

Uganda Identifies Harmful Subsidies For Possible Redesign Options

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Table of contents

Acknowledgements	ii
Executivesummary.....	1
1. Description of the problem	2
2. Overview of research	3
3. Findings	4
3.1 Agricultural sector	4
3.2 Industry and manufacturing sector	6
4. Analysis	8
4.1 The agricultural sector	4
4.2 The industry and manufacturing sector	9
5. Policy recommendation	14
Reference	14

List of tables

Table 1: Proposed redesign options for uganda agricultural sector.....	5
Table 2: Redesign options for tax exemptions on agricultural chemicals.....	5
Table 3: Overview of the potential biodiversity impact.....	6
Table 4: Redesign options for tax exemption on packing material of any designed for Packaginggoodsforexport.....	7
Table 5: List of agricultural subsidies with direct or indirect adverse impacts on biodiversity.....	8
Table 6: Redesign scenario for subsidy on packaging material.....	12

List of figures

Figure 1: Revenue loss from agricultural subsidies from imports and vat.....	9
Figure 2: Projections of the subsidy cost of plastics used in the production of packaging Materialsforexport.....	12

Executive Summary

Uganda's commitment to biodiversity conservation is evident through its implementation of the National Biodiversity Strategy and Action Plan II (NBSAP) for 2015-2025. The country's rich biodiversity, including endemic species and vital ecosystems, is crucial for sustaining economic prosperity, human well-being, and ecological balance. Since 2015, Uganda has been implementing the Biodiversity Finance Initiative (BIOFIN). To date, the United Nations Development Programme (UNDP) and the National Environment Management Authority (NEMA) have generated policy frameworks that aim to align Uganda's economic incentives with biodiversity targets under the national and global biodiversity frameworks.

Target 18 of the Kunming-Montreal Global Biodiversity Framework (KMGBF) requires the global community to identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective, and equitable way, while substantially and progressively reducing them by at least 500 billion United States dollars per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity. The KMGBF is a contribution to the achievement of the 2030 Agenda for Sustainable Development. At the same time, progress towards the SDGs and the achievement of sustainable development in all its three dimensions (environmental, social, and economic) is necessary to create the conditions necessary to fulfil the goals and targets of the Framework.

In the realm of environmental policy, a phenomenon frequently emerges where certain well-intentioned subsidies and incentives end up producing unintended and often costly consequences for both the environment and biodiversity. The Organisation for Economic Co-operation and Development (OECD) has shed light on the potential pitfalls of such subsidies, estimating that a substantial sum of approximately US\$ 100 billion allocated to agricultural production across OECD countries might inadvertently contribute to adverse environmental outcomes. This could involve outcomes like habitat destruction resulting from the conversion of forest areas, land degradation, and the introduction of harmful nutrient pollution. Similarly, the fisheries sector exhibits parallel in this narrative, with subsidies ranging from US\$ 7 to 35 billion annually identified as posing threats to marine ecosystems due to pollution and unsustainable resource exploitation.

The multi-stage process systematically identified, assessed, and proposed redesign options for subsidies with negative impacts on biodiversity of two subsidies identified as having significant negative impacts on biodiversity in Uganda. The two subsidies include.

a) Packing material for export:

Subsidies on packing materials designed for exporting goods, particularly non-biodegradable materials, contribute significantly to environmental pollution and waste generation.

b) Tax exemptions on agricultural chemicals (fungicides & pesticides):

Aimed at boosting agriculture, these subsidies have consequences on biodiversity through soil degradation, water pollution, & harm to non-target species. The widespread use of these chemicals underscores the need for a strategic shift towards more sustainable agricultural practices.

1. Description of the Problem.

Given Uganda's location in a zone between the ecological communities that are characteristic of the drier East African savannas and the moist West African rain forests, combined with high altitude ranges, the country has a high level of biological diversity. Uganda occupies only 2% of the world's area, with a recorded 18,783 species of fauna and flora (NEMA, 2009) and ranks among the top ten most bio-diverse countries in the world.

Uganda being an agronomic country makes agriculture the main economic activity for most of the heads of those agricultural households. The proportion is higher for female household heads, with 87 percent of them reporting to have agriculture as their main economic activity, compared to 74 percent of the male household heads (UBOS 2022).

According to the 2019 Intergovernmental Panel on Climate Change (IPCC) report, agriculture accounts for 70% of global freshwater use and one-third of global greenhouse gas emissions (GHGs) and 80% associated with global deforestation according to United Nations Food and Agriculture Organization (UNFAO).

Uganda's Bureau of Statistics (UBOS, 2011) states that about 66% of the working population are employed in the agricultural sector. This implies that the agricultural sector is the main channel for the delivery of biodiversity and ecosystem services to the population for socio-economic development. Uganda's economic development is directed by the third National Development Plan (NDPIII) with a major focus on growth and socio-economic transformation, prioritizing infrastructure, and human capital development.

The incoming NDPIV will consolidate development gains in infrastructure development and high impact programmes such as increasing production, value addition in agriculture, minerals, oil, and gas and leveraging existing opportunities through supporting private sector to drive growth. For a lower middle-income country like Uganda, environmental and natural resources will require sustainable approaches to manage the negative impacts of subsidies.



2. Overview of Research.

The development of the Subsidy Redesign Action Plan (SRAP) used a multi-stage process designed to systematically identify, assess, and propose redesign options for subsidies with negative impacts on biodiversity. This process involved defining the study's scope, conducting an exhaustive desk review of relevant literature, and developing tools to map and categorize subsidies.

Key sectors such as agriculture, fisheries, energy, and transportation were identified for their potential impact on biodiversity. A subsidy screening tool was developed to evaluate the impact of subsidies across multiple dimensions, including their environmental, sectoral, and economic implications. It further facilitated a detailed analysis of each subsidy, assessing its potential or actual negative effects on biodiversity and the environment.

An inventory of subsidies with potential to impact biodiversity was compiled, with particular attention to those in the energy and mineral development, agriculture, and construction sectors using a subsidy screening tool and an excel-based screening tool was employed to rank subsidies based on a scoring mechanism that considered various criteria, including biodiversity/environmental impact, sectoral impact, and economic impact.

This allowed for the identification of subsidies with the most significant negative impacts on biodiversity. A pareto analysis was undertaken to assess the impact of the three subsidies to offer a more strategic visualization of the relative impact of various subsidies on environmental and biodiversity factors.



3. Findings

3.1 Agricultural Sector

Agricultural chemicals, including fungicides and pesticides, also emerge as a top contributor to environmental impact. The high score in this category is indicative of the potential ecological toxicity and disruption to natural ecosystems, raising concerns about the balance between agricultural productivity and environmental health. In FY 2022/23, agriculture accounted for about 24% of GDP, and 35% of export earnings. The Uganda Bureau of Statistics (UBOS) estimates that about 68% of Uganda's working population is employed in agriculture.

There is large scale expansion of agriculture and therefore loss of habitat due to agriculture has been recorded as one of the factors contributing to loss of forest cover, according to a World Resources Institute report 2023, farming is a major cause of deforestation in Uganda, accounting for more than half of all deforestation. People cut down forests and convert the area to agricultural land as they move to more rural regions and develop farms.

There has been limited monitoring of the policy implementation in the use of fungicides and pesticides, yet the sector has attracted many players. The weak monitoring has given ground to proliferation of fake products scaling up the challenge. Conversely, subsidies with the lowest impact scores, such as those for surveying equipment and agricultural production equipment, represent areas where current impacts are less pronounced. Although these areas may benefit from optimization, they are not identified as immediate priorities for environmental impact mitigation based on the Pareto analysis. The primary direct economic incentive of the tax exemption on agricultural chemicals is the reduction in production costs for farmers, making it financially feasible for them to use these inputs. This policy supports higher crop yields and better-quality produce, thus potentially increasing farmers' profit margins.

Indirectly, the subsidy stimulates economic activity across various sectors. Increased agricultural productivity can lead to a higher supply of crops, which may lower food prices and benefit consumers. Additionally, it promotes growth in related industries such as agrochemical manufacturing, distribution, and agricultural equipment sales. The subsidy also enhances Uganda's export potential by making agricultural products more competitive in international markets, which positively affects the trade balance.

Table 1 shows the redesigning options targeting the most impactful subsidies – agriculture could yield high negative environmental impacts and shows how addressing the concerns related to the top-scoring subsidies could significantly improve sustainable agricultural management.



Table 1: Proposed redesign options for Uganda Agricultural sector

Environmental Impact:	<p>The use of these chemicals has a high negative impact on biodiversity indicating potential toxicity to a range of species and the potential for significant ecological disruption.</p> <p>Pesticides and fertilizers are known to degrade and acidify the soil, pollute groundwater sources, and negatively affect biodiversity and ecosystem functions and services.</p> <p>Extensive use of these substances in agriculture leads to potential pollution and contamination of natural water resources.</p>
Financial Impact:	<p>The high budgetary cost of subsidizing these chemicals is implied, which could be redirected towards more sustainable agricultural practices.</p> <p>Subsidies may inadvertently support the continued use of environmentally harmful practices, hindering the adoption of innovative and sustainable agricultural methods.</p>
Social Impact:	<p>The adverse effects of chemical use in agriculture pose direct threats to human health and safety, particularly for those living close to farmlands where these substances are extensively used.</p>

Based on the analysis of agricultural subsidies and their impacts, Table 2 below details three alternative incentive models for tax exemptions on agricultural chemicals (fungicides and pesticides).

Table 2: Redesign options for Tax exemptions on Agricultural Chemicals

Alternative one: Subsidy shift to green Practices	<p>Description: Redirect tax incentives from synthetic agricultural chemicals to support the use of organic and biopesticides, which have a lower environmental impact.</p> <p>Objective: To reduce the ecological footprint of agricultural practices by encouraging the use of environmentally friendly pest control methods.</p> <p>Implementation Strategy: Introduce tax credits for purchases of certified organic pest control products and provide additional support for farmers transitioning to organic farming practices.</p>
Alternative two: Investment in Integrated Pest Management (IPM) research and development programs	<p>Description: Invest in research and educational programs and financial incentives for farmers who adopt IPM strategies, which use a combination of biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks.</p> <p>Objective: To minimize the negative impacts of pesticides on the environment while maintaining agricultural productivity.</p> <p>Implementation Strategy: Develop training programs for farmers, subsidize the cost of IPM certification, and offer tax exemptions for the adoption of IPM strategies over traditional pesticide reliance.</p>
Alternative three: Performance - based Tax Credits	<p>Description: Implement a tax credit system based on measurable reductions in pesticide use, rewarding farmers who achieve lower pesticide application rates through sustainable practices.</p> <p>Objective: To incentivize farmers to reduce their reliance on chemical inputs and to adopt more sustainable farming practices.</p> <p>Implementation strategy: Establish benchmarks for reduced chemical use and provide a graded tax credit system that rewards farmers for meeting or exceeding these benchmarks.</p>

3.2 Industry and Manufacturing sector

The subsidy for packing materials designed for export exhibited a notably high impact score. The environmental footprint of these materials, likely related to waste generation and pollution, is substantial. Given the modern emphasis on sustainability, the prominence of this subsidy highlights the need for re-designing the subsidy, possibly through the adoption of biodegradable or reusable materials. Environmentally, the subsidy presents both opportunities and challenges. On one hand, it can indirectly encourage the use of sustainable packaging solutions if integrated with environmental guidelines.

This could contribute to Uganda’s commitments under the NEA (amendment) 2019, the National Water Policy, and the National Biodiversity Strategy and Action Plan, which emphasize sustainable resource use and environmental conservation. However, there are environmental risks associated with the subsidy if not properly regulated. The production and disposal of non-biodegradable packing materials, such as plastics, can lead to pollution and biodiversity loss. This aligns with global concerns highlighted in the United Nations Sustainable Development Goals (SDGs), particularly Goal 12 (Responsible Consumption and Production) and Goal 14 (Life below Water), which emphasize the reduction of waste and the protection of marine environments from plastic pollution.

The study revealed significant environmental, social, and financial impact of tax exemption of packing material of any kind designed for packaging goods for export. Table 3 below shows an overview of these issues.

Table 3: Overview of the potential biodiversity impact

<p>Environmental Impact:</p> <p>The tax exemption on packing materials may lead to increased production and use of these materials, which can have environmental consequences such as</p>	<p>Waste generation: An abundance of packing materials can result in significant waste, much of which may not be recyclable or biodegradable, leading to landfills’ expansion and increased environmental pollution.</p> <p>Resource consumption: The production of packing materials often involves the consumption of natural resources, which can lead to resource depletion and habitat destruction if not managed sustainably.</p> <p>Carbon footprint: The manufacturing, transportation, and disposal of packing materials contribute to GHG emission, exacerbating climate change.</p>
<p>Financial Impact: The financial implications of the tax exemption include:</p>	<p>Government revenue: Tax exemptions can lead to reduced government revenue, which would otherwise fund environmental conservation efforts or social programs.</p> <p>Market effects: If the tax exemption encourages the use of non-sustainable packing materials, it may inhibit the growth of green industries and technologies that produce environmentally friendly alternatives.</p>
<p>Social Impact: Socially, the tax exemption on packing materials may have several impacts:</p>	<p>Employment: The production of packing materials can create jobs; however, if the industry is not sustainable, it could lead to long-term social and economic instability.</p> <p>Public Health: Pollution from the production and disposal of packing materials can affect public health, particularly in marginalized communities close to production sites or landfills.</p>
<p><i>To address these challenges, it’s essential to consider finance solutions that realign expenditures to reduce negative impacts and improve positive outcomes, as well as investing in preventative actions and infrastructure.</i></p>	

To green the subsidy, Table 4 below provided alternatives aligned with environmental and economic goals by incentivizing sustainable practices and providing a framework for exporters to contribute positively to environmental conservation.

Table 4: Redesign options for tax exemption on packing material of any kind designed for packaging goods for export.

<p>Alternative one: Sustainable Material Incentives</p>	<p>Description: Shift the focus of the tax exemption from all packing materials to those that are certified as sustainable, biodegradable, or made from recycled materials.</p> <p>Objective: To encourage the use of environmentally friendly materials, reduce waste, and support a circular economy.</p> <p>Implementation Strategy: Develop a certification system for sustainable materials and provide tax credits based on the percentage of sustainable material used in packaging.</p>
<p>Alternative two: Export Rebates for Waste Reduction</p>	<p>Description: Implement a rebate system that offers financial returns on the evidence of reduced waste or implementation of a waste recycling program by exporters.</p> <p>Objective: To promote waste reduction and recycling within the export industry.</p> <p>Implementation Strategy: Establish benchmarks for waste reduction and recycling, and audit participants to ensure compliance before issuing rebates.</p>
<p>Alternative three: Progressive taxation based on environmental impact.</p>	<p>Description: Introduce a progressive taxation system where packaging materials are taxed based on their environmental impact, with higher taxes on non-recyclable, non-biodegradable materials.</p> <p>Objective: To discourage the use of environmentally harmful packaging materials through economic disincentives.</p> <p>Implementation Strategy: Assess the environmental impact of various packaging materials and structure the tax rates, accordingly, providing clear guidance to exporters on the tax implications of their packaging choices.</p>



4. Analysis

4.1 The Agricultural sector

The subsidy on agricultural chemicals aligns with Uganda’s economic policies, particularly those outlined in the NDP IV and the Agriculture Sector Strategic Plan (ASSP). These policies emphasize the modernization and commercialization of agriculture to enhance productivity and food security. By reducing the cost of inputs like fungicides and pesticides, the government aims to boost agricultural yields and stabilize food supplies, which is essential for economic stability and growth.

Conversely, the subsidy presents a complex relationship with Uganda’s environmental sustainability goals as articulated in the National Environment Act (NEA) 2019 and the National Climate Change Policy 2015. Increased use of agricultural chemicals can lead to higher yields and more efficient land use but also poses significant environmental risks, such as soil degradation, water contamination, and biodiversity loss.

These issues challenge the government’s environmental sustainability goals, which prioritize sustainable natural resource management and climate resilience. These direct and indirect, short term and long-term impacts of the subsidy on agricultural chemicals compromises the vision of the Kunming-Montreal Global Framework (KMGBF). The KMGBF emphasizes the urgent need to halt and reverse biodiversity loss through sustainable practices. It highlights several targets relevant to Uganda’s situation: **Target 7:** Reduce pollution risks and negative impacts of pollution, including from pesticides and hazardous chemicals, by at least half by 2030.

Target 10: Ensure that areas under agriculture are managed sustainably, promoting biodiversity-friendly practices such as sustainable intensification and agro-ecological approaches, and **Target 18:** Identify and reform incentives, including subsidies, that are harmful to biodiversity, and scale up positive incentives for conservation and sustainable use of biodiversity.

The tax subsidy on agricultural chemicals in Uganda, particularly fungicides and pesticides, has considerable environmental impacts. These impacts include soil degradation, water contamination, biodiversity loss, and pollution, all of which undermine the ecological balance and long-term sustainability of agricultural practices.

When these agro chemicals cross the threshold into the soil, they deplete soil structures and disrupt the natural balance of microorganisms, leading to long-term soil fertility issues. Additionally, the runoff from these. Uganda’s tax incentive guide 2022, provided for tax incentives in agricultural sector and Table 5 shows agricultural subsidies with direct or indirect adverse impacts on Biodiversity.

Table 5: List of agricultural subsidies with direct or indirect adverse impacts on biodiversity

S/N	Subsides	Nature of subsidy	Likely diverse biodiversity impact
1	Seeds	Indirect	Direct
2	Chemical fertilizers	Indirect	Direct
3	Agriculture equipment	Indirect	Indirect
4	Organic fertilizer production	Indirect	Direct
5	Reduced import tariff on agricultural equipment and chemicals (i.e. subsidized tax)	Indirect	Direct
6	Agriculture commodities import taxes	Indirect	Direct
7	Support from development partners	Indirect	Direct

According to figure 1, the total cost of revenue loss by Uganda from agricultural subsidies from imports and VAT over recent years shows that between Fiscal Year (FY) 2019-20 to FY2022-23, total revenue loss increased from UGX30.95 billion UGX to 37.83 billion. This indicates an increasing financial burden on the government, likely driven by rising costs of imported agricultural chemicals and stable but substantial VAT subsidies. The import subsidy loss nearly doubled from 6.89 billion UGX in FY 2021-22 to 13.72 billion UGX in FY2022-23, suggesting a considerable surge in the importation of these chemicals.

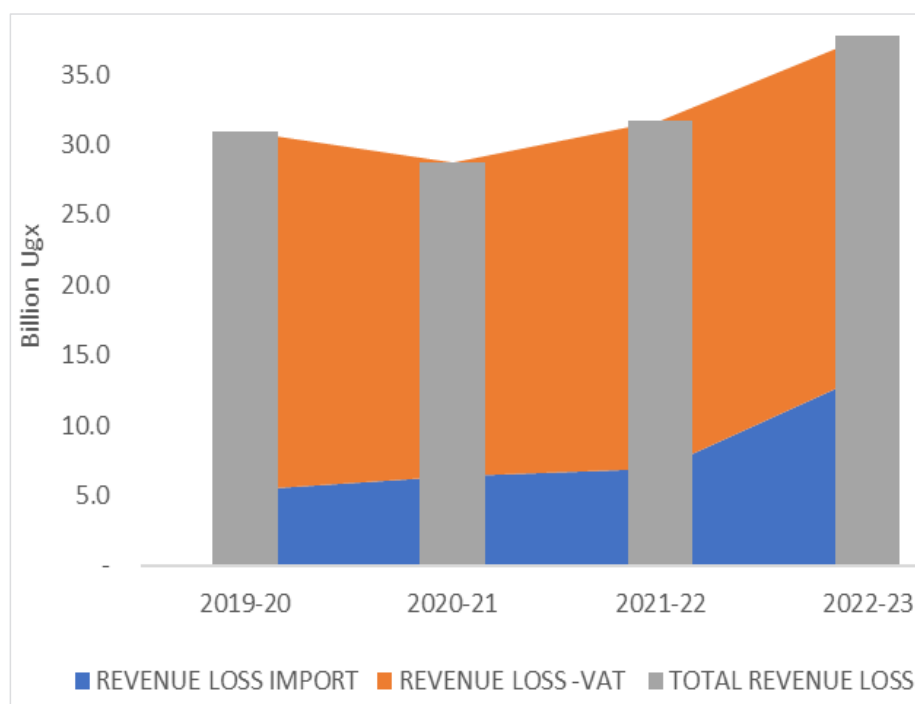


Figure 1: Revenue loss from agricultural subsidies from imports and VAT.

Nevertheless, VAT revenue loss has remained relatively stable, averaging around 24.5 billion UGX per year while aligning the total subsidy cost with the national budget and sectoral allocation reveals a growing commitment to the agricultural sector.

The budget allocation for agriculture increased from 1,130 billion UGX in FY2019-20 to 1,650 billion UGX in FY2022-23, indicating a strong governmental focus on supporting agricultural development. Despite the rising revenue losses due to subsidies, the agricultural budget has grown, suggesting that the government considers these subsidies critical for enhancing agricultural productivity and overall economic growth. The net benefit shows an increase in agricultural GDP consistently outweighing the total revenue losses each year, hence highlighting the positive impact of these financial commitments.

The trends in financial commitment over recent years underscore the government’s strategic focus on agriculture as a pillar of economic growth. The substantial increase in budget allocation coupled with the managed, though rising, subsidy costs indicate a balanced approach to supporting the agricultural sector. This approach has led to significant increases in agricultural GDP, from 24.8 trillion UGX in FY2019-20 to 32.4 trillion UGX in FY 2022-23.

4.2 The industry and manufacturing sector

The subsidy on packing materials for goods intended for export in Uganda is a strategic initiative aimed at enhancing the competitiveness of domestic products in the global market. By exempting these materials from all taxes, the government seeks to lower production costs for exporters, thereby making Ugandan goods more attractive on the international stage. This aligns with Uganda’s broader economic policies that focus on export-led growth, as outlined in the NDP IV, which prioritizes industrialization and export-oriented production to drive economic transformation.

Globally, similar subsidies exist in countries aiming to boost their export sectors. For instance, under the World Trade Organization (WTO) rules, such subsidies must align with international trade regulations to avoid unfair trade practices. Uganda's approach must also consider the Ministerial Decision on Export Competition adopted during the WTO's 10th Ministerial Conference, which requires the phasing out of export subsidies by developing countries.

Environmental considerations and policies:

Environmentally, the subsidy presents both opportunities and challenges. On one hand, it can indirectly encourage the use of sustainable packaging solutions if integrated with environmental guidelines. This could contribute to Uganda's commitments under the NEA 2019, the National Water Policy, and the National Biodiversity Strategy and Action Plan (NBSAP), which emphasize sustainable resource use and environmental conservation. However, there are environmental risks associated with the subsidy if not properly regulated.

The production and disposal of non-biodegradable packing materials, such as plastics, can lead to pollution and biodiversity loss. This aligns with global concerns highlighted in the United Nations Sustainable Development Goals (SDGs), particularly Goal 12 (Responsible Consumption and Production) and Goal 14 (Life below Water), which emphasize the reduction of waste and the protection of marine environments from plastic pollution.

Compliance with World Trade Organization (WTO) rules help Uganda avoid trade disputes and maintains good relations with trade partners, crucial for sustaining and growing the URA and MTIC to ensure compliance with international standards.

This collaboration ensures that Uganda's exports meet global quality requirements, thereby facilitating smoother trade relations. The subsidy on packing materials for export in Uganda, while primarily aimed at economic growth and enhancing export competitiveness, has measurable environmental impacts, particularly concerning biodiversity loss, ecosystem degradation, natural resource utilization, and pollution. These environmental consequences stem from both the direct and indirect effects of increased production and export activities facilitated by the subsidy. Due to weak monitoring, the export packaging materials may be found on the local market increasing the exposure to plastics.

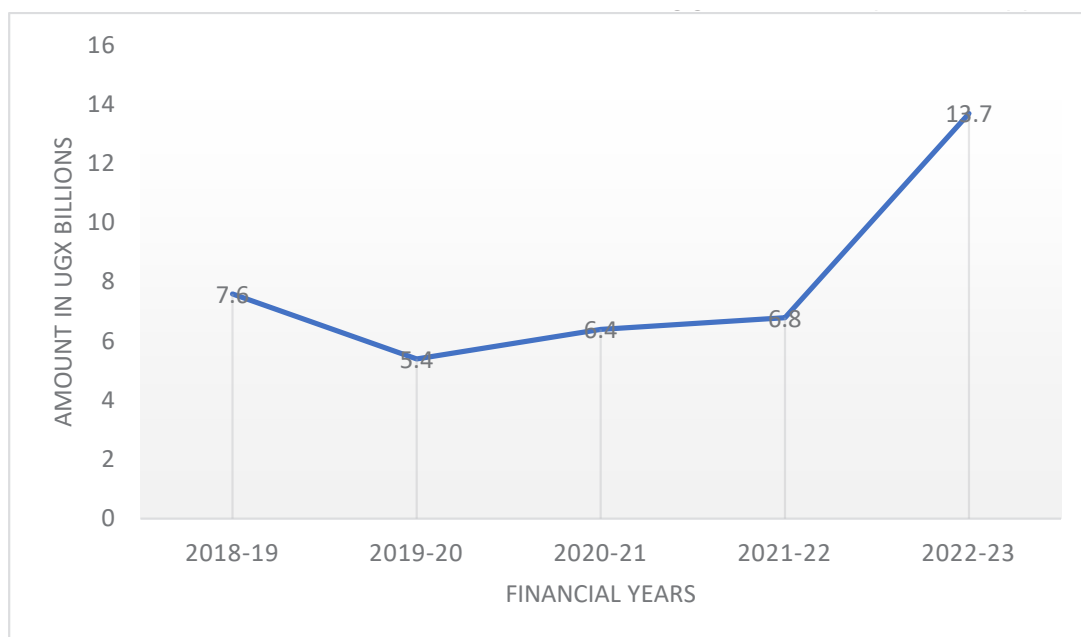


Measurable environmental impacts:

The subsidy indirectly contributes to biodiversity loss and ecosystem degradation through the increased use of non-biodegradable packing materials. Non-biodegradable materials such as plastics are commonly used due to their cost-effectiveness and durability, which are further incentivized by the tax exemption. However, these materials can accumulate in natural habitats, causing harm to flora and fauna. Quality Plastic Uganda highlighted that non-biodegradable materials like polyethylene and other plastics that are mainly imported and used for packaging can accumulate in natural habitats, harming flora, and fauna. Furthermore, the improper disposal of these materials can lead to pollution of land and water bodies, exacerbating the degradation of ecosystems.

Impact on natural resource utilization and sustainable practices: The subsidy influences natural resource utilization by promoting the use of imported packing materials, which often come from resource-intensive production processes. This includes the extraction of raw materials and the consumption of significant amounts of energy and water, which can lead to resource depletion and environmental stress. Despite these concerns, there are potential opportunities for the subsidy to promote sustainable practices. For instance, businesses could leverage the cost savings from the subsidy to invest in sustainable packaging solutions.

According to Uganda Revenue Authority (URA) Figure 2 Shows the cost of plastic incentives for export packaging materials has fluctuated over recent years. In 2018-19, the subsidies were UGX 7.6 billion. However, during the COVID-19 pandemic, the incentives dropped to UGX 5.4 billion in 2019-20 and UGX 6.4 billion in 2020-21. Post-pandemic, the subsidies increased significantly, rising to UGX 6.8 billion in 2021-22 and almost doubling to UGX 13.7 billion in 2022-23. This increase reflects a strong governmental push to support the export sector.



Source: Uganda Revenue Authority (URA), 2024

Figure 2: Cost of plastic incentives for production of export packaging materials on Uganda's economy over 5 years.

The UGX 13.7 billion cost of plastic incentives to produce packaging materials in 2022-23 was largely a response to the COVID-19 pandemic, aimed at increasing production to address the shortfall caused by the pandemic. Projections indicate that this cost will gradually decrease, settling at UGX 11 billion by 2025-26 As shown in figure 3. While this reduction is significant, it still represents a substantial expense for an economy already burdened by debt servicing.

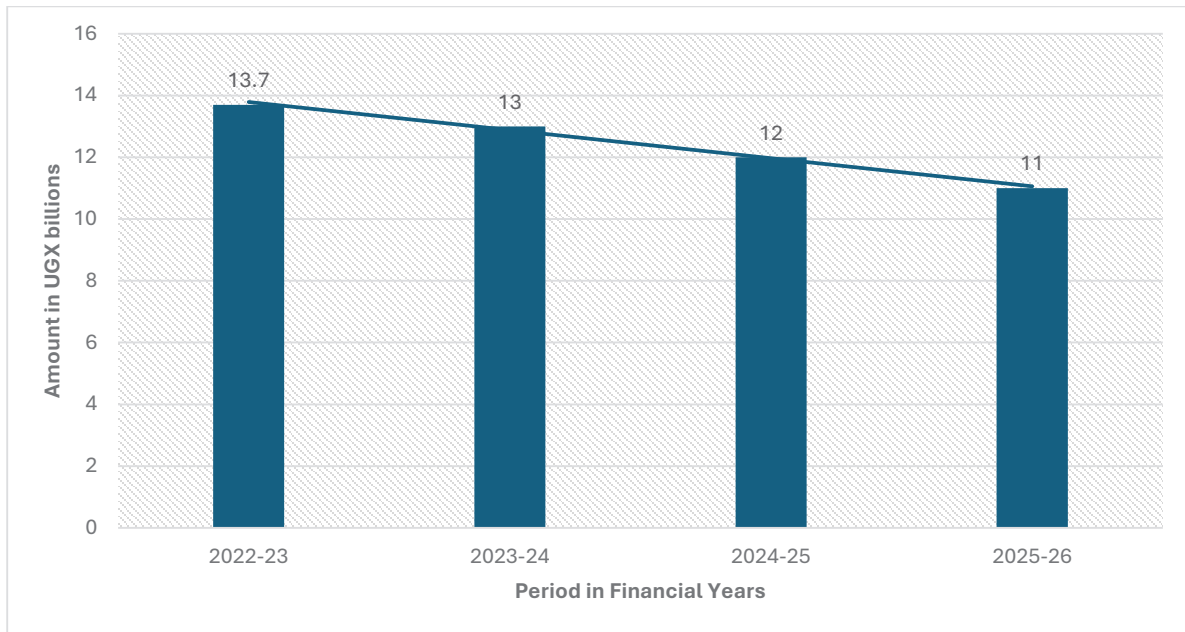


Figure 3: Projections of the subsidy cost of plastics used in the production of packaging materials for export.

Given the potential environmental, economic, and social impacts, several redesign scenarios for the subsidy can be considered. These scenarios focus on enhancing sustainability, cost-effectiveness, and stakeholder acceptance compared to the current model. Table 6 shows the viable scenarios for subsidy on packing materials.

Table 6: Redesign scenario for subsidy on packaging materials

Scenario 1: Performance-Based Subsidies	Scenario 2: Tiered subsidies based on environmental impact
<p>Description: Transitioning from input-based to performance-based subsidies can ensure that financial support is tied to specific economic & environmental outcomes. Companies would receive subsidies based on their achievement of sustainability targets, like reducing carbon emissions, minimizing waste, and using eco-friendly materials.</p> <p>Sustainability: This approach directly incentivizes sustainable practices, leading to a significant reduction in environmental impact.</p> <p>Cost-Effectiveness: By focusing on measurable outcomes, the government can ensure that funds are used efficiently and effectively, maximizing the return on investment.</p> <p>Stakeholder Acceptance: Businesses that are already investing in sustainable practices would likely support this model, while others might need initial assistance to transition.</p>	<p>Description: Implementing a tiered subsidy structure where the level of subsidy varies based on the environmental impact of the packing materials used. For example, companies using 100% recycled materials could receive a full subsidy, while those using conventional materials might receive a partial subsidy.</p> <p>Sustainability: This scenario promotes the use of low-impact materials, aligning the subsidy with environmental priorities.</p> <p>Cost-Effectiveness: It encourages companies to shift towards sustainable materials without abrupt economic disruption, as they can gradually transition to higher subsidy tiers.</p> <p>Stakeholder Acceptance: This model provides a clear financial incentive for adopting sustainable practices, which can be appealing to companies looking to enhance their environmental credentials.</p>

The subsidy on packing materials for export in Uganda has a profound impact on market prices, competitiveness, and the economic behaviour of both consumers and producers.

By exempting taxes on these materials, the subsidy significantly reduces production costs for businesses involved in exporting goods. In addition, this cost reduction allows companies to offer their products at more competitive prices in the global market, enhancing their market position and profitability. Considering that the cost of plastic incentives for export packaging materials fluctuated significantly over recent years, from UGX 5.4 billion in FY2019-20 to UGX 13.7 billion in FY2022-23, reflecting a considerable financial commitment, which while beneficial for exporters, represents a recurring cost to the state.

Financial stability: This recurring expenditure could limit the government's ability to allocate resources to other critical sectors such as healthcare, education, and infrastructure. The Ministry of Water and Environment highlighted that subsidies might inadvertently incentivize unsustainable practices or benefit a limited segment of the population, leading to financial inefficiencies and a misallocation of public funds. The long-term financial burden of maintaining such subsidies could exacerbate the fiscal deficit and increase national debt, compromising Uganda's financial sustainability.

Risk to revenue generation: Since government forgoes significant revenue by exempting import duties on packing materials, the risk of revenue loss will be there, yet this potential revenue could otherwise be used to fund public services and development projects. The Uganda National Bureau of Standards (UNBS) noted that while the subsidy supports industry growth, it also means the government misses out on considerable tax income. The reliance on these exemptions creates a dependency that may be difficult to reverse without causing economic disruption to the beneficiary sectors.

Box 1: Economic benefits of subsidies with examples from manufacturing industries

Manufacturing industries like **Riley Packaging and Felm Limited** benefit from reduced costs on materials like cardboard boxes, plastic crates, and wooden pallets, they can pass these savings onto their customers.

Riley Packaging noted that tax exemption on these packing materials significantly reduces our production costs, allowing them to offer more competitive prices in the global market.

This pricing strategy rates Ugandan products to be more attractive compared to international competitors, securing new contracts, and expanding market share.

Consumers are more likely to buy Ugandan products that offer good value for money, thereby increasing demand and driving sales volumes. Additionally, the emphasis on eco-friendly packaging materials due to the subsidy aligns with the growing consumer preference for sustainable products.

There is often job creation, support to local economies and improving livelihoods. For instance, **Quality plastic Uganda** highlighted that the subsidy indirectly supports job creation by making exporting more viable and profitable for businesses.

This shift not only meets consumer expectations but also promotes environmental responsibility among producers.

5. Policy Recommendation

Strategies for an effective subsidy redesign program

1. Implement pilot projects for the proposed subsidy redesign options to assess impacts and refine strategies before nationwide implementation.
2. Enhance collaboration among MDAs to ensure a cohesive approach to subsidy reform that integrates economic, environmental, & social considerations.
3. Engage a broad range of stakeholders throughout the redesign process for inclusive, equitable and responsive policy reforms.
4. Invest in awareness and educational programs to build capacity of actors on the benefits & importance of sustainable practices and biodiversity conservation.

Engage Policy makers to :

1. Reduce the use of tax incentives to drive Investment but rather focus on improving the core drivers of investments like infrastructure development, political stability, and sound macroeconomic environment. Where exemptions are granted, government should focus on sector targeted rather than individual/ company specific.
2. Encourage statutory exemptions other than arbitrary executive exemptions because they are less distortionary as they usually apply to an entire sector not specific entities and are more transparent.
3. Develop clear guidelines for implementing tax exemptions. At the moment, there are no clear guidelines for granting exceptions. There guidelines should accommodate needs of sectors based upon research and commitments of entities to international Conventions/protocols/ or Multilateral Environmental Agreements (MEAs) among others.

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