markets (31 for fresh beef and 35 for frozen beef in 2006). South Africa further exports more broadly to regional markets within Africa, including Angola, Congo, Gabon, Mauritius, Mozambique, and Nigeria, as well as to higher value markets in Switzerland and the United Arab Emirates (table 1). Average export unit values (i.e., the price in the exporting country) tend to be high for fresh beef (well over US$4,500 per ton, with much higher values found in European markets and, surprisingly, in some African markets. The latter may reflect small niche sales of high value goods for expatriate populations, for example. Frozen beef export unit values tend to be lower, as expected, though values from Namibia and Botswana tend to be about US$1,000 per ton higher than those prevailing in South Africa.

Table 2 presents export data on game and other meat (found in HS 0208.90, which aggregates game meat with other types of meat such as rabbit) from South Africa in 2006. The data point out very high unit values associated with game meat exports – nearly US$10,000 per ton. The data also show significant exports to European markets, notably Belgium, France, Germany, the Netherlands, and Switzerland (table 2). On the other hand, trends in game meat exports from South Africa during 2003-2006 show an erratic trend in both export values and volumes, suggesting that while these markets are lucrative, demand may be more fickle and require closer attention to marketing and other promotional activities (figure 4).

Table 3 presents data on chicken meat exports from Namibia, South Africa, and Zimbabwe in 2006 (2005 for Zimbabwe). Exports in all cases tend to be small (less than US$5 million for each country), with sales concentrated in regional markets, including Namibia (from Zimbabwe), DRC (from Namibia and South Africa), South Africa (from Namibia), Mozambique (from South Africa), and Nigeria (from South Africa). As with beef exports, South Africa tends to export small product volumes to a large number of markets, including high-value sales to the European Union, notably Germany and the Netherlands. This may reflect speciality products that target specific market niches. Table 4 reports goat meat exports from Ethiopia in 2006, which totalled over US$13 million in 2006. Goat meat sales are predominately regional, serving Egypt, Saudi Arabia, and the United Arab Emirates, with small levels of sales within Africa and to European markets (table 4). Similarly, sheep meat exports from Sudan (the largest exporter in Africa) are likewise regionally focused, with most sales going to Middle Eastern markets such as Bahrain, Jordan, Qatar, Saudi Arabia, and the United Arab Emirates (table 5). Most trade in sheep and goats from Africa to the Middle East is concentrated in live animal, rather than meat, sales, given preferences in Middle Eastern markets for live animals. Indeed, figure 5 illustrates quite clearly the importance of live sheep exports vis-à-vis sheep meat exports. Table 6 gives data on pig meat exports from Kenya and Zimbabwe and which again shows relatively low levels of exports (less than US$2 million) and sales concentrated on regional markets and those in the Middle East.

If we look at imports, Africa is similarly a small player in global markets, although in aggregate the value of imports is larger than that of exports. Figure 6 shows that imports from Africa of beef and chicken each hovered around US$300 million in 2003, while imports of other products (pig meat, goat meat, and sheep meat) were each less than US$50 million. Chicken meat imports have been rapidly increasing, with import values doubling between 1999 and 2003. On the other hand, beef imports have been much more erratic, rising slowly from just over US$300 million in 1999 and 2000, declining sharply in 2001, and rebounding to near-1999 levels in 2003 (figure 6). In share terms, Africa's proportion of chicken meat imports to global imports rose steadily from around 2.25 percent in 1999 to over 4 percent in 2003 (figure 7). Africa's share of goat meat imports declined over 1999-2002, then rose sharply to just under 1.5 percent in 2003. By contrast, the share of beef and sheep meat imports have been on an erratic and declining trend, with import shares of under 2 percent and under 1.5 percent, respectively (figure 7).

Tables 7 and 8 provide information on African beef and chicken imports, respectively, for selected African countries in which data were available. In both cases, the growth of imports for a number of countries has been especially rapid, as highlighted (in color) in the tables. For instance, beef imports from Algeria have increased at a cumulative annual rate of 82 percent during 2001-2005, rising from just under US$9 million to nearly US$175 million (table 7). Similarly, imports from Libya have grown at an even more rapid pace, while imports from Egypt, though increasing more slowly than other countries in North Africa, more than doubled between 2001 and 2005 (table 7). In Southern Africa, beef imports from South Africa, Mozamique, and Mauritius increased significantly during 2001-2005, while those from Angola rose in an erratic fashion. Chicken imports have experienced similarly rapid growth, particularly from West Africa (e.g., Benin, Cote d'Ivoire, Gambia, Ghana, Guinea, Senegal, and Togo) and Southern Africa (Angola, Mozambique, and Southern Africa) (table 8).

Globally, imports of meat products from developing markets are on the rise, providing a potential impetus for new suppliers, including those from Africa. Tables 9 through 11 illustrate trends in imports for selected markets in beef, sheep, and game meat (products in which current export values from Africa are relatively high) during 2001-2005. In particular, there has been strong import growth from markets in the Middle East, notably Saudi Arabia, United Arab Emirates, Kuwait, Jordan, and Lebanon, as well as strong demand in Asian markets, including China, Korea, Malaysia, and Indonesia (tables 9 and 10). Global game meat imports, by contrast, have been erratic, with declines in Asian markets (other than Thailand), stagnant growth in Europe and North America, and rapid declines in Latin America (table 11).

The ability of Africa to take advantage of these new opportunities will depend largely on its ability to effectively compete with other global competitors. In the next section, I will outline some of the constraints and challenges that African suppliers face in the current global environment, including production constraints, marketing issues, and other competitive factors that militate against African exports.

Constraints and challenges for Africa

Africa faces a number of challenges in its pursuit to become more integrated into other global meat markets. A core constraint to African exports is its competitiveness with other diverse competitors. A major development in global meat markets that has an important impact on Africa, both as an exporter and importer, has been the rise of Brazil as an important global player in meat exports, notably beef and chicken. In 2006, Brazil exported over US$3 billion in fresh and frozen beef; just four years earlier, export values were US$1.2 billion (UN Comtrade). Similarly in chicken, exports from Brazil rose from US$1.9 billion in 2003 to over US$3 billion in 2006. The meat industry in Brazil has become increasingly sophisticated over the past several years, utilizing sophisticated marketing and promotion activities through its main trade association (ABIEC); investments in higher quality animal genetics, irrigation, pasture lands, and infrastructure; low costs for production inputs; subsidized credit for agricultural investment; rapid area expansion of pasture land; and reductions in the mean slaughter age of animals (Steiger, 2006; Valdes, 2005). More importantly, there is further room to improve quality and product segmentation in the Brazilian industry, with future investments in improved supply chains and distribution needed to successfully deliver high-value products (Steiger, 2006). Still, even at present, Brazil manages to export to over 60 countries worldwide and with that market access comes the flexibility to market a variety of different cuts to different markets, based on supply and demand conditions in those markets and at prices that are extremely competitive.

While Brazil has managed to increase its position in various parts of the global meat trade, another competitor, India, has also further raised its profile. Kumar (2008) reports that Indian exports of bovine meat (mainly buffalo) have risen rapidly in the past several years, with export values increasing from US$178 million in 2000 to nearly US$600 million in 2007. Indian exports are primarily low-value, frozen cuts destined for markets in Asia, the Middle East, and Africa.

The emergence of Brazil and India in global meat markets has important ramifications for Africa, both as an exporter and importer. In table 12, the total value of beef imports from seven African countries is presented, as is an identification of the most important supplier and the price at which products landed in those markets. For six of the seven countries, either Brazil and/or India comprise a major share of these countries' beef imports (table 12). Moreover, the prices at which Brazil and India are able to land beef in these countries are quite striking. With the exception of the Seychelles, where transportation costs are high and fresh beef sales likely target high-end hotel and restaurant markets, import unit values (which include transport costs from Brazil or India to the market in question) range between US$1,342 per ton to US$2,069 per ton. These prices are much lower than the average of those from Southern Africa (recall table 1), which ranged between US$3,000-US$5,000 per ton; moreover, those prices reported for Southern Africa are *export* unit values and do not account for transport costs to other markets. Table 13 provides an even more stark example of the average export unit value of beef exports to Angola and the DRC in 2006: prices from India are US$2,000-US$5,500 per ton lower than similar (i.e., in the same aggregate category) products from Namibia or South Africa. Even though transport costs will increase the landed costs of Indian exports relative to those from Southern Africa, it is no surprise that the share of Indian products in those markets is high, at 68 percent (see figure 8). By contrast, the combined share of South Africa and Namibia in those two markets is just over 2 percent.

An important advantage that Brazil, India, and other markets in Latin America (e.g., Argentina, Uruguay, Paraguay) have over African producers is scale. Figures 9 and 10 contrast cattle stocks of major African producers with those in Brazil, India, Argentina, Paraguay, Pakistan, and Uruguay. The total stock of cattle in Africa according to the latest FAO data (2006) is about 232 million head. By contrast, Brazil

alone has over 207 million head of cattle, while India has 180 million head of cattle and nearly 99 million head of buffalo. On a smaller scale, Argentina maintains a cattle stock of 50 million (figure 10). The only countries in Africa that come close to this type of scale are Ethiopia and Sudan (figure 9). However, offtake rates and productivity in both countries remain quite low. The pastoral nature of production throughout much of these two countries further limits the consistent marketing of animals needed to facilitate the large-scale commercial production and export of meat. Combined with the endemic prevalence of animal diseases such as FMD that restrict trade, the ability to date of large-scale export-oriented production from Sudan and Ethiopia has remained relatively limited. Furthermore, as noted earlier, trade from the Horn of Africa (primarily sheep and goats) is predominantly in live animals, reflecting local preferences for consumption in the Middle East. Similar constraints in productivity and marketing have limited exports from Tanzania and Madagascar as well. Despite the presence of relatively large cattle stocks in South Africa (over 13 million head), most production is for domestic consumption and indeed, South Africa has been a net importer of meat products in recent years.

While Africa does not likely have the scale in the short-to-medium run to compete with the likes of Brazil, India, and others, exporters in Botswana, Namibia, and (until recently) Zimbabwe had been able to make inroads into the European Union market. This trade is driven largely by preferential access to the European Union under the Cotonou Agreement, which provided significant tariff reductions (up to 90 percent) for ACP (Africa, Caribbean, and Pacific) countries for a specific quota of exports (Stevens and Keenan 2005; Kruger and Werner 2005). Botswana received a quota of nearly 19,000 tons, Namibia 13,000 tons, and Zimbabwe 9,100 tons (Scoones and Wollmer 2008). However, in most years, none of the three countries have been able to fill its export quota. Scoones and Wollmer (2008) remark that the costs of compliance to meet ever-increasing EU standards have been rising, while according to Stevens and Keenan (2005), prices in the EU have been stagnant. Moreover, to retain its access into the European Union market, all three countries have had to maintain FMD-free areas within the country from which to export to European markets. In addition to the costs of maintaining FMD freedom, it has also restricted market access for producers that are not in FMD-free areas. In Namibia, for example, this precludes communal areas in the north of the country, home to over 1 million head of cattle, from access to the EU and thus limits the scale at which Namibia can export (Kruger and Werner 2005). The segmentation of areas in Botswana by FMD status limits the ability of abattoirs to run at full capacity, as does the monopsony power of the BMC (Botswana Meat Commission). In the latter case, the low prices offered to producers by the BMC (which controls exports as a single-desk buyer and seller) combined with growing domestic market reduces incentives for producers to sell animals for export, thus putting further strains on the profitability of export-oriented abattoirs (Jefferis, 2005). Mapitse (2008) remarks that because EU markets tend to be more attractive relative to others, there is generally an insufficient supply of meat available to profitably sell to other markets. Concomitant with its preferential access to the EU has also been external protection in the form of high common SADC tariffs on beef and other meat products. Combined, this has kept prices in Southern Africa relatively high compared to other competitors.

The flip side of this protection has been an inability of African producers to successfully access regional markets on a large scale. While African importers are generally less sensitive to SPS concerns than the European Union, the high costs incurred in meeting EU standards and the relatively limited scale available for export makes selling in regional markets relatively less appealing or profitable (Mapitse 2008). The challenge in Southern Africa will be to find ways that countries can scale up production, while maintaining appropriate SPS standards and lowering costs. These challenges will be discussed further in the last section.

The road ahead: Where can Africa contribute to global demand and how?

The picture painted thus far has been relatively pessimistic, at least from the standpoint of Africa's potential competitiveness in export markets. Exports of meat products from Africa remain at low levels and those products in which African suppliers have made some inroads face uncertain and erratic demand (game meat) or are only able to access relatively high-cost markets based on preferential trading arrangements (beef). On the import side, demand growth from Africa is booming, but most of the gains are being enjoyed by suppliers outside of Africa, such as Brazil, India, and the European Union. Africa's contribution to date in these growing import markets has generally been as a residual supplier. Given this backdrop, what are some potential avenues to enhance Africa's future in the global meat trade? In this section, I will conclude with some possibilities for Africa, although I must stress that at the end of the day, significant improvements in productivity, breeding, infrastructure, marketing, and promotion will be required over and beyond the options discussed here.

One of the most recently discussed and intriguing options for increasing Africa's role in the global meat trade is the concept of *commodity-based trade* (Thompson et al. 2004; Scoones and Wollmer 2008). A commodity-based approach looks at the product from the standpoint of food safety rather than whether an animal was derived from a disease-free or disease-endemic area. The idea is that once meat has been sufficiently chilled and matured, it no longer poses a threat for diseases such as FMD and, as such, the origin of the animal (assuming it is healthy) is immaterial for the purposes of trade. The commodity-based approach was a major topic at a recent workshop in Pretoria in April 2008 organized by the Institute of Development Studies in the UK. As a result of a growing body of evidence and re-thinks in policy circles, the idea has been gaining traction, with the World Animal Health Organization, or OIE, establishing an *ad hoc* committee to discuss the concept further this year. Proponents of commodity-based trade, including the Africa Union, see this as an important step in promoting livestock exports from Africa on a large scale (Thompson 2008).

While commodity-based approaches could pave the way for increased trade from Africa, two caveats need to be highlighted. First, assuming that commodity-based approaches become accepted by major trading partners (and this remains a big "if"), significant capacity, investment, and maintenance of facilities certified to export "safe" products will be required. While these costs are not trivial, Scoones and Wollmer (2008) point out that the costs of a commodity-based approach may be lower than trying to maintain disease freedom on a zonal basis, as is the norm in Southern Africa. Second, and more critical, is the understanding that a commodity-based world, should it come to fruition, will not just simply open export markets to Africa. Once a commodity-based approach is accepted, *any* country that is able to comply with the food safety and quality standards necessary to export could benefit. India, for example, could be a major beneficiary from such a trading regime, and the scale and low-costs at which it operates (even if those costs rise under a commodity-based approach) could potentially undermine the benefits that Africa seeks to benefit from commodity-based trade. Commodity-based trade may be a necessary condition for increased trade from Africa, but it is certainly *not* sufficient, and other investments that reduce costs and improve the scale and quality of meat from Africa will be required to compete on a global scale.

Building and promoting certification programs and disease-free *compartments* is a second area in which Africa could raise its profile in global markets by demonstrating compliance with SPS standards. A compartment is a network of micro-level disease-free areas (production areas, feedlots, abattoirs, etc.) that are linked amongst themselves and maintained through high levels of monitoring, biosecurity, and traceabilty (Zepeda and Salman 2006; Scoones and Wollmer 2008). Traditionally, compartments have been considered in the context of poultry and pig farming, which tend to use more enclosed production areas, though some discussion has been given towards the use of compartments for cattle (Thompson 2008). An example of a type of compartment to be piloted in Africa is a proposed two-phase certification program for beef and live animal exports from Ethiopia that is being funded by USAID and implemented by the SPS-LMM program (http://www.spslmm.org/). The program entails purchasing animals from selected market areas; holding them in quarantine for a few weeks where they are vaccinated and tested for disease; and sending certified, disease-free animals from the previous phase to a feedlot until reaching export weight. Products from this system would initially be exported to Middle Eastern markets, though in the long-run, exports to Europe and the United States are desired. A recent feasibility study found that while the costs to comply with SPS standards in this system were relatively low, high feed costs necessary to improve the quality of meat and smooth supply made Ethiopian meat uncompetitive in target Middle Eastern markets relative to Brazil and other competitors (Rich et al. 2008). Improving the competitiveness of meat from this system will require investments in feed resources, animal productivity, and marketing to build bridges between pastoral suppliers and commercial markets. Nonetheless, systems like this may help to facilitate the global movement of meat from Africa by providing enhanced credibility about the safety and quality of exported products.

A third area which holds promise for Africa is in the area of *branded, niche products* that take advantage of the strengths that Africa has to offer to global buyers. Perry et al. (2005) provide a number of case study examples of successful African meat exports, including Farmer's Choice of Kenya (exports of pork products to the Middle East and East Africa); the Farm Assured Namibian Meat (FAN Meat) program of the Namibian Meat Board; and Kalahari Kid Corporation, a joint venture of private entrepreneurs, the government of the Northern Cape, and emerging farmers in the region. Southern Africa, in particular, is blessed with strong trade associations and marketing organizations, including the Namibian Meat Board, SAMIC, and NEPRO, that actively promote local products, engage in branding and quality assurance, and build the capacity of emerging farmers. The emerging farmer sector in South Africa holds significant promise as an engine for growth in branded and niche products alike, with further capacity building needed

to improve productivity and market orientation. Scaling-up these types of marketing and capacity-building efforts to other potential export regions in Africa should be encouraged.

The challenge with niche products and markets is sustaining one's position in those markets. As noted earlier, game meat is a lucrative area for African exports, but demand trends are sometimes erratic. Likewise, the European market is a profitable one for Namibia and Botswana, but is a high-cost and protected one. The key for sustaining one's position is continued innovation and promotion, building brand presence that justifies higher costs and price premiums and targeting consumer segments willing to pay higher prices for a high-quality product.

A fourth area that could improve Africa's ability to compete in global markets is further enhancements of *regional integration and trade*. In SADC, for instance, there remain high barriers to trade between regional members in cattle and livestock products. Botswana bans the export of live animals, which prevents the movement of animals (particularly weaners) to areas in South Africa where they could be further fattened. Allowing the export of weaners could provide new market outlets (and better prices) for Botswana's farmers and improve the supply base in South Africa, reducing the need for South Africa to import meat from other sources (Jefferis 2005). Such an integrated supply structure, combined with the development of a compartment and/or commodity-based approach could further help to improve efficiencies and scale in Southern Africa that would make it more competitive in alternative markets outside the EU.

In any scenario, competing on a global scale will necessitate various investments in productivity, marketing, supply chain management, inputs, etc. that bring costs down and improve the quantity and quality of the supply base from Africa. Further investments in marketing and promotion, particularly for niche products, and the capacity to engage in these, will be required to effectively enter and sustain oneself in high-value markets.

Finally, while the emphasis of this discussion has been on Africa's role in global markets, one should not forget the potential of *own, domestic markets*. Over the past several years, GDP growth in many African countries has been substantial and created significant demand domestically in formal and informal channels for meat products. Indeed, there are numerous instances in which the domestic price exceeds the international price. In these instances, the option for Africa is to find ways that deliver indigenously produced products at competitive prices for consumers.

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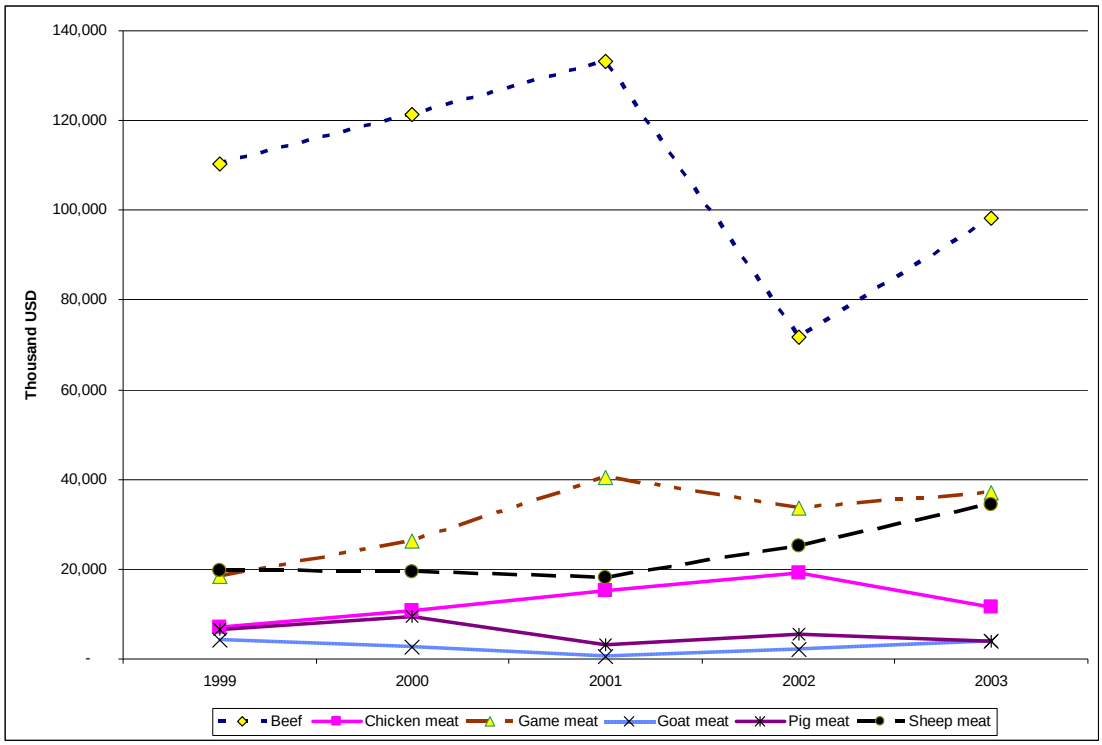


Figure 1. Export value of African meat exports, selected products, 1999-2003 ('000 USD). Source: FAOSTAT (2008).

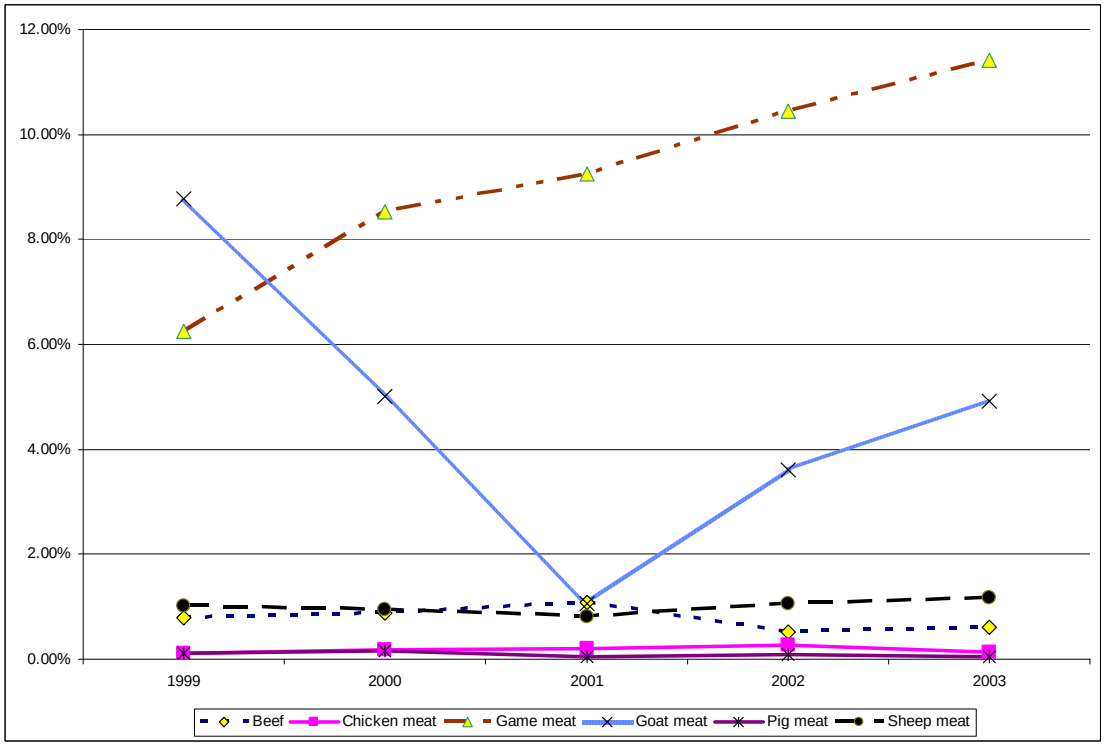
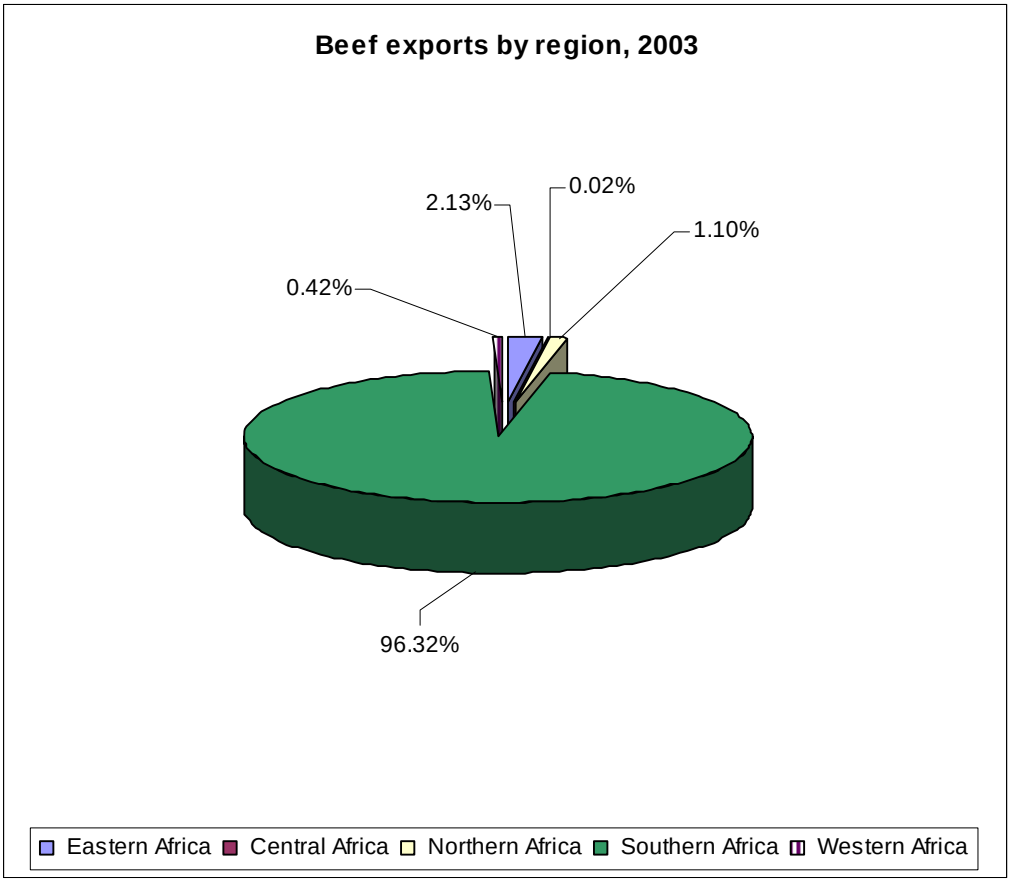
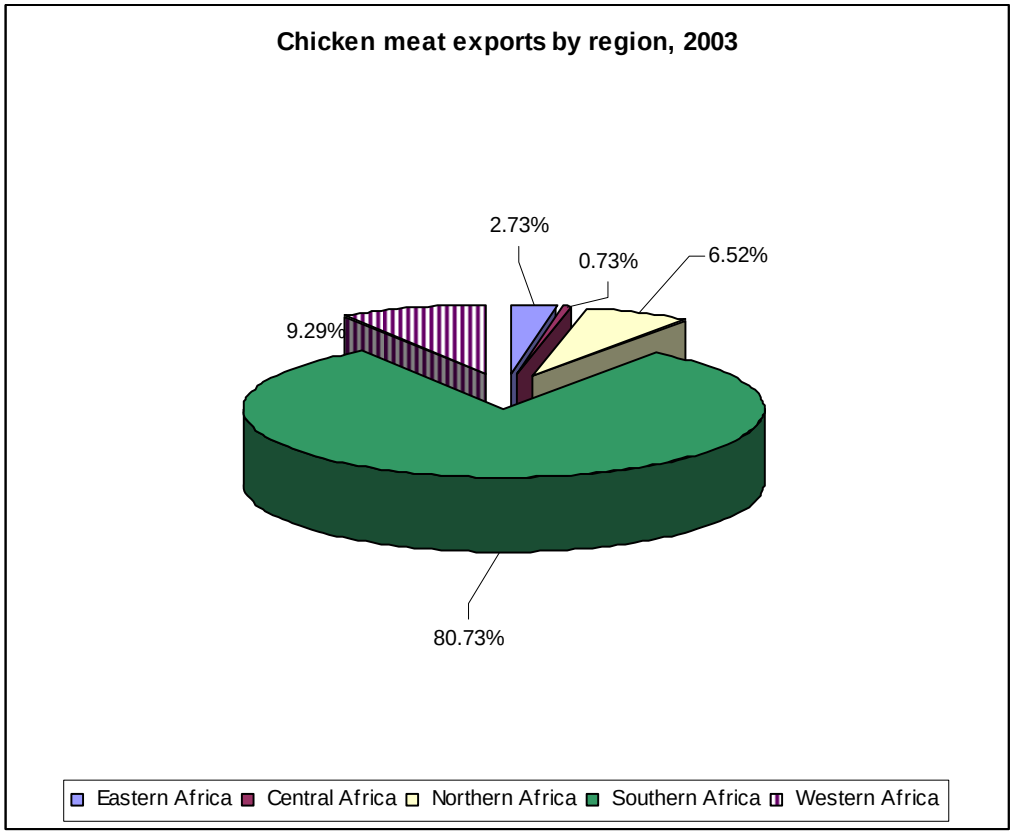
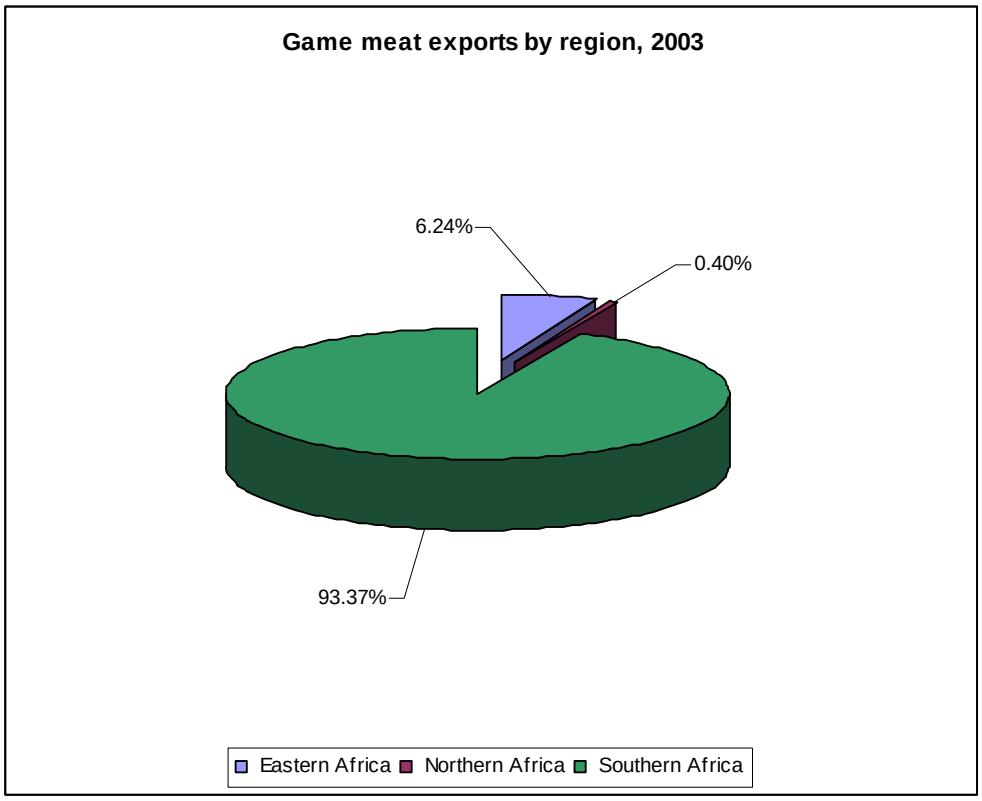
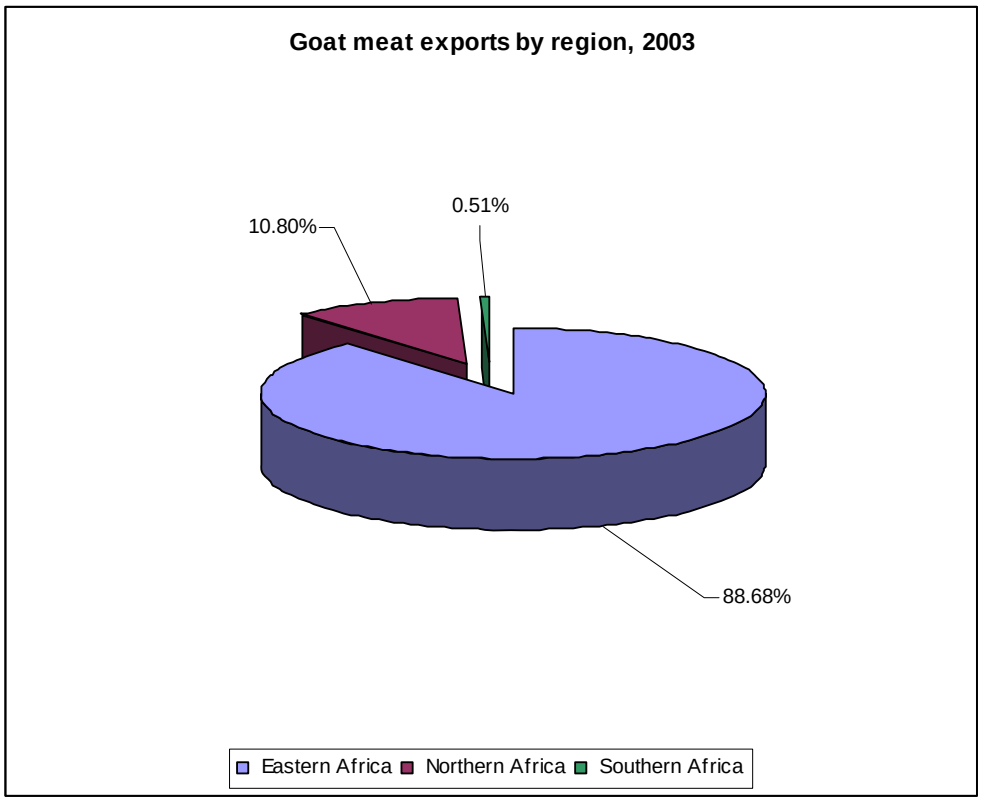


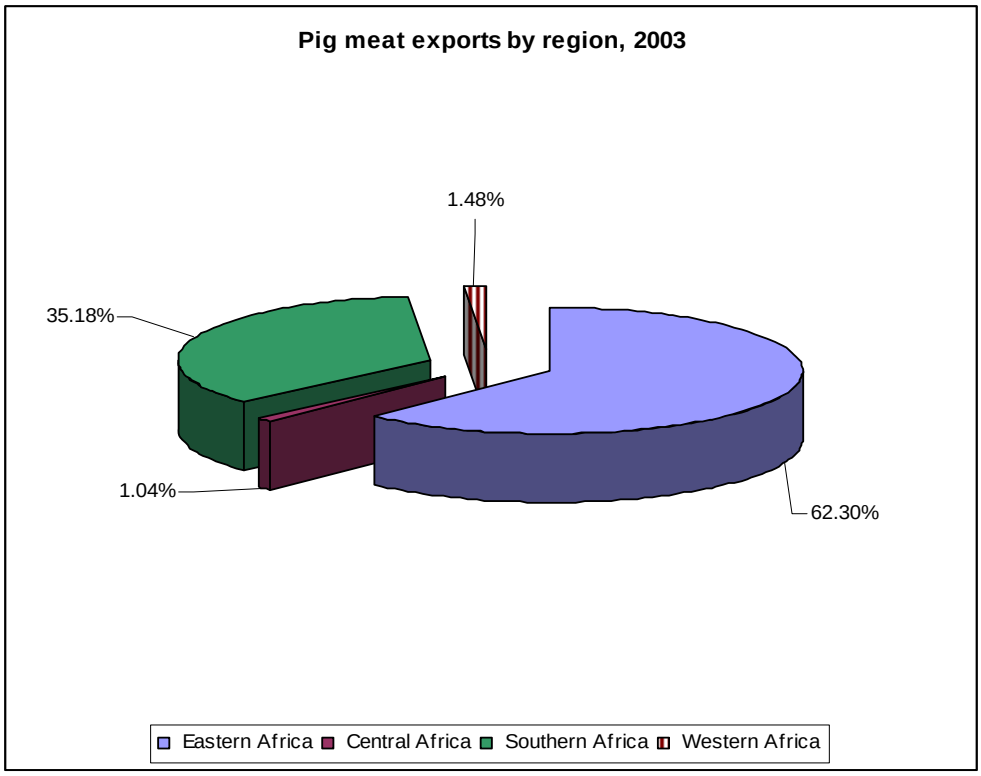
Figure 2. Africa's share of the value of global meat exports, selected products, 1999-2003. Source: FAOSTAT (2008).


Beef exports by region, 2003
2.13%
0.02%
1.10%
0.42%
96.32%
Eastern Africa
Central Africa
Northern Africa
Southern Africa
Western Africa


Chicken meat exports by region, 2003
2.73%
0.73%
6.52%
9.29%
80.73%
Eastern Africa
Central Africa
Northern Africa
Southern Africa
Western Africa


Game meat exports by region, 2003
6.24%
0.40%
93.37%
Eastern Africa
Northern Africa
Southern Africa


Goat meat exports by region, 2003
0.51%
10.80%
88.68%
Eastern Africa
Northern Africa
Southern Africa



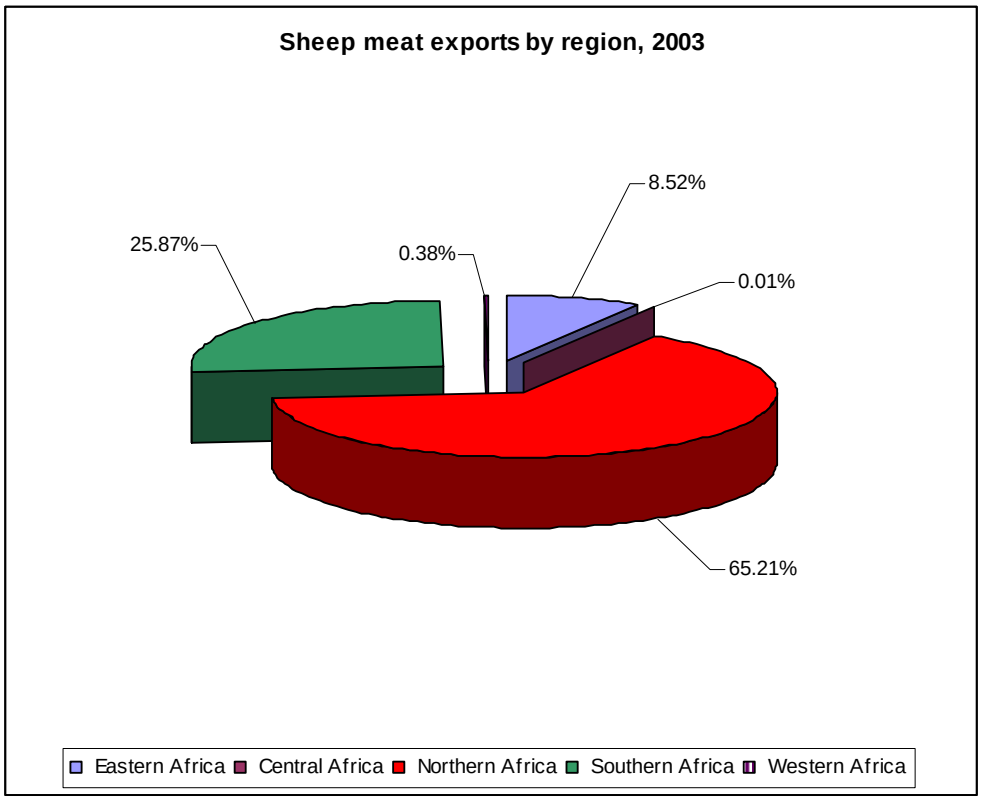


Figure 3. Regional share of selected meat exports in Africa, 2003. Source: FAOSTAT (2008).

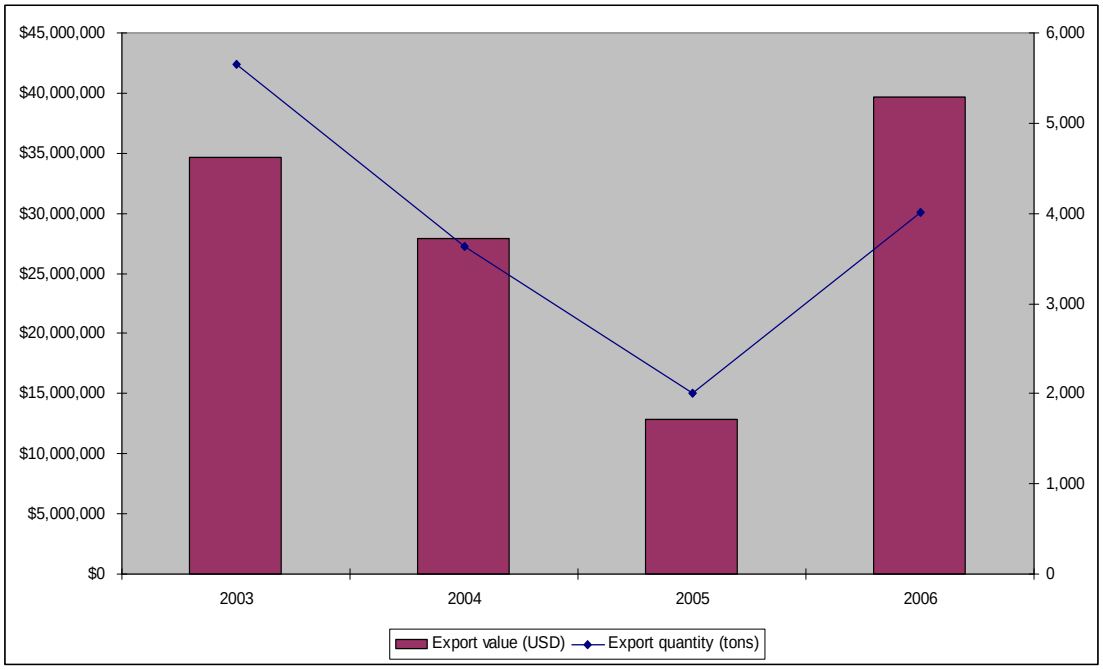


Figure 4. Trends in game and other meat exports from South Africa, 2003-2006. Source: UN Comtrade.

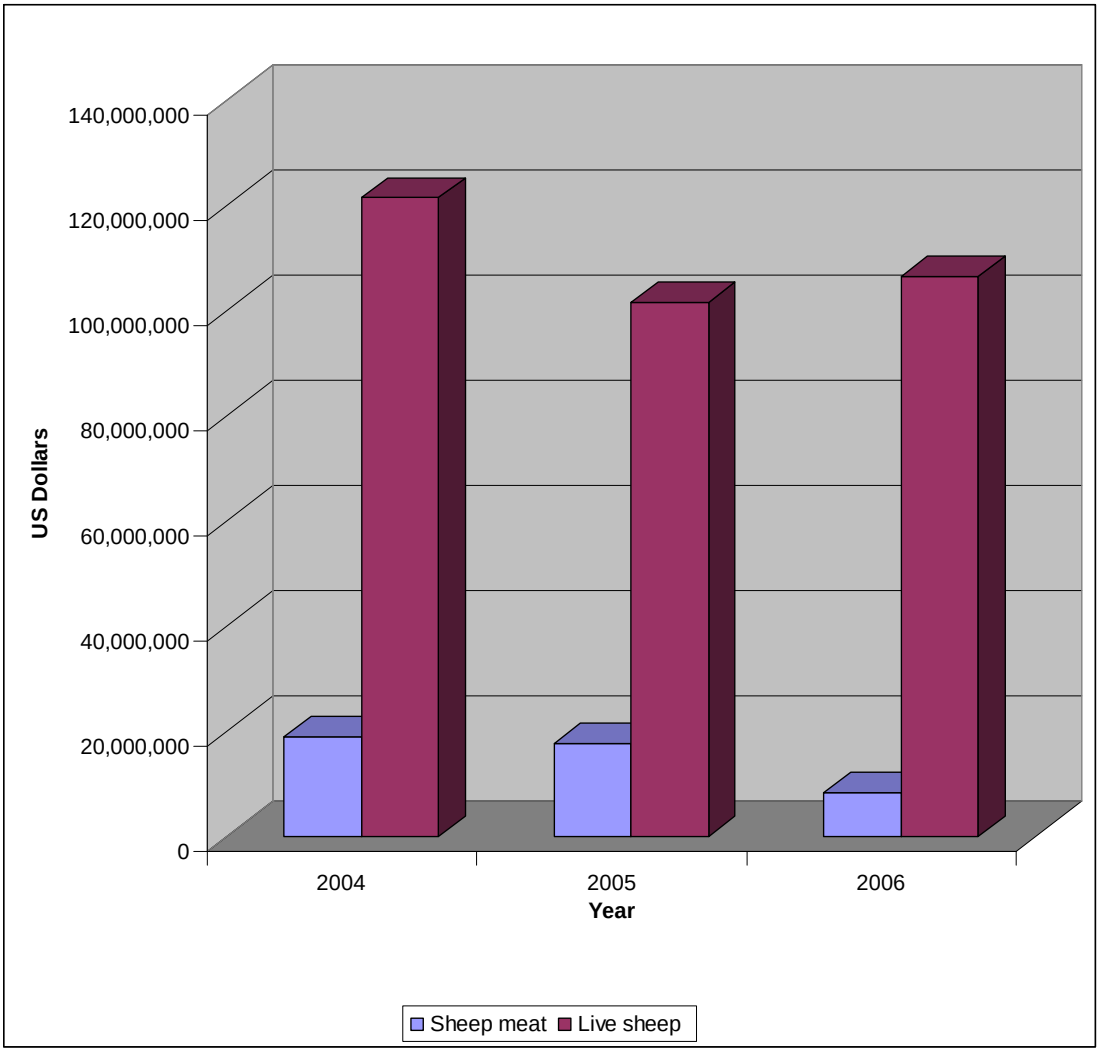


Figure 5. Trends in sheep meat and live sheep exports from Sudan, 2004-2006. Source: UN Comtrade.

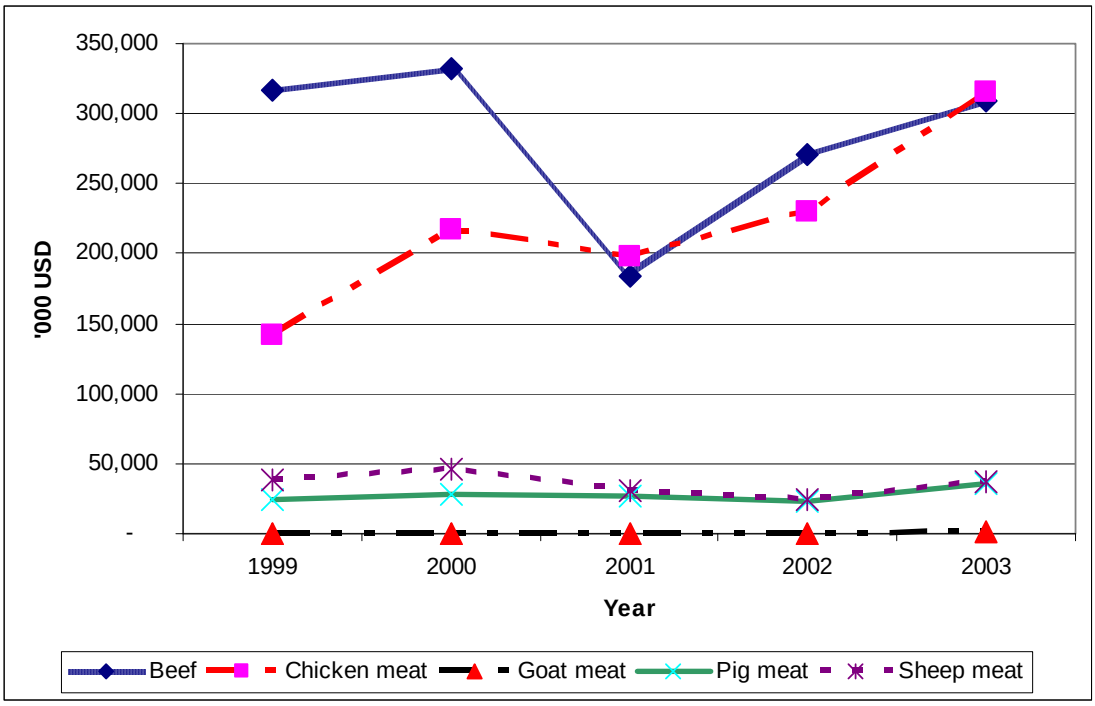


Figure 6. Import value of African meat imports, selected products, 1999-2003 ('000 USD). Source: FAOSTAT (2008).

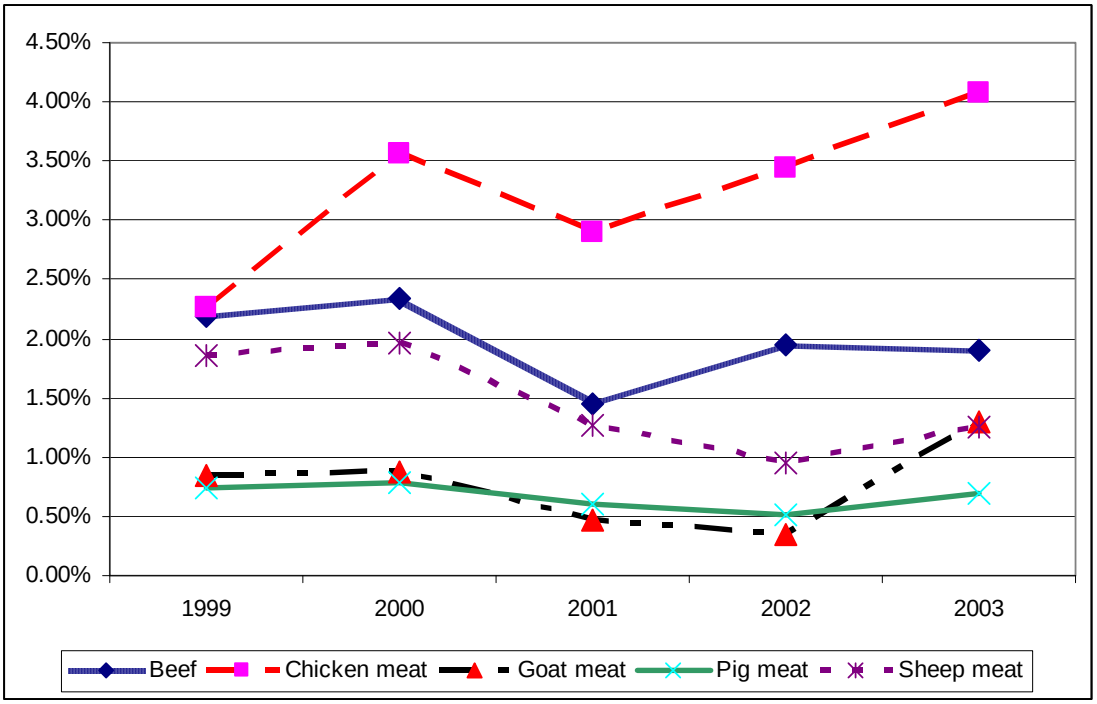


Figure 7. Africa's share of the value of global meat imports, selected products, 1999-2003. Source: FAOSTAT (2008).

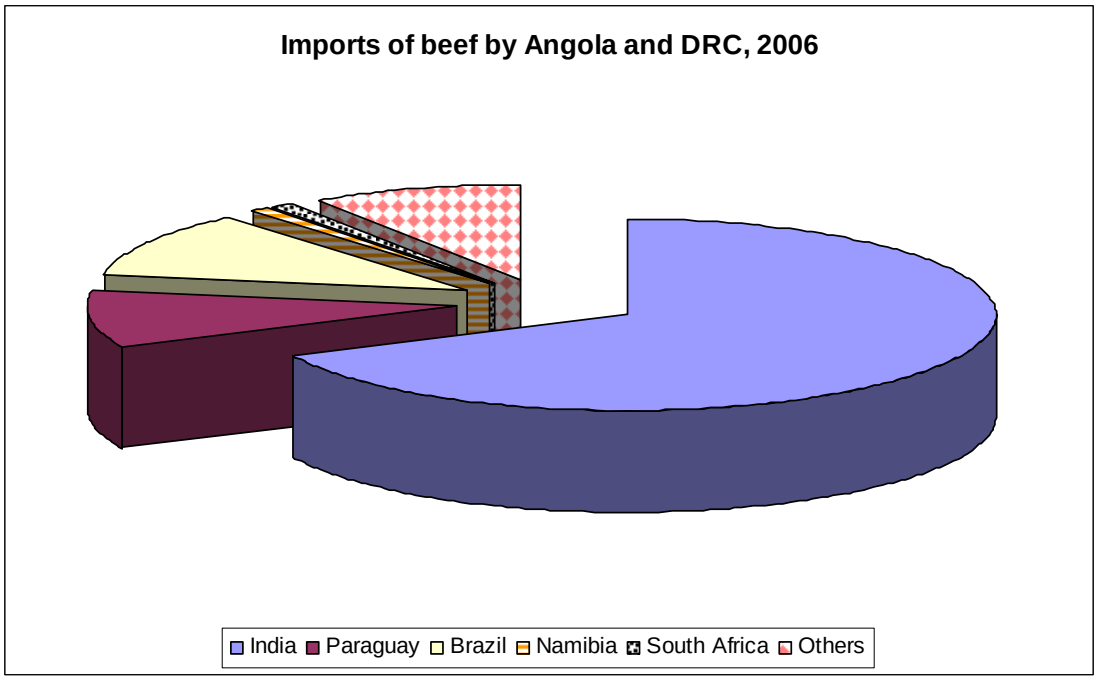


Figure 8. Imports of beef by Angola and DRC, 2006. Source: UN Comtrade.

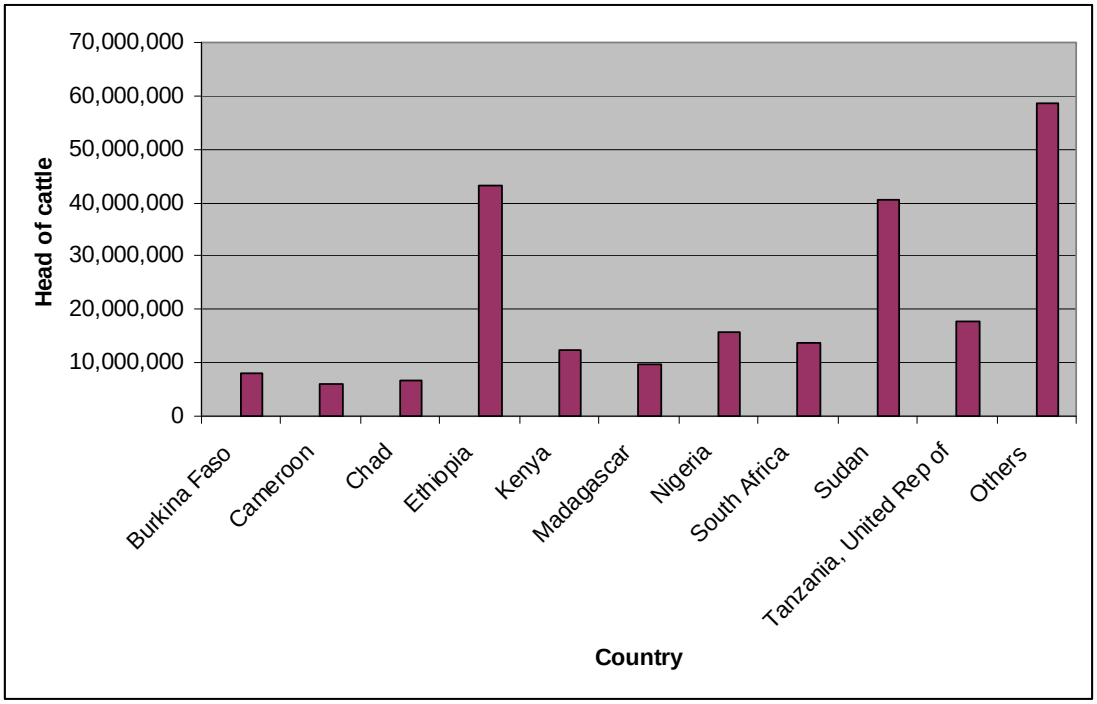


Figure 9. Stocks of cattle from selected African countries, 2006. Source: FAOSTAT (2008).

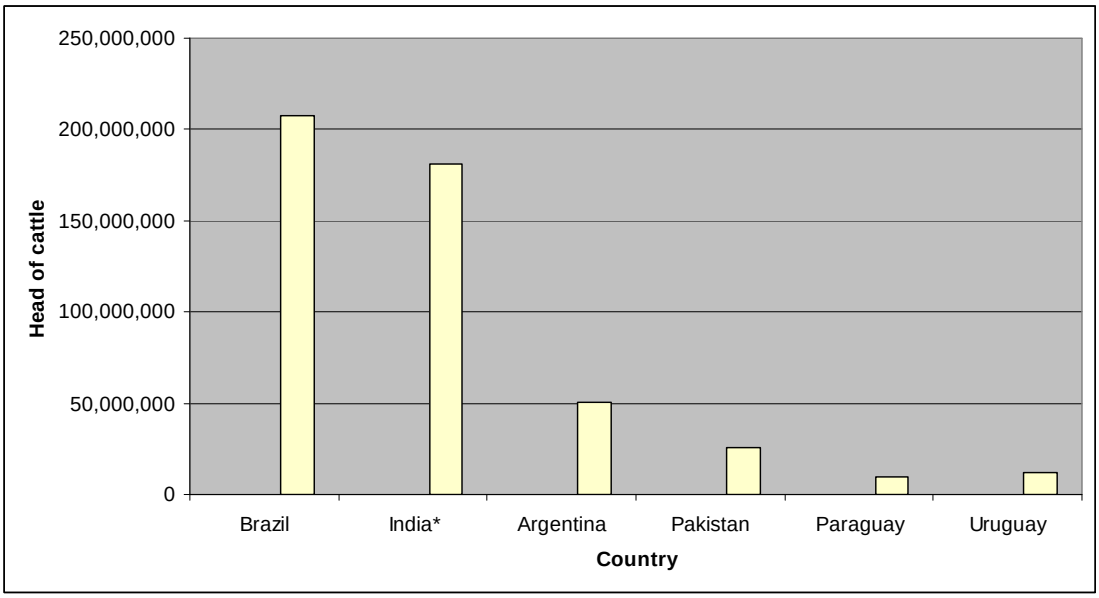


Figure 10. Stocks of cattle from selected Latin American and Asian countries, 2006. *Does not include stocks of 98.8 million buffalo in India. Source: FAOSTAT (2008).

Table 1. Regional share of beef exports in Africa, selected Southern African markets, 2006 [Source: UN Comtrade]

Botswana: Fresh beef (HS 0201)

Market	Export value	Export quantity (tons)	Unit value (USD/ton)
European Union	$28,158,609	4,056.60	$6,941
South Africa	$14,855,733	5,021.20	$2,958
Malawi	$421	2.93	$143
Mozambique	$953	1.88	$506
Namibia	$42,900	31.92	$1,343
Zambia	$61	28.00	NA
Zimbabwe	$1,058	4,673.00	NA
World	$43,059,733	9,119.23	$4,721

Botswana: Frozen beef (HS 0202)

European Union	$14,381,488	3,931.99	$3,657
Brazil	$110	0.01	$9,166
Japan	$135	0.04	$3,139
Mozambique	$673	2.51	$268
Namibia	$134,425	36.93	$3,640
South Africa	$23,146,193	7,853.19	$2,947
Zimbabwe	$1,557	3.34	$466
World	$37,664,579	11,828.00	$3,184

Namibia: Fresh beef (HS 0201)

Market	Export value	Export quantity (tons)	Unit value (USD/ton)
European Union	$3,131	0.53	$5,941
Angola	$15,092	0.75	$20,096
Botswana	$1,095	0.06	$18,250
China	$768	0.10	$7,604
India	$19	0.00	$4,750
Norway	$31,250	94.71	$330
South Africa	$35,273,253	6,399.75	$5,512
Switzerland	$113,911	2.14	$53,229
USA	$692	0.07	$9,351
Zambia	$157,873	23.57	$6,697

World	$35,597,084	6,521.69	$5,458
Namibia: Frozen beef (HS 0202)			
European Union	$11,226	1.62	$6,951
Angola	$1,754	0.47	$3,764
Botswana	$1,470	0.29	$5,140
China	$126	0.02	$6,000
Dem. Rep. of the Congo	$1,210,723	624.83	$1,938
Norway	$1,052	0.08	$12,675
South Africa	$38,529,479	13,032.90	$2,956
USA	$236	0.04	$5,900
Other	$156	0.01	$15,600
World	$39,756,222	13,660.25	$2,910

South Africa: Fresh beef (HS 0201)

Market	Export value	Export quantity (tons)	Unit value (USD/ton)
European Union	$648,725	147.29	$4,404
Angola	$890,159	156.31	$5,694
China, Hong Kong SAR	$58	0.02	$2,900
Comoros	$6,575	0.88	$7,471
Congo	$109,378	22.63	$4,833
Côte d'Ivoire	$22,824	4.26	$5,361
Dem. Rep. of the Congo	$18,780	1.75	$10,749
Ethiopia	$2,098	0.20	$10,334
Gabon	$416,188	94.40	$4,408
Ghana	$61,477	6.88	$8,938
Heard Island and McDonald Islands	$447	0.05	$9,312
Kuwait	$107,746	16.64	$6,474
Lebanon	$92,391	9.99	$9,247
Libya	$426	0.02	$25,058
Madagascar	$339	0.03	$10,935
Malawi	$1,304	0.20	$6,392
Mali	$79	0.01	$7,900
Mauritius	$532,777	88.16	$6,043
Mozambique	$482,810	498.73	$968
Nigeria	$184,452	14.15	$13,032
Rep. of Korea	$460	0.06	$7,540
Rwanda	$588	0.06	$10,137
Saint Helena	$53,578	15.75	$3,401
Seychelles	$13,063	1.67	$7,812
Switzerland	$3,661,538	399.99	$9,154
Uganda	$963	0.71	$1,356
United Arab Emirates	$932,347	102.58	$9,089
United Rep. of Tanzania	$21,750	3.79	$5,743
Zambia	$6,000	4.21	$1,424
Zimbabwe	$247	0.13	$1,857
Others	$141,151	33.83	$4,171
World	$8,410,979	1,625.41	$5,174

South Africa: Frozen beef (HS 0202)

Market	Export value	Export quantity (tons)	Unit value (USD/ton)
European Union	$91,504	40.61	$2,253

Angola	$1,069,597	269.47	$3,969
Antarctica	$249	0.03	$8,032
Benin	$1,250	0.62	$2,003
Brazil	$342,888	367.17	$934
Cameroon	$162	0.01	$11,571
Chad	$862	0.12	$6,952
China, Hong Kong SAR	$37	0.04	$925
Comoros	$1,751	0.23	$7,646
Congo	$282	0.04	$7,231
Côte d'Ivoire	$4,395	0.75	$5,860
Dem. Rep. of the Congo	$150,637	358.11	$421
Ethiopia	$6,392	1.26	$5,057
Gabon	$1,507	0.41	$3,721
Ghana	$125,091	36.10	$3,465
Jordan	$2,357	0.25	$9,428
Kenya	$852	0.45	$1,893
Madagascar	$443	0.05	$8,860
Maldives	$102	0.02	$6,375
Mali	$438	0.05	$9,319
Mauritius	$28,372	3.48	$8,155
Mozambique	$688,785	892.87	$771
Nigeria	$516,064	47.34	$10,901
Panama	$395	0.07	$5,725
Rwanda	$1,353	0.11	$11,973
Saint Helena	$18,150	4.26	$4,264
Saudi Arabia	$59,464	20.63	$2,882
Senegal	$687	0.08	$8,481
Seychelles	$46,769	7.11	$6,578
Switzerland	$1,593	0.14	$11,379
Uganda	$466	0.13	$3,557
United Arab Emirates	$845,645	178.06	$4,749
United Rep. of Tanzania	$2,894	0.30	$9,810
Zambia	$957	0.17	$5,696
Others	$935,901	234.99	$3,983
World	$4,948,292	2,465.52	$2,007

Table 2. Game and other meat exports from South Africa, 2006 [Source: UN Comtrade]

South Africa: Game and other meat exports (HS 020890)

Market	**Export value**	**Export quantity (tons)**	**Unit value (USD/ton)**
Angola	$18,144	6.25	$2,902
Belgium	$6,715,364	744.81	$9,016
Bunkers	$4,357	0.93	$4,685
China, Hong Kong SAR	$822,327	210.85	$3,900
Comoros	$73	0.01	$5,214
Congo	$135	0.02	$9,000
Cyprus	$20,673	5.61	$3,684
Dem. Rep. of the Congo	$21,450	15.13	$1,417
Ethiopia	$107	0.10	$1,070
France	$1,725,340	180.89	$9,538
Gabon	$126,851	28.60	$4,436
Germany	$9,561,365	1,048.73	$9,117
Ghana	$61,786	7.57	$8,160
Italy	$173,745	17.81	$9,753
Mauritius	$6,707	0.50	$13,522
Mozambique	$1,590	2.20	$721

Netherlands	$13,891,982	1,009.31	$13,764
Nigeria	$8,332	2.23	$3,745
Portugal	$202	0.08	$2,590
Rep. of Korea	$337	0.02	$15,318
Saint Helena	$2,037	0.44	$4,640
Seychelles	$946	0.12	$8,085
Singapore	$11	0.01	$1,100
Spain	$125,105	15.72	$7,960
Switzerland	$6,342,700	704.19	$9,007
Uganda	$30	0.12	$250
United Arab Emirates	$21,046	4.72	$4,456
United Kingdom	$26	0.03	$867
United Rep. of Tanzania	$488	0.04	$13,943
Viet Nam	$1,712	0.17	$10,313
Zambia	$83	0.01	$13,833
Zimbabwe	$3,346	5.00	$669
World	$39,658,399	4,012.19	$9,884

Table 3. Chicken meat exports from selected South African markets, 2006 [Source: UN Comtrade]

Namibia

Market	Export value	Export quantity (kg)	Unit value (USD/ton)
Angola	$80,168	2,103	$38,121
Botswana	$2,532	1,079	$2,347
China	$262	88	$2,977
Congo	$89,176	52,700	$1,692
Dem. Rep. of the Congo	$1,579,849	3,119,201	$506
Germany	$588	173	$3,399
India	$517	170	$3,041
South Africa	$300,280	95,779	$3,135
Spain	$2,226	727	$3,062
Switzerland	$338,132	36,053	$9,379
Thailand	$24	6	$4,000
United Kingdom	$2,653	901	$2,945
USA	$269	91	$2,956
Zambia	$3,748	2,044	$1,834
Zimbabwe	$74	6	$12,333
Other	$42	10	$4,200
World	$2,400,540	3,311,131	$725

South Africa

Market	Export value	Export quantity (kg)	Unit value (USD/ton)
Andorra	$456	320	$1,425
Angola	$648,456	362,415	$1,789
Antarctica	$664	155	$4,284
Benin	$6,990	1,802	$3,879
Brazil	$33,190	51,990	$638
Burundi	$560	131	$4,275
Chad	$2,045	452	$4,524
Colombia	$47	10	$4,700
Congo	$4,086	1,266	$3,227
Côte d'Ivoire	$263	57	$4,614
Dem. Rep. of the Congo	$242,086	215,813	$1,122
Denmark	$45	20	$2,250
Ethiopia	$6,873	1,846	$3,723
Germany	$58,996	5,200	$11,345
Ghana	$132,282	26,938	$4,911
Madagascar	$694	172	$4,035
Malawi	$290	226	$1,283
Mali	$5,098	1,050	$4,855
Mauritius	$89,756	19,693	$4,558
Mozambique	$1,661,286	1,017,903	$1,632
Netherlands	$326,245	35,210	$9,266
Nigeria	$377,813	102,039	$3,703
Panama	$502	192	$2,615
Papua New Guinea	$24	15	$1,600
Rep. of Korea	$97	28	$3,464
Rwanda	$4,248	889	$4,778
Saint Helena	$100,994	39,004	$2,589
Senegal	$1,217	263	$4,627
Seychelles	$2,344	511	$4,587
Switzerland	$114,881	10,000	$11,488
Uganda	$5,126	445	$11,519
United Arab Emirates	$47,055	14,438	$3,259
United Kingdom	$2,794	628	$4,449

United Rep. of Tanzania	$101	29	$3,483
Zambia	$2,268	465	$4,877
Zimbabwe	$193,009	285,051	$677
Other	$566,750	287,516	$1,971
World	$4,639,629	2,484,182	$1,868

Zimbabwe (2005)

Market	Export value	Export quantity (kg)	Unit value (USD/ton)
Belgium	$21,610	8,746	$2,471
China	$1,042	90	$11,578
Mozambique	$19,921	6,500	$3,065
Namibia	$2,350,848	536,000	$4,386
Netherlands	$15,349	6,129	$2,504
South Africa	$4,816	1,971	$2,443
Switzerland	$1,624	651	$2,495
World	$2,415,211	560,087	$4,312

Table 4. Goat meat exports from selected East African markets, 2006 [Source: UN Comtrade]

Ethiopia

Market	Export value	Export quantity (kg)	Unit value (USD/ton)
Bahrain	$23,911	9,000	$2,657
Brazil	$9,065	4,900	$1,850
China	$7,320	2,500	$2,928
Colombia	$4,040	2,000	$2,020
Congo	$44,230	20,000	$2,212
Egypt	$542,379	212,100	$2,557
India	$6,589	2,250	$2,928
Neth. Antilles	$5,303	3,000	$1,768
Netherlands	$39,208	17,000	$2,306
Saudi Arabia	$4,227,902	1,729,746	$2,444
Sweden	$102,691	35,734	$2,874
United Arab Emirates	$8,025,213	3,094,927	$2,593
United Kingdom	$5,418	1,850	$2,929
USA	$17,771	8,000	$2,221
Yemen	$77,932	45,695	$1,705
Other	$13,141	4,000	$3,285
World	$13,152,113	5,192,702	$2,533

Table 5. Sheep meat exports from selected North African markets, 2006 [Source: UN Comtrade]

Sudan

Market	Export value	Export quantity (kg)	Unit value (USD/ton)
Bahrain	$280,407	71,768	$3,907
Egypt	$32,036	8,200	$3,907
Jordan	$400,349	102,377	$3,911
Lebanon	$17,132	4,385	$3,907
Libya	$18,753	4,800	$3,907
Oman	$42,780	10,950	$3,907
Qatar	$205,045	52,566	$3,901
Saudi Arabia	$6,809,618	1,766,862	$3,854
Syria	$42,122	11,004	$3,828
United Arab Emirates	$504,968	134,395	$3,757
United Kingdom	$7,814	2,000	$3,907
World	$8,361,023	2,169,307	$3,854

Table 6. Pig meat exports from selected East African markets, 2006 [Source: UN Comtrade]

Kenya

Market	Export value	Export quantity (kg)	Unit value (USD/ton)
Bahrain	$137,582	23,053	$5,968
Ethiopia	$9,593	2,037	$4,709
Ghana	$4,825	638	$7,563
Mauritius	$88,148	27,132	$3,249
Netherlands	$45,995	15,395	$2,988
Oman	$16,078	5,150	$3,122
Rwanda	$5,728	804	$7,124
Saint Helena	$157	19	$8,263
Sudan	$34,047	19,948	$1,707
Uganda	$57,418	16,690	$3,440
United Arab Emirates	$830,283	290,052	$2,863
United Kingdom	$1,578	264	$5,977
United Rep. of Tanzania	$598,925	159,094	$3,765
USA	$1,391	500	$2,782
Other	$18	5	$3,600
World	$1,831,767	560,781	$3,266

Zimbabwe (2005)

Market	Export value	Export quantity (kg)	Unit value (USD/ton)
Mauritius	$1,162,744	469,860	$2,475
Mozambique	$101,394	97,000	$1,045
World	$1,264,138	566,860	$2,230

Table 7. Beef imports from select African countries, 2001-2005 (thousand USD) [Source: FAOSTAT (2008)]

Markets	2001	2002	2003	2004	2005	Cumulative annual growth rate
Algeria	8,668	30,301	81,539	142,072	174,799	*82%*
Angola	11,461	9,556	19,074	26,841	16,356	*7%*
Cape Verde	183	194	512	691	682	*30%*
Comoros	737	1,359	2,000	2,640	2,142	*24%*
Congo, Dem Republic of	22	1,276	1,587	1,443	745	*103%*
Congo, Republic of	355	1,488	836	543	560	*10%*
Côte d'Ivoire		2,492	7,543	4,508	3,270	*NA*
Djibouti	24	109	49	600	1,266	*122%*
Egypt	126,921	189,762	149,127	180,758	298,024	*19%*
Equatorial Guinea	59	118	656	2,020	2,051	*103%*
Gabon	7,019	2,001	5,087	8,860	3,684	*-12%*
Gambia	11	16	11	107	164	*72%*
Ghana	585	1,788	2,181	1,439	1,770	*25%*
Guinea			198	145	356	*NA*
Kenya	67	66	96	13	132	*15%*
Liberia	726	422	546	917	535	*-6%*
Libyan Arab Jamahiriya	415	1,297	2,153	16,602	32,803	*140%*
Mauritania	4	2	53	9	16	*28%*
Mauritius	5,848	7,570	8,467	9,320	10,383	*12%*
Morocco	935	1,292	1,234	2,229	2,832	*25%*
Mozambique	377	664	400	1,231	1,323	*29%*

Namibia	570	975	935		95	*-30%*
Nigeria	377	141	738	932	541	*7%*
Saint Helena	4	13	48	25	48	*61%*
Sao Tome and Principe	0	1	10	21	31	*175%*
Senegal	857	840	1,478	3,375	7,073	*53%*
Seychelles	615	780	1,715	1,275	1,940	*26%*
Sierra Leone	138	-	367	80	44	*-21%*
South Africa	4,638	3,867	9,439	20,540	30,892	*46%*
Sudan	-	11	34	13	30	*NA*
Tanzania, United Rep of	58	38	68	45	132	*18%*
Tunisia	53		1,462	1,718	2,805	*121%*

Table 8. Chicken meat imports from select African countries, 2001-2005 (thousand USD) [Source: FAOSTAT (2008)]

Markets	**2001**	**2002**	**2003**	**2004**	**2005**	**Cumulative annual growth rate**
Angola	37,486	47,682	64,000	64,727	87,779	*19%*
Benin	17,689	23,140	26,723	29,735	28,552	*10%*
Burundi	-	-	1	22		*NA*
Cameroon	5,574	11,897	18,044	27,645	9,294	*11%*
Cape Verde	2,037	2,106	2,886	4,906	5,817	*23%*
Central African Republic	-	7	40	27		*NA*
Chad	1	111	215	239	391	*270%*
Comoros	995	2,128	5,687	7,001	7,321	*49%*
Congo, Dem Republic of	11,458	12,791	18,355	31,860	35,661	*25%*
Congo, Republic of	14,398	17,095	24,881	19,289	26,864	*13%*
Côte d'Ivoire	828	2,883	9,645	7,762	3,544	*34%*
Djibouti	314	460	504	2,024	3,612	*63%*
Egypt	4,406	4,486	685	3,077	2,615	*-10%*
Equatorial Guinea	3,840	4,992	4,945	7,197	7,892	*15%*
Eritrea	36	2	29	39	1	*-47%*
Ethiopia	23		-	6	3	*-32%*
Gabon	21,904	10,313	12,685	21,169	24,996	*3%*
Gambia	447	803	247	2,850	4,404	*58%*
Ghana	8,303	17,119	21,576	34,797	43,933	*40%*
Guinea	517	628	1,223	2,075	2,537	*37%*
Guinea-Bissau	776	444	1,000	1,287	642	*-4%*
Kenya	1	9	-	3	887	*289%*
Liberia	676	1,147	1,037	3,879	3,183	*36%*
Libyan Arab Jamahiriya		319	153	31	19	*NA*
Madagascar		-	4	-	380	*NA*
Malawi	923	244	61	20	1	*-76%*
Mali	26	4	77	44	1	*-44%*
Mauritania	3,650	5,178	5,921	5,342	4,801	*6%*
Mauritius	72	31	146	256	325	*35%*
Morocco	385	406	345	228	423	*2%*
Mozambique	7,304	10,465	7,239	9,619	14,992	*15%*
Namibia	5,917	2,910	2,698	1,774	930	*-31%*
Niger	33	26	29	97	66	*15%*
Nigeria	11,955	3,163	1,039	324	165	*-58%*

Saint Helena	44	115	121	296	196	*35%*
Sao Tome and Principe	327	514	589	592	663	*15%*
Senegal	5,075	10,583	20,926	25,210	21,645	*34%*
Seychelles	451	786	1,197	394	707	*9%*
Sierra Leone	2,148	9,194	3,802	2,384	1,122	*-12%*
Somalia	62			5,056	5,160	*142%*
South Africa	25,448	23,665	51,107	78,046	113,953	*35%*
Sudan	-	61	3	68	37	*NA*
Tanzania, United Rep of	286	230	261	210	298	*1%*
Togo	809	1,434	3,892	1,429	1,636	*15%*
Uganda	4	15	4	52	1	*-24%*
Zimbabwe	98	51	38	691	244	*20%*

Table 9. Beef imports from select Middle Eastern and Asian countries, 2001-2005 (thousand USD) [Source: FAOSTAT (2008)]

Markets	**2001**	**2002**	**2003**	**2004**	**2005**	**Cumulative annual growth rate**
Afghanistan		729	1,589	426	418	*NA*
Armenia	8,206	6,010	8,450	10,879	9,131	*2%*
Azerbaijan, Republic of	6	421	557	1,437	3,593	*259%*
Bahrain	5,608	6,277	4,816	4,621	4,859	*-3%*
Bangladesh	10	65	52	659	74	*50%*
Brunei Darussalam	360	1	35	108	113	*-21%*
Cambodia	5	8	2	12	328	*131%*
China	288,989	302,982	368,709	336,363	415,852	*8%*
Cyprus	7,817	7,986	7,756	9,858	13,365	*11%*
Georgia	1,038		1,379	954	2,542	*20%*
India	308	640	368	259	342	*2%*
Indonesia	22,849	17,728	17,535	26,507	42,487	*13%*
Iran, Islamic Rep of	77,650	13,382	56,250	91,970	51,341	*-8%*
Iraq		39	6,479	6,916	4,602	*NA*
Israel	113,622	114,025	105,540	148,705	110,843	*0%*
Japan	2,260,994	1,511,756	2,111,495	1,824,993	1,994,699	*-2%*
Jordan	16,385	22,674	21,037	34,078	45,731	*23%*
Kazakhstan	802	1,532	3,489	2,582	3,082	*31%*
Korea, Dem People's Rep	33,110	65,050	256	2,708	3,196	*-37%*
Korea, Republic of	240,965	462,259	529,475	377,739	427,517	*12%*
Kuwait	7,412	11,670	49,077	26,253	36,019	*37%*
Lebanon	16,022	24,921	34,428	43,582	41,503	*21%*
Malaysia	105,537	106,441	103,234	153,770	176,336	*11%*
Maldives	1,986	2,330	2,565	3,073	2,496	*5%*
Myanmar	69	71	29	187	41	*-10%*
Oman	8,553	11,283	11,155	1,480	6,531	*-5%*
Pakistan			7	33	462	*NA*
Philippines	81,529	81,956	50,930	123,526	54,792	*-8%*
Qatar	4,245	7,185	4,717	2,961	3,442	*-4%*
Saudi Arabia	45,750	88,042	58,375	91,705	76,924	*11%*
Singapore	36,669	37,739	41,198	46,908	50,075	*6%*
Sri Lanka	152	178	179	286	791	*39%*
Tajikistan	57			81	166	*24%*

Thailand	1,353	1,752	1,333	1,667	2,639	*14%*
Timor-Leste		122	683	310	105	*NA*
Turkey	264	5	505	74	862	*27%*
Turkmenistan	64	1,258	4,293	1,047		*-100%*
United Arab Emirates	23,236	52,046	46,427	41,598	44,089	*14%*
Uzbekistan	58	1,271	371	87	998	*77%*
Viet Nam	673	1,259	1,541	2,821	7,982	*64%*
Yemen	569	465	719	3,498	3,405	*43%*
TOTAL	3,412,921	2,963,557	3,657,035	3,426,720	3,643,774	*1%*

Table 10. Sheep meat imports from select Middle Eastern and Asian countries, 2001-2005 (thousand USD) [Source: FAOSTAT (2008)]

Markets	**2001**	**2002**	**2003**	**2004**	**2005**	**Cumulative annual growth rate**
Azerbaijan, Republic of	476	535	528	569	214	*-15%*
Bahrain	3,556	4,001	4,151	2,782	2,472	*-7%*
China	66,651	83,612	95,480	118,011	135,913	*15%*
Cyprus	2,519	3,084	2,442	5,802	5,786	*18%*
Georgia	3	2	6	49	20	*46%*
India	21	5	6	30	123	*42%*
Indonesia	796	913	1,476	2,006	2,514	*26%*
Israel	2,259	722	1,422	779	1,374	*-9%*
Japan	70,902	82,929	88,124	131,410	155,360	*17%*
Jordan	18,005	16,160	20,110	23,788	27,203	*9%*
Korea, Republic of	3,748	5,873	5,991	8,009	9,063	*19%*
Lebanon	1,253	1,624	1,067	1,496		*NA*
Malaysia	24,465	25,257	24,302	36,889	40,729	*11%*
Maldives	478	670	724	1,208	974	*15%*
Oman	14,692	14,460	15,355	15,992	17,407	*3%*
Pakistan	4	5	172	94	11	*22%*
Philippines	658	636	3,427	514		*NA*
Qatar	7,319	8,359	14,384	11,523	17,451	*19%*
Saudi Arabia	85,170	100,695	124,559	149,654	159,605	*13%*
Singapore	19,244	19,678	22,885	26,800	25,662	*6%*
Sri Lanka	953	1,070	949	992		*-100%*
Thailand	432	390	499	970	1,289	*24%*
United Arab Emirates		72,308	72,465			*NA*
Yemen			391	718	399	*NA*

Table 11. Game imports from selected countries, 2001-2005 (thousand USD) [Source: FAOSTAT (2008)]

Markets	**2001**	**2002**	**2003**	**2004**	**2005**	**Cumulative annual growth rate**
China	6,743	162	89	1,693	1,689	*-24%*
Indonesia	13	3	7	88	2	*-30%*
Japan	11,734	2,878	1,823	1,628	1,308	*-36%*
Kazakhstan		-	2	37	72	*NA*
Korea, Republic of	72	61	38	121		*-100%*
Kuwait	641	343	78	10	84	*-33%*

Lebanon		8	16	39	7	*NA*
Malaysia	407	485	246	105	-	*-100%*
Philippines			28		41	*NA*
Saudi Arabia	49	1	31	2	61	*4%*
Singapore	828	972	911	647	892	*1%*
Syrian Arab Republic		8	3	3		*NA*
Thailand	2	4	83	232	157	*134%*
United Arab Emirates	328			511	421	*5%*
Viet Nam	1		7	8	3	*30%*
Europe (all)	382,788	303,736	333,408	383,443	398,672	*1%*
North America (all)	11,816	11,037	10,243	11,045	11,421	*-1%*
Latin America (all)	11,204	125	365	442	1,671	*-32%*

Table 12. Imports of beef from selected African countries and main source of supply, 2006 [Source: UN Comtrade]

Market	**Commodity**	**Total import value (2005)**	**Main source**	**% share**	**Import unit value of main source (USD/ton)**
Algeria	Fresh beef	$21,296,945	Ireland	62%	$3,881
	Frozen beef	$158,637,238	Brazil	69%	$2,069
Egypt	Frozen beef	$277,085,875	Brazil	90%	$1,821
Mauritius	Fresh beef	$2,644,967	Australia	83%	$9,391
	Frozen beef	$7,989,251	India	69%	$1,583
Senegal	Fresh beef	$191,870	India	78%	$1,342
	Frozen beef	$8,291,416	India	84%	$1,345
Seychelles	Fresh beef	$153,818	Brazil	75%	$6,055
	Frozen beef	$2,027,140	Ireland	76%	$3,383
South Africa	Fresh beef	$1,713,310	Brazil	100%	$2,140
	Frozen beef	$29,458,726	Brazil	45%	$1,403
Tunisia	Fresh beef	$19,877,322	Germany	100%	$3,044
	Frozen beef	$2,800,672	Argentina	97%	$3,185

Table 13. Import unit values of main beef suppliers to Angola and DRC, 2006 [Source: UN Comtrade]

Market	**Fresh carcasses**	**Fresh bone-in beef**	**Fresh boneless meat**	**Frozen carcasses**	**Frozen bone-in beef**	**Frozen boneless meat**
India			$1,544		$1,407	$1,427
Paraguay			$3,525		$1,779	$3,048
Brazil		$1,821	$2,788		$1,642	$2,360
Namibia		$25,669	$5,548		$3,764	
South Africa	$4,830	$5,347	$6,062	$4,758	$3,553	$7,060