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Monitoring

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Report Highlights:

Kenya's feed ingredients market is currently estimated at \$530 million, with a potential to grow by 30 percent by 2027 due to an expanding feed industry. Currently white corn is the main feed ingredient, but supply is constrained as corn is also a staple food. Both local and regional supplies of alternative ingredients such as soybeans and cake are constrained due to low production, and restrictive import conditions. Imported Distiller's Dried Grain with Solubles (DDGs) and Sorghum, have potential as alternative ingredients.

This is an abridged version of a study report that was undertaken by Kilimo Center for USDA/FAS

Nairobi. The study was funded under the FAS/CSSF Program

EXECUTIVE SUMMARY

In 2022, USDA/FAS Nairobi contracted Kilimo Centre to undertake an analysis of Kenya's livestock sector to inform FAS Nairobi's market development and promotion strategy in Kenya. Specifically, the study sought to understand potential market opportunities for corn, sorghum, and distiller dried grains with soluble (DDGs) in the Kenyan feed market.

The consultants undertook an extensive review of contextual literature, surveys, market observations, key interviews, and consultations with a range of stakeholders. Interviewees included select feed manufacturers drawn from the membership of the Association of Kenya Feed Manufacturers (AKEFEMA), bulk purchasers of local raw material, grain importers, and local livestock handlers. Key areas of focus were identification of constraints to the acquisition and usage of raw feed materials and ingredients, and potential opportunities for alternative feed ingredients in Kenya.

Kenya's feed industry is expected to grow at 5-10 percent for ruminants and monogastric animals, in tandem with the growth in demand for animal protein as human population increases. Based on discussions with key stakeholders in the livestock sector, Kilimo Center estimates that Kenya's feed ingredients market at \$530 million, with a potential to grow by 30 percent by 2027.

This study established that white corn is the most common ingredient used in the manufacture of feed in Kenya. The over-reliance on white corn as a key ingredient in production is problematic since white corn is also Kenya's food staple, creating competition between the feed sector and for human consumption. Apart from corn, feed manufacturers use protein-rich raw materials like oil cakes from soy, cotton, canola, copra, and sunflower seeds after the oil has been extracted. Oil cakes are the most expensive part of feed formulations. Kenya does not produce enough of these ingredients domestically and relies on imports from regional and world markets. Sardines that are harvested from Lake Victoria have also traditionally been used as a source of protein, but their supply has become unreliable due to low yields, salmonella contamination, poor keeping quality, and adulteration with sand and shells. Other raw materials include milling byproducts like bran, corn germ and pollard which are sourced from flour millers. As Kenya's local production cannot meet demand, large volumes of feed ingredients are imported from Uganda and Tanzania.

Unreliable local and regional supplies of key feed ingredients have hampered the overall growth and development of Kenya's feeds sector. The study determined that, to date, very few initiatives to promote alternative feed ingredients have been put in place. Kenya's feed sector would therefore benefit from technical capacity support on the usage of alternative feed grains like sorghum, and distiller's dried grains with solubles (DDGS). DDGS have favorable costs per nutrient for both metabolizable energy and crude protein and therefore

have the potential for placement in the Kenyan market, with appropriate formulation knowledge. Currently, very limited amount of a DDGS-like product, mainly sourced from local breweries is currently being used in Kenya's feed industry. The product is however characterized by high moisture content, mold formation, and inconsistent supply.

Use of sorghum sourced from the United States as an alternative ingredient has been undergoing trials at a local feed manufacturer with positive results. U.S. sorghum is preferred due to amounts of low tannin, an antinutritional agent in poultry and monogastric animals.

The study determines that both DDGS and sorghum, when delivered at competitive prices, can replace corn and other grain byproducts. As an entry strategy, DDGS should be positioned as a protein and energy source, while sorghum could be positioned as an alternative to corn and wheat byproducts.

Strategies to reduce freight and logistics costs of raw materials exported from the United States should be explored to increase U.S. competitiveness vis-à-vis other export origins.

Additionally, the easing of policy and regulatory impediments that currently limit exports of raw materials and feed ingredients to Kenya, notably the existing import ban on genetically modified products, need to be pursued.

CONSTRAINTS FACING THE FEED SECTOR IN KENYA

Currently, Kenya's feed industry operates in an uncompetitive environment attributed to ineffective strategies for implementation of relevant policies and standards. A common vision and better coordination between government agencies and other industry players would provide gains to the industry. According to the State Department of Livestock, the main regulatory frameworks that are currently governing the feed sub-sector are: The National Livestock Policy of 2020, the Livestock Bill of 2020, Livestock Feed Regulation of 2021 - at drafting level, Cap 345 of laws of Kenya amended in 2015 Cap 496 and the Code of practice on feed manufacturing, Kenya Standard (KS) – 2543.

The regulatory framework and bodies in the feed industry are fragmented and hence ineffective in driving the growth of the industry. Though there is some level of organization in these sectors through industry associations, these bodies are not sufficiently funded or possess robust mandates. As a result, they are not able to adequately lobby and represent their members. There are no clear mechanisms and systems through which producers and manufacturers can channel complaints which in most cases exposes them to exploitation.

Kenya's livestock, poultry and aquaculture industries face similar supply chain and procurement constraints. More than 70 percent of the ingredients used by the feed manufacturing industries in Kenya are raw materials imported from neighboring countries. As livestock and feed manufacturing is increasing in these countries, they increasingly lack excess supply of raw ingredients for export to Kenya. There are also inconsistency and supply challenges due to seasonality and weather disruptions.

Additionally, Kenya manufacturers are in most cases unable to ascertain the quality and composition of the raw materials in terms of nutritional value and contaminants before they are imported.

The cost of raw materials is especially prohibitive in Kenya due to high taxes, import duties and port costs for globally sourced ingredients. These factors are major constraints that act as a disincentive to trade and investment.

According to a rapid assessment carried out among poultry farmers in Murang'a and Nyeri counties, it was established that one of the key constraints in the poultry feed sector is the inconsistent quality of feed, which has become commonplace since April 2021. This can be attributed to the high cost of raw materials, which effectively forces feed millers to compromise on the quality of the final product. In most cases, there are counterfeits emerging in both counties with most smallholders that rely on last mile distribution being mostly affected. At the retail end, poor feed quality has been attributed to poor storage and handing conditions. It was also observed that in these counties, both smallholder and large-scale farmers, as well as retailers, did not belong to any organized groups (co-operatives or associations) leading to an inability to lobby on feed issues.

Findings from a similar assessment in Kiambu and Kajiado Counties indicated that the cost of feed is very high, owing to the high cost of raw materials especially among farmers doing their own farm feed formulation. The farmers also indicated a key capacity issue in that they lacked the systems to test the quality of available raw materials. Additionally, the issue of inconsistent feed quality also came up with some distributed feed reportedly having mold. At the retail end, due to fluctuations in supply, farmers end up mixing brands and cannot adequately keep track of their stock performance. Farmers also indicated marketing challenges in that they normally relied on brokers who in most cases are exploitative.

It is worth noting that the Kenyan feed industry does not have adequate standards for ingredients and quality control of the byproducts and ingredients that are imported for the feed manufacture. The lack of accredited feed analysis laboratories to ascertain raw material chemical composition has also contributed to poor feed quality. In recent years, there has been a noted uptick in production/growth enhancers being included in animal feeds, which has caused increased consumer concerns on their safety and potential health hazards. While these concerns remain minimal, they pose potential risks that could undermine industry growth.

In the beef sub-sector, discussions with various feedlot operators pointed to the fact that feed quality and cost were major constraints to production. Some operators were forced to ration feed, which in turn resulted in longer turnaround time of livestock and low profitability. Operators indicated that the search for alternative cheaper feed sources that can meet beef cattle nutritional requirements for high quality meat was their current priority. The cost of raw materials for feed has been increasing since 2019 hence forcing some of the operators to abandon their enterprises while others recorded poor performance of their livestock due to compromises in quality and quantity of the feeds.

SOURCES OF RAW MATERIALS AND FEED INGREDIENTS

According to Kenya's Ministry of Agriculture, Livestock, Fisheries and Cooperatives, Kenya is currently sourcing raw materials from the East African Community (EAC) region - notably Uganda, Tanzania, Rwanda, and Burundi. From the Common Market for Eastern and Southern Africa (COMESA) region, Kenya mainly imports from Zambia. Kenya occasionally also imports from Ethiopia, South Africa, Mexico, and Greece. Based on an interview with the head of animal feed resources at the Ministry of Agriculture, Livestock, Fisheries, and Cooperatives, it was clear that the United States has a competitive advantage over the existing sources in view of wider variety of raw materials and exportable volumes which would present the potential for cost-cutting and affordability in Kenya. However, the main challenge for U.S. feed and feed ingredients remains the long-standing import ban on GM products.

ENERGY SOURCES

Grains and grain byproducts

Grain and grain byproducts provide energy to the animal and constitutes between 45 and 70 percent by weight of the total compounded feeds depending on the animal species and category. Grains have low protein levels but due to their high formulation share they can contribute up to 30 percent of the protein content in a diet. Most diets are corn-based in Kenya; other energy sources include sorghum, wheat, oats, and barley.

In Kenya there are numerous grain byproducts such as wheat bran, wheat pollard, corn bran, rice bran, and rice polish that are widely used to formulate feeds. They contribute heavily to the nutrient composition of diets and help in lowering cost and bulking feeds. Wheat pollard and brans have a higher protein content than most grains and are also relatively inexpensive. They are vital in formulating least-cost feed.

Recent exports of grain byproducts to the UAE and other markets have destabilized feed prices in the region, as only small quantities get into the local feed market, which creates shortages that trigger higher domestic prices. The shortages lead to a higher cost for compounded final feeds. Export markets offer better prices to flour millers and, as a result, most local feed millers cannot compete. This jeopardizes the quality of feeds in local markets, which further lowers farm productivity and farm incomes. Exporting to other countries when the same product is not sufficiently available locally stifles the growth of the feed and animal industry, creating a threat to food security. It also invites the government to act in protective measures that will negatively affect the industry in the long run.

PLANT PROTEIN SOURCES

Oilcake meals

Soybean oilcake meal, cotton seedcake, canola and sunflower oilcake meal are the most common plant protein feedstuffs used in Kenya. Soybean oilcake has a better nutritional profile compared to other oilcakes. Soy cake can also be de-oiled or used as full fat — with de-oiled cake providing high levels of protein and energy. Globally, soy is commonly used in most diets, with Kenya using approximately 145,807 MT of soy per year. Up to 80 percent of Kenya's soy is imported from Uganda, Zambia, Tanzania, Brazil, Argentina, and India.

Cotton seed cake is mainly used in dairy diets, with limited use in non-ruminants due to the toxic compound gossypol and relatively high fiber levels. Kenya approved National Performance Trials on BT cotton in 2018 and was noted as a key development both for the plant and animal sectors. There are ongoing early stages commercial production of BT cotton Kenya and, although not yet possible to confirm officially, there are indications that locally produced seedcake is being used in the animal feed industry. Additionally, since most of Kenya's animal feed raw materials originate from neighboring South African countries (including Malawi and South Africa), BT cotton could be in used in Kenya's feed manufacturing to a larger extent. Biotechnology offers the possibility of producing a cotton variety with lower gossypol levels that could be used in most livestock species. Currently, the total demand for cotton seed cake in Kenya is approximately about 60,000 MT (both BT and non-BT). If the use of BT cottonseed cake was allowed, supply would increase and become consistent, with lower price and increased the demand well above 60,000MT. Despite having testing equipment such as ELISA and PCR kits, there seems to be insufficient capabilities in differentiation parameters for BT and non-BT cotton. There are also rapid test kits that can be used in the field, but the supply route of feed raw materials is very porous and difficult to implement some of these measures. The feed market is unlikely to have any issues with BT cotton, with price and availability being key factors.

ANIMAL PROTEIN SOURCES

Byproducts of the animal and fishing industry can be used as animal protein sources.

Fishmeal

Fishmeal is the most frequently used protein source in feed mixtures. It also has a high digestible energy content. The Lake Victoria sardine, imported from neighboring countries within the region, is also widely used as a fish protein source, but has many challenges that limit its viability. For example, sardine availability is seasonal, the product has high salmonella risk, and sardines are often sold adulterated with sand and shells, reducing quality. These factors limit its usage and increases its cost per kilogram.

Other fish protein materials used include Profish which is imported from Europe and Egypt. Profish is a quality product with optimized nutrients is very well preserved against salmonella.

The use of protein from microorganisms such as yeast, algae and bacteria and insects, such as black soldier flies, are also gaining traction and with further investments and increased production, these could provide an alternative to soy and other conventional protein sources. Presently, there are no major local production or import investments in use of microorganisms for protein source.

VITAMINS AND MINERALS INCLUDING ADDITIVES

Vitamins and minerals play a key role in metabolism and utilization of the ingested feed by the animal. In the commercial feed industry in Kenya, vitamins and trace minerals are supplied through premixes, whereas the macro elements such as calcium and phosphorus are added directly into feed. Calcium is readily and cheaply available in Kenya as feed lime (calcium carbonate), while monocalcium phosphate (MCP), dicalcium phosphate (DCP) and bonemeal are usually included as sources of phosphate. These sources also contain calcium and are more expensive compared to feed lye. There have also been issues with phosphate in terms of cost and quality with cases of adulteration reported widely by feed millers and mineral deficiencies by farmers.

Feed additives are used compounded or singularly. They are typically used to address specific purposes; they enhance feed digestibility or even reduce use of microbials in feeds. Some of the additives are enzymes, toxin binders, mold inhibitors, feed acidifiers, probiotics, prebiotics, gut modulators, absorption enhancers etc.

CURRENT RAW MATERIALS CONSTRAINTS

Based on key interviews with members of AKEFEMA and other stakeholders, the scarcity of key feed raw materials was identified as a significant constraint facing the feeds industry, and is attributed to several interrelated factors:

- I. Globally, key source countries been restocking their swine herds, thus increasing demand for soy and corn.
- II. COVID-19 restrictions and unfavorable weather across the region affected production of key raw materials and global supplies; export bans by many producing countries have also led to supply crises in Kenya.
- III. Panic buying by farmers during the initial stages of the pandemic led to an unprecedented surge in demand of key feed raw materials
- IV. There have also been global shipping challenges due to lack of containers, leading to delays and high sea freight costs.
- V. Kenya's overall institutional framework for the animal feed industry is weak; the industry lacks a clear policy and strategy for implementation of key aspects including coordination with other EAC governments on trade policies.
- VI. The export of wheat bran, wheat pollard, corn germ, and sunflower to the UAE has also affected local supply and the local prices of raw materials. (As reported by AKEFEMA).
- VII. The ongoing ban in Kenya on the importation of biotech products continues to limit Kenya's supply options.

The impact of raw materials scarcity is felt through the entire value chain: as supply goes down, demand and price increase, but the farm gate prices remain the same or drops, incurring major losses to farmers.

According to industry sources. animal nutritionists or feed formulators use different raw materials to meet their animal requirements, such as raw material availability, price per kilogram or per nutrient or per dry matter. Seasonality and fluctuation in quality of materials are also influence their inclusion in feed. The knowledge and experience of the animal nutritionists allows them to use available raw materials formulate a least-cost feed.

In terms of volume, corn is the most-used raw material at 34 percent, followed by cereals byproducts at 24 percent, then soy and other oil cakes at 13 percent each, then DDGS projected at 9 percent and additives and minerals at 6 percent. The projected values of DDGS were attained by substitution of the currently used feed raw materials and the acceptable inclusion levels for different animal species. Currently very little DDGS is used for commercial feed milling mainly from the local breweries due to handling challenges such as high moisture content, mold formation, inconsistency in supply and quality, brokerage, or long bureaucracy in getting the product from the breweries. In terms of value, feed additives and soy are the most expensive per kg of product. The total value of animal feed raw materials business is approximated to be USD 530 million, as of 2020.

FEED INDUSTRY TRENDS AND OPPORTUNITIES

As the population increases and economies improve, demand for animal protein will increase, which will lead to more farmed animals, thus more demand for feed raw materials. The feed industry is expected to grow at 5-10 percent for ruminants and monogastric feeds, respectively, for the year 2021-2022. Monogastric growth is mainly driven by rapid expansion and new pig farms. The swine industry in Kenya is growing, and because of high nutrition and economic value compared to corn, DDGS and sorghum provide greater opportunities for inclusion in swine diets.

A shift from subsistence to commercial livestock farming has been noted. Additionally, farms are becoming fewer but with higher number of livestock per unit area, which is an indication of increased intensification.

Kenya's growing population will increase demand for feed ingredients, such as corn via competition with human consumption and increase demand for livestock products. This will require additional imports of feed ingredients to meet Kenya's demand.

The forecast also shows a sustained increase in the volume of feed produced in Kenya as explained above.

Table 1: Animal Feed Raw Materials Value

INGREDIENT	VOLUME REQUIRED IN MT (PROJECTED DEMAND)	VALUE IN USD (1 Kenya shilling = USD 0.0088)	PROPORTION/COMMENT
Corn/corn	371,137	101,246,195.42	34 percent (actual quantities for 2020)

DDG's	102,201	37,773,489.60	9 percent (substituted quantities from 2020 figures)	
Soy	145,807	147,556,522.08	13 percent (actual quantities for 2020)	
Sorghum	167,011	68,047,226.68	Sorghum is not widely used but can replace up to 40 percent of corn requirements in selected animal categories. These are projected quantities for 2020	
Minerals and additive	84,361	128,259.10	Include additives and trace and major minerals elements such as calcium and phosphorous	
Other oil cakes	176,796	48,638.54	Sunflower, cotton seedcake, canola copra etc.	

Estimates show that feed raw materials is a USD 530 million industry. Raw materials have a potential to grow by 30 percent in the next 5 years. This growth can be attributed to an increase in installed feed mill capacity in the last 2-3 years. During this period, 2 new mills have been installed and operationalized in Nakuru, with other mills in Limuru and Thika. These four feed mills have an installed capacity to produce more than 15,000MT of feed per month. This added capacity will lead to an increase in the demand for raw materials.

When raw materials are ranked in terms of price value, soy has the highest price value followed by minerals and additives. These two items have the highest cost per unit in most of the local formulations. DDGS and sorghum delivered at attractive prices can replace corn and other grain byproducts in feed diets due to their better nutritional profile. As an entry strategy, FAS could aim to position DDGS as a protein and an energy source, while sorghum should be positioned as an alternative to corn and cereals byproducts.

Table 2: Feed Industry Production Capacity and Segmentation

FEED PRODUCTION SUMMARY	
Total feed per month (MT)	86,173
Top 10 feed producers* (MT)	49,235
Top 10 producers (percent of total feed produced)	57.1 percent
Top 20 feed producers** (MT)	60,643

Top 20 producers (percent of total feed produced)	70.4 percent
Other producers	23,222
Percent of the total feed tonnage produced by	26.9 percent
other producers	

Kenya's feed industry is still at a nascent stage with enormous potential for growth. Structurally, the industry can be categorized based on the volume of feed produced into top, mid, and lower tier producers. Kenya's top 10 tier producers manufacture 60MT of feed and above per day translating to 57.1 percent of the total feed produced. Top tier feed millers are characterized by heavy investment in milling plants and personnel, as well as quality assurance programs and an elaborate marketing system that directly targets farmers. The top 20 mid-tier feed mills produce 70.4 percent of total feed while the remaining feed mills produce 26.9 percent. Exporters should consider the varying levels of production and sophistication across Kenya feed mills when strategizing market entry.

Table 3: Value Proposition for U.S Products

ITEM	VALUE PROPOSITION
Corn	 Corn is a staple food in Kenya – imports reduce pressure on food chain. Seasonality – as a rainfed crop, domestic corn sources are subject to supply inconsistencies. Aflatoxicosis/mold growth, poor post-harvest handling, and lack of appropriate infrastructure hamper Kenya's production. Corn import debates always take a political twist with politicians from corn growing regions against imports, even when the regions cannot meet demand. Kenya does not produce enough corn to meet the above requirements, therefore normally rely on regional imports to fill the deficit. As seen above, corn constitutes up to 54% of animal feed diets, and competes with human food line. On the other hand, corn or yellow corn does not form a major portion of the diet and thus can be imported directly for animal feeds without interfering with the political dynamics. Kenya faces decreasing yields per acre due to poor soil health. Kenya has high domestic market prices for feed grade corn.
Sorghum	 Sorghum is a viable alternative to corn.

	Low tannin levels – local varieties have high tannin	
	levels; US sorghum is low tannin and thus more	
	palatable.	
	Does not compete with corn as it not a staple food in Kenya.	
	 Low demand in the human food chain 	
	Not a political crop	
DDGS	High nutritional profile	
	 Economical cost/nutrient especially energy and protein 	
	Better presentation (high dry matter) compared to locally	
	available product. The local brewers waste has a very	
	high moisture level thus difficult to handle in commercial	
	feed mill whereas DDGS has a low moisture content thus	
	easy to handle.	
	• Ease of handling	
	High tolerable levels in both ruminant and non-ruminant	
	diets	
Soy cake	Superior consistency in supply and quality	
	 Quality assurance systems in place will minimize 	
	adulteration with non-protein nitrogen sources currently	
	experienced in the market	

FEED MANUFACTURERS KNOWLEDGE AND PERCEPTIONS OF US SOY, DDGS, CORN AND SORGHUM

According to AKEFEMA, there are 305 registered feed companies in Kenya, of which 115 solely manufacture feed, 96 supply raw materials and 94 engage in both activities. The number of registered feed producers has almost doubled over the last five years, while production only rose by 30 percent, indicating the presence of inefficient practices within the feed sector.

Feed manufacturers' decisions on which raw materials to use is mainly driven by availability, quality and price, with country of origin having little influence on purchase decisions.

For both feed manufacturers and local bulk raw materials traders, there is little awareness regarding the possibility of sourcing feed ingredients from the United States, pointing to a need for information channeling. There are also perceptions that all products from the United States are GMO-based, and this seems to reduce the appetite for purchase explorations given Kenya's current ban on GMOs.

Feed manufacturers interviewed stated that the industry lacks the necessary technical knowledge to fully include DDGS and sorghum in feed formulations, pointing to a need for capacity building and knowledge sharing with feed manufacturers.

REGULATORY & POLICY ENVIRONMENT (STATUTORY REQUIREMENTS)

The Kenya Bureau of Standards (KEBS) is the government regulatory body, under Kenya's Ministry of Trade and Industrialization, mandated to prepare standards relating to products, measurements, materials, and processes, and to promote them at national, regional, and international levels. The National Environment Management Authority, under the Ministry of Environment and Natural Resources, the Department of Public Health, and the Ministry of Health develop environmental and public health standards in partnership with KEBS. KEBS conducts product testing for individual product categories and undertakes certification. KEBS operates on a flexible market-driven approach whereby they provide industry players opportunities to take part in the standards formulation process through technical committees and publication of standards for public review.

STANDARDS

A Kenyan standard is a document established through a general agreement by industry actors and approved by KEBS that provides for common and repeated use, rules, guidelines, or characteristics for products and services, as well as related processes or production methods, aimed at the achievement of quality delivery of services and products.

Kenya applies a comparative 'standard' to all products or services, and standards are classified into six categories: glossaries or definitions of terminology; dimensional standards; performance standards; standard methods of testing; codes of practice; and measurement standards. These standards are developed by technical committees whose membership includes representatives of various interest groups such as producers, consumers, technologists, research organizations, and testing organizations, in both the private and public sectors. The Food and Agriculture Department of KEBS is responsible for the development of standards covering food technologies, food safety, fertilizers, agricultural produce, livestock products and poultry products.

KEBS also consults standards developed by regional and international organizations like International Organization for Standards (ISO), East Africa Communities' Standardization, Quality Assurance, Metrology and Testing (SQMT), the U.S. Food and Drug Administration (FDA), ASTM International-standards international, The British Standards Institute, CODEX, and The African Organization standardization (ARSO).

CERTIFICATION REQUIREMENTS

The following are required for imports of feed and feed ingredients:

PRE-SHIPMENT DOCUMENTS

- i. Plant Import Permit (PIP) for bulk commodities issued by the Kenya Plant Health Inspectorate Service (KEPHIS).
- ii. Import Declaration Form (IDF) issued by the Kenya Revenue Authority (KRA).

POST-SHIPMENT DOCUMENTS

i. Certificate of Conformity (CoC)

A certificate of conformity is a certified document by Kenya Bureau of Standards (KEBS), which assures that commodities have met required standards and specifications. CoCs are usually issued before shipment through pre-export verification. This verification is performed by contracted third parties such as Intertek and SGS. When a consignment arrives in Kenya without a certificate of conformity, indicating that the consignment was inspected at the country of origin, an importer will have to obtain a certificate of compliance. The certificate is only issued after successful inspection and verification of the consignment is carried out by KEBS. For consignments shipped without inspection may pay a penalty of 5 percent on custom value

- ii. Phytosanitary Certificate (PC) containing the required additional declarations for bulk commodities (corn, wheat, pulses, rice, sorghum, barley, etc.).
- iii. Non-Genetically Modified Organisms (GMO) Certificate
- iv. Bill of Lading (three original B/L plus non-negotiable copies)
- v. Commercial Invoice
- vi. Packing List
- vii. Customs Entry Form
- viii. Certificate of Origin
- ix. Health Certificates (Cleanliness, Weight, and Quality)
- x. Insurance Certificate

OTHER DOCUMENTS REQUESTED DEPENDING ON THE AGRICULTURAL COMMODITY

- i. Fumigation Certificate
- ii. Radiation Certificate
- iii. Noxious Weed Certificate
- iv. Free from Karnal Bunt Certificate

The following laws govern the trade and imports of grains and cereals into Kenya.

- Fertilizers and Animal Foodstuffs_Amendment_Act No 20 of 2015.pdf
- National Cereals and Produce Board Act_Cap 338.pdf
- Consumer Protection Act No 46 of 2012.pdf
- Competition_Act_No._2012_of_2010.pdf
- ➤ Kenya Trade Remedies Act No 32 of 2017.pdf
- The Warehouse Receipt System Act_No._8 of 2019.pdf
- ➤ Kenya Agricultural and Livestock Research Act No 17 of 2013.pdf
- Customs and Excise Act 20A20 of 2010_1.pdf

THE IMPACT OF KENYA'S TRADE COMMITMENTS WITH REGIONAL ECONOMIC BODIES (EAC & COMESA) ON U.S. EXPORTS

The EAC region categorizes corn, sorghum, soy, and DDGS as unprocessed agricultural produce (cereals, seeds, plants, etc.). Under this category, goods produced entirely by partner states are exempt from custom duties and tariffs, as per EAC trading guidelines. Similarly, COMESA has three main priority areas that it seeks to achieve for its member states: a Free Trade Area, a Customs Union, and

Trade Promotion. This includes eliminating tariff and non-tariff trade barriers, and customs duties, to promote trade within the member states on COMESA originating products.

U.S. Exports face stiff competition from the EAC Member States who have a preferential tariff advantage and have cheaper shipping costs due to geographical proximity.

BARRIERS TO TRADE FOR U.S. EXPORTS TO KENYA

Table 3: Tariffs (2020)

Corn	Sorghum	Soy	DDGS
50 percent	25 percent	10 percent	N/A

^{**}Tariffs vary periodically, especially with government intervention.

NON – TARIFF BARRIERS TO TRADE

The following barriers apply to feed and feed ingredient imports:

- Lengthy administrative costs for obtaining licenses, permits, certification.
- Lack of standardized testing for aflatoxins with differing results
- > Corruption & bribery at roadblock points and various border points.
- Multiple county levies applied to goods crossing county borders.
- ➤ Lengthy bureaucracy and procedures at customs offices and ports, which increase the cost of imported goods.
- Importers must obtain a Certificate of Conformity (CoC) after export certification by pre-shipment inspection companies (SGS or Intertek International) that have contracts with the government.
- ➤ Taxes & levies associated with shipping to Kenya: 3.5 percent Import Declaration Fee (IDF), a 2.0 percent Railway Development Levy (RDL), and a Value Added Tax (VAT) of 14 percent charged on Cost, Insurance, and Freight (CIF) value.

TECHNICAL BARRIERS TO TRADE

Kenya maintains a ban on Genetically Engineered Products or "GMOs," placing some U.S. exports at a disadvantage in comparison to other countries. Additionally, potential users of biotech feed ingredients, as well as consumers, have little knowledge about biotech materials, potentially limiting opportunities for trade.

^{**}DDGs are not currently exported to Kenya

GENERAL SANITARY & PHYTOSANITARY REQUIREMENTS FOR THE MOVEMENT OF PLANTS AND PLANT PRODUCTS

Plant protection services in Kenya ensure that foreign injurious pests, diseases, and noxious weeds, are not introduced or spread when importing plant material into the country. Imported high-risk plant materials undergo quarantine; and new materials being introduced into the country are grown under observation for a certain period before they are approved, to reduce the chances of introduction of harmful pathogens.

The operations of the Plant Protection Service department are undertaken at:

- Plant Health Clinics including the KEPHIS Headquarters plant quarantine station and the Muguga Grading and Inspection Station.
- Jomo Kenyatta International Airport, Moi International Airport, Mombasa Sea Port, Eldoret Airport, and other border points.

When inspecting at the exit/entry points, the following standards are checked:

- Freedom from pests/pest damage.
- Freedom from diseases/disease damage.
- Maximum Residue Levels compliance.
- Absence of physiological disorders.
- Proper grading (size, color, shape, etc.).
- Absence of excessive moisture
- Absence of mechanical damage.
- Compliance with packaging standards (clearly labeled, clean and well ventilated).¹

Corn entering Kenya is subject to a total aflatoxin limit of 10 parts per billion (ppb) and a 13.5 percent maximum moisture content. Both the moisture and aflatoxin standards also apply to locally sourced corn. Under special circumstances such as food shortages, Kenya has allowed higher moisture content for imported corn, which must then be dried and milled immediately upon arrival to reduce the risk of aflatoxin contamination.

**Sanitary & phytosanitary requirements for all products

The Kenyan Ministry of Public Health maintains an order for public health officials to remove from the market all foods, feed, and seeds derived from agricultural biotech and to enact a ban on agricultural biotech food and feed imports. The ban hampers potential U.S. exports of feed ingredients, including soy, feed corn, and distiller dried grains.

REFERENCES

FAO. (2005). Livestock Sector Brief.

Hinner Köster, K. I. (2016, July 12). *All About Feed*. Retrieved from https://www.allaboutfeed.net/animal-feed/feed-processing/africa-the-feed-situation-in-kenya-and-tanzania/

^{**}Sanitary & phytosanitary requirements specific to corn

Statista. (n.d.). https://www.statista.com/statistics/1229652/forecast-of-the-total-population-of-africa/.

Retrieved from Statista: https://www.statista.com/statistics/1229652/forecast-of-the-total-population-of-africa/

Attachments:

No Attachments.