

A DOCUMENTATION OF THE STUMBLING
**BLOCKS AND ENABLERS IN THE
IMPLEMENTATION OF THE ORGANIC
AGRICULTURE VALUE CHAIN IN UGANDA**



BY
ADVOCACY COALITION FOR SUSTAINABLE
AGRICULTURE (ACSA)



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We strongly believe that this documentation will contribute to the wealth of knowledge that will transform practices within the organic agriculture value chain in Uganda and beyond.

December, 2024



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1. INTRODUCTION



This Report relates to a consultancy study titled: “Documentation and publicizing of stumbling blocks and enablers in the Implementation of organic agriculture value chains in Uganda”. The study was commissioned by Advocacy Coalition for Sustainable Agriculture (ACSA) and conducted by Godfrey Kayobyo in a three months period between August and October 2024. The report presents the study context, methodology, findings, conclusions and recommendations.

1.1 About Advocacy Coalition for Sustainable Agriculture

Advocacy Coalition for Sustainable Agriculture (ACSA) is a legally registered national network of Civil Society Organizations (CSOs) that work with Smallholder farmers promoting sustainable agriculture, agricultural market development, environmental conservation, research and advocacy. ACSA’s work is geared at increasing farmer’s understanding of policy issues affecting smallholder farmers in Uganda. Its’s mandate is “Advocating for the agrarian policy environment for smallholder farmers in Uganda”. Currently, ACSA has a membership of 29 CSOs (9 Faith Based Organizations, 3 Networks, 4 Farmers’ Associations and 13 NGOs) spread country wide in 46 districts across Central, East Central, Lango, South Western, Western, Teso, and West Nile Regions. ACSA envisages “Smallholder farmers living in a Sustainable Environment” and thus sets out “to Empower civil society organizations working with smallholder farmers to advocate for favorable agrarian policy environment for sustainable communities”. ACSA’s overall Goal is “Relevant agriculture policies and services for Small Holder Farmers (SHFs) are implemented to foster profitable sustainable agriculture enterprises”. ACSA’s key focus areas are; Advocacy and Lobbying, Research and Documentation, Capacity building of Member Organizations, Capacity building of ACSA secretariat, Networking and Partnership building.

1.2 Contextual background

Uganda’s economy has continued on a positive growth trajectory over the last ten years. Gross Domestic Product (GDP) per capita grew from USD 807 in 2015/16 to USD 1,088 in 2022/23 and USD1, 146 in FY2023/24, surpassing the annual NDP III target of USD1, 116. GDP growth recovered from the impact of COVID-19, improving from 3.5% in 2020/21 to 4.7% and 5.3% in 2021/22 and 2022/23 respectively to 6% in 2023/24 and it is projected to grow by 6% in 2024/25. The main drivers of this growth in per capita GDP include the strong recovery in agriculture; industry; and services sectors.

The agricultural sector is a dominant source of livelihood for most Ugandans. It employs 68% of the working population of men, contributed 24% of GDP and 42% of export earnings during the

1 Legally registered under the laws of Government of Uganda (GOU) by URSB as Company limited by guarantee and an NGO under NGO bureau

3 Ministry of Finance, Planning and Economic Development 2024: Background to the Budget for Fiscal Year 2024/2025 <https://budget.finance.go.ug/sites/default/files/National%20Budget%20docs/BACKGROUND%20TO%20THE%20BUDGET%20FY%202024-25.pdf>

4 Uganda Bureau Of Statistics (UBOS) 2023, Statistical Abstract 2023; <https://www.ubos.org/wp-content/uploads/publications/2023-Statistical-Abstract.pdf>

5 National Planning Authority 2020, Third National Development Plan 2020/21- 2024/25

6 Uganda Bureau Of Statistics (UBOS) 2023, Statistical Abstract 2023

The agricultural sector is a dominant source of livelihood for most Ugandans. It employs 68% of the working population of men, contributed 24% of GDP and 42% of export earnings during the FY2022/23. Majority (84%) of Uganda's population is rural where most of them (80%) are smallholder farmers, farming on units of about one hectare and 69% of the households relying on subsistence agriculture for a living. The sector is recognized as being critical for catalyzing agro-industrialization, and realization of the country's strategic objective of increasing household incomes and improving the quality of life of Ugandans. Increasing commercialization and competitiveness of agricultural production and agro-processing; as well as fostering market access are key tenets of national strategy towards facilitating full monetization of the economy for increased household incomes (NPA 2020 and MFPED 2024).

Uganda's agriculture sector is centered on Vision 2040 which envisages a transformed Ugandan society from a predominantly peasant and low-income country to a modern, competitive and prosperous upper middle-income country. The transformation is expected to ensure food and nutrition security, create employment opportunities and increase household income along the entire commodity value chains of production, processing and marketing. Attainment of this transformation, among others hinges on a modern and indigenous knowledge-based agriculture as articulated in the National Agricultural Policy that envisages "a competitive, profitable and sustainable agricultural sector" . Promoting a sustainable productive Natural Resource Base (NRB) and healthy environment for improved livelihoods, poverty eradication and economic growth is a key strategic objective of the country under the water and environment sector. This reflects the country's commitment to achieve the aforementioned economic and social targets while maintaining the integrity and functionality of its environment, ecosystems and natural resources.

Ecological Organic Agriculture (EOA) has the potential to contribute to food security and nutrition, restore land degradation, alleviate poverty, mitigate climate change, and enhance resilience, among other socioeconomic and environmental benefits. With 404,264 certified farmers, Uganda has the highest number of certified organic producers on the African continent and only second to India, globally in 2022 and also stood out as the country with the largest area under organic agriculture management standing at 505'308 hectares in 2022 . However, production of organic products remains marginal with the area under organic agriculture accounting for only 3.5% of the agricultural land in Uganda, and ranks number 5 on the African continent after Sao Toame (21.1%), Sierra Leone (4.9%), Reunion (4.6%) and Togo 4.2%).

Uganda's agriculture is generally described as organic by default with majority of farmers still relying on nature and chance to produce crops. Only 10% and 23% of agricultural households use inorganic fertilizers, and pesticides . With the lowest inorganic fertilizer application in the World currently estimated at only 2kg per hectare per year, most of the Ugandan farmers particularly the smallholder farmers are subconsciously practicing organic farming. Use of inorganic fertilizers for soil fertility improvement and agro-chemicals for pest and disease control are rarely employed by the smallholder farmers because they are largely not available and/or unaffordable.

The minimal use of external inputs makes Uganda's agriculture system largely organic by default and positions the country to have a comparative advantage for organic production in Africa. According to the International Federation of Organic Agriculture Movements (IFOAM-Organics International) Organic agriculture is a production system that sustains the health of soils, the ecosystem and the people. It hinges on Ecological processes, biodiversity, and cycles adapted to local conditions instead of use of external inputs with adverse effects. It's a holistic production management system geared at avoiding the use of synthetic and harmful pesticides, fertilizers, growth regulators, and livestock feed additives to reach a long-term goal of sustainable production of crops and animals.

Our grandparents practiced successful natural seed and livestock breed selections, crop rotations, integrated farming, identification and use of peat soils and forest litter to improve crop yields. These are all elements of organic farming techniques traditionally practiced in Uganda that unfortunately lack the scientific merits and standards to qualify them as organic, according to the FAO Codex Alimentarius Commission standards. The slow growth of the organic agriculture system in Uganda is largely attributed to failure to develop the organic subsector value chain accompanied by lack of coordinated efforts and a regulatory framework to guide and control the production system.

6 Ministry of Finance Planning and Economic Development (MFPED): Background to the Budget for Fiscal Year 2024/25 <https://budget.finance.go.ug/sites/default/files/National%20Budget%20docs/BACKGROUND%20TO%20THE%20BUDGET%20FY%202024-25.pdf>

7 UBOS June 2021, Uganda National Household Survey (UNHS) 2019-2020 presentation <http://www.fao.org/3/i8359en/i8359EN.pdf>

8 Ministry of Finance Planning and Economic Development: Background to the Budget for Fiscal Year 2018/19, and for Fiscal Year 2019/20.

9 MAAIF 2013; National Agriculture Policy. <https://www.agriculture.go.ug/wp-content/uploads/2019/04/National-Agriculture-Policy.pdf>

10 JAN TRÁVNÍČEK, BERNHARD SCHLATTER AND HELGA WILLER: Organic Agriculture in Africa: Key Facts and Figures. In Willer Helga, Jan Trávníček and Bernhard Schlatter (Eds.) (2024): The World of Organic Agriculture. Statistics and Emerging Trends 2024. Research Institute of Organic Agriculture FiBL, Frick, and IFOAM - Organics International, Bonn. https://www.fibl.org/fileadmin/documents/shop/1747-organic-world-2024_light.pdf

In 2019, the Government of Uganda approved the National Organic Agriculture Policy (NOAP) and its corresponding Implementation Plan to address the challenges affecting the Organic Agriculture subsector. The overall goal of the National Organic Agriculture Policy 2019 is to harness Uganda's Organic agricultural potential by ensuring a well-regulated and coordinated sub-sector that contributes to National Development. Two of the targets in the NOAP are i) to increase the contribution of organic agriculture sub-sector to GDP to reach over 50% of agriculture GDP and ii) to increase productivity of organic agriculture by more than 50% in the period 2020-2025 . These ambitions are in line with aspirations of Vision 2040, and the National Development Plan (NDP) III which identify agriculture as one of the key sectors for spurring increased incomes and livelihoods of the people. NOAP is also well aligned to International Development frameworks and protocols such as the Comprehensive African Agriculture Development Plan (CAADP) and the Sustainable Development Goals (SDGs) among others.

Launch of the NOAP by government, was expected to be accompanied with a number of follow up activities as part of the operationalization of the policy. These included; documentation and publicizing the stumbling blocks and enablers in the implementation of the Organic Agriculture value chains. It is against this background that Advocacy Coalition for Sustainable Agriculture (ACSA) has commissioned this study to document the stumbling blocks and enablers in the implementation of OA value chains in Uganda.



1.3 Objectives of the assignment

The purpose of the assignment was to undertake a study on documentation and publicizing the stumbling blocks and enablers in the implementation of the Organic Agriculture value chains.

Specifically, the study set out to achieve the following objectives:

1. To analyze the stumbling blocks and enablers and their implication to the implementation of the Organic Agriculture value.
2. Highlight the existing policy and regulatory frameworks in place and extent to which they address the stumbling blocks in the implementation of the Organic Agriculture value chain for replication
3. Identify good practices in addressing stumbling blocks in the Organic Agriculture value chain
4. Provide recommendations to various stakeholders clearly indicating the enablers for effective implementation of the organic agriculture value chains at all levels in Uganda with emphasis on consumption habits

1.4 Expected Deliverables

The consultant was expected to deliver the following outputs at the end of the assignment as demanded by the Terms of References (ToR) and agreed upon during the kickoff meetings with ACSA,

- i. A technical proposal indicating the interpretation of the assignment
- ii. A draft report about the stumbling blocks in the implementation of the Organic Agriculture value
- iii. A FINAL report submitted to ACSA in softcopy in an editable format.

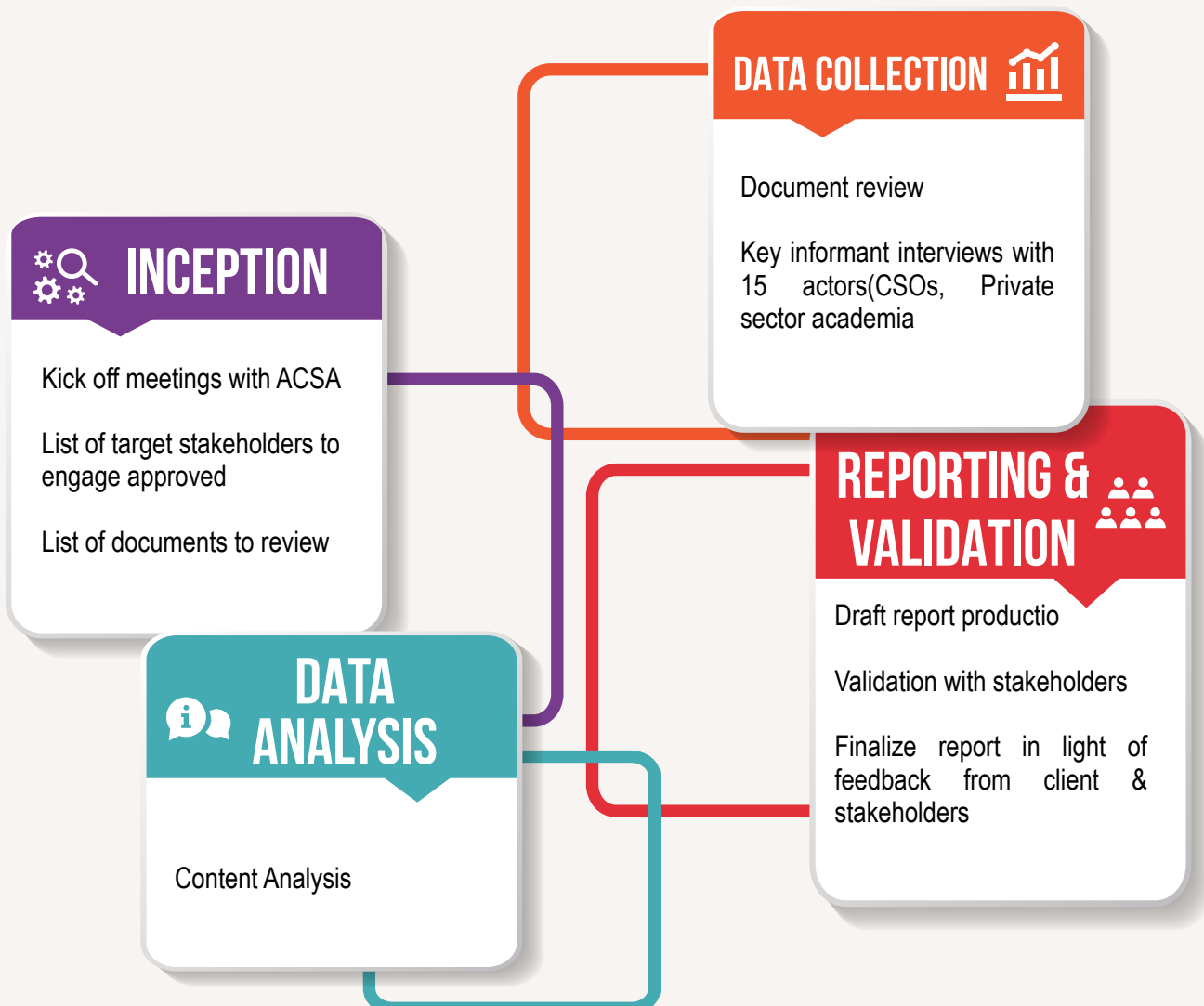


2. METHODOLOGY

2.1 Study approach and data collection methods

A qualitative approach was adopted in undertaking this study that largely relied on secondary data complimented with primary data from key informant interviews with selected stakeholders in the organic sector in Uganda and direct observations during visits to markets in Kampala and Wakiso. Primary data came from 15 stakeholders working with farmers countrywide including private actors and staff of CSOs with interventions on promoting Organic Agriculture value chains in Uganda as well as those engaged in policy advocacy towards conducive environment for Organic Agriculture in the country. The study was implemented in four steps depicted in figure 1 below.

figure 1: steps in implementation of the study



2.2 Data analysis

The data from document review, and key informant interviews was to be subjected to content analysis to identify analytic patterns or themes that could aid interpretation, and filtering of non-repetitive and non-overlapping meanings.

2.3 Report production and validation

A draft report addressing study ToRs was produced and shared with ACSA for review and comments. The draft report was also presented for stakeholder validation during the 8th National Organic Agriculture Innovation and Research Symposium held at J-FRIGH hotel on 31st October 2024. The comments from ACSA and stakeholder validation meeting were used to refine the draft into a final report submitted to the client.



3. FINDINGS



The findings are structured around the study objectives.

3.1 Stumbling blocks in implementation of organic agriculture value chains in Uganda

A host of stumbling blocks/barriers limit effective implementation of organic agriculture value chains in Uganda. These are enumerated below.

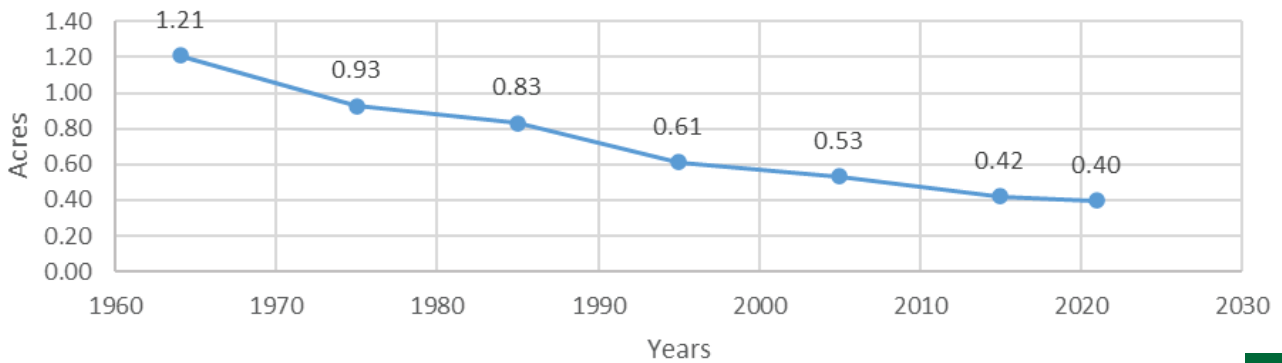
- a) Low production levels and productivity. Low levels of productivity is a key binding constraint for several commodities that have huge potential to drive growth and promote exports. The NDP III Mid-term Review indicated that labour productivity in the agriculture sector stood at USD 945 in FY2021/22 far below the NDP III target of USD2,656 .

Low production levels are attributed to a number of factors including; reducing farm sizes, nutrient mining, vulnerability to climate change induced harvest failures, as well as limited knowledge and skills on Ecological organic production practices among the smallholder farmers (SHF). These factors individually and /or jointly culminate in low yield levels of agricultural produce and also contribute to intermittent / seasonal supply of products thus impairing SHFs ability to consistently satisfy demand on a sustainable basis. The inability/failure to consistently supply products in the quantities and quality required by off-takers on a sustainable basis presents a barrier for successful SHF entry into niche markets, both on the local and international scene. The various ways through which each of the above factors influences low production levels and hence implementation of organic agriculture value chains are elaborated below.

Reducing farm sizes was noted to emanate from increasing population which increase pressure on land for housing and other economic activities as well as SHF getting displaced off their land by landlords who reclaim and sale off parts of the land that was formerly used by farmers for agricultural production. The country's population stands at 45.9 million in 2024 with an annual population growth rate of 2.9% , it's projected to reach 63.8 million by 2030 and 105.7 million by 2050 . The high population places pressure on use of land .

Uganda has total arable land area of about 6,900,000 hectares (ha) but the increasing population size, has led to a steady decline in the per capita arable land over the years from the 0.49 ha (1.21 acres) per person in 1964 to 0.161ha (0.397 acres) per person in 2021 (Figure 2). The reducing farm sizes negatively impact on the land area devoted to agriculture production, thus culminating in low production levels.

Figure 2: Percapita land in Uganda



Inappropriate land-use practices over several years have triggered rapid eco-system deterioration characterized by soil erosion, and soil infertility associated with nutrient mining and loss of soil organisms thus rendering the soils unable to supply crops with the nutrients they need. On the other hand, the booming population have increased demands on the already overworked soils. The low level of soil fertility is impairing production levels thus reducing farmers' livelihoods, increasing hunger, and accelerating environmental breakdown. The continuing degradation of agriculture land - presents a challenge to the subsector to develop economically viable organic soil fertility replenishment technologies.

Vulnerability to climate change induced harvest failure have serious negative consequences on agricultural production and productivity. According to the Notre Dame Global Adaptation Initiative (2021), Uganda ranks the 13th most vulnerable country in the world to climate change and 160th out of 192 nations in readiness to confront the threat. Climate change manifesting through weather variability (frequent, intense and prolonged dry spells, droughts, floods, increase in temperature), as well as increased prevalence and high incidence of pests and diseases are increasing the vulnerability of Ugandan citizens and their livelihoods . The odds for these events are predicted to increase in magnitude and intensity, (MAAIF NAPA 2018). The situation is further compounded by SHF dependence on rain-fed agriculture. High prevalence of the poor weather conditions is linked to higher outbreak of pests and diseases affecting both crops and livestock production of the agricultural households with consequences for food shortage . This has culminated into shifts in farming seasons; led to loss and damages; ultimately impair increased agriculture production and harvest failures leading to reduced or lost income and food and nutrition insecurity among the farming households . The following qualitative quotes elucidate stakeholder views on how climate change is impairing production.

'Most farmers rely on rains to grow their crops, but not engage in dry season production and thus they are not able to supply organic products on a consistent basis throughout the year, especially during the dry season in the face of climate change' (Key informant from CSO).

The prolonged dry spells and reliance on rain-fed agriculture is limiting the quantities produced and capacity to supply products on a regular basis. This is one of the reasons supermarkets currently do not entertain special sections for organic agriculture products, as they are not certain of consistent supplies to meet customer demands. So, they opt to sell the organic products in the same sections as the conventional ones (Key informant, from private sector).

<https://www.ubos.org/wp-content/uploads/publications/National-Population-and-Housing-Census-2024-Preliminary-Report.pdf>

World Bank Data Bank (2020). Health Nutrition and Population Statistics: Population estimates and projections - Uganda. URL: <https://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics:-population-estimates-and-projections>

Ministry of Finance Planning and Economic Development, June 2017: Background to the Budget for Fiscal year 2017/18. Republic of Uganda National Environment Management Report 2019; National State of the Environment Report 2018-2019

This points to the need for climate change resilient agriculture interventions to strengthen farmer capacity to adapt and mitigate climate change effects and enhance productivity of land so as to position farmers to consistently supply on a sustainable basis.

Limited knowledge and skills on Ecological Organic Agriculture (EOA), production practices among SHFs. The holistic Ecological Organic Agriculture production system approaches to soil fertility management, soil water conservation, crop and livestock health protection and management, product post-harvest handling are knowledge intensive yet not all SHFs have access to comprehensive knowledge about these relevant strategies/practices. The limited knowledge and skills on the organic production practices is noted to limit uptake among SHFs thus impairing production (Ronner et al 2023) .

b) Contradictions between some government programs and the Organic Agriculture agenda. Some government programs present contradictions with the organic agriculture agenda of avoiding the use of inputs with adverse effects on people and the ecosystem. While CSOs and private actors may be promoting organic agriculture, some government programs may provide inorganic inputs to farmers or promote conventional management of pests and disease vectors in the farming households. Agricultural programs which prioritize distributing of conventional agro-inputs to farmers are a case in point. Likewise, programs that promote the spraying of conventional chemicals to control disease vectors such as mosquitoes and bed bugs in agricultural homesteads result in contamination of would-be organic produce that is often stored in the houses. For example, the spraying of chemicals to control mosquitoes in Northern Uganda around 2018, led to contamination of the chia seeds. The off takers opted not to buy the product for the organic export market culminating in loss of niche markets.

c) Limited effective demand for organic agriculture products. This is attributed to limited awareness on the nutritional, health and environmental benefits of organic agriculture practices and products among producers and consumers; low purchasing power as well as supply and demand swings due to food price inflation all of which constrain development of viable local organic markets.

<https://agra.org/ourharvest/december/sustainable-use-of-fertiliser-key-to-africas-food-security/?utm>

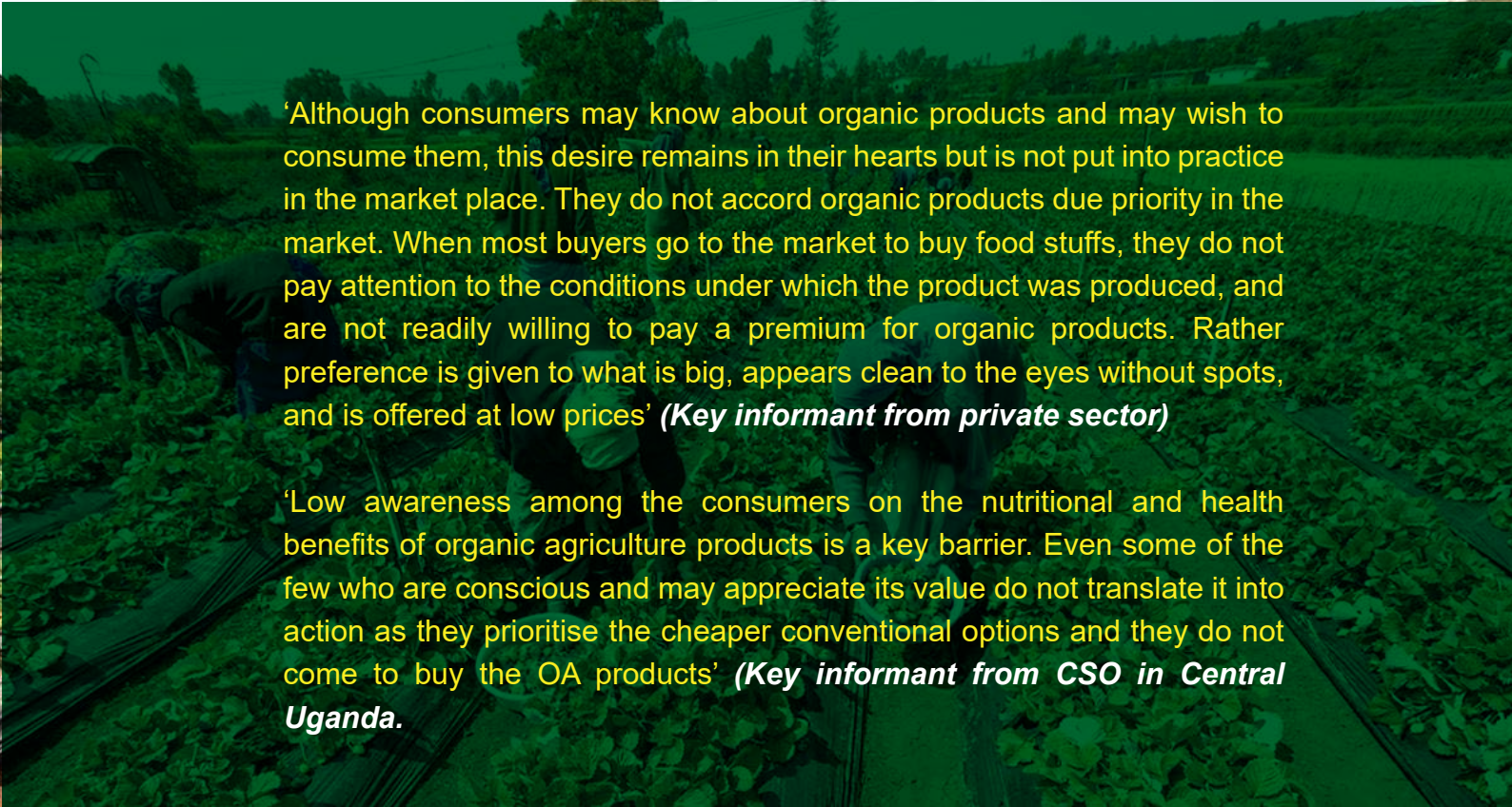
Office of the Prime Minister (OPM) 2020, Annual state of disaster report 2020: <http://www.necoc-opm.go.ug/ASDR/ASDR%202020.pdf>

Uganda Bureau of Statistics 2023, Statistical Abstract 2022

Budget Monitoring and Accountability Unit (BMAU) June 2018, Briefing paper 17-18: Effects of changing weather patterns on the agricultural sector - how has production and livelihoods been affected

FAO. (2017). Strengthening sector policies for better food security and nutrition results. Food and Agriculture Organisation of the United Nations

Findings indicate that the local demand for OA products is sluggish due to a low level of awareness of benefits of OA products. It's noted that changing mindsets about potential benefits of organic practices and products is still a challenge among both the producers and consumers. This was partly attributed to OA promoters not devoting sufficient time and resources to heightening awareness among both the producers and consumers. Consumer consciousness about food safety is not translated into practical preference for OA products. Key informants noted that most consumers do not deliberately look out for OA products, rather priority is accorded to product size, appearance, and lower price with preference given to whatever is big or heavy, appears clean to the eye, and offered at a lower price. Study findings are in line with those of Ssemugabo et al 2022 which indicated that consumers preferred succulent and big fruits and vegetables regardless of whether they have applied pesticides in their production . This impairs consumer willingness to pay premium prices for the organic products. The quotes below illuminates this view.



'Although consumers may know about organic products and may wish to consume them, this desire remains in their hearts but is not put into practice in the market place. They do not accord organic products due priority in the market. When most buyers go to the market to buy food stuffs, they do not pay attention to the conditions under which the product was produced, and are not readily willing to pay a premium for organic products. Rather preference is given to what is big, appears clean to the eyes without spots, and is offered at low prices' *(Key informant from private sector)*

'Low awareness among the consumers on the nutritional and health benefits of organic agriculture products is a key barrier. Even some of the few who are conscious and may appreciate its value do not translate it into action as they prioritise the cheaper conventional options and they do not come to buy the OA products' *(Key informant from CSO in Central Uganda).*

Ronner, E., Van Reemst, L. and Van der Poel, M., 2023 Opportunities for Organic Agriculture in Uganda. Wageningen, Wageningen Environment Research Report 3314

Sseugabo, C, Bradman, A, Ssempebwa. J. C, sille, F. and Guwatudde, D 2022; Consumer Awareness and Health Risk Perceptions of Pesticide Residues in Fruits and Vegetables in Kampala Metropolitan Area in Uganda <https://journals.sage-pub.com/doi/10.1177/11786302231184751>

Supply and demand swings and rising food prices. The coronavirus pandemic led to a surge in demand for organic foods in the west in 2020. Supply could not keep pace with demand in numerous organic product categories, but since then demand has been sluggish. Rising food prices were cited as a key factor accounting for decline in organic food sales in the subsequent years. In Europe food prices increased by about 12% in 2022, triggering an adverse effect on organic food sales. They have made consumers more price-sensitive; thus negatively affecting effective demand for premium products, including organic foods. Food inflation remains high, in developing countries, Uganda inclusive. These supply-demand swings have a negative effect on the organic food market. Conventional food producers become reluctant to convert to organic agricultural practices if there is uncertain demand. Some organic products are marketed as conventional products without the premium because of weak demand .

d) Marketing gaps; Inadequate packaging, branding, information on organic packing hinders commercialization of organic products. Lack of market product differentiation of organic products from conventional ones makes distinguishing them a challenge in the market. This impairs marketing of organic products notably promotion and pricing to ensure premium returns to the producers (Ronner et al 2023). The lack of premium pricing for the organic products impairs profitability of the OA enterprises, curtailing ability of the farmers to realize adequate returns to their investment and thus a disincentive for farmers and SMEs to consistently invest in the input intensive OA production practices. This lack of product differentiation and pricing not only impairs SHF and SME's moral to consistently invest in the time and labor-intensive organic agriculture practices but also denies them income thus limiting their purchasing power to effectively demand and access organic productivity enhancing inputs (quality seeds, bio-fertilizers, and bio-pesticides).

'Getting a premium price is a driver for producers' adherence to organic agriculture production standards. However, producers of organic products in Uganda mainly sale in the same markets as the conventional producers. If 90% of the organic product is sold in the usual market with no premium, it's a disincentive to organic farmers. If one does not get a remunerative market for their product, then they may abandon organic production in the subsequent seasons. It's for this reason that the number of farmers we engage with has reduced in the last couple of years' (Key informant from private sector)

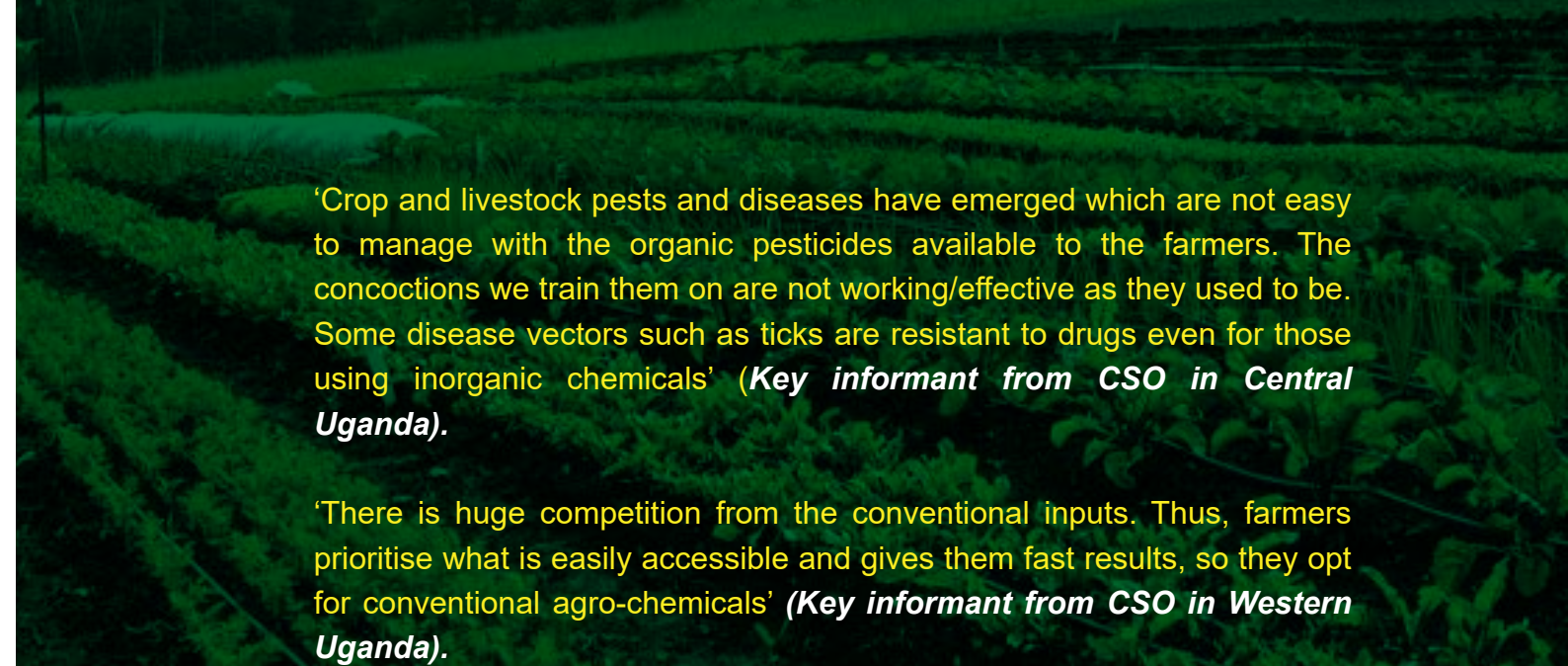
There are few distinct local organic agriculture product markets notably in the rural areas. This culminates in limited sale opportunities and makes commercialized organic agriculture risky as it mainly relies solely on the export market. This is further compounded by the weak linkages between OA producers and prospective buyers which impairs consumer confidence and trust in the products supplied by the farmers.

e) Limited access to organic agriculture production inputs (seeds, organic manure, bio-fertilizers, bio-pesticides, bio-rations). This stems from limited outlets supplying OA inputs; inadequate quantities produced on farm; and efficacy of farmer developed concoctions in managing some crop /livestock diseases and pests in the face of climate change. It noted that although some dealers in organic inputs have emerged, these are by and large restricted to the cities and a few district towns but not available in the rural areas. This lack of accessibility compounds availability and use of such inputs by farmers.

Limited access to organic soil amendments and bio-pesticides is attributed to the small quantities of composite and or animal manure and plant teas produced on their own farms. Thus, SHFs face nutrient and organic matter scarcity in the soils making it a challenge to improve soil fertility for increased productivity without external inputs. The inconsistent quantities constrain scale of application, consistent use and expansion of enterprises. The small quantities are applied to just a few crops and parts of the garden which impairs realized production levels due to lack of all required inputs. The quote below exemplifies this view.

'While we have built capacity of farmers to produce own organic inputs, there is still a gap of accessing the inputs on a large scale and this is limiting their application, productivity and expansion of the enterprises' Key Informant CSO in Central Uganda)

Biological pest and disease control strategies are knowledge intensive unlike the conventional inorganic chemical control systems, this limits uptake among SHFs. The farmer produced organic concoctions and bio-pesticides on the market that they may deploy for pest and disease management exhibit a delay in effectiveness yet farmers are seeking urgent solutions and results in the face of increasing prevalence of crop and livestock pests and diseases (Ronner et al 2023). Key informants noted that alternative methods of crop and livestock pest and disease control are not well developed and this is compelling farmers to prioritise the readily available conventional agro-chemicals for fast solutions. The quotes below exemplify this view.



'Crop and livestock pests and diseases have emerged which are not easy to manage with the organic pesticides available to the farmers. The concoctions we train them on are not working/effective as they used to be. Some disease vectors such as ticks are resistant to drugs even for those using inorganic chemicals' (*Key informant from CSO in Central Uganda*).

'There is huge competition from the conventional inputs. Thus, farmers prioritise what is easily accessible and gives them fast results, so they opt for conventional agro-chemicals' (*Key informant from CSO in Western Uganda*).

- f) **Inappropriate Post-Harvest Handling and Transport Infrastructure.** Use of inappropriate infrastructure for storage, processing, and transportation distorts the quality of the organic products. For instance, using taxis, boda motorcycles and open Lorries exposes products to contamination and other forms of quality deterioration during transportation to the market. Fresh products are exposed to dust, and people stepping on or sitting on them along the way thus deforming their physical qualities in addition to increasing risks of contamination with chemicals.
- g) **Weaknesses in the Organic Agriculture information and knowledge management support systems.** Although information and knowledge on organic agriculture exists, its scattered, not properly documented and standardized thus negatively impacting access to relevant information and knowledge products (Ronner et al 2023). This is noted to lead to limited availability and access to knowledge products focusing on organic agriculture production methods compared to those on conventional agriculture. The qualitative quotes below highlight this assertion.

'Sharing of information on organic agriculture is limited compared to that on conventional. Most of the information you find on line is related to conventional agriculture, this impairs ability to self-learn if you have not participated in training on organic farming' (*Key informant from CSO in Western Uganda*).

'Farmers and practitioners in CSOs rely on experiential learning with no or very limited documentation of the tacit knowledge to make it explicit in knowledge products' (*Key informant from CSO in Central Uganda*).

Training programs in formal agricultural institutions are largely skewed to conventional agriculture. Only few educational institutions have included OA education in their curriculum and as a result, OA education and training is not yet fully institutionalized. Majority of agricultural extension workers are graduates of the formal training programs which do not integrate OA and thus they have limited capacities to impart knowledge and effectively advise farmers on OA farming practices. This contributes to inadequate outreach and farmer training /advisory services related to OA culminating in limited farmer capacity to apply new environmentally friendly technologies.

Findings also point to limited integration of OA in public and private research. It's argued that in Uganda, research on organic agriculture is negligible, where it is being conducted, it tends to be isolated and not part of a national effort to develop the sub sector. The limited focus/attention and priority accorded to developing of appropriate technologies for OA notably soil health as well as crop and animal health is culminating into limited availability of proven OA technologies /production methods for scaling-out. Key informants cited low levels of innovativeness in terms of inputs, production methods and practices used in OA sector as a key barrier to its growth. Market forces have dictated demand away from traditional organic products creating a threat to indigenous species and plant genetic resource investment.

h) Limited funding of the Organic Agriculture sub-sector in Uganda.

The lack of dedicated public funding for sub-sector is noted to manifest in inadequate resources to support effective implementation of the supportive policies and programs. On the other hand, there are no specific financial products tailored for value chain actors in the OA sub-sector provided by private finance institutions. This results into limited access to credit for the SHFs and SMEs in OA to spur investment in their enterprises.

- i) Limited access to organic certification.** The Uganda Organic Certification Ltd (UgoCert) is the main local certification body in the country and it certifies organic products against the Uganda Organic Standards (UOS). In collaboration with foreign certification bodies, UgoCert certifies for both the local and the international markets. Other Organic Agriculture certification measures include: the East African Organic Product Standards (EAOPS), the EU Organic Regulation 2018/848, National Organic Program of the USA, Japanese Organic Agricultural Standards (JAS). These are directly implemented in Uganda by the accredited local and foreign certifiers. UgoCert was established as local certifying body in 2004 with the aim of reducing the certifying costs. However, due to differing confidence and trust levels among foreign buyers/countries in

the various certifying bodies, the buyers may dictate the standards and service provider/certifying body to use for organic certification of products going into their market. Since it's a business for the certifying bodies accredited by the foreign buyers, this increases the cost of certification. It's noted that certification costs are still generally high and prohibitive thus a key barrier for SHF and SMEs from accessing niche markets . None certification of products as organic impairs consumer confidence /trust in OA product quality and safety exacerbated by limited consumer awareness of the conditions and methods under which the product is produced.

Informal nature of current farming system: None certification of OA products is also driven by limited farmer organizing which leads to weak internal quality systems among the smallholder farmer groups. Consequently some unprincipled farmers take advantage of the weak internal quality control systems by not adhering to the expected OA practices and standards thus supplying inferior quality products and undermining confidence and trust of the buyers.

Limited knowledge among the agricultural extension advisory service providers and SHFs on the existing organic standards and requirements for certification. Organic certification and access to niche markets calls for continuous provision of information to farmers on the existing mandatory quality and organic standards as well as their respective requirements coupled with development of technical skills to empower farmers to meet the requirements of participation in the specialized organic product market chains . However, the limited knowledge among the extension officers expected to strengthen capacity of the operators (SHFs and Small and Medium Enterprises - SMEs) to comply with and meet the mandatory quality standards and the organic standards for their chosen target market culminates in lack of clarity on the specific requirements and thus low compliance capacity of the SHFs and SMEs to obtain certification. This calls for development of knowledge products and deployment of Information Education Communication (IEC) materials on the various existing organic standards and their requirements so as to position farmers to make informed choices/decisions on which product markets to target before embarking on production processes.

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Geopolitical factors that trigger stringent requirements for certification: Agricultural food products, including organic foods, are affected by geopolitical factors. For instance, the guidance for growers' groups under the new European Union's (EU) Organic Regulation 2018/848 introduces significant changes to group certification and internal control systems (ICS) in organic farming. These regulations call for more comprehensive organizational changes impacting millions of organic farmers globally currently certified under ICS groups. This includes ICS groups involved in the production of commodities such as coffee, cocoa, sugar, cotton, rice, tropical fruits, nuts, spices, and honey. The majority of currently certified smallholder producer groups will need to reorganize or establish new legal group entities that align with the EU's definition of a "group of operators." Organic operators worldwide will be expected to achieve compliance with all the detailed and intricate requirements of Regulation (EU) 2018/848 and its secondary regulations, as the decade old import system of "equivalence" is phased out by December 31, 2024 .

j) Weak regulatory framework to effectively guide control of the organic agriculture product production and marketing. Key shortcomings of the existing regulatory framework include the following ;

i. No OA Act and regulations to support implementation of the NOAP. It's noted that lack of the organic legal framework is impeding allocation of funding and investment for supporting implementation of the NOAP. Findings from literature and key informant interviews suggest that although the NOAP exists, it has not been popularized among grassroot farmers and extension service providers. The limited popularization of NOAP was attributed to lack of funding.

Absence of an OA Act and regulations was also noted to account for the lack of provisions for protection of OA producers from contamination from other farmers using conventional inputs. Such provisions would provide the basis/foundations upon which local governments and or communities would develop by-laws to support gazettement of areas as organic production areas and create buffer zones

between the organic producers and their conventional counterparts. As of now there is no legal basis to support community level guidelines to protect the OA producers from contamination by neighbors who may maliciously use conventional agro-chemicals very close to the OA production units. The flush floods and strong winds in the face of climate change increase the risks of contamination of OA production fields in absence of clear buffer zones.

- ii. Weak implementation / enforcement of existing laws. The Agricultural Chemicals (Control) Act of 2006, the National Environment Act, Cap 153, the fertilizer control regulations 2012 and the Control of Agricultural Chemicals (Registration and Control) Regulations SI 29-1 are the governing laws with standards for manufacture, storage, distribution and trade in, importation and exportation, use, and disposal of agro-chemicals. The country is however, faced with challenges of regulatory implementation and compliance; there are outdated regulations; inadequate penalties are prescribed under the laws; no policy on promotion of alternative or non-chemical techniques to pesticides; the International Labour Organization (ILO) conventions on safety and health in Agriculture, and Labour Inspection in Agriculture are yet to be ratified; limited human and financial resources; limited awareness of laws; and limited stakeholder coordination .

Weak implementation of existing laws is condoning excessive use of conventional pesticides under the current regulatory regimes and if left unabated shall undoubtedly worsen the environment degradation, reduce productivity and cause adverse effects on health of consumers using those commodities. Findings from recent studies reveal that conventional agro-chemical residues in foodstuffs such as vegetables and fruits exceed acceptable Maximum Residue Levels (MRLs). 86% of the market vegetable samples contained detectable pesticide residues, of which 8% had residues that exceeded MRLs . Contamination was attributed to desire to produce good quality fruits and vegetables which catalyzes irrational use notably mixing different chemicals, not observing the agro-chemical mixing concentrations on the labels and the pre-harvest intervals (Ssemugabo, C. et al 2022). Pesticide residues may lower food quality and pose risk to human health. In addition to the risk pesticide residues pose to human health upon consumption of the contaminated foodstuffs, they have a greater potential to re-distribute and accumulate in the environment resulting in adverse effects on soil micro-organisms, groundwater and surface water quality and biodiversity This calls for more stronger and effective monitoring of pesticide use in agriculture and regulation of pesticide residues in food produced in Uganda.

Xhona Hysa, Vladyslav Zhmailo, and Te Chun Chen; Worldwide Overview of Regulations and Policies on Agroecological Approaches Including Organic; in Willer, Helga Jan Trávníček and Bernhard Schlatter (Eds.) (2024): The World of Organic Agriculture. Statistics and Emerging Trends 2024. Research Institute of Organic Agriculture FIBL, Frick, and IFOAM - Organics International, Bonn. https://www.fibl.org/fileadmin/documents/shop/1747-organic-world-2024_light.pdf

- iii. **No provisions to protect and preserve indigenous knowledge of local varieties and effectively protect community intellectual property rights.**
- iv. **Seed and plant Act 2006 requires that All seed offered for sale should only be seed of approved varieties.** Contrary to the Seed policy and regulation 18 of the Seed and Plant Regulations 2017 which recognizes the informal seed system and quality declared seed, the Seed and Plant Act 2006 requires that 'All seed offered for sale should only be seed of approved varieties' This clause does not adequately meet the aspirations of the seed policy which calls for conserving farmer varieties. It thus compounds the challenges of access to organic seed. The IFOAM organic standard and its accreditation requirements used for certification demands that operators use organically produced seed and planting materials, while conventional seed may only be used if it has not been treated with post-harvest pesticides. With the law not adequately providing for formal production of organic seed, producers mainly rely on what they access from the community managed seed systems where seed is often recycled for many seasons leading to loss of vigour and thus to low productivity.
- v. **Organic agricultural chemical (Biopesticides, biorationals & biofertilizers) is evaluated and registered following the same system as for conventional ones.** The Agrichemicals Act 2006 demands that candidate agricultural chemicals be tested by competent scientists in institutions such as universities, research institutes and companies authorised by the board for efficacy, suitability and safety. The agricultural chemical shall be tested for a minimum of three crop growing seasons or six months for animals, both in the laboratory and different field locations in Uganda to cover all the appropriate ecological zones. Despite the fact that organic agricultural chemicals (Bio-fertilizers, bio-pesticides, biocontrol agents) are generally less toxic to humans and have less impact on the environment, they are by and large evaluated and registered following the same system as for conventional agricultural chemicals. This approach poses an unnecessarily high and inappropriate regulatory burden because many, if not most, of the data requirements and evaluation criteria are not relevant to a beneficial microorganism/biological pest control agent. Likewise, the level of risk resulting from the use of organic chemicals agents is often lower than for conventional chemicals, so higher tier testing is usually unnecessary. Key informants noted that the registration process is very hectic and it's expensive for the farmers, CSOs to fund the product testing and evaluation trials. The unnecessarily high and inappropriate regulatory burden presents a barrier to registration and commercialization of OA inputs from farmer led innovations.

Nabwiso, A. (2022). *Assessing the legal mechanisms for promoting sustainable pesticide use in the agriculture sector in Uganda*; unpublished thesis, Makerere University <http://makir.mak.ac.ug/handle/10570/11689?show=full>
<https://backend.kab.ac.ug/server/api/core/bitstreams/4f48c44a-e2cf-475d-af3b-979e2576a430/content>
<https://www.agriculture.go.ug/wp-content/uploads/2023/01/Seeds-and-Plant-Regulations-2017.pdf>
<https://ugandatrades.go.ug/media/Seeds%20and%20Plant%20Act,%202006.pdf>

- vi. Lack of clarity in handling and registration of Plant Incorporated Protectants (PIPs). The National Biotechnology and Bio-safety policy 2003 provides for safe development, transfer, and application of biotechnology and its products. It provides mechanisms put in place to regulate and control potential risks that biotechnology possess to human health, environment as well as socio-economic impacts. Hence bio-pesticides in the form of Plant Incorporated Protectants (PIPs) - would be regulated under this policy. PIPs are pesticidal substances produced by plants from genetic material added to the plant. PIPs act like pesticides and are used by plants to protect themselves from pests (insects, viruses and fungi). In this case it is the protein and its genetic material which have to be regulated and not the plant itself. However, the policy does not give clear rules that deal with PIPs. It does not provide guidelines to be followed in conducting scientific evaluation for purposes of registration.

3.2 Enablers for implementation of organic value chains in Uganda

There are several factors that act as drivers and/or offer opportunities for implementation of organic agriculture value chains in Uganda. These are enumerated and elaborated below.

- i. Growing attention to healthy and safe food. Growing attention to food safety among consumers and policy makers is attributed to newspaper articles on chemical residues found on fruits and vegetables as well as general attention to healthy lifestyle which calls for consumption of natural products (Ronner et al 2023). A recent study by Ten Hove, H et al 2023, revealed that a majority (72%) of consumers are worried about food safety to some extent (i.e., 34.4% is highly worried, 39.1% is slightly worried). More than a half (55 %) of consumers were concerned with food safety due to chemical residues in fruits and vegetables, and 72% expressed willingness to pay a premium to access safe food for certified safe fruits and vegetables. The lowest surplus amount (200 shillings above the price of non-certified produce) is the most popular choice, though 22.3% of consumers indicates to be willing to pay double the standard market price for the promise of safety. 28.5% of consumers navigate their food safety concerns by only buying from a source they trust – mainly market vendors, and to a lesser extent farmers and supermarkets .

The growing health consciousness and wellness trends among consumers in the country is noted to broaden demand for organic products and thus spur emergence of outlets selling organic agriculture products including health shops, periodic farmer markets as well as these products slowly penetrating the shelves of large supermarket

chains and restaurants. It offers potential for OA producers to supply their produce as being sustainably produced healthy and nutritious organic foods. However, adhering to quality standards, traceability and consistent supply will be critical if the OA producers are to fully take advantage of this opportunity.

- ii. Emergence of private actors producing and supplying organic inputs. There is an increasing number of non-state actors including private sector, CSOs and farmers engaged in the manufacturing and marketing of organic inputs notably bio-fertilizers, bio-pesticides, mechanical crop protection innovations such as traps for pests and disease vectors. Examples include UGACHICK, Bukoola Chemicals, Leticia Organic Research; Volcano Ventures Uganda; and Memago; just to mention a few. These are catalyzing increased availability on the organic inputs on the market and enabling farmers to have access to alternative inputs to the inorganic agro-chemicals.
- iii. Emergence of local market outlets for Organic Agriculture products. These include: On-line marketing platforms for promotion and placement of orders complimented by door-to-door basket delivery; dedicated periodic OA product farmer markets (such as the one in Nsambya, and Bugolobi in Kampala; Abaita Ababiri in Wakiso, and slow food in Mukono) Supermarkets and Health shops. These offer opportunities for farmers to earn premium prices for their organic products.
- iv. Existence of organizations with a passion for promoting the production and marketing of organic products. Existence of CSOs and private sector actors with a passion to promote the production and consumption of safe and healthy food provides a strong foundation to build on. Such organizations include NOGAMU, PELUM, ACSA, ESSAF as well as a host of NGOs and private entities which has provided the framework for increased coordination of Organic Agriculture stakeholders and mobilization of the smallholder farmers towards production and marketing of OA products. They provide the foundation for facilitating capacity building programs for farmers and SMEs engaged in the OA sub-sector. These have facilitated increased marketing of OA. These organizations are catalyzing emergence of the supportive structures for effective coordination and establishment of local organic markets, the formation of Participatory Guarantee System Groups (PGS), and extension support aimed at boosting the production volumes of organic products by farmers. The willingness of SHF to embrace OA practices is also a key enabler for organic value chains.

- v. Growing support for OA from development partners: These provide funding to support CSO programs geared at developing EOA in the country. Such support is fostering strengthening farmer capacity for production and marketing of OA products.
- vi. Existence of some knowledge products for promoting adoption of EOA
Knowledge management, achieved through the development and dissemination of knowledge products, plays a pivotal role in promoting the adoption of EOA. These knowledge products cover a wide range of areas, including soil fertility management (preparation of quality manure and vermicompost), crop protection (crop rotation, mixed cropping, companion cropping), water harvesting and management, value addition in various agricultural enterprises, organic standards and certification, and livestock management. Some farmers have already been trained on OA and these offer opportunities for knowledge transfer and horizontal learning through exchange visits.
- vii. Sustainable Intensification. The reducing size of landholdings coupled with rapid population growth that increase pressure on land and posing a major challenge to farmers to produce adequate food and income for their families also serves as a driver for sustainable intensification. Efforts to intensify agricultural production and productivity should include application of organic agriculture principles and practices.
- viii. The global trading environment and demand for organic produce in Europe, Japan and the United States of America provides a clear impetus for stimulating Organic Agriculture in Uganda. High prices are already the norm for organic produce in export markets. When consumer awareness, appropriate marketing mechanisms, and strategies are adopted, good quality organic products have the potential to generate high price premiums, in domestic markets. In 2023, EOA farmers, on average, earned an annual income of 634 US dollars, reflecting a 19% increase compared to the previous year.
- ix. Existence of supportive policies and initiatives at national and regional level which provide a pull for integration and implementation OA. At the regional level, in 2011, the Heads of States and Governments of the African Union (AU) made a significant decision to integrate Organic Agriculture (EX.CL/Dec.621 XVII) into their national plans, programs, and policies by 2025. This commitment gave birth to implementation of the multi-year continental initiative known as Ecological Organic Agriculture (EOA) overseeing and reporting on the implementation of the AU commitment. Three indicators related to EOA associated with Commitment 3 (Ending Hunger by 2025) and Commitment 6 (Enhancing Resilience to Climate Variability) under the CAADP Biennial Review processes were adopted and countries are expected to report progress on these indicators which encompass organic fertilizer usage, the status of Farmer Managed Seed Systems, and the agricultural area under EOA practices.

Uganda is one of the countries implementing regional projects with the goal of promoting organic agriculture and agroecology such as the AU EOA Swiss Agency for Development and Cooperation (SDC) support; The Knowledge Centre for Organic Agriculture and Agroecology in Africa (KCOA) which is part of the German BMZ's 2 initiative "ONE World – No Hunger" and The Knowledge Hub for Organic Agriculture & Agroecology in Eastern Africa (KHEA).



Favorable policy environment at the national level in Uganda include,

- National policies recognize and put emphasis on sustainable agriculture. These policies provide the impetus for integration and implementation of OA. Uganda's agriculture sector is anchored on Vision 2040 which envisages a transformed Ugandan society from a predominantly peasant and low-income country to a modern, competitive and prosperous upper middle-income country within 30 years. NDP III goal is to; Increase Average Household Incomes and Improve the Quality of Life of Ugandans. Uganda aspires to achieve the aforementioned economic and social targets while maintaining the integrity and functionality of its environment, ecosystems and natural resources. This transformation is to be achieved, among others, through a modern and indigenous knowledge-based agriculture as articulated in the National Agricultural Policy whose vision is "a competitive, profitable and sustainable agricultural sector"

The National Environment Management Policy (NEMP) 1994 calls for the promotion of farming systems, and land use practices that conserve and enhance land productivity in an environmentally sustainable way. The national climate change policy is geared at realizing a climate-resilient and low-carbon development path for sustainable development in Uganda. It calls upon all stakeholders to address climate change impacts and their causes through appropriate measures while promoting sustainable development and a green economy. It prioritizes promotion of climate change adaptation strategies that enhance resilient, productive and sustainable agricultural systems, and enhance biodiversity to ensure ecosystem health for sustainable and resilient development. It calls for promoting and encouraging highly adaptive and productive crop varieties and cultivars in drought-prone, flood-prone and rain-fed crop farming systems as well as livestock breeds, conservation agriculture and ecologically compatible cropping systems as well as agricultural diversification, improved post-harvest handling, storage and value addition, all of which are key for Ecological Organic Agriculture. Increasing the country's resilience to the impacts of climate change effects is one of the tenets of Uganda's Green Growth Development

Strategy . It prioritizes increased adaptation for key sectors of agriculture, water, energy and health, and specifically to increase sustainable agricultural and livestock production, improve forestry management, improve infrastructure, and continue to strengthen its disaster risk management activities.

- The overall goal of the Uganda Food and Nutrition Policy (UFNP) 2003 is to ensure food security and adequate nutrition for all the people in Uganda, for their health as well as their social and economic well-being . Through the UFNP GOU commits to ensuring availability, accessibility, affordability of food in quantities and qualities sufficient to satisfy the dietary needs of individuals sustainably; promote good nutrition of all the population; and safeguard the health of personnel associated with agricultural chemicals, food processing inputs and products, as well as consumers likely to be affected. Likewise, The National Agricultural Policy pledges to promote production and consumption of diversified and nutritious food crops including indigenous crops.
- The Presence of the NOAP and efforts to develop an Organic Agriculture Act provide the basis for relevancy of programs and activities of OA promoter organizations. It provides impetus to such organizations to undertake programs and projects that promote the production and consumption of OA products.
- The Plant Variety Protection Act 2014 provides for the traditional method of access, use or exchange of knowledge, technologies, and plant varieties by local and between local communities thus allowing for communities to continue exchanging planting materials. Likewise, the Seed Policy 2018 , and Seed and Plant Regulations 2017 recognize quality declared seed. These provide a foundation for community managed seed systems.
- The Agricultural Chemicals (Control) Act, 2006 section 2 recognizes use of bio-rationals , bio-pesticides, and bio-fertilisers for promoting and protecting the health of plants, plants products and by products. This provides a strong foundation for commercial production & use Organic inputs

Regulation 35 part 5, 6, and 7 of the Agro-Chemicals Control Regulations SI 29-1 which explicitly requires that pesticides be used only when they cannot be avoided, prohibits indiscriminate use of agro-chemicals and encourages use of the least damaging agricultural chemical materials on the environment provides a strong

Uganda National Planning Authority (2018). The Uganda Green Growth Development Strategy, 2017/18-2030/31. URL: <https://www.undp.org/content/dam/LECB/docs/pubs-reports/undp-ndc-sp-uganda-ggds-green-growth-dev-strategy-20171204.pdf>
Uganda Food and Nutrition policy <https://faolex.fao.org/docs/pdf/uga145392.pdf>
<https://www.agriculture.go.ug/wp-content/uploads/2019/05/Ministry-of-Agriculture-Animal-Industry-and-Fisheries-National-Seed-Policy.pdf>
<https://www.agriculture.go.ug/wp-content/uploads/2019/04/Agricultural-Chemicals-Control-Act-2007.pdf>
bio-rationals" means any potent plants, parts of plants or chemical extracts of plant origin;

foundation for promotion of integrated pest management practices and promotion of and use of OA production practices. The Plant Protection and Health Act 2015, recognizes beneficial organisms utilized specifically for the control of harmful organisms, pollination, or for other purposes beneficial to agricultural production and environmental protection.

- Uganda Fertilizer Policy calls for use of an integrated approach that promotes both organic and inorganic fertilizers. Fertilizer Control Regulations 2012 provide for the registration of bio-fertilizers, and microbial fertilizers, the standards to be met by those who offer them on the market, their labeling & packaging.
- The National Agricultural Research Act 2005, recognizes that agricultural research includes the furtherance, accumulation and improvement of knowledge in agricultural sciences through investigations and methods of a scientific or indigenous nature into the production, treatment or handling of an agricultural product. The act provides for farmers groups, civil society organisations, and private sector organisations to conduct or manage research as service providers



3.3 Good Practices in addressing stumbling blocks in the Organic Agriculture value chain

- i. Promotion of community managed seed systems. Some OA promoter CSOs catalyze community managed seed systems thus facilitating sustainable access to organic seeds and planting materials of different crops notably maize, beans, as well as a host of vegetables and spices. Activities undertaken in this regard include strengthening farmer capacity in proper seed selection, seed multiplication, post-harvest handling and preservation and establishment of community seed banks. The seed is stored in gunny bags instead of polythene sacks, and no inorganic chemicals are applied to manage the storage pests or preserve it. Rather farmers are imparted with knowledge on organic methods of preserving seed. They also facilitate establishment of partnerships/linkages between the farmer groups and other producer cooperatives that sell organic seed researchers from the National Agricultural Research Organization (NARO) and/or for purposes of sourcing seed. The partnership with NARO enables farmers to access foundation seed of preferred varieties from research, which the researchers also accompany the groups during seed selection further strengthening their capacity in seed selection and management.

- ii. Establishment of partnerships and collaborative activities with organic inputs dealers. Some CSOs engage in collaborative activities with private companies supplying OA inputs. Strategies used include engaging the private companies to participate in CSO organized plant/animal clinics, trade fairs and exhibitions; or inviting them to show case their inputs during the periodic organic product farmer markets, where the company is also allocated a stall to sale from. This creates a win-win situation as the companies promote their products, enhance their reach to SHFs and sensitize the farmers about the products on offer and their attributes in process stimulating demand for their products. On the other hand, this approach enhances SHF awareness on existence of the OA inputs as viable alternatives to the conventional ones and how to use them. Farmers get first hand information about the OA inputs/innovations, and where to get them in the event they want to buy, thus offering them access to trustworthy sources of genuine OA inputs.

- iii. Participatory Guarantee System (PGS) : This fosters active participation of stakeholders (including producers, buyers, and consumers) built on a foundation of trust, social networks, and knowledge exchange. The PGS nurture consumer confidence in the OA product production processes and conditions while also assuring producers of access to remunerative markets for their quality product. This culminates into trusting relationships between the producers and buyers and thus enhances market system resilience. CSOs promoting PGS include Caritas Kampala, ACSA, AFIRD, NOGAMU, PELUM and ESAFF among others.

- iv. Supporting of dedicated OA product marketing outlets : Strategies deployed for spurring dedicated OA product markets include : 1) Promotion of products, linking producers and the prospective buyers and facilitating placement of orders for products through On-line marketing platforms complimented by door to door box delivery, and 2) catalyzing the periodic OA product farmer markets. These outlets enable producers to earn premium prices for their OA products. However, cost of door to door delivery may undercut the potential return if the orders and quantities ordered are small.

- v. Farmer Institutional Building : Capacity strengthening of farmer institutions in business and marketing. Interventions include strengthening farmer capacity in market research, market intelligence, and analysis of marketing information to guide informed decision making on timing of when to sell and at what price; as well as catalyzing establishment of structures and systems for collective marketing and internal quality control measures. Supporting establishment and equipping of group bulking centres and or emergence of higher level farmer organisations is also a key strategy in these efforts.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Uganda has great potential to benefit from development of organic value chains as these would enable producers and SMEs to earn ample income while supplying healthy and nutritious foods to population both in the local and export markets. However, a lot of stumbling blocks are impeding effective implementation and realization of the potential benefits of OA value chains in the country. These include: low production levels, limited access to organic inputs, product quality distortions due to poor post-harvest handling and transport infrastructure, marketing gaps, low effective demand for the OA products; limited access to organic certification and weak regulatory framework among others. On the contrary, there are several factors that drive and offer opportunities for implementation of OA value chains in the country. These include: favorable policy and initiatives at regional and national level which provide a pull for OA promotion; growing consumer attention to food safety; emergence of private sector companies supplying the alternative OA options on the local market and emergence of dedicated OA product market outputs in the country.



4.2 Recommendations

- 1) Stimulate effective demand for OA products. OA promoter organisations should invest adequate resources and time in heightening consumer awareness on food safety issues and benefits of OA. Utilize a lot of communication channels and products (news paper pullouts, radio and TV talkshows, seminars/workshops, roadside shows, and IEC materials) to create awareness and catalyze mindset change towards consumption of health foods
- 2) Promote PGS which will catalyze trusting relationships among the stakeholders notably producers and the potential customers. The CSOs should expedite the operationalization of the national PGS Council that will support in assessing and ratifying PGS certification.
- 3) Engage in advocacy for fast tracking development of the OA Act for a more robust regulatory framework that will provide clear guidance for effective engagement in the OA value chains
- 4) Strengthen farmer capacity to produce and consistently supply quality OA products.
- 5) Promote measures to enhance farmer access to certification. Options include;
 - i) Strengthen capacity of SHFs and agricultural service providers on existing organic standards and requirements for certification
 - ii) Advocacy and support for subsizing cost of accessing certification services
- 6) Government should increase the support to the OA sub-sector. The support should entail the following :
 - i. Dedicated funding to the OA sub-sector ;
 - ii. Increase public research attention to generating OA focused technologies, purify lines and provide foundation seed for indigenous varieties ;
 - iii. Mainstream OA in the extension services. Retooling of public extension workers on OA practices.



5. 5.0 References



Budget Monitoring and Accountability Unit (BMAU) June 2018, Briefing paper 17-18: Effects of changing weather patterns on the agricultural sector - how has production and livelihoods been affected

East African Commission (EAC) 2019; EAC harmonized guidelines for the registration of Biopesticides and bio control agents for plant protection 2019 <https://faolex.fao.org/docs/pdf/mul204457.pdf>

Food and Agriculture Organization (FAO), 2017;. Strengthening sector policies for better food security and nutrition results. Food and Agriculture Organisation of the United Nations

GOU, Office of the Prime Minister (OPM) 2020, Annual state of disaster report 2020: <http://www.necoc-opm.go.ug/ASDR/ASDR%202020.pdf>

Jan Trávníček, Bernhard Schlatter and Helga Willer: Organic Agriculture in Africa: Key Facts and Figures. In Willer Helga, Jan Trávníček and Bernhard Schlatter (Eds.) (2024): The World of Organic Agriculture. Statistics and Emerging Trends 2024. Research Institute of Organic Agriculture FiBL, Frick, and IFOAM – Organics International, Bonn. https://www.fibl.org/fileadmin/documents/shop/1747-organic-world-2024_light.pdf

MAAIF 2013; National Agriculture Policy. <https://www.agriculture.go.ug/wp-content/uploads/2019/04/National-Agriculture-Policy.pdf>

MAAIF 2019; National Organic Agriculture Policy. <https://www.agriculture.go.ug/wp-content/uploads/2020/09/National-Organic-Agriculture-Policy.pdf>

Ministry of Finance, Planning and Economic Development 2024: Background to the Budget for Fiscal Year 2024/2025 <https://budget.finance.go.ug/sites/default/files/National%20Budget%20docs/BACKGROUND%20TO%20THE%20BUDGET%20FY%202024-25.pdf>
Ministry of Finance Planning and Economic Development 2019: Background to the Budget for Fiscal Year 2019/20

Nabwiso, A. (2022). Assessing the legal mechanisms for promoting sustainable pesticide use in the agriculture sector in Uganda; unpublished thesis, Makerere University <http://makir.mak.ac.ug/handle/10570/11689?show=full>

National Planning Authority 2020, Third National Development Plan 2020/21-2024/25

Republic of Uganda National Environment Management Report 2019; National State of the Environment Report 2018-2019

Ronner, E., Van Reemst, L. and Van der Poel, M., 2023 Opportunities for Organic Agriculture in Uganda. Wageningen, Wageningen Environment Research Report 3314

Sseugabo, C, Bradman, A, Ssempebwa . J. C, sille, F. and Guwatudde, D 2022; Consumer Awareness and Health Risk Perceptions of Pesticide Residues in Fruits and Vegetables in Kampala Metropolitan Area in Uganda <https://journals.sagepub.com/doi/10.1177/11786302231184751>

Ten Hove, Hermine, Peter Yiga, Julia Glaser, Albert Kihangire, 2023. Fresh fruit and vegetable consumption in Uganda; Barriers, facilitators and current consumption practices. Wageningen Centre for Development Innovation, Wageningen University & Research. Report WCDI-23-250. Wageningen. <https://edepot.wur.nl/630024>

Uganda National Planning Authority (2018). The Uganda Green Growth Development Strategy, 2017/18–2030/31. URL: <https://www.undp.org/content/dam/LECB/docs/pubs-reports/undp-ndc-sp-uganda-ggds-green-growth-dev-strategy-20171204.pdf>
Uganda Food and Nutrition policy <https://faolex.fao.org/docs/pdf/uga145392.pdf>

Uganda Bureau Of Statistics (UBOS) UBOS June 2021, Uganda National Household Survey (UNHS) 2019-2020 presentation

Uganda Bureau of Statistics (UBOS) 2022; Agriculture Survey 2019 https://www.ubos.org/wp-content/uploads/publications/05_2022Uganda_UBOS_StatRelease_AAS2019-Final.pdf

Uganda Bureau Of Statistics (UBOS) 2023, Statistical Abstract 2023; <https://www.ubos.org/wp-content/uploads/publications/2023-Statistical-Abstract.pdf>

Uganda Bureau Of Statistics (UBOS) 2024; National Population and Housing Census 2024-Preliminary Report <https://www.ubos.org/wp-content/uploads/publications/National-Population-and-Housing-Census-2024-Preliminary-Report.pdf>

Willer, Helga Jan Trávníček and Bernhard Schlatter (Eds.) (2024): The World of Organic Agriculture. Statistics and Emerging Trends 2024. Research Institute of Organic Agriculture FiBL, Frick, and IFOAM– Organics International, Bonn.
https://www.fibl.org/fileadmin/documents/shop/1747-organic-world-2024_light.pdf

World Bank Data Bank (2020). Health Nutrition and Population Statistics: Population estimates and projections – Uganda. URL:
<https://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics:-population-estimates-and-projections>

Xhona Hysa, Vladyslav Zhmailo, and Te Chun Chen; Worldwide Overview of Regulations and Policies on Agroecological Approaches Including Organic; in Willer, Helga Jan Trávníček and Bernhard Schlatter (Eds.) (2024): The World of Organic Agriculture. Statistics and Emerging Trends 2024. Research Institute of Organic Agriculture FiBL, Frick, and IFOAM – Organics International, Bonn.
https://www.fibl.org/fileadmin/documents/shop/1747-organic-world-2024_light.pdf



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