

Cultivating an Enabling Business Environment for the Organic Inputs Sector in Kenya



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Executive summary

Kenyan agriculture is a cornerstone of the national economy, but high input costs and unsustainable farming practices threaten its long-term productivity and environmental health. Organic inputs offer sustainable and economically viable solutions. However, the organic inputs sector faces significant challenges that hinder growth, innovation and adoption of more sustainable farming practices. Key barriers include administrative hurdles, high costs, technical barriers, and an unsupportive policy environment. Addressing these challenges will create a more enabling business environment, encourage innovation and farmer adoption, and strengthen Kenya's position as a regional leader in organic agricultural inputs.

Key messages

- **The organic inputs sector is key to the sustainability and long-term performance of Kenyan agriculture:** Expanding the use of organic inputs can enhance soil health, biodiversity and food security while positioning Kenya as a leader in sustainable agricultural inputs.
- **Reducing administrative costs and delays will support growth of SMEs:** Lengthy certification processes, bureaucratic delays and excessive fees prevent SMEs from scaling up organic input production.
- **Suitable standards will facilitate market entry of organic products:** Current standards impose impractical quality requirements, while regulatory agencies lack sufficient expertise in organic and biological inputs.
- **Levelling the playing field will stimulate farmer adoption of organic inputs:** Absence of organic products from the National Fertilizer Subsidy Program and inconsistent tax classifications make it harder for organic inputs to compete with synthetic products and curb farmer demand.
- **Improving the business environment for organic inputs aligns with Kenya's national policy goals:** Streamlining regulatory procedures and addressing market barriers will support the transition to sustainable farming practices and help achieve key national policies.

Introduction

The agricultural sector is a pillar of the Kenyan economy, contributing 21.8% to the national Gross Domestic Product (GDP), accounting for 60% of export earnings and supporting the livelihoods of 80% of the rural population. [1] While playing a pivotal role in economic growth and poverty reduction, the sector is negatively affected by high costs of inputs and unsustainable farming practices that contribute to health risks, environmental degradation and climate change. With a growing population and the escalating impacts of climate change, it has become a national priority to make food production systems more sustainable and resilient, as demonstrated in the National Agroecology Strategy for Food Systems Transformation, 2024-2033.

The organic inputs sector has a critical role to play in the transformation of Kenya's agricultural production. Organic inputs have a significantly lower environmental impact than synthetic inputs and positively contribute to soil health, crop productivity, biodiversity, healthier ecosystems, and long-term food security. [2] The organic input sector also presents significant economic growth and employment opportunities.

In comparison to other African countries, the organic fertilizer sub-sector in Kenya is advanced. Dozens of companies have come in to take advantage of the market opportunity created by rising prices for inorganic fertilizers coupled with a growing awareness of their effects on soil acidification. It is estimated that organic fertilizers could achieve a 6%-11% share of the national fertilizer market by 2030, equating to USD 45-75 million a year. [3] Moreover, given the relatively high number of registered companies in the sub-sector, Kenya is in a favourable position to service the regional market.

The biopesticide sub-sector is also expected to grow rapidly in coming years, stimulated by heightened awareness about highly hazardous pesticides (HHPs) – 76% of the total volume of pesticides used by Kenyan farmers in 2020 contained one or more active ingredients categorized as HHPs [4] – and growing demand for safe, healthy foods. Alongside South Africa, Kenya is leading in biopesticide development and use. Studies have shown biopesticides have positive socio-economic returns. When used as part of an integrated pest management (IPM) package, biopesticides reduced mango yield losses in Kenya caused by fruit flies by 19-55% and resulted, on average, in a 22-48% increase in mango net income. [5] [6] Adoption of IPM, including biopesticide, among mango farmers in Kenya has also had positive effects on human health and the environment. [7]

While the organic inputs sector is a key lever for economic growth and improving the sustainability and resilience of Kenya's food system, businesses operating in the sector currently face a number of administrative hurdles, high costs, regulatory and standards-related barriers, as well as lack of policy support. These issues create an unfavourable business environment in which it is difficult for organic input companies, in particular small and medium size enterprises (SME), to bring innovative products to the Kenyan market and access international markets. In consequence, organic input companies are unable to scale up impactful solutions to agri-food system challenges, while the economic potential of the organic input sector at large is held back. There is a pressing need to create a more enabling business environment for the sector.



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Organic inputs at a glance

Organic inputs comprise a wide range of products used in agricultural production, including (but not limited to) organic fertilizers, biofertilizers, soil amendments, bio-stimulants, botanical pesticides and biopesticides.

Organic fertilizers: carbon-rich materials of biological origin (e.g. guano, livestock manures, compost, blood meal, vermicompost) used to supply plants with nutrients and/or improve soil structure.

Biopesticides: pest management agents derived from natural materials (e.g. animals, plants, fungi, bacteria, certain minerals) and used to disrupt or eliminate pests.

Administrative hurdles: licensing and certification barriers

Organic input manufacturers in Kenya face administrative hurdles that frequently arise in product certification procedures and take the forms of delays, high costs and administrative bottlenecks.

Waiting times and delays

Organic fertilizer manufacturers experience prolonged delays when navigating government procedures for product certification. Organic fertilizers in Kenya are registered by the Kenya Bureau of Standards (KEBS) under Kenya Standard 2290 of 2018 (KS 2290:2018). Product certification involves multiple stages, including application, submission, sample collection by an assigned officer, sample testing, and certification issuance. Despite the KEBS service charter stipulating that the registration process should take no more than 56 days, surveyed companies report waiting periods exceeding five months, significantly delaying product registration, business operations and sales.

Extended waiting times for organic fertilizer sample analysis at KEBS often result in sample degradation, which affects the accuracy of test results and increases the likelihood of certification failure. This is supported by accounts from companies highlighting that private accredited laboratories provide test results faster, and these results often reveal different nutrient levels when compared to KEBS test results for identical samples. While applicants are permitted to have sample testing done at KEBS-accredited private laboratories (such as Kenya Agricultural & Livestock Research Organization, SGS, Bureau Veritas, and Crop Nutrition Laboratory Services), this option is costlier, sometimes up to 40% more expensive than KEBS testing, making these services inaccessible to many SMEs.

As part of the product certification process, organic fertilizer companies are required to conduct efficacy trials of their products and then submit the results to the Kenya Plant Health Inspectorate (KEPHIS). A vetting committee reviews the reports and issues certification letters when products meet required standards. However, the vetting committee meets only once every quarter, prolonging approval time.

High costs

Beyond paralyzing delays, the high costs of the product registration process pose another significant challenge. Input manufacturers must absorb numerous expenses, ranging from registration fees to product efficacy trial costs and mandatory environmental impact assessments of production premises. In the aggregate, these costs amount to a significant financial (and bureaucratic) burden for SMEs.

Certification of an organic fertilizer through KEBS can range from KES 30,000 to KES 40,000 per product. Thereafter, fertilizer manufacturers must pay the same amount for product renewal applications every two years. When it comes to registering a biopesticide with the Pest Control Products Board (PCPB), the cost stands at KES 85,000 to register a single product for five years. Thereafter, biopesticide manufacturers must pay a fee of KES 55,000 to obtain a three-year product renewal. These fees add onto other business and regulatory expenses, which further strain SMEs trying to grow their business.

By far, efficacy trials represent the largest share of the cost burden and can cost over KES 1 million per product. Third-party entities accredited by KEPHIS (for fertilizers) or PCPB (for pesticides) conduct the trials and are free to set the price for their services. Some accredited institutions charge up to KES 2.7 million for efficacy trials, making the process prohibitively expensive for many companies. PCPB publishes and maintains a list of accredited institutions¹, which allows input producers to compare quotes from different institutions. However, KEPHIS does not do the same.

Input manufacturers are also required to conduct an Environmental Impact Assessment (EIA) of their premises and submit results to the National Environmental Management Agency (NEMA) as part of compliance requirements. The cost of an EIA can be substantial; one company reported spending KES 50,000 on the process. One biopesticide producer indicated that the combined costs of an EIA, product certification, and licensing of manufacturing premises can exceed KES 100,000.

As of early 2025, companies that utilize a “biological resource” (e.g. microbes, live organisms, extracts, or compounds in

their products must take on additional costs related to access and benefit sharing. The Kenya Wildlife Service (KWS) is enforcing the recently enacted Management and Co-ordination Act (Access to Biological Resources and Benefit Sharing) Regulations, 2025, which imposes an access fee of KES 500,000 to any Kenyan-owned company selling a product that contains a biological resource. On top of this, input manufacturers are now required to make annual royalty payments of 10-15% to KWS. Companies will also have to pay KES 50,000 to renew their access. These substantial new costs are a major financial obstacle for businesses and will discourage SMEs from using Kenya’s biological resources to produce sustainable pest control products.

Technical barriers: unsuitable standards and lack of expertise

Organic input manufacturers report that the current standards for organic and bio-inputs are unsuitable. They lead to frequent product rejections and ultimately pose a barrier to market entry.

Unsuitable standards for organic fertilizers

The current Kenya Standard (KS) 2290:2018, to which organic fertilizer companies must ensure their products adhere to, is set to be replaced by the East Africa Standard Organic Fertilizer Specification (FDEAS 1167: 2024 ICS 65.080), which will apply in East African Community (EAC) member states. The new standard has been gazetted but has not yet been operationalized.

On the one hand, this development is seen as a positive step, as standard harmonization will facilitate the export of organic fertilizers within the EAC. On the other hand, companies have raised concerns over stringent quality requirements in the new standard that demonstrate a lack of understanding of organic fertilizer products. In particular, the minimum dry matter (DM) content threshold is set at 70%. Most organic fertilizers typically contain dry matter in the 30–50% range. For comparison, the European Union (EU) regulations on fertilizing products [8] sets the minimum threshold of DM content for organic soil improvers at 20% with a margin of ±5%. Additionally, the forthcoming East Africa standard sets the moisture content limit at 30%, presenting further conformity challenges.

Lack of expertise related to organic inputs

Organic input manufacturers have encountered a general lack of familiarity with organic and bio-inputs among the personnel of the regulators that assess and certify their products. Organic fertilizer producers have noted that KEBS currently only has one person with qualifications on organic and bio-inputs. A similar situation was identified at PCPB by biopesticide producers. Whereas the regulator has toxicologists, chemists and efficacy specialists on staff, there was no biologist to handle biopesticide registration. As a result, organic input manufacturers have felt that their products are unfairly assessed, as regulatory personnel often refer to testing parameters for synthetic inputs, which differ significantly in their composition.



¹ The list is uploaded to the PCPB website: <https://www.pcpb.go.ke/accredited-institutions/>

Regulatory barriers: inconsistent and unfair treatment of imported organic inputs

The Kenya Finance Act, 2022 reclassified fertilizers from VAT-exempt to zero-rated, thereby reducing production costs and lowering end prices for farmers. This move aligned with regional efforts to promote agricultural productivity and reduce costs for farmers. Under Chapter 31 of the East African Community Common External Tariff (EAC CET), fertilizers are zero-rated for VAT. However, recent HS Code reclassifications by the Kenya Revenue Authority (KRA) have sowed confusion and increased costs for companies importing organic fertilizer and raw materials for fertilizer.

Importers of organic fertilizers, especially those dealing in bio-stimulantsⁱⁱ and dual-use products, report that KRA frequently reclassifies imported products under different HS Codes. Consequently, imported products and materials are not treated as fertilizers and attract a less favourable “exempt” status, requiring companies to claim VAT and pass on added costs to farmers.

Policy barriers: a disadvantageous policy environment for organic fertilizer

The latest National Fertilizer Subsidy Program (NFSP), introduced in response to rising food and fertilizer prices distributes fertilizers to farmers through government-run National Cereal and Produce Board (NCPB) depots across the country. Ahead of the 2023 long rains, the NFSP procured 472,500 metric tons of fertilizer, at an estimated worth of KES 54.3 billion, and provided subsidized fertilizers at significantly discounted prices – 42% lower than market rates during the 2023 long rains. [9]

While the present NFSP provides much needed price stabilization and greater access to fertilizers, it only includes chemical fertilizers. As a result, the program makes organic alternatives much less competitive. Though a handful of organic fertilizers are now available at some NCPB depots, these are sold at the regular commercial rate, which cannot compete subsidized prices.

Subsidies play a major role in fertilizer adoption. In years where the amount of subsidized fertilizer is higher, so is subsidized fertilizer’s share of overall fertilizer used (Figure 1). At present, the NFSP creates an unfair playing field for organic and organo-mineral fertilizers, while hampering farmer awareness and uptake of organic fertilizers. Moreover, subsidization of only inorganic fertilizer only aggravates the issues of land degradation and fertilizer-related greenhouse gas emissions.

Supporting the organic sector aligns with national policies

When considering the numerous challenges that organic input companies face, it becomes clear that improvements to the business environment of the organic input sector are in order. Enhancing the business environment of the organic inputs sector is, in fact, very much aligned with key national policies. The Agricultural Soil Management Policy 2023 explicitly calls for “streamlining licensing procedures and reducing bottlenecks in certification processes for organic input manufacturers” (Section 3.2.4). It also emphasizes the development of “national standards for organic inputs [...] to ensure high-quality soil management products”. Such standards should consider the unique characteristics of organic products. Similarly, the Agricultural Policy 2021 prioritizes market access and consumer awareness through its provision to “facilitate domestic and international market linkages for agricultural products” (Clause 5.2.3).

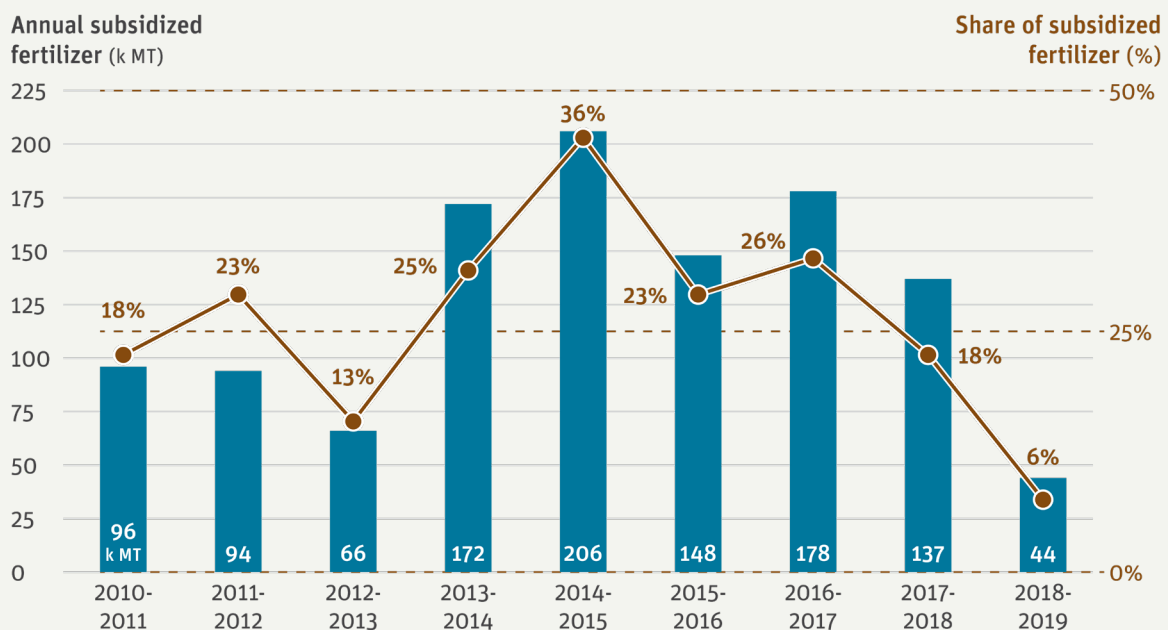


Figure 1. Annual subsidized fertilizer, in Kilo Metric Tons (k MT) and as a percentage of total fertilizer used in Kenya

ii Bio-stimulants are products that contain substances and/or microorganisms that stimulate natural plant processes. Such products can increase the availability of nutrients in the soil or rhizosphere, improve a plant’s nutrient-use efficiency, improve plant tolerance to environmental stress or reinforce other plant characteristics. Bio-stimulants can be used as ingredients in the formulation of organic fertilizers.



Recommendations

Implementation of the following recommendations will resolve the identified barriers and establish a truly conducive and enabling business environment in the organic inputs sector:

1. **Streamline the KEBS product certification process** for organic fertilizers to ensure compliance with the regulator's 56-day service charter. Further reduce waiting times whenever possible.
2. **Increase the meeting frequency of the KEPHIS vetting committee** to expedite issuance of certification letters for organic fertilizers.
3. **Reduce certification costs** by implementing a tiered pricing system for product registrations at KEBS and PCPB, ensuring affordability for SMEs.
4. **KEPHIS to publish and maintain a list of accredited institutions** that carry out efficacy trials, similarly to what PCPB has done.
5. **Revise ABS-related fees downward** to ease financial burdens on organic input manufacturers. Replace the newly introduced royalty fee model with a more realistic licensing fee or adopt a benefit-based model that accounts for employment creation, health benefits, and environmental sustainability.
6. **Amend the EAC organic fertilizer standard** by lowering the minimum threshold for dry matter content and adjusting the moisture content limit. Refer to the relevant thresholds in the EU's regulation for fertilizing products.
7. **Equip personnel at KEBS and PCPB with specialized knowledge on organic and bio-inputs.** Recruit specialists with expertise in organic agriculture, biopesticides and microbiology.
8. **Return to KRA's previous classification of imported organic fertilizers** under HS Code / Tariff No. 3101.00.00 attracting a "zero-rated" VAT.
9. **KRA to consistently implement clear HS Code guidelines** for organic inputs and avoid frequent reclassifications that lead to greater cost unpredictability and added financial burden.
10. **Include organic fertilizers in the NFSP** to rectify the market distortion currently giving undue favor to chemical fertilizer producers and slowing farmer uptake of organic fertilizers.

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