

INTRODUCTION

Background and Context

Tanzanian sunflower producers and processors are well-positioned to meet growing domestic demand for cooking oil – estimated to be upwards of 500,000 MT. The sunflower value chain is inclusive and accessible to economically vulnerable demographics, offering competitive margins across the value chain. Sunflower production can support farmers to build resilience against climatic and economic shocks while incentivising downstream investment in the value chain.

Challenges

- ➤ Markets: There is poor organisation and coordination among farmers, processors, and their respective membership organisations which limit or even hinder access to bundled services.
- ▶ Processing: Low technical, operational, and financial management capacity among processors deflates utilisation and stifles demand.
- **Production:** Low agronomic productivity: extension system is fragmented and services are not embedded within embedded market actors and service providers.

Some of the systemic constraints which continue to hold back the productive poor to sustainably participate in sunflower value chain include:

- 1. Limited access to agricultural friendly loans so that they can invest in relevant inputs.
- 2. Lack of adequate supply of improved seeds.
- 3. Limited access to pro-poor market linkages due to unstructured and unregulated market systems.
- 4. Inadequate business development services (BDS) support from relevant service providers.

Most smallholder farmers (SHFs) still struggle to meet conditions for business engagement. Challenges observed from these systemic constraints include:

- Lack of access to inputs: Agro-dealers are in towns and peri-urban areas, so it is difficult for rural farmers to access inputs. This also increases the cost to procure seeds and other inputs.
- 2. Seed affordability: high prices for hybrid seed make farmers uninterested or unable to use it.
- 3. Low seed quality: germination issues with some seed varieties makes farmers lack confidence in hybrid/ improved seed.
- 4. Unavailability of seed during planting seasons: agro-dealers are not stocking enough seed in their shops, because they are not sure whether farmers will buy seed (ie testing the market), so it is not available for purchase when farmers need it.

Opportunity

In Tanzania, around 6% of the land that is under agriculture production is being used for the production of sunflower¹. Sunflower is mostly produced by about 1,000,000² smallholder farmers in 19 out of the total 30 regions of Tanzania, but production is mainly concentrated in the Central Corridor and the Southern Highlands. Just like in other regions, sunflower

¹ https://snv.org/cms/sites/default/files/explore/download/tanzania_sunflower_and_climate_risks.pdf

² Dahlberg Advisors, Tanzania's sunflower sector is paving the way for future industrialisation and sustainable growth, 4th May 2022. Access <u>here</u>.

production in Singida and Manyara is dominated by smallholder farmers. The *Market System Assessments* conducted by Farm Africa and FaidaMali through the Agriculture Markets Development Trust (AMDT) facilitation show that, sunflower production is highest in Dodoma region, followed by Singida and Manyara.

There are hundreds of SME sunflower seed processors with installed capacity ranging from 4.5 to 18 MT per day (24 hours). However, most of them are not processing more than 1 to 2 MT daily, due to limited raw materials, often caused by inadequate working capital. All SMEs produce semi-refined/filtered cooking oil, more or less of the same quality, and sell it locally (mostly retail) and/or to buyers in Arusha, Moshi, Dar es Salaam (mostly wholesale) and other urban and peri-urban areas.



Photograph: Farm Africa / Eliza Powell

High demand for sunflower oil has facilitated importation of cheaper oil products which distort market prices causing the sunflower sold by farmers to be uncompetitive. Due to the availability of imported and cheaper cooking oil, which is mostly palm oil but sometimes blended, these SMEs face marketing constraints.

There is a market shift to double refined oil in Tanzania, which is bio fortified with nutrients and vitamins, as a result of improved purchase power by (urban) customers and increasing awareness by customers of its assumed health benefits. Moreover, there is potential of exporting double refined oil that is meeting all the health, safety and traceability standards and requirements³. The Government of Tanzania is strongly promoting double refined cooking oil, as laid down in its sunflower sector development strategy (draft, version 29.01.2016) and there are various (local) Government programmes that will be providing financial support (eg ASDP II) to those engaging in this value adding industry. Also, its regulatory bodies like the Tanzania Food and Drug Authority (TFDA) and the Tanzania Bureau of Standards (TBS) are in the forefront of enforcing this policy.

Possibility to initiate contractual relationship between existing SHF/ Farmer Organisations (FOs) and SME processors and/or off takers who are actually the main buyers of sunflower grains

Some smallholder farmers and farmer organisations (FOs) have been receiving seeds on credit during planting seasons through contractual arrangements with off-takers and processors. The majority of these farmers reported to be happy with the model; however, in some instances others defaulted to payback their seed loan.

The AMDT Faida Mali 2019 pilot phase report for Singida shows that there are **32,265** (13,339 female) and 5455 youth smallholder sunflower farmers organised into 915 farmers' groups mobilised to-date. Out of this, **632** groups have been registered with the Community development office (LGA) as CBOs, while 101 are registered by regional cooperative

³ Primary info from Pyxus Agriculture Tanzania, a large scale processor who is currently sourcing raw sunflower through contract farming with smallholders, and processes and sells sunflower oil to both domestic and export markets.

registry offices as AMCOS. Similarly, Farm Africa's 2020 report shows that in the neighbouring region of Manyara there are **13,064 farmers** mobilised in **267 FOs** from Manyara, where with strategic effort these farmers are well positioned to engage in business with sunflower buyers. Under contractual arrangements, some of the FOs can be linked to a number of market actors and service providers to acquire productive bundled services such as **credit seeds** or **seed loans** from sunflower processing businesses such as Pyxus Tanzania Limited, Singida Sunshine, Sekenke Kwetu, JJ Oil Mills and Nuru Oil Mills.

Existing sunflower value chain financing opportunities from financial service providers

There are several financial service providers, including commercial banks like TPB, TADB, NMB and CRDB which provide loans to some of the FOs related to sunflower farming, especially for inputs such as seed and fertiliser. However, formal financial institutions require collateral and rigorous financial processes that make credit difficult to access for many smallholder farmers, and smallholder farmers and SMEs often do not qualify for the loans offered by the financial providers.

Where commercial loan financing is not available or accessable, there is a possibility for FOs to mobilise their internal resources and opt to became SACCOS or AMCOS which provide credit inputs or VLSA based farmer groups. Because AMCOS and SACCOS are formally registered and recognised by the government and maintain historical production and sales records, these groups can also be linked with financial services providers to receive credit for inputs, where individual farmers would not qualify for such financing. The groups can be trained on business management packages and financial skills to enable better record keeping and to enhance their access to formal credit channels and improve repayment rates.

Extension services delivery and coordination by local government extension officers

There is at least one extension officer in each ward (an administrative sub-unit of each district which is made up of one or more villages) which makes it easy for extension planning, delivery and coordination at the local level, as most of the agricultural extension services are mainly offered by the government through the District Agricultural, Irrigation and Cooperative Officers (DAICO) office. In terms of extension service delivery, there are also a significant number of agro-dealers selling agro-inputs and together with local government extension officers, agronomists from input suppliers and buyers like Pyxus have been providing extension advisory services to smallholder farmers.



MARKET ANALYSIS

Demand for sunflower seeds and oil in global markets

The global sunflower oil market is forecasted to witness a compound annual growth rate (CAGR) of 5.67% during the forecast period (2020-2025)⁴. Sunflower oil has high demand in developing countries, as it is healthy and cheaper than most of its counterparts. The growing sunflower oil consumption is offsetting declines for palm, cottonseed, and rapeseed oil, globally. Europe being the largest consumer of the crop, the region imports a considerable volume of sunflower oil to meet the exceeding product demand. A large share of around 85% of the total European imports is derived from Intra-European trade, with Romania, Spain, Bulgaria, France and Hungary being major suppliers⁵. The application of sunflower oil is being increasingly used in personal care products, with giant players of the market incorporating sunflower oil in their clean-label and sustainable products. For instance, in April 2019, L'Oréal launched a sustainable beauty brand, Seed Phytonutrients⁶, a beauty brand using organic sunflower seed oil.

Fluctuating prices of other vegetable oils drives the demand

Sunflower oil is witnessing an upsurge in the global market, mainly driven by the fluctuating/unstable prices of other vegetable oils, such as palm oil, soybean oil, and others. The fluctuating prices often affect the overall sales of the end-user products; thus, firms are inclining toward stable-priced options like sunflower oil to utilise them for various purposes.

The manufacturers of snacks are readily opting for sunflower oil due to its capability to impart healthier properties to the products at a comparatively lower cost than olive oil. Moreover, the snack industries are choosing sunflower oil as a convenient alternative to palmolein oil as it does not require any kind of additional heating in cold temperature conditions, thus reducing the cost required for putting extra heating setup, unlike for palmolein oil, which has a higher freezing point.

Sunflower oil also provides cost-effective solutions in other industries as well. Sunflower oil is rich in essential fatty acids and helps moisturise, regenerate, and condition the skin. Thus, it is considered for a variety of skin care products due to its lower pricing as compared to other nourishing oils, like argan oil, almond oil, and olive oil. Additionally, it is also used as the primary vegetable oil in bath oil and body oil formulations⁷.

Sunflower market in Tanzania⁸

Sunflower is mostly produced by smallholder farmers in Tanzania, and around 1,000,0009 smallholders produce sunflower each season. These farmers cultivate 1.7 acres on the average, with production of about 500kg per farmer. There is a high but unknown number of small oil millers that crush the grains with an inexpensive but inefficient technology. They do not achieve the TBS standard, but can supply the larger oil processors with crude sunflower oil and cake. There are five large oil mills in Tanzania, including one solvent extraction and five oil refineries. They have very modern technology and sufficient capacity to meet the demand for refined sunflower oil and processed cake.

Singida region, which is the second largest sunflower producing region in Tanzania has a total of 175 processing industries, out of which two are large, seven are medium and 166

⁶ https://www.loreal.com/en/news/brands/seed-phytonutrients-farmer-fresh-and-seed-obsessed/

⁴ DUBLIN, July 27, 2020 /PRNewswire/The "Sunflower Oil Market Growth, Trends and Forecasts (2020-2025)" report ⁵ *Ibid*.

⁸ Sunflower Market Systems Analysis Singida July 2017

⁹ Dahlberg Advisors, Tanzania's sunflower sector is paving the way for future industrialisation and sustainable growth, 4th May 2022. Access here.

are small scale processors. For sunflower processing, the region has two large processing plants, three medium and 115 are small processing facilities. Distribution by district shows that Iramba district is the leading with 45 processors followed by Singida Rural with 29, Singida Urban with 22, and Ikungi and Manyoni with eight each.

Sunflower market potential and opportunities are highly perceived in the following aspects:

1. DEMAND-LED GROWTH

The sunflower seed market is mainly driven by domestic consumption. Tanzania's share of the world's total sunflower seeds' exports in 2019 was less than 1%¹⁰. Tanzania is ranked 75th in world exports of sunflower seeds. Tanzania's top export markets for sunflower seeds are Malawi, Burundi, China, the Netherlands and Kyrgyzstan. The main sunflower related export business for Tanzania is sunflower cake,¹¹ which is mainly exported to India and Kenya.

The market for cooking oil is growing among Tanzanian consumers, with an estimated annual demand of 400,000 - 570,000¹² MT. However, more than half of demand is met through imported palm oil – committing \$80 million of Tanzania's foreign currency reserves on something that can be produced domestically. Sunflower processors throughout Tanzania have responded to the growing demand and earn reliable profits through value addition: under optimal conditions, margins can reach 18% among small-scale processors. Tanzanian farmers, traders, and processors have a strong foundational infrastructure for aggregation, trade, and processing and are well-positioned to scale in response to the growing demand for sunflower oil.

2. SME-DRIVEN GROWTH

With relatively low barriers to entry, small- and medium-sized enterprises (SMEs) – particularly youth and women – are driving investment in infrastructure for aggregation and sunflower processing, driving up installed capacity. The most impactful means of scaling up domestic processing is by increasing efficiency, productivity, and yield among SME processors, creating new demand for sunflower seed among the smallholder farmers who supply them. If incentives for farmers and processors are well-aligned, they will increase investment, wages (on- and off-farm), and income – driving inclusive economic growth throughout rural Tanzania.

3. RESILIENCE TO ECONOMIC AND CLIMATIC THREATS

Sunflower has a high tolerance to drought and erratic weather, and therefore it offers a climate-resilient opportunity suitable for production across most of Tanzania's agroecological zones. Crop diversification will offer multiple revenue streams for farmers and their families, stabilising income and building resilience against economic shocks. With improved market information and linkages to structured buyers – including local SMEs and regional off-takers – farmers will be positioned to negotiate increasingly favourable sales terms.

4. ACCESSIBLE AND INCLUSIVE

Sunflower production is accessible to those with limited capital to invest, and can cost around TZS 200,000 (USD \$87) per acre to cultivate, which is less or equivalent to maize production. Therefore, smallholder farmers are drawn to the low costs of production, comparatively high gross margins, and reliable domestic market. Sunflower serves as an entry-level crop for economically-marginalised demographics to engage in a structured, low-

¹⁰ Sunflower Seeds Production in Tanzania - Markets, Suppliers and Exporters (selinawamucii.com)

¹¹ Bank of Tanzania (BoT) 2018 Annual export report

¹² The untapped edible oil sector in Tanzania – Further Africa

¹³ Farm Africa. AMDT Inception Phase Report (2018)

risk value chain. It offers a pro-poor, inclusive opportunity for youth and women to scale up and branch out into high-value markets.

5. COMPETITIVE AND PROFITABLE

For enterprising farmers, the return on investment proves compelling. By adopting the use of hybrid seeds, which are currently available from companies such as ByTrade, Advanta and SDC seed, along with adoption of other climate-smart technologies and good agricultural practices, their yield could increase by 67% from 240 kg/acre up to 720kg/acre. 14 At farm-gate prices of TZS 850/kg (USD \$.037) in the 2021 season, farmers can expect margins of 56% – equivalent to revenue of TZS 385,800/acre (USD \$167). When scaled across 10,000 smallholder farmers, production volumes could increase by 3,867 MT per season, an increase of 262% that is equivalent TZS 10.4 billion (USD \$4.5 million) of farm-gate sunflower sales.

6. CREATING LOCAL DEMAND

By processing the volume grown by just 10,000 farmers, SME processors would produce 5.5 million litres of cooking oil valued at TZS 19.2 million - generating TZS 23.9 million of new wages for rural workers. For example, within Singida region, there are over 175 small, medium and large scale sunflower processors with an installed capacity that could process up 200,000 MT¹⁵ of sunflower annually, equivalent to farm-gate sales of TZS 150 billion (USD \$65 million).

Type scale	Capacity range (MT/Day)	Average Daily Input (MT)	Annual Demand (MT)	Business Model	Quality standards
Small	1.5 – 3.6	1.8	71,712.00	Cash on delivery	None
Medium	3.5 – 6.0	3.6	5,880.00	Cash on delivery	Public
Large	40 - 200	43	98,400.00	Contracts/ cash	Public
	Total Ann	ual Demand (MT)	175,992		

Table 1 Sunflower demand in Singida

From the installed capacities and the daily outputs, it is evident that the large processors have a higher demand for raw sunflower, despite there being only five such processors in the whole country. These include large processors like Pyxus Agriculture International and Murzah Oil, which purchase sunflower seed from a number of regions. This creates a higher competition for sunflower, hence increasing the selling prices for the farmers. For example, in the 2021 season the purchase price of sunflower per Kg has increased from TZS 750 (USD \$0.36) to TZS 1200 (USD \$0.52) due to limited supply from farmers and other related market forces.

¹⁴ Farm Africa. AMDT Inception Phase Report (2018)

¹⁵ Farm Africa Rapid Assessment

7. SUNFLOWER STOCK AND SUPPLY ANALYSIS

In the sunflower market context, the stock and supply refers to the quantity of sunflower which producers are able and willing to offer for sale at a particular price during a certain period of time. As is the case of some other agricultural commodities, sunflower supply is relative to price and time: its supply comes out of stock; stock determines the potential supply and stock is the outcome of production.

The current production from Singida region shows that there is low productivity as the average smallholder yields are only 240kg/acre, which is only 33% of their potential. Similarly smallholder farmers in Ikungi district have a productivity of 454kg/acre which is only 47% of the potential productivity which could be achieve by cultivating high-yielding and drought tolerant hybrid seeds. Poor production attributed to poor seed selection, low planting density, and poor crop management.

Strategic effort is needed to mobilise smallholders, especially the productive poor women, men and youth farmers and support them to become market-oriented producers with clear and feasible business plans, who are producing high-quality sunflower to the full potential. With strategic interventions as depicted in Table 2 below, smallholder farmers can optimise their market potential.



Photograph: Farm Africa / Eliza Powell

Table 2 Current Sunflower Production and Optimised Market Potential in Singida Region¹⁶

	Current annual sunflower production	Optimised market potential	Strategic interventions:
Yield (kg/acre)	454	720	 ✓ Use of high-yielding and high-oil content hybrid seed ✓ Evidence-based extension delivered through community-based partners ✓ Adoption of modern technologies, improved planting material, and good agricultural practices
Price (TZS/kg) Revenue (TZS/acre)	850 385,900	1,200*	 ✓ Increased market value through improved post- harvest handling, higher quality and higher oil- content of cultivated hybrid seed ✓ Prices monitored, documented, and disseminated through market information
Profit (TZS/acre)	TZS 95,000(cost of production) TZS 290,900	TZS 374,000 (cost of production) TZS 490,000	systems ✓ Promotion of good agricultural practices to minimising costs, mitigate risk, and build resilience ✓ Farmer training on costs of production and record-keeping ✓ Value chain assessment to determine agroecological suitability and socioeconomic impact potential
Size (acres/ farmer)	1.7	3.5	✓ Whole-farm assessment to determine margins and commercial viability while preserving crop diversity
Scope (acres under production)	21,000	42,000	✓ Coordination with local government authorities to scale support
Volume aggregated for marketing (MT)	5,34,000	30,240,000	 ✓ Formalisation of supply contracts to structured, regular buyers (traders, processors, etc.) ✓ Increased market confidence attributed to rising trade volumes and documented in market information systems ✓ Farmer-led and -managed aggregation and marketing systems ✓ Improved postharvest infrastructure for grading, packing, and transport ✓ Increase demand through technical assistance and financing to SME processors to maximise efficiency, increase volume, and reduce operational seasonality
Aggregated value (TZS)	8,103,900,000 (approx. USD \$3.5 million)	36,288,000,000 (approx. USD \$15.75 million)	Inform public policy and sector investment by citing these figures as indicative of economic growth potential and the catalytic effects of investing in agricultural production and processing

¹⁶ Using production data from Singida Region and Ikungi District

Why is the market system not working for the SHF?

A 2017 Sunflower Market Systems Assessment report by AMDT¹⁷ analysed and clearly addressed seven questions to articulate why the sunflower market is not working efficiently for productive poor women, men and youth farmers. The questions are addressed here under.

1. Why is extension service not working for the poor?

With the devolution of government extension services down to the village level, it is worth investigating why farmer practices are not improving and the yields not increasing. First, it is important to note that there is still a deficit of extension staff. It is estimated that government extension agents reach only about 10% of farming households, and the current average ratio of extension workers to farmers is 1:2000. 18 Secondly, the demand of the extension officers is spread amongst different crops with a bias on the priority crops of the given district. Third, the government has not invested any resources in developing content and literature that can be used to train and provide extension specific to sunflower production. Private extension has not complemented government extension as expected because in many instances it depends on how well their distribution network exists for different inputs. If the farmers cannot easily access inputs, it will be difficult to access practical guides to these inputs, for example. In addition, there is a challenge of affordability and willingness to pay for private extension services.

2. Why aren't improved seeds accessible to farmers?

Despite the introduction of QDS seeds by the government, improved seeds have remained inaccessible to smallholder farmers. The existence of seed varieties without a proper multiplication and distribution system has resulted in farmers recycling their seeds over the years. The lack of a robust agro-dealer network has discouraged farmers from using purchased seeds. However, agro-dealers say they are not guaranteed of a commercial base to break even in the villages meaning that they are not sure the farmers will come to buy seeds. This raises another challenge and that is the lack of GAP knowledge by the farmers. The farmers do not understand the importance of using improved seeds in their yield. Secondly, they are also reluctant to spend their money on inputs because of the losses they get caused by erratic weather. The other challenge is seed availability- when farmers lack improved seeds during the planting season, they revert back to recycled seed. In the few shops that stock seeds, there may be a question of traceability and they cannot verify where they got it from. There is a general lack of a seed distribution system to continue supporting the seed system.

3. Why smallholder farmers do not use better quality inputs?

The general use of fertilisers and pesticides amongst smallholders is very low. Supply of poor quality fertilisers affects adoption of the same. For instance, most farmers believe that the use of fertilisers depletes soil fertility. As much as they use farm-yard manure, it is difficult to verify the required nutrition for the crop since there are no records for soil analysis in the region and soil testing is generally unavailable in rural areas. Just like seeds, the challenge of erratic weather also supports farmers' lack of investment on chemical fertilisers. In the past the government has supplied farmers with fertilisers under the input subsidy programme; however, the inputs have often arrived late in the season.

¹⁷ MSA report by AMDT in Partnership with Farm Africa and Faida Mali

¹⁸ Hella, J. Study to Establish Return to Investment in Agricultural Extension Service in Tanzania; Ministry of Agriculture, Food Security and Cooperatives: Dar Es Salaam, Tanzania, 2013.

4. Why don't small oil millers demand better quality and quantity of sunflower grains from smallholders?

Small oil millers together with aggregators make the closest contacts with smallholder farmers. They are also the only ones who guarantee cash transactions with the farmers making them the most preferred off-taker by the farmers. However, small millers do not have the infrastructure to take care of high volumes as they look for markets. They also do not want to tie their limited working capital on stocks. They therefore invest in fast moving market chains like the crude oil market and even the grain markets in other regions. If there was a reliable market they would have invested into upgrading their businesses to medium and even large millers. Secondly, the capacities of the machinery that the small oil millers invest in is quite low and the technology quite cheap to maintain giving the millers a low cost of operation. Oil quality is not tied to better prices; therefore, the processors do not expect that the technology they are using will give them any exceptional quality and are therefore not worried at all about quality.

5. Why don't financial service providers offer adequate services to farmers?

The risks of dealing with smallholder farmers is quite high according to financial institutions such as commercial banks. First, the farmers do not have a commercial identity. They do not have their farms operating as a business, they are not in groups producing reliable volumes, they do not have title deeds or any immovable assets to act as collateral and they do not even have any records to prove the viability of their businesses. Secondly, in many parts of the country erratic weather patterns make it even more risky to invest in financing the farmers without any insurance. The financial institutions therefore find it better to lend to processors, grain aggregators or other SMEs instead of the farmers.

6. Why are information services not (yet) working for the poor?

There was limited evidence to establish what the farmers' information needs are. Despite the farmers having mobile phones they have not seen the phones as information tools beyond their daily personal use. There haven't been any service providers in the region until recently, that have shown interest in providing information services to the farmers and commercialising these services is often difficult. Nevertheless, the sparse distribution of farmers and the current infrastructural challenges that the farmers are faced with justify the need for an easily accessible and affordable information system.

7. Why are there only few providers for bundling services for the poor to grow out of poverty?

The dominance of the sunflower market system by the aggregators, most of whom are referred to as brokers has denied stakeholders visibility of the underlying potentials in the sunflower value chain throughout the country. Aggregators and their immediate markets which are the medium and large scale processors have therefore ended up doubling as offering a bundle of services including inputs, agronomy and finance to the farmers. This dominance has also denied farmers the opportunity to look beyond what they receive from the aggregators. However, the farmers do not have the basic requirements that would attract organised service providers. The farmers' lack of entrepreneurial skills has denied them the opportunity to showcase the potential that would attract the right bundle of services.

CONCLUSION AND RECOMMENDATIONS

Based on this Market Analysis the following key constraints have been identified and prioritised:

- i Poor collaboration and poor financing mechanisms along the value chain, leading to high transaction costs, poor quality and low volume supplied by farmers, and low capacity utilisation for processors facilities.
- ii Limited availability of improved seed varieties.
- iii Uncoordinated administration of multiple levies, taxes and regulations that have become a disincentive for farmers and processors.
- iv Limited capacity for generation and use of evidence, knowledge sharing, and strategic coordination among private and public sector stakeholders.

Therefore, to address these constraints we recommend the following actions to stimulate/promote the market for improved sunflower seed varieties. The aim is to stimulate the private sector to invest in supplying improved seed varieties, while also encouraging the public sector through respective government agencies and responsible research institutes to invest in developing the breeding capacity for new varieties in the longer term. The target is to connect farmers' organisations with seed and input companies and link them with off-take markets. Currently, varieties which are widely available for farmers are farmers' saved seeds and open-pollinated varieties (OPV), which have been recycled over time and have lost their desirable production characteristics. Specific interventions here should be to:

- Increase availability and access to improved seed varieties by smallholder farmers, especially hybrid seeds varieties from private seed systems which are highly productive.
- Invest in the use of cleaned record seed through local quality declared seed (QDS) production. Current initiatives by the government through agricultural research institutions to clean parent stock of record seed for farmers to source foundation seed for QDS multiplication can support such efforts.
- ➤ Stimulate the stocking of improved sunflower seed varieties to increase retail and bulk selling by local stockists and agro-dealers by fostering partnerships between farmers, FOs and AMCOS and use farmers' business cases to influence local agro dealers to stock the seeds and engage in business relationships with local farmers and their respective FO to increase access and availability of seed.
- 1. Enhance pro-poor contractual arrangements between smallholder farmers, small-scale processors, and larger processors/buyers. The aim is to enhance collaboration through contractual arrangements, and enhanced access to finance across the chain specifically targeting farmers and small-scale processors, so as to increase the volume and quality of supply, reduce transaction inefficiencies and costs, and enhance economies of scale. Two specific interventions have been proposed, and both build on a core brokered pro-poor contractual arrangement that links farmers (sunflower seeds), small-scale processers (crude or unprocessed sunflower oil), and large processors/buyers (refined sunflower oil and sunflower cake).
 - ➤ Enhancing access to bundled services for farmers and small-scale processors. Such bundled services included agricultural advisory services, market information services, business development services (eg training services in farming as a business), and financial services (eg credit, savings, and micro-insurance services).
 - ▶ Building the capacity of associations of farmers/FOs/AMCOS and small-scale processors to increase their capacity for self-organisation within the contractual

arrangements, increase their respective bargaining power, and enhance their capacity for effective representation and addressing issues of strategic importance to them in the sub-sector in the long term.

- 2. Coordination of stakeholders to advocate and lobby for improved changes on levies, taxes and regulations that are currently a disincentive especially to farmers and small-scale processors. The aim is to build the capacity of farmers and processors associations, and other strategic partners to advocate and dialogue for a more inclusive local and national business environment in the sub-sector. Capacity targeted will include:
 - Enabling the representative organisations of farmers and processors to frame debates and get key issues for reform on policy agendas.
 - Capacity to influence key discussions or declarations by key institutions and leaders in a timely fashion, especially such declarations that are likely to impact potential benefits of beneficiaries within a given agricultural season.
 - Capacity to influence procedures and processes, and the content of regulations, levies, taxes, and laws so that there is improved harmonisation especially in their implementation.
 - ➤ Enhance farmers' organisation to identify the policy related challenges, document and communicate in a proper channel for advocacy and dialogue that focus on sunflower business environment related issues.
- 3. Enhancing evidence generation, knowledge sharing and strategic coordination in the sunflower sub-sector. The aim of knowledge sharing is to enhance access to and utilisation of information and knowledge generated (through case studies, success stories, interventions, lessons from evaluations and reports) to be used to inform decisions of sunflower project beneficiaries and relevant stakeholders. The aim of strategic coordination is to enhance the strategic focus of key stakeholders, market actors and development partners on a strategic pro-poor agenda in the sub-sector (building on the National Sunflower Strategy), while minimising the fragmentation and duplication of investments by other initiatives in the value chain.



Photograph: Farm Africa / Eliza Powell

ANNEX: PRODUCTION OF SUNFLOWER BY UKRAINE AND RUSSIA

For the last five years, Ukraine and Russia have been the leading producers and suppliers of sunflower products globally, contributing an average of 13 million MTs of seed and 5.6 million MTs of oil. Between 2017 and 2020, Ukraine exported sunflower seeds estimated at USD \$39 million and sunflower oil valued at USD \$4 billion on an average annual basis. Annual exports for seed and sunflower oil from Russia to the world stood at USD \$221.4 million and billion respectively.¹⁹

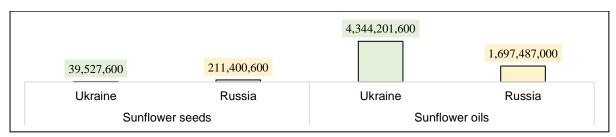


Figure 1: Annual average value of sunflower oil and seed exported by Ukraine and Russia in USD (2017-2020)²⁰

Effects of the Ukraine war on Tanzania sunflower sector

Supply chain disruptions of sunflower products. To meet the domestic supply deficit of sunflower oil in Tanzania, Ukraine has been the leading supplier of oil in the Tanzanian market. In 2022, Tanzania imported 80% of its sunflower oil needs worth USD \$5.4 million²¹ from various countries, including Ukraine. Market disruptions caused by war have affected the supply of edible oils, resulting in increased domestic prices for cooking oils. The average price for sunflower oil increased from TSH 1,555/kg in 2021 to TSH 4,015/kg in June 2022²² as the sunflower production gap continues to widen. At the same time, the purchasing price of sunflower grain (raw seed) per kg for farmers has decreased from an average of TZS 1000/kg in 2021 to TZS 800/kg in 2022, likely due to a glut of other cheaper imported edible oil, such as palm oil, in the market.²³

Increasing prices for fertiliser is likely to widen the production gap. From January to April 2022, Tanzania registered a 72% increase in fertiliser price, from USD \$32.50 per 50kg to USD \$55.9 per 50kg.²⁴ The county's agricultural sector heavily depends on fertilisers from Russia for domestic production. In 2021, fertilisers worth USD \$35 million were imported from Russia.²⁵ The rising price of fertiliser is expected to increase the cost of production for farmers who are able to afford the use of fertiliser in the coming season. It is expected that many farmers will not be able to afford to purchase fertiliser, which will keep productivity per acre low and impact the profitability for farmers. To strengthen the supply of fertilisers and increase affordability to farmers, the government is taking the following measures:

21 IBIE

¹⁹ ITC, 2022. Trade Map. Trade statistics for international business development Available at https://www.trademap.org/Index.aspx

²⁰ IBID

²² Tanzania Invest (2022) Sunflower Has Enormous Potential in Tanzania, Report Indicates. Available at https://www.tanzaniainvest.com/agriculture/sunflower-enormous-potential Accessed on 21st July 2022.

²³ Market information (June-August 2022), Singida and Manyara regions.

²⁴ Tanzania Invest (2022) Tanzania Reintroduces Prices Regulation on Fertilizers Available at https://www.tanzaniainvest.com/agriculture/new-prices-control-fertilizers-2022 Accessed on 21st July 2022

 $^{^{25}}$ ITC, 2022. Trade Map. Trade statistics for international business development Available at https://www.trademap.org/Index.aspx

- Removal of the bulk procurement scheme²⁶ which was introduced in 2017. This will open up the fertiliser import business to everyone who can import fertiliser.
- Supporting/encouraging fertiliser companies to engage in forward contracts to hedge against short-term supply shocks.
- Introduction of a fertiliser subsidy by the Ministry of Agriculture which went into effect on August 15, 2022.²⁷

Improving public sector investment in sunflower production. With increased sunflower oil prices globally, the government has intervened to supplement private sector initiatives by increasing budget allocation for the Agricultural Seed Agency (ASA), up from TZS 5.42 billion (USD \$2.3 million) in 2020-2021 to TZS 10.8 billion (USD \$4.7 million) in 2021-2022²⁸ as a measure to improve seed production to cover the increasing market deficit. As a key strategic crop identified by the government, sunflower will be one ASA's production.s for seed

Opportunity to produce for regional markets

The Ukraine war presents an opportunity for Tanzania to tap into regional markets for the exportation of sunflower products to East African countries, especially Kenya and Ethiopia, which heavily depend on sunflower oil imported from Ukraine. From 2017 to 2021, Kenya and Ethiopia imported sunflower oil worth USD \$26 million and USD \$56 million respectively, of which 76% and 84% respectively were supplied by Ukraine. Tanzania has refocused on increasing sunflower seed production by 100,000 MTs in the next five years to meet the growing demand in the local and regional markets. The government and processors can take this advantage to invest more incentives that spur increased production in order into local and regional trade.

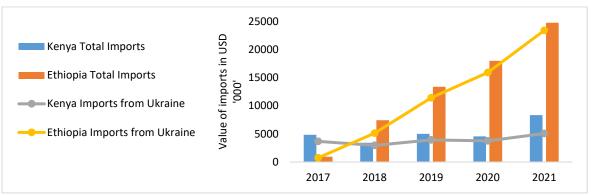


Figure 2: Value of sunflower imported by Kenya and Ethiopia and the proportion coming from Ukraine³¹

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²⁶ Tanzania Invest (2 August 2021). Tanzania to Abolish Fertilizer Bulk Procurement System. Available at https://www.tanzaniainvest.com/agriculture/fertilizer-bulk-procurement-abolished

²⁷ Ministry of Agriculture. (9 August 2021). STARTING ON AUGUST 15, 2022 FARMERS WILL BUY FERTILIZER AT HALF PRICE - MINISTER BASHE. Available at https://www.kilimo.go.tz/highlights/view/kuanzia-tarehe-15-agosti-2022-wakulima-watanunua-mbolea-kwa-nusu-bei-waziri-bashe

²⁸ Land Portal Foundation (2022) Tanzania government lists priorities to give agriculture a push. Available at: https://landportal.org/news/2021/08/tanzania-government-lists-priorities-give-agriculture-push

²⁹ ITC, 2022. Trade Map. Trade statistics for international business development Available at https://www.trademap.org/Index.aspx

³⁰ All Africa (2022) Tanzania Boosts Sunflower Production, Targets to Combat Drought. Available at https://allafrica.com/stories/202202090169.html Accessed on 22th July 2022.

³¹ ITC, 2022. Trade Map. Trade statistics for international business development Available at https://www.trademap.org/Index.aspx

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