# Chemical Products – Pesticides Kenya

July 2019

التعاون الألماني
DEUTSCHE ZUSAMMENARBEIT

Implemented by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Kingdom of the Netherlands

## Market Macro-Overview
- Macroeconomic overview of the country
- Political, economic and legal risks associated with the market
- Trade agreements with Jordan

## Industry/Sector Demand Overview
- Current demand dynamics
- Future forecast for the sector

## Product Overview/Demand Analysis
- Product description and application
- Demand 2013-2023 (volume and value)
- Key demand drivers
- Emerging trends and potential changes

## Supply Analysis
- Supply 2013-2023 (production and imports)
- Supplier profiles/Market share of imports
- Market share of key suppliers
- Note on methodology

## Route to Market Analysis
- Key channels
- Typical buyers
- Customer requirements
- Marketing activities
- Product pricing
- List of exhibitions and trade fairs

## Competitive Landscape
- Key market suppliers (companies or countries)
- Breakdown by company supplying
- Existing value proposition offered by competitors

## Import Procedure
- Tariff and non-tariff barriers
- Required documents
- Packaging requirements for shipment
- Labelling requirements
- Key transportation and logistics requirements, such as recommended port of entry and key distribution hubs
- Applied tariffs for the product in the country

## Import Supply Chain
- Structure of the import supply chain (including planning, logistics and distribution)
- Recommendations on how to overcome challenges related to the import supply chain

## Recommendations
- Market access strategy
- Key success factors for winning in the market
- Marketing mix



giz

# Market Overview

Macro-economic Overview

# Strong economic growth will continue to support household spending levels

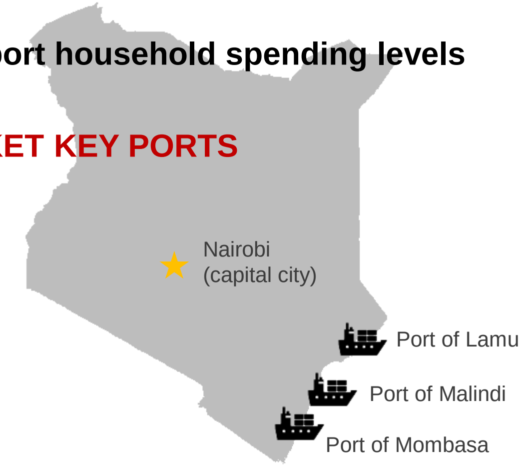
## MARKET RISKS

| | |
|---|---|
| **Economic** | While increased economic activity is expected to drive GDP growth, the high national debt and increased taxation is likely to reduce disposable income and consumer expenditure. |
| **Political** | Implementation of institutional reforms has been slow owing to financial and political instability.<br>Agricultural being in the Top 4 of the government's political agenda, is likely to attract investment from both the government and private sector. |
| **Legal** | The sudden introduction of Value Added Tax on pesticides in 2018 at a rate of 16% of the retail price took the agriculture sector by surprise. Lobbying continues to have this scrapped. |
| **Trade** | Strong trade links with EAC and COMESA members make Kenya difficult to penetrate<br>The Agrochemical Association of Kenya (AAK) leads in lobbying and harmonisation of the agrochemical trade environment. |

## TRADE AGREEMENTS

- No trade agreements were found between the governments of Kenya and Jordan, resulting in full tariffs applied to Jordanian products.
- However, trade agreements exist between Kenya and the USA under the African Growth and Opportunity Act (AGOA), and one is under discussion between Kenya and the EU.
- Kenya is a member of the Common Market for Eastern and Southern Africa (COMESA) and East African Community (EAC), both of which offer a free trade area for member countries. This is likely to be extended to unify all pan-African trade agreements from 2020.

## MARKET KEY PORTS




## ECONOMY

| | |
|---|---|
| **Total GDP 2018:** | US$87.43 trillion |
| **Real GDP Growth: 2013-2018 (CAGR)** | 5.6% |
| **Forecast GDP Growth: 2018-2023 (CAGR)** | 6.0% |

## DEMOGRAPHICS

| | |
|---|---|
| **Total Population 2018:** | 50.9 billion |
| **Population Growth: 2013-2018 (CAGR)** | 2.6% |
| **Forecast Pop. Growth: 2018-2023** | 2.4% |

## PER HOUSEHOLD SPENDING

| | |
|---|---|
| **Average Spending 2018: (per household)** | US$6,231 |
| **Avg. Spending Growth: 2013-2018 (real terms)** | 6.1% |
| **Forecast Spending Growth: 2018-2023 (real terms)** | 6.9% |



giz

# Industry Overview

Overview of The Sector

# Kenya leads in the production and supply of basic and allied chemical products in the East African region

## SECTOR OVERVIEW

- The Chemical industry in Kenya registered a CAGR of 4.9% in real terms over the period 2013-18, with a market size estimated at US$4.57 billion in the latter year.
- Despite global fluctuations in crude oil pricing, which is a key raw material for several products in the industry, the rising cost of production and high dependence on imported products that are affected by exchange rate fluctuations, the industry exhibited a steady performance in the 5-year period ending 2018, led mainly by Plastic in primary forms.
- A plethora of policy interventions are proposed to develop and implement tax incentives and waste management initiatives for the various chemical sectors.
- In 2018, Kenya's Chemical Industry comprised: Plastic in primary forms and synthetic rubber (34%), Basic Chemicals (22.5%), Fertilizers and nitrogen compounds (16.2%), Photochemical, explosives and other chemicals (11.4%), Household Cleaning and Personal Care products (5.6%), Pesticides and other Agro-chemical products (4.7%), Paints and Varnishes (3.2%) and Man-made fibres (2%).
- Growth in the sector was led by rapid growth in paints and varnishes, which registering an estimated CAGR of 5.4% for the period 2013-18.

## SECTOR SIZE

The size of the sector in **2018** was estimated at

**US$4.57 billion**

and by **2023** it is expected to reach a total of

**US$5.83 billion**

## KEY TRENDS AFFECTING THE SECTOR

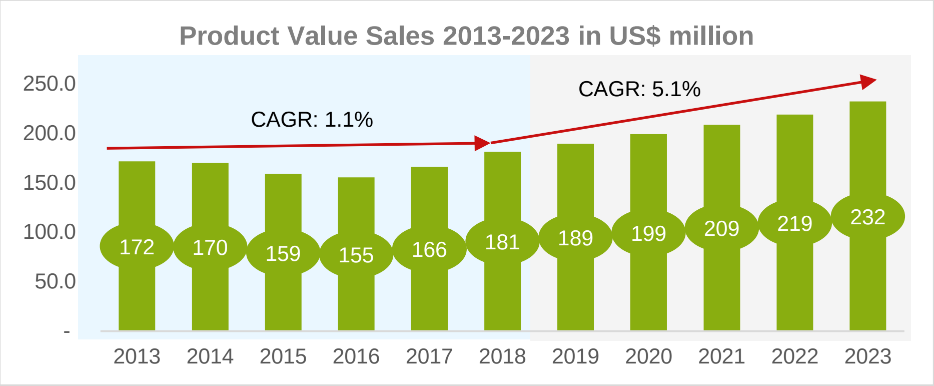
- Despite the ban on plastic bags in August 2017 resulting in a 3.8% decline in Plastic production output in that year, the plastic products sector rebounded both within and around Kenya, resulting in over 60% capacity utilisation and feeding into over 90% of the local requirements of other sectors requiring plastic products.
- The introduction of VAT on pesticides due to pressure on the government by the International Monetary Fund, to correct its fiscal policy, slowed growth of the otherwise robust pesticides and other agrochemical sector.
- Although the chemical industry (excluding Plastics and Synthetic rubber) imports 98% of its raw material requirements, it operates at over 98% capacity utilization, led mainly by paints and resins, fertilizers and agrochemicals.
- With growing demand for chemical products in the African region and several initiatives initiated under the 'Buy Kenya, Build Kenya' scheme, the chemical industry is expected to continue its steady trajectory, growing at an estimated CAGR of 5% for the five-year period ending 2023.

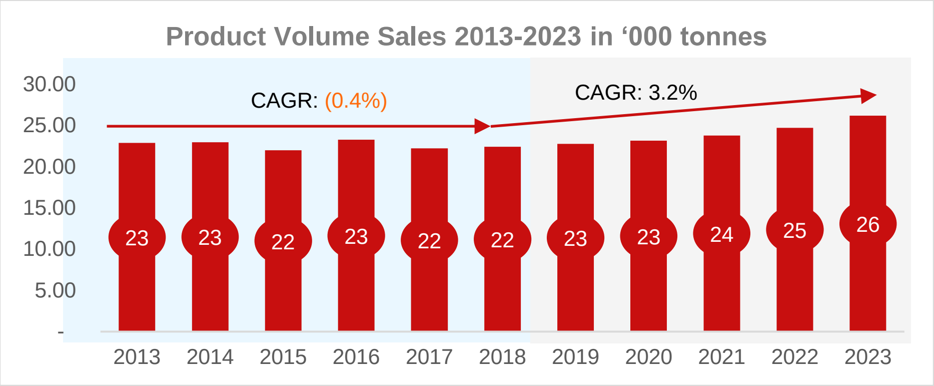
# Demand

Product Overview and Demand Analysis

# Demand for pesticides driven by adoption of agricultural best practices and rapidly increasing farmer education

## DEMAND FOR THE PRODUCT (HISTORIC AND FORECAST)




## PRODUCT DESCRIPTION AND APPLICATIONS

- All categories of pesticides including insecticides, fungicides, rodenticides, herbicides, miticides, anti-sprouting products, plant growth regulators, disinfectants and similar products used for crop protection in Kenya.
- Sprayed and drip irrigated together, the pesticides are applied either as liquids or in power form over farm land.

## KEY DRIVERS BEHIND MARKET GROWTH

- Rapid mechanization of agriculture, even at a small-scale level, backed by the adoption of recent technologies such as autonomous irrigation rigs, drone fumigation, hydroponic farming etc. has led to robust growth in agricultural products.
- With a multitude of options, companies have ensured last-mile distribution reach for a wide range of pesticides, available even at the farthest agrovet shops through aggressive relationship marketing
- Despite the implementation of 16% VAT and the increased penetration of counterfeit products, the sector continued to have steady demand on the back of strong agricultural growth.

## EMERGING TRENDS AND POTENTIAL CHANGES

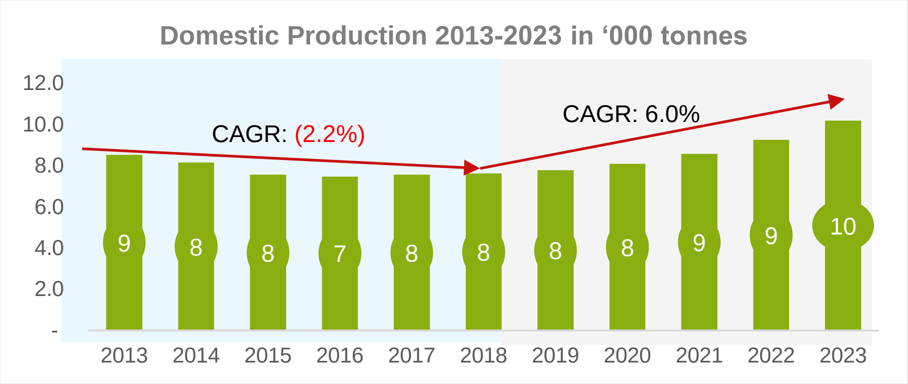
- Increased Sino-Kenya engagement is likely to assist in increased imports of agrochemical raw materials and finished pesticides from China.
- Local representative embassies have started hosting expos to increase access to the best products and technology from across the globe. Similarly, the Kenya Association of Manufacturers (KAM), along with government agencies, is looking to support local manufacturers to participate and showcase Kenya's capabilities in global exhibitions.
- Precision agriculture, implementation of drought-resistant crops and a steady transformation from rain-fed to irrigated agriculture is likely to support growth of pesticides.

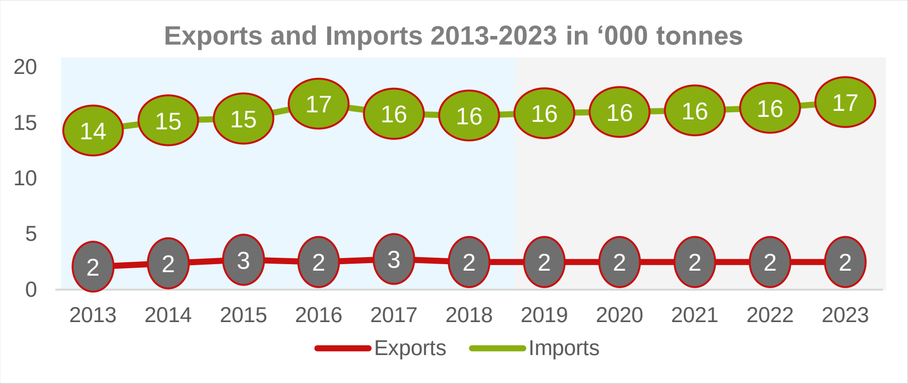
# Supply

## Supply Analysis

# Kenyan farmers prefer imported products while local products target exports to neighboring countries

## SUPPLY OF PESTICIDES (HISTORIC AND FORECAST)




## PROFILES OF TOP SUPPLYING COUNTRIES

| # | Country | % Share of Imports | Competitive Advantages |
|---|---|---|---|
| 1 | China | 43% | ▪ Longstanding bilateral trade and domestic partnerships has helped ease market entry for Chinese players<br>▪ Despite long product haulage, weekly shipments from China to Kenya help ease import stocks held by local players<br>▪ China's 'value-for-money' product offering has gained rapid acceptance in the market |
| 2 | India | 16% | ▪ Longstanding bilateral trade, domestic partnerships and Indian owned/led facilities in Kenya helped ease trade between the countries<br>▪ Lower costs resulting in competitive prices offered |
| 3 | South Africa | 10% | ▪ Excise duty of 25% waived as per the COMESA trade pact<br>▪ Lower product haulage costs due to proximity |
| 4 | Belgium | 7% | ▪ Stringent regulations ensure high-quality products with lower chance of counterfeits<br>▪ Long-standing partnerships with local distributors |
| 5 | France | 6% | ▪ Premium products supplied to French companies established in Kenya<br>▪ Stringent regulations ensure high-quality products used for specific agricultural requirements |

## FORECASTING METHODOLOGY

- Historical data was obtained from local, international statistics, and Euromonitor International's Passport database and validated through trade interviews with all members of the value chain.
- These inputs were used alongside relevant exogenous variables to develop a forecast based on the analysis of variance approach, while also taking into account the expected effect of market, regulatory and policy developments on forecast variables.
- Exchange rate forecasts are as per Euromonitor International's Passport database used for forecasting Import prices. Production and export forecasts are based on inputs from field interviews.

# Route To Market

Bringing The Product To The Market



giz

# Pesticides market is equally split between B2B and B2C consumers

## PRODUCT PLACEMENT (TOP CHANNELS)

| CHANNEL | TYPICAL BUYER | BUYER EXPECTATIONS/ REQUIREMENTS | MARKETING ACTIVITIES |
|---|---|---|---|
| Fumigation companies (B2B) | ▪ Typically comprises industrial fumigation companies subcontracted by the government and NGOs, agricultural manufacturing companies (e.g. flowers, fruits and vegetables) who grow produce through farmer outreach programs and offer fumigation extension services.<br>▪ Key tasks include quality control, periodic hazard assessment, haulage and storage. | ▪ Expected to be eco-friendly and food grade (GAP approved) with safe storage for bulk transportation.<br>▪ Best prices in line with market trends to match need-based bulk buying.<br>▪ Readily available certifications clearing the pesticides from all hazards helps companies save cost and time spent on hazard assessment. | ▪ Relationship based on direct marketing. |
| Large farms (B2B) | ▪ Typically comprises commercial farms beginning at 2,000 acres.<br>▪ Key tasks for buyers include hazard assessment and appropriate storage. | | |
| Distributor (B2B) | ▪ Key buyers are either importers or manufacturers as well as independent distributors involved in the distribution of pesticides to retailers.<br>▪ These distributors supply other B2B and B2C channels.<br>▪ Key tasks include quality checks, appropriate storage and haulage. | ▪ Distributors usually expect aggressive pricing to address storage and distribution costs. | |
| Agrovet Stores (B2C) | ▪ Comprises retailers dealing specifically in agricultural and veterinary products and equipment such as Jumbo Agrovet, Kasarani Agrovet, etc.<br>▪ Key tasks include appropriate storage. | ▪ Lawful products packed in convenient home or single use packaging.<br>▪ Instructions for use on labels, lawful packaging, appropriate pricing. | ▪ In-store promotions, digital marketing and farmer outreach programs .<br>▪ Pesticides brands use ATL marketing such as billboards, radio and TV ads by KTN, newspaper pull-outs, etc. |

## PRODUCT PRICING

- Price fluctuations owing to exchange rate fluctuations are passed on to the end consumer for finished products or absorbed by the manufacturer for raw materials.
- Retail prices include an average 20% margin on factory prices.
- The introduction of 16% VAT resulted in a steep increase in end-consumer prices.

| Product price range in US$/Pack | Min | Avg. | Max |
|---|---|---|---|
| Distributor buying prices (@20% margin) | 0.41 | 6.6 | 43.1 |
| Selling price to retailers/end customer prices | 0.5 | 8.0 | 51.8 |

## PRODUCT PROMOTION (TRADE SHOWS)

- Main agricultural trade shows for agrochemicals and agro-industries in Kenya are organised by the Agricultural Society of Kenya while trade exhibitions are organised by the Kenya Manufacturers Association. Key Trade fairs include Nairobi International Trade Fair (annual)/Kampala Lugogo International trade fair.
- Various agro exhibitions are also organised by the Ministry of Trade and their counterparts in a trading partner country as well as associated embassies. A recent trade fair hosted by the Chinese embassy saw over 40 agrochemical manufacturers displaying their capabilities.
- Other smaller events like ‘Agri Gala Night’ hosted by Agrochemical Association of Kenya and county-specific trade exhibitions held every-quarter help brand awareness.



giz

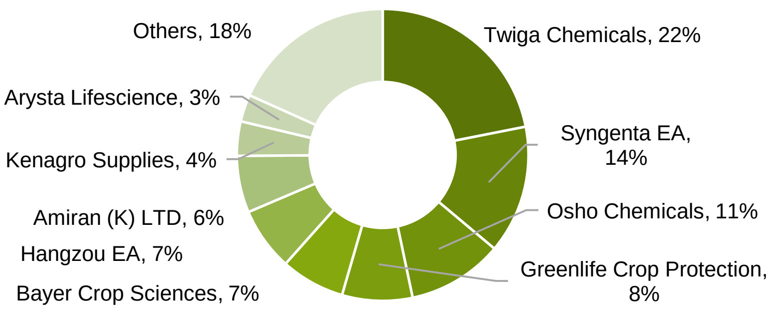
# Competitive Landscape

# Long-standing relationships with B2B buyers are key to penetrating the market

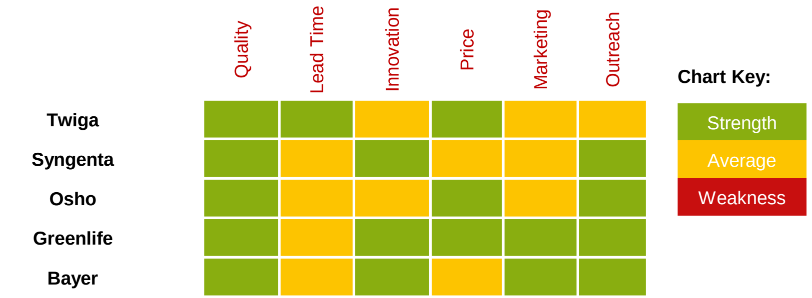
## TOP MARKET SUPPLIERS

| Supplier | Value Proposition |
|---|---|
| **Twiga Chemicals (Actellic)**<br>Kenya<br>Manufacturer, distributor | **Value Proposition**<br>The company, which began as African Explosives and Chemical Industries (AECI), was renamed as Twiga Chemical Industries Ltd in 1962 when it expanded from distribution of consumer products, crop protection, animal health and explosives into manufacturing of other chemicals and pesticides. The company's main product offering, Actellic is the most preferred in the region, known for killing and deterring weevils. Operating mini depots and sub distributors ensures last-mile stock availability. This helps the company command a good price in the region. |
| **Syngenta EA (Ridomil)**<br>China<br>Manufacturer, importer, distributor | **Value Proposition**<br>Syngenta East Africa's regional office in Kenya controls supplies to key African countries. The company specialises in crop protection by providing pesticides and other solutions to achieve the desired yield. The company leverages its global presence by operating a global R&D team in Europe. The company is also said to be very innovative in its marketing approach by adopting newer technologies like digital marketing or sample offering. |
| **Osho Chemicals (Skana)**<br>Kenya<br>Manufacturer, distributor | **Value Proposition**<br>Incorporated in Kenya in 1993, Osho Chemicals has grown to become a large manufacturer of pesticides and several other chemical products. The company offers quality satisfactory to Kenyan requirements but is not big on exports to countries, other than Uganda, Tanzania, Malawi and Zambia. The company has well-researched products made available across the country. |
| **Greenlife Crop Protection (Profile 440EC)**<br>Kenya<br>Manufacturer, Importer | **Value Proposition**<br>Greenlife Crop Protection is an agrochemicals, seeds and farm equipment company specialising in providing agro consulting services to farmers and other clients. Besides distributing pesticides, the company provides several services to farmers including transport and toxic spillage management.<br>The company is well established in digital marketing and marketing activities. |
| **Bayer Crop Sciences EA (Roundup Turbo)**<br>Germany<br>Importer | **Value Proposition**<br>Bayer Crop Sciences East Africa Ltd is a subsidiary of Bayer AG, a global innovation enterprise with core competencies in the fields of agriculture and health care. With an established base in Germany, Bayer has well researched products and is a trendsetter in agrochemicals research. The company leverages its global presence to provide a wide range of crop protection solutions to its customers. |

## MARKET SHARE OF KEY SUPPLIERS, 2018




## COMPETITIVE POSITIONING






giz

# Imports

Import Process



giz

# Despite increasing tightening of the regulations, Kenya still lacks stringent laws to ban consumption of counterfeit products

## IMPORT REQUIREMENTS

| | |
|---|---|
| **PACKAGING REQUIREMENTS** | ▪ While there are no specific standards highlighted for packaging of pesticides or hazardous materials, buyers insist packaging must be in line with international transportation safety requirements.<br>▪ Specific containers allowing for increased safety have to be used after being cleaned and tested thoroughly as per the standard. Shelf life of the container should be more than 2 years and expiry date prominently displayed. Please refer to source for detailed guidelines. (Source: http://www.bvsde.paho.org/bvstox/i/fulltext/fao12/fao12.pdf)<br>▪ Packaging should be clean and dry, designed to prevent product deterioration, compaction, weight change and other spoilage. |
| **LABELLING REQUIREMENTS** | ▪ The Kenyan Pest Control Products Board insists on labelling compliance with international safety standards. Kenya mandates the inclusion of actionable insights such as 'READ THE LABEL BEFORE USING' and 'KEEP OUT OF THE REACH OF CHILDREN'.<br>▪ All labels must be highlighted in both English and the local language.<br>▪ Specific labelling instructions for primary and secondary display panels are provided based on product use (commercial / experimental) and by pack size. (Source: http://pcpb.go.ke/otherresources/labelformat.pdf ) |
| **TRANSPORTATION REQUIREMENTS AND LEAD TIME** | ▪ Transportation requirements are less stringent and mostly only monitored at source and destination. Since the industry involves a large amount of imports from Asian countries, importers usually have domestic operations points to stockpile high demand items. Average shipping lead times are 3–6 weeks, with customs taking an average of 1- 3 weeks and an additional 1 day for the product to reach the customer's warehouse.<br>▪ As part of the managed services offering by most local manufacturers, some market leaders such as Twiga Chemicals are also involved in imports and distribution on the back of a strong and well-connected network. |
| **DOCUMENT REQUIREMENTS / CUSTOMS' PROCESSES** | ▪ Imports into Kenya involve a very detailed 23-step import process including documentation required for specific government agencies such as Customs and Pest Control Products Board. Hence, companies are advised to reach out to clearing agents to complete the process. Availability of all required documents helps expedite the customs clearance process. Source: https://infotradekenya.go.ke/procedure/374/116?l=en |

## TRADE BARRIERS

- Once an importer is identified, a clearing agent is critical to obtaining required clearances and an import health certificate as well as paying for a destination inspection fee.
- A large competitive base thriving on long-standing relationships making market penetration harder for newcomers.
- Debt collection from retailers is a major problem. It is recommended to encourage cash-on-delivery or minimal credit to major distributors, who as experts would recover the debt from smaller agrovets.
- Individuals or companies exporting products to Kenya must be registered with the Kenya Revenue Authority, which provides a Personal Identification Number, a copy of which must be included along with every shipment. Increasingly stringent pesticide regulations make importation a very lengthy process.
- Companies are required to obtain a Certificate of Conformity or equivalent to show the product's compliance with Kenyan standards or rules laid out by the corresponding Kenyan authority.

## APPLIED TARIFFS

| HS CODE | PRODUCT DESCRIPTION | APPLIED TARIFFS |
|---|---|---|
| 380891 | Insecticides | 45% over and above the Cost, Insurance and Freight (CIF) price which comprises 25% customs duty, 16% VAT, 2% import declaration fee and a 1.5% railway levy. This excludes excise duty charged on a variable basis. |
| 380892 | Fungicides | |
| 380893 | Herbicides | |
| 380894 | Disinfectants | |
| 380899 | Rodenticides, Miticides, acaricides and others | |

# Supply Chain

Imports Supply Chain



giz

# Identifying the right importer is key to expediting market entry and achieving faster market penetration

## SUPPLY CHAIN OUTLINE

### Distribution

Products are either delivered directly to B2B customers or through a distributor and retailer.

Key regions include Central and Mount Kenya, Western Kenya and the Rift Valley.

Most distributors, depending on the volume traded, use warehouses to store products and reduce lead time to market.

Smaller retail Agrovet stores hold limited stock and expect timely deliveries.

### Planning

Identify an import partner and finalise pre-import and pricing agreements as well as approval from the Pest Control Products Board.

The entire value chain lacks structured planning with orders placed on an as-needed basis factoring a lead time of 4-8 weeks for the entire process.

Importers have to support the obtaining of required certificates and local labelling for product entry into Kenya.

All goods dispatched to Kenya must be accompanied by the required documents including Bill of Lading, Certificate of Clearance, etc.

The first and third quarters, as rainy seasons see high consumption of pesticides.

### Logistics

Product logistics scope is as agreed mutually between the exporting and importing parties.

Scope of storage depends on mutually agreed terms. Commercial buyers generally have their own storage facilities on site.

Sometimes depending on INCOTERMS, insurance might not be provided for by the seller.

A key consideration is to ensure compliance with safe transport regulations, ensuring no toxic leaks and resultant penalties.

Consumers/retailers receive goods up to 2 days from the date of dispatch of the product from the warehouse.

## RECOMMENDATIONS TO INCREASE MARKET ACCESS EFFICIENCY

- Kenyan manufacturers offer 'managed services' as a separate offering for import and distribution services. After obtaining product approvals, it is recommended to partner with these companies to expedite product clearance and ensure deeper market penetration. However, these companies are likely to charge a high margin (20-25%) to position the imported products higher than their offerings.
- Once the brand is established, companies could alternatively explore establishing a central storage point from which distributors could collect products.

## LOGISTICS COSTS VS KEY COMPETITORS

| Costs of shipping to destination market | Land | Air | Sea |
|---|---|---|---|
| Jordan to Kenya | n/a | $3,592 | $2,855 |
| China to Kenya | n/a | $3,844 | $1,240 |
| India to Kenya | n/a | $4,263 | $1,615 |

Note: Shipping costs are calculated based on a standard 40 ft container.



giz

# Recommendations

# Balancing wide regional access with achieving the right market price is critical to penetrating the market

## WHO TO TARGET FOR SALES

- The key buyer group to be approached are well-established importers who could assist not only in deeper market penetration but also in expediting clearances and approvals to market access.
- Importers with equal access to both B2B and B2C customer categories are important. However, active engagement with identified end-customer categories is critical for sustained business.

## RECOMMENDED TRADE ROUTE

- Product shipment by sea is recommended, as air freight is very expensive and only recommended for urgent shipments of small quantities.
- Most hazardous chemical products are traded through Mombasa port in Kenya.
- With the new standard gauge rail (SGR) operating between Mombasa port to Nairobi and beyond, cargo transit time has been cut from 10 hours by road to 4 hours by rail.

## KEY CHALLENGES RELATED TO THE COMPETITION

- Farmers are used to outreach programs, wherein companies have to differentiate their products from the competition.
- Well-established companies run farmer outreach programs through experts and agronomists to increase product confidence and hence, brand value.
- While managed services helps exporters to access the market faster, the end prices offered can be less competitive owing to the high margins added by these companies.

## SUCCESSFUL MARKETING MIX

- **Product**: Market is led by insecticides (Acetellic), herbicides (Weedal, Krismat) and Fungicides (Ridomil). All products should adhere to FAO regulations on formulation, packaging and labelling and be pre-approved by the Pest Control Products Board (PCPB).
- **Place**: The main distribution channel is importers/ distributors with wide network coverage of consumers. Safe transport to retailers is critical.
- **Promotion**: Promotional activities should include direct marketing for B2B consumers and ATL marketing coupled with experiential farmer outreach services for B2C sales.
- **Pricing**: Competitive price positioning targeting peer importers e.g. Syngenta, Osho Chemicals, etc. Market leading products are priced at US$8.20/kg for local insecticides, US$5.70/kg for imported herbicides and US$23.80/kg for local fungicides

# APPENDIX I
## DATA SOURCES USED IN THIS REPORT

DATA SOURCES

| | |
|---|---|
| **Slide 3 / Market Macro-Overview** | Euromonitor International's analysis based on data from Passport, World Bank, International Monetary Fund / Passport forecasts |
| **Slide 4 / Industry Overview** | Euromonitor International's analysis from Passport's in-country research, secondary research / Passport forecasts |
| **Slide 5 / Product Overview/Demand Analysis** | Euromonitor International research based on trade interviews with Acumen EA, Chem Raw EA, East African Business Company, secondary sources (*Eurostat, UN Comtrade, trade press*) and national statistics |
| **Slide 6 / Supply Analysis** | National statistics / United Nation's COMTRADE / TradeMap database / trade interviews with Elgon Kenya Limited, Green life Crop Protection, East African Business Company, among others |
| **Slide 7 / Route to Market Analysis** | Trade interviews with Carst & Walker Importers, East African Business Company, Elgon Kenya Limited, among others |
| **Slide 8 / Competitive Landscape** | Trade interviews with Greenlife Crop Protection, East African Business Company, Bayer Crop Sciences EA, Chem Raw EA |
| **Slide 9 / Import Process** | National regulatory offices / EU Market Access Database / ITC Market Access Map / US Commercial Service |
| **Slide 10 / Import Supply Chain** | Euromonitor International research from trade interviews with *East African Business Company and Carst & Walker* |
| **Slide 11 / Recommendations** | Euromonitor International's analysis based on trade interviews with *manufacturers and importers*, secondary research (*Plastics Europe, trade press*) |
| **Slides 13 / Price List** | Based on Secondary Research and trade interviews with East African Business Company and Carst & Walker |

## APPENDIX II
# COMPETITORS' PRODUCT MARKET PRICES

| Market Prices | Product | Variety | Brand, Measure-Unit | Average Prices at Distributor Level (US$ / unit)[1] | Average Prices at Retail Level (US$/unit) |
|---|---|---|---|---|---|
| | Pesticides | Insecticide | Twiga Actellic Super 019DP 1KG | $4.86 | $5.83 |
| | | Herbicide | Hangzou Weedal 480SL 1L | $3.39 | $4.07 |
| | | Herbicide | Syngenta Krismat 75 WDG 5kg | $102.21 | $122.66 |
| | | Herbicide | Bayer Round up Turbo 450 SL 20l | $87.61 | $105.14 |
| | | Herbicide | Hangzou Weedal 480SL 500ml | $2.10 | $2.52 |
| | | Insecticide | Twiga Actellic Super 019DP 500g | $2.78 | $3.34 |
| | | Fungicide | Syngenta Ridomil Gold MZ 68 WG 1kg | $15.82 | $16.93 |
| | | Herbicide | Excel Glycel 480SL 1l | $3.46 | $4.16 |
| | | Insecticide | Twiga Duduthrin 1.7SEC 100ml | $1.12 | $1.35 |
| | | Herbicide | Kenagro Kausha 480SL 1l | $3.33 | $4.00 |
| | | Insecticide | Twiga Actellic Super 019DP 200g | $1.35 | $1.63 |
| | | Insecticide | Twiga Actellic Gold 020DP, 1kg | $5.60 | $6.72 |
| | | Insecticide | Bayer Crop Science Thunder 0D145, 100ml | $5.25 | $6.30 |
| | | Insecticide | Elgon Coragen 200SC, 30ml | $5.19 | $6.23 |

NOTE: [1]Distributor prices considers an average 20% margin for low-priced insecticides and herbicides and an average 7% for high-priced fungicides.

**Deutsche Gesellschaft für**
**Internationale Zusammenarbeit (GIZ) GmbH**

Registered offices
Bonn and Eschborn

Friedrich-Ebert-Allee 36 + 40
53113 Bonn, Germany
T +49 228 44 60 - 0
F +49 228 44 60 - 17 66

Dag-Hammarskjöld-Weg 1 - 5
65760 Eschborn, Germany
T +49 61 96 79 - 0
F +49 61 96 79 - 11 15

E info@giz.de
I www.giz.de

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH