TASAI
The African Seed Access Index

Somalia Country Report 2025

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In collaboration with the Federal Government of Somalia

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LIST OF ACRONYMS

COMESA	Common Market for Eastern and Southern Africa
DUS	Distinctness, Uniformity, and Stability
EAC	East African Community
FAO	Food and Agriculture Organization of the United Nations
FMoAI	Federal Ministry of Agriculture and Irrigation
ICRC	International Committee of the Red Cross
ISTA	International Seed Testing Association
NGO	Non-Governmental Organization
NRC	Norwegian Refugee Council
OECD	Organization for Economic Co-operation and Development
OPV	Open Pollinated Variety
SARIS	Somali Agricultural Regulatory and Inspection Service
SOSTA	Somalia Seed Trade Association
SSG	Seed Systems Group
SSSRI	Somalia Seed Systems Recovery Initiative
VCU	Value for Cultivation and Use
ZUST	Zamzam University of Science and Technology

INTRODUCTION

The increased use of productivity-enhancing technologies, including mechanization, irrigation, fertilizer, and improved seed, are critical to improving food and nutritional security across Africa. For field crops, a competitive formal seed sector is key to ensuring the timely availability of high-quality seed of improved, appropriate varieties at affordable prices for smallholder farmers. Improved seeds can deliver state-of-the-art technology to farmers, including higher yields, disease and pest resistance, climate change adaptation, reduced post-harvest losses, and improved nutrition. To facilitate the delivery of these benefits to the farmers, The African Seed Access Index (TASAI) conducts seed industry assessments at the national level and uses the findings to encourage public policymakers and development agencies to create and maintain enabling environments that will accelerate the development of competitive formal seed systems serving smallholder farmers in Africa.

This report summarizes the key findings of a study conducted by TASAI in 2025 to appraise the structure and economic performance of Somalia's formal seed sector. This is the first TASAI country study of Somalia, and it focuses on the four grain and legume crops important to the country's food and nutritional security (the "four focus crops"). In Somalia, these crops are maize, sorghum, sesame, and cowpea. Maize, sorghum, and sesame account for 81% of the land area under cultivation.[1] All four are listed as priority crops in the country's National Transformation Plan (Federal Republic of Somalia 2025b). Maize, sorghum, and cowpea are priority food crops, while sesame is a priority export crop, contributing 5.25% of GDP in 2023 (FMAI, 2024).

During the first four decades after independence in 1960, Somalia's agriculture sector experienced significant growth paralleling that of its neighboring countries. In 1991 a civil war broke out, which, over the next three decades, led to the collapse of government services, widespread famine, and displacement of the population. The impact of the conflict on the agricultural sector, including the seed sector, was devastating.

In 2009, a coalition government was formed, and the next decade was marked by efforts to return the country to peace with significant international support, including a 14-year-long African Union peacekeeping mission, while violent clashes with insurgent groups, notably Al-Shabaab, continued to hinder progress. Over time, the government gained control of most of its territory, and the last five years have been marked by increasing stability in many parts of the country. This gave way to more sustained rebuilding efforts, although pockets of insecurity remain, and extreme weather events, such as droughts and floods, continue to impact the country.

1 FAOSTAT, accessed on 28 March 2025

In the area of agriculture, the Somali government, in collaboration with partners, has been actively rebuilding and modernizing its agriculture sector, which employs the majority of the country's population. Key initiatives include the reintroduction and increasing use of improved seed, as well as the restoration of extension services that were severely compromised during the war. An important step in the revival of the formal seed system in the country was the establishment of the Somali Agricultural Regulatory and Inspection Service (SARIS) in 2019 (Federal Republic of Somalia 2024b). The work of SARIS is facilitated by the SARIS Law, approved in 2024. SARIS, along with other agencies, is part of government's efforts to develop policy frameworks that support land tenure security, agricultural research, and market access.

OVERVIEW OF SOMALIA'S FORMAL SEED INDUSTRY

Like most other African countries, Somalia's seed industry consists of two systems: the informal and formal system. Although TASAI recognizes the presence and role of pluralist seed systems TASAI studies focus primarily on the formal seed sector due to the inherent difficulties of measuring – or finding existing data on – the informal sector.

The informal system refers to a system where seed is produced, maintained, and distributed through informal networks. These activities "tend to be decentralized and might revolve around local entrepreneurship, seed banking, community-based seed production, or seed villages" (McGuire and Sperling 2016). In many cases, farmers keep seed from the harvest and exchange it with neighbors, relatives, and through rural markets. Seed from this system is of variable varietal purity, physical and sanitary quality[2].

In Somalia, the informal system dominates, covering 94% of the national seed requirement for maize seed, 96% of the same for sorghum seed, and 78% of the same for cowpea seed.[3] This is in part because the civil war halted the operations of whatever formal seed sector existed prior to 1991. As such, it is not uncommon for smallholder farmers and community-based organizations, such as cooperatives, to multiply and sell seed of improved cultivars near the production site and without much quality control (Mamo, Singh, and Mahama 2023). Most of these entities are not formally registered, although their fields are occasionally inspected by the government. However, government is

2 See seed system definitions at https://www.agrilinks.org/post/seed-system-definitions

3 According to a 2023 study, certified seed production meets a small percentage of the national seed requirement: 6% for maize, 4% for sorghum, and 22% for cowpea. The balance is sourced from the informal seed system (AUC, AGRA, TASAI, 2023).

keen to formalize as many such entities as possible to improve and expand access to higher quality varieties by farmers.

The formal system is a structured and regulated value chain to produce seed of improved varieties. This process involves multiple actors and institutions, who engage in activities ranging from breeding and maintaining varieties to the multiplication, processing, and distribution of certified seeds. These different stages of improved seed production are regulated by government and follow approved regulations and standards. In the formal system, seed is sold through limited – formal - distribution channels, such as registered seed growers/companies and agro-dealers.

Table 1 lists the agencies and actors that play a key role in Somalia's formal seed industry.

Table 1: Role of key players in Somalia's formal seed sector

ROLE	KEY PLAYERS
Research, breeding, variety development	No active breeding programs/ institutions
Variety adaptation trials	Seed companies, Somali National University (SNU), Zamzam University of Science and Technology (ZUST), Centers of the Consultative Group on International Agricultural Research (CGIAR), Seed Systems Group (SSG), the Food and Agriculture Organization of the United Nations (FAO)
Variety release and regulation	Federal Ministry of Agriculture and Irrigation (FMoAI), Somali Agricultural Regulatory and Inspection Service (SARIS)
Seed production and processing	Seed companies, seed cooperatives, individual seed producers
Education, training, and extension	FMoAI, SNU, FAO, seed companies, Non-Governmental Organizations (NGOs), SSG
Distribution and sales	Seed companies, FAO, NGOs

METHODS

TASAI studies cover 22 indicators divided into five categories: **Research and Development**, **Industry Competitiveness**, **Seed Policy and Regulations**, **Institutional Support**, and **Service to Smallholder Farmers**[4]) (Table 2). In most TASAI studies, the bulk of the performance data reported comes from the year before when the study was conducted ("the study year"), because that is when the most recent data are available. Accordingly, the data reported in this Country Report pertain primarily to 2024; however, whenever 2025 data are available, they are included in the report. As TASAI has conducted similar studies in 25 other African countries, the report also draws relevant cross-country comparisons.

Table 2: TASAI Indicators

		Crop-specific	Impact on seed access[a]
A	**RESEARCH AND DEVELOPMENT**		
A1	Adequacy of active breeders	**Yes**	+
A2	Number of varieties released	**Yes**	+
A3	Number of varieties with 'special' features	**Yes**	+
A4	Availability of basic seed	**Yes**	+
B	**INDUSTRY COMPETITIVENESS**		
B1	Number of active seed companies/producers	**Yes**	+
B2	Quantity of seed produced and sold	**Yes**	+
B3	Number of varieties sold and dropped	**Yes**	+
B4	Average age of varieties sold	**Yes**	-
B5	Market concentration	**Yes**	-
B6	Market share of state-owned seed company	**Yes**	-
B7	Efficiency of seed import/export processes	**Yes**	+
C	**SEED POLICY AND REGULATIONS**		
C1	Length and cost of variety release process	**Yes**	-
C2	Status and implementation of national seed policy framework	**No**	+/-
C3	Harmonization with regional regulations	**No**	+
C4	Adequacy of efforts to eradicate counterfeit seed	**No**	+
C5	Use of government subsidies	**No**	+/-
D	**INSTITUTIONAL SUPPORT**		
D1	Performance of national seed association	**No**	+
D2	Adequacy of seed inspection services	**No**	+
E	**SERVICE TO SMALLHOLDER FARMERS**		
E1	Availability of agricultural extension services for smallholder farmers	**No**	+
E2	Concentration of agro-dealer network	**No**	+
E3	Availability of seed in small packages	**Yes**	+
E4	Seed and grain price at planting time	**Yes**	-

* The +/- signs signal a positive or negative correlation between the indicator and smallholder farmers' access to improved seed.

4 The list of indicators and recent TASAI data are available at https://tasai.org/wp-content/uploads/TASAI-Appendix_CURRENT.pdf

Using TASAI survey tools, data collection focused on three key seed industry players: seed companies, plant breeders, and government agencies and other key entities active in the country's seed sector. For several indicators, TASAI supplemented quantitative data with self-reported industry satisfaction scores on a 0-100 scale, with the following scoring brackets: 0-19.99% **extremely poor,** 20-39.99% **poor,** 40-59.99% **fair,** 60-79.99% **good,** and 80-100% **excellent.**

In 2024, a total of 15[5] seed companies were registered and licensed to produce certified cereal and legume seeds in Somalia. Of these, 14 companies produced seeds of one or more of the four focus crops, and thus met the criteria for inclusion in the study (Table 3). All 14 produced both maize and sorghum seed, highlighting the importance of these two food crops in the country. Somalia also has a number of cooperatives and individual seed producers; however, none of them met the criteria for inclusion in 2024 as they are primarily active in the informal sector or produce crops other than the four focus crops.

Table 3: Breakdown of registered and surveyed seed companies in Somalia (2025)

Crop	Number of registered seed companies (government data)*	Number of seed companies surveyed (TASAI data) by crop**
Maize	15	14
Sorghum		14
Sesame		7
Cowpea		13

* A registered company may produce certified seed of any crop; that is, registration is not disaggregated by crop.

** Total exceeds sample size, as one company may produce multiple crops.

In addition to seed companies, the survey covered local institutions, such as SARIS, the Department of Research and Extension in the Federal Ministry of Agriculture and Irrigation (FMoAI), the Somali National University (SNU), the Zamzam University of Science and Technology (ZUST), and the Somalia Seed Trade Association (SOSTA), as well as NGOs and international organizations involved in seed sector development, such as the FAO, the Seed Systems Group (SSG), and the ICRC.

5 By January 2025, the number had increased to 18, which shows that the seed sector is growing.

RESEARCH AND DEVELOPMENT

NUMBER OF ACTIVE BREEDERS

A functioning seed system needs vibrant public and private breeding programs to develop improved varieties that respond to the farmer and consumer needs. The number of active public breeders is indicative of the level of investment in research and development.[6] In addition to tracking the number of breeders working on the four focus crops, the study also measured the level of satisfaction with the public breeding programs as reported by seed companies.

Somalia had two agricultural research stations before the civil war erupted in 1991: the Central Agricultural Research Station (CARS) at Afgooye, established in 1964 with a focus on adaptive and applied agricultural research in irrigated areas, and the Bonkay Agricultural Research Station (BARS) in Baidoa, established in 1965 that specialized in food crops in the rainfed areas. Using germplasm introduction, these two stations focused primarily on improving varieties for cereals, such as sorghum and maize, legumes, such as mung bean and cowpea, oil crops, such as sesame, soya bean, and safflower, and fruits and vegetables. Two successful varieties developed during this period were Somtux, a maize variety, and Filsan, a mung bean variety. Both are still marketed today.

The plant breeding and variety development programs at these stations collapsed during the war, leaving the country without a functioning national agricultural research institute. In September 2024, the FMoAI established the Department of Research and Extension to oversee plant breeding and variety development. In addition, the rehabilitation of the national research centers in Bonkay and Afgooye is underway, and the construction of a new national agricultural research institute (NARI) is slated to begin in June 2025, with support from the World Bank. Plans also include the building of a satellite center in each of the six federal member states.

Along with the absence of adequate infrastructure, Somalia has also experienced a shortage of breeders; the country had only one active (maize) breeder in 2023 (AUC, AGRA, TASAI, 2023), a number that reduced to 0 in 2024. None of the public universities had an active breeding program either. While one private seed company did employ a sorghum breeder, the individual was not actively involved in any breeding or variety maintenance activities in 2024. The FMoIA is sponsoring master's level training of four breeders at the University of Zimbabwe as part of a World-Bank funded project implemented by SSG. They are expected to graduate in 2026.

Respondents including FMoIA, SARIS, SNU, seed companies, and ZUST all agreed on the urgent need to revive the national agricultural research institutes so they can develop crop varieties suited to the agro-ecological conditions of the country. Developing new local varieties takes time, so the government has also engaged in adaptation trials of varieties originally developed in other countries, which presents a cost-effective and relatively quick option to bring new varieties on the market. According to SARIS, in 2024 six entities (two seed companies, two individuals, and two NGOs) imported seed for a total of 48 varieties of maize, sorghum and cowpea to conduct adaptation trials in collaboration with the FMoAI (Table 4).[7]

6 TASAI studies define an "active breeder" as a breeder who is currently engaged in breeding/maintaining a variety or a breeder who had either developed and released at least one variety or was developing a variety of the crop of interest at the time of the TASAI study.

7 Seed imported for research purposes is not counted under the section on imports and exports.

Table 4: Varieties imported for research purposes (2024)

Crop	Number of varieties imported for research purposes	Sources of varieties
Maize	31	International Maize and Wheat Improvement Center (CIMMYT) Kenya; Quali Basic Seed (QBS) Kenya; QBS, Zambia; private seed company, Kenya; private seed company, Zimbabwe
Sorghum (hybrid, forage and grain)	16	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Kenya; *Institut National de la Recherche Agronomique du Niger* (INRAN) Niger; private seed company, Zimbabwe
Cowpea	1	Private seed company, Zimbabwe
Total	**48**	

In addition, there are ongoing efforts led by the SNU and ZUST to retrieve and clean[8] varieties developed in Somalia several decades ago that have not been maintained because of the war. In 2024 graduate students at Somalia National University's Faculty of Agriculture were running trials for eight local varieties of maize, sorghum, and sesame in isolated fields. Table 5 provides information on these trials and the preliminary findings. Finally, ZUST has been running a project to enhance the Somtux maize variety's genetic purity, yield potential, and adaptability to local growing conditions. The 7th season for this project started in February 2025.

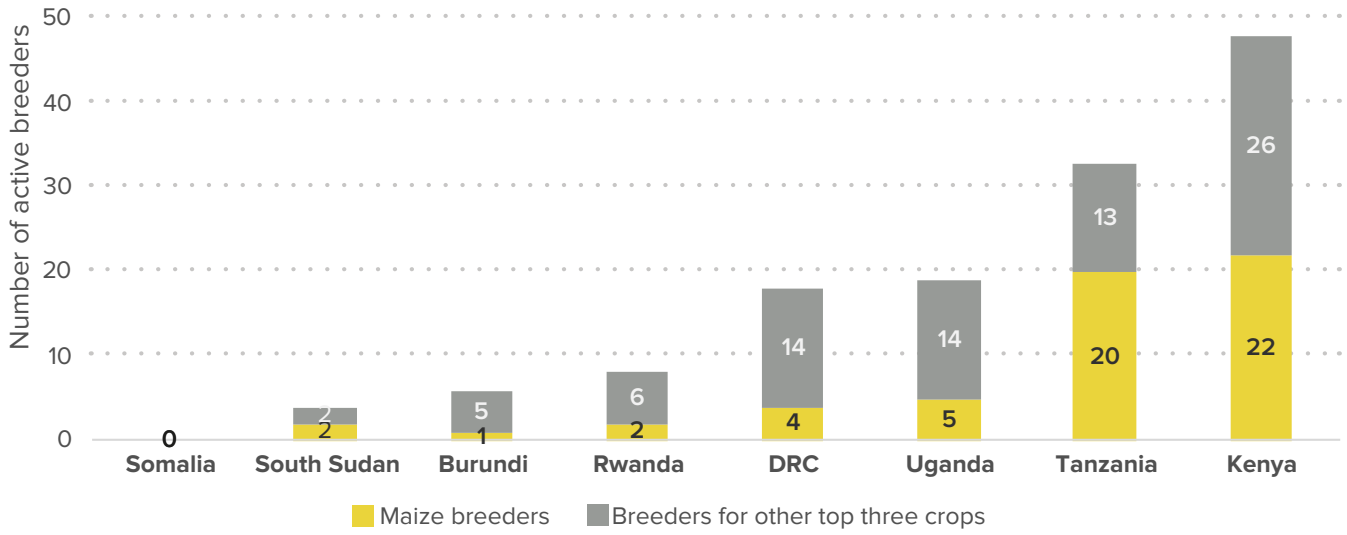
8 When varieties are not maintained properly, they become intermingled with other local varieties. The cleaning process restores the varieties to their original state, ensuring that they are once again true-to-type.

Table 5: Varieties under isolated field trials by Somalia National University

Crop	Number of varieties	Name of varieties	Preliminary findings
Maize	1	Somtux	Potential high yield; suitable for semi-arid and arid conditions
Sorghum	4	Cadooy, Abuur cas, Moordi, elmi Jamaac	Cadooy and Moordi are potential drought-resistant varieties; elmi Jamaac may have high susceptibility to pest infestation
Sesame	3	Humerya, white sesame, black sesame	No preliminary findings

Given the challenges Somalia's seed sector has to overcome, the current adaptation trials and variety purification efforts are laudable. Nevertheless, with challenges such as food insecurity and climate change on the rise, the importance of well-trained breeders with adequate resources is evident, and variety development has to be a key focus area for the formal seed sector. To offer a regional comparison, Figure 1 shows the number of public breeders employed by national breeding programs in the eight countries of the East African Community (EAC). Besides Somalia, which did not have a breeder in 2024, the numbers range from four in South Sudan, a country also emerging from political conflict, to 48 in Kenya, a country with an established seed sector. The differences are due to a combination of factors, including the size of the country and the level of development of the seed sector. Nevertheless, it is clear that Somalia and South Sudan are the only countries that do not have at least one public breeder per focus crop, and that, in the more established sectors of Kenya and Tanzania, the staple crop of maize has many dedicated breeders. In addition, these countries also have breeders employed by private seed companies, further increasing the number of varieties in the release pipeline.

Figure 1: Number of active breeders for the top four crops across the EAC.[9]



9 With the exception of Somalia, the data represents numbers from 2022, published in the SSPI 2023 Status Report for Africa (AUC, TASAI, and AGRA 2024)

VARIETIES RELEASED IN THE LAST THREE YEARS (2022-2024)

The number of varieties released is a good measure of the functioning of the variety development and release system. In addition to higher yields, new varieties often carry desired traits such as climate smartness, disease/pest resistance, and nutrition enhancements. To track the functioning of the variety release system, TASAI studies track the number of varieties released, using the 3-year moving average. A three-year moving average is commonly used to smooth out short-term fluctuations in time-series data.

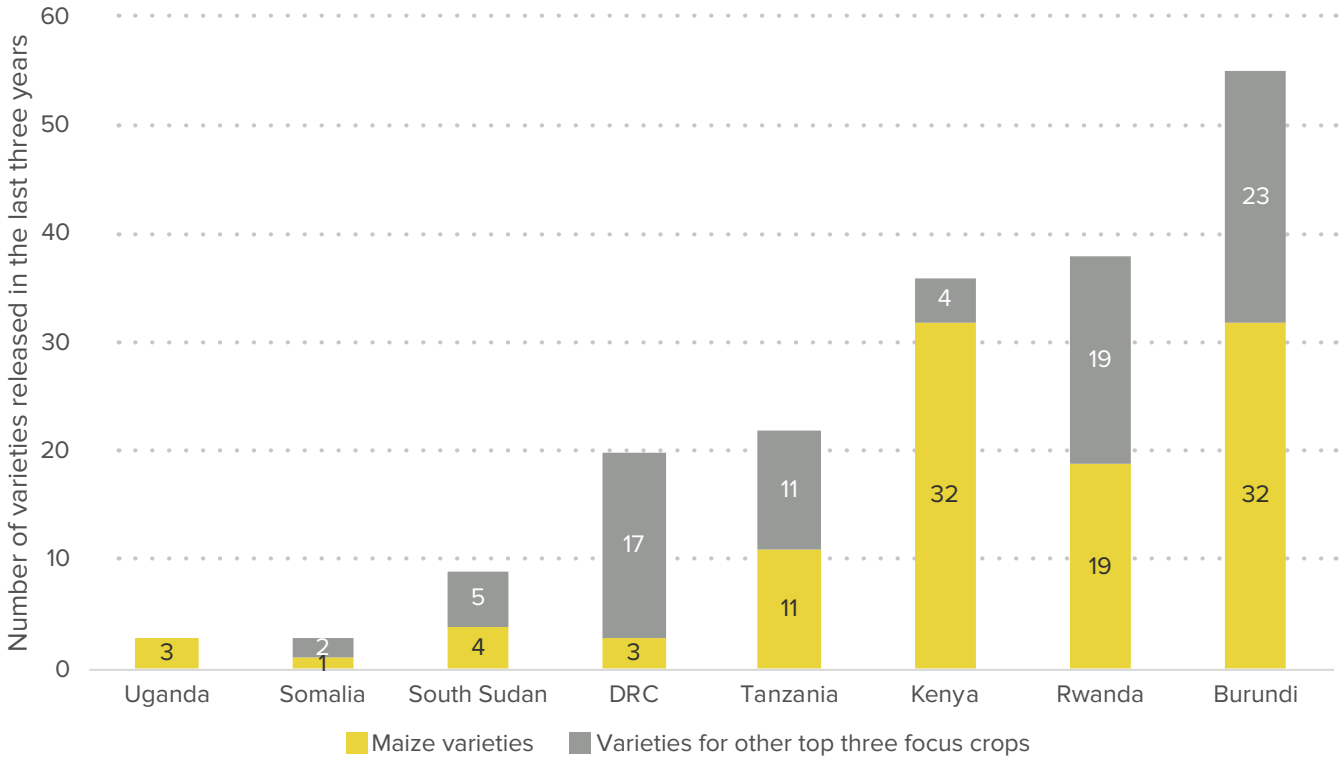
Variety releases ceased once the civil war began in 1991. Since 2020, the political situation has been peaceful enough to allow the resumption of variety development, registration, and release. As a result, the first new varieties - three rice varieties - were released in 2021. Looking at the four focus crops, between 2022 and 2024, three new varieties were released – one each for maize, sorghum, and cowpea seed (See Table 6), (Federal Republic of Somalia 2025c).

Table 6: Variety, year of release in Somalia, features and origin

Crop	Variety name	Year of release in Somalia	Features	Origin
Maize	Siman	2023	Stress-tolerant	Developed by CIMMYT in collaboration with a private seed company in Somalia in 2023
Cowpea	Machakos 66 (M66)	2024	Lowland Open Pollinated Varieties (OPV) Heat-tolerant Used as grain/leaves consumed as vegetable	Developed by the Kenya Agricultural Research Institute (KARI) in 1998
Sorghum	Gadam	2024	Very-early maturing (2.5-3 months) Drought-tolerant	Developed by KARI in 1994

Since the only available variety release data in Somalia is for two years (2023 and 2024), a moving average is not presented because it is yet to show any meaningful trends. Figure 2 compares the number of varieties released in EAC member states for the four focus crops over a consecutive three-year period during 2020-2024. Maize is included among the focus crops in all countries and is shown alone, while numbers for the other three crops are combined (AUC, TASAI, and AGRA 2024).

Figure 2: Varieties released in EAC member countries between 2020 and 2024



VARIETIES WITH SPECIAL FEATURES

Varieties may have special characteristics, for instance, climate-smart, use-related, or industry-demanded features. While acknowledging the increase in biotic stresses (pests, weeds, and diseases) due to climate change, TASAI studies narrowly define "climate-smart features" as those that respond to extreme weather events, such as droughts, floods, and frost, that affect current farming practices. As such, climate-smart features include drought tolerance, early maturity, or extra-early maturity. Use-related features include fast–cooking or nutritional enhancements, such a vitamin enrichment. Industry-demanded features include suitability for making starch or livestock feed, for brewing and milling, or varieties with high oil content.

Between 2022 and 2024, a total of three crop varieties were released in Somalia—one each for maize, sorghum, and cowpea (Table 7). All three varieties had special features, namely, all three are drought tolerant. In addition, the sorghum variety is also extra-early maturing. No new varieties had use-related features (such as fast cooking or nutrition enhancement) or industry-demanded traits (like suitability for animal feed).

Table 7: Number of varieties released that have special features (2022-2024)

Feature	Description of feature	Number of varieties released 2022-2024				
		Maize	Sorghum	Sesame	Cowpea	TOTAL
All varieties released		1	1	0	1	**3**
All varieties released with special features		1	1	0	1	**3**
Climate smart features	All climate-smart features	1	1	N/A	1	**3**
	Drought tolerant/tolerance to water stress	1	1	N/A	1	**3**
	Early / extra-early maturing	0	1	N/A	0	**1**
Use-related features	All use related features	0	0	N/A	0	**0**
	Fast cooking	0	0	N/A	0	**0**
	Nutrition enhanced features	0	0	N/A	0	**0**
	Aromatic/ good taste	0	0	N/A	0	**0**
Industry-demanded features	All industry-demanded features	0	0	N/A	0	**0**

NUMBER OF VARIETIES SOLD

For every crop, the number of varieties sold in any given year is a good indicator or the breadth of farmers' choice. In addition, a vibrant seed sector should retire old varieties as newer (better) ones become available or as old varieties fail to meet farmer needs. An increase in the number of varieties sold in a country often results in increased choice of varieties available to farmers.

Given that the variety release process in Somalia is under development, most of the varieties sold by seed companies operating in the country have not gone through the official release process. As a result, seed is marketed with incomplete information, such as without an official name, age, and other relevant information that would normally be included with a formally released variety. It is common for seed companies to refer to a variety as "a local variety" or by its appearance, such as "red cowpea."

In 2024, the 14 surveyed seed companies sold a combined total of 10 varieties of the four focus crops: three maize varieties, three sorghum varieties, two cowpea varieties, and two sesame varieties[10] (Table 8). The most commonly sold maize variety was Somtux, first released in 1979 and still sold by 13 of the 14 companies producing maize seed. Three other varieties - the hybrid maize variety Siman, the sorghum variety Gadam, and the cowpea variety M66 – are the three varieties released in 2023 and 2024, mentioned previously. The remaining commonly sold varieties are either landraces or varieties that were informally introduced from neighboring countries and therefore did not go through an official variety release process.

10 These findings align with a recent survey conducted by the World Food Programme (WFP 2025). The survey identified 13 local sorghum varieties, six local cowpea varieties, and four local maize varieties being cultivated by farmers.

Table 8: Name and age of popular varieties sold (2024)

Crop	Number of varieties sold in 2024	Name of commonly sold varieties	Number of seed companies selling variety	Year of release
Maize	3	Somtux (or "local white")	13	1979
		Siman	1	2023
		Adopat7*	1	Not released
Sorghum	3	*"Red sorghum"*	12	Not released
		"White sorghum"	3	Not released
		Gadam	1	2024
Sesame	2	Black Sesame	1	Not released
		Dunyar (or "local variety")	6	Not released
Cowpea	2	*"Red cowpea"* or *"kidney-red cowpea"*	12	Not released
		M66	1	2024
Total	10			

*The Adopat 7 variety has not been released officially in Somalia, and thus limited information is available on it. One company reported selling it in 2024.

AVERAGE AGE OF VARIETIES SOLD

In vibrant seed systems, farmers regularly replace old varieties with new ones. In many African countries, old varieties persist, even though newer varieties often outperform older varieties as they are bred for traits that respond to demands by farmers, consumers, and industry. A lower average age of varieties signals higher rates of variety turnover. TASAI tracks the average age of variety by crop.

Given the sparse data on the age of varieties, it is difficult to compute accurately the average ages of varieties sold in Somalia. However, what we do know is that the local varieties on the market were either developed before the war or are landraces and that all but one of the recently released varieties had been released in other countries a long time ago (Table 6). In short, nearly all varieties currently available to farmers in Somalia are old and, as such, do not allow farmers to benefit from the latest advances in plant breeding.

SOURCES AND AVAILABILITY OF FOUNDATION (BASIC) SEED

Seed companies use basic (foundation) seed to produce certified seed for sale to farmers. In many African countries, limited access to basic seed from public research institutions tends to constrict the ability of seed companies to scale up production. In Somalia, the capacity to produce basic seed in the national agricultural research centers is yet to be restored or established. As such, seed companies maintain their own basic seed from the local varieties they sell. This basic seed is not inspected by SARIS. Only one of the seed companies surveyed reported sourcing basic seed for maize, sorghum, and cowpea from outside the country.

INDUSTRY COMPETITIVENESS

NUMBER OF ACTIVE SEED COMPANIES

Competition breeds excellence: the presence of more active seed companies increases competition and creates incentives for companies to innovate and improve. A vibrant seed sector depends on a robust private sector in which seed companies invest in developing, producing, processing, and marketing seed of improved varieties to farmers. This section tracks the number of registered seed companies that produced and marketed seed of one or more of the focus crops.

In 2024, 14 of the 15 registered seed companies produced and marketed seed of one or more of the four focus crops. All 14 seed companies produced seed for maize and sorghum, highlighting the importance of these two food crops in people's diet in the country (Table 9). All but one company is locally owned.

Table 9: Breakdown of companies surveyed (2024)

Crop	Number of active seed companies by crop
Maize	14
Sorghum	14
Sesame	7
Cowpea	13
Total*	14

* The actual number of companies does not equal the sum of companies by crop because a company may grow seed of multiple crops.

To produce seed, a company is required to register with SARIS, following the requirements laid out in the SARIS's Company Registration Requirements for Seed Producers, Processors, and Importers, developed in 2020 and revised on 16 February 2025. Registration materials are submitted to SARIS by email (SARIS, 2025). During the registration process, SARIS inspects the applicant's fields and/or premises and verifies that the company has adequate seed processing and storage facilities and is able to maintain a seed gene bank. At the time of data collection, the registration process had been in force for a short period only; nevertheless, the surveyed seed companies were asked to rate the cost of registration and the overall registration process. The cost of registration was rated "fair", at 57%, with six of the 14 companies saying that, at USD700, the cost of the registration was too high, especially for start-ups. The registration process overall was also rated "fair" at 52%.

GENDER IN THE MANAGEMENT OF SEED BUSINESSES

TASAI studies track the number of women in management and ownership positions in seed companies. This indicator tracks the number of women working in management roles in seed companies that have clearly defined management structures and positions.[11] The positions include director general/chief executive officer, distribution manager, operations manager, finance and administration manager, research and development manager, country lead, and sales and marketing manager.

Of the 14 surveyed seed companies, two have female owners, who also serve as the top manager of their respective companies. In addition, 23 (26%) of the total 87 management positions are held by women (Table 10).

Table 10: Gender in management in seed businesses (2024)

Gender indicator	Number	%
Companies with female top manager (n=14)	2	14%
Companies with female owner (n=13)	2	15%
Women in management positions (n=87)	23	26%

PRODUCTION AND SALE OF CERTIFIED SEED

To measure the overall size of a country's seed sector, TASAI tracks the volumes of seed produced and sold for the four priority crops. The data are presented as aggregate quantities in metric tons (MT) of certified seed sold in the data collection year, as reported by active seed companies.

Table 11 shows the volumes of certified seed produced in 2024, comparing official government data provided by

11 Some companies, such as multinationals or government-owned companies, may not have management structures that allow respondents to answer this question.

SARIS and production volumes reported by seed companies in the TASAI survey. SARIS recorded lower volumes of certified seed production for maize, sorghum, and cowpea, while government and TASAI data are the same for sesame seed. In addition to certified seeds, the TASAI survey also recorded significant production volumes of uncertified seed: 34% of maize seed, 31% of sorghum seed, 51% of sesame seed, and 32% of cowpea seed produced were uncertified. A more detailed look at the data showed that companies either certified all the seed they produced or not; in other words, it is not the case that a company certifies only a part of the seed it produces. In terms of sales, most seeds sold in 2024 were certified (1,184 MT), although uncertified seed still made up nearly 40% (706 MT) of sales. In contrast to the other three crops, uncertified seed made up the larger share of sales for sesame seed.

Seed companies and the FMoAI were both asked to comment on the reasons for the high volumes of uncertified seed in the country. For their part, some seed companies felt that the cost of certification was too high, eating too much into their profit margins. For its part, SARIS noted that, coupled with the high cost of certification, SARIS's limited capacity to fully enforce existing laws also contributes to high volumes of uncertified seed. The ongoing security challenges in parts of the country means that SARIS staff cannot access certain areas. Finally, SARIS staff felt that the recently introduced stricter seed production standards, including a three-stage inspection process and a formalized documentation system, may have made complying with the certification requirements too onerous for some seed producers.

Table 11: Seed production and sale (2024)

Crop	Seed production (MT) - SARIS data	Seed production (MT) -TASAI survey data			Seed sales (MT): TASAI survey data		
		Certified	Uncertified	Total	Certified	Uncertified	Total
Maize	549	584	300	883	486	278	764
Sorghum	337	364	167	531	309	156	465
Sesame	103	103	108	211	82	105	187
Cowpea	314	374	175	549	307	168	475
Total	**1,304**[12]	**1,425**	**750**	**2,173**	**1,184**	**706**	**1,890**

12 According to SARIS, aggregate seed production for the four crops reduced significantly from 2,079 MT in 2023 to 1,304 MT in 2024 primarily due to lower production for maize seed (1,062 MT) and sorghum seed (606 MT). The main reasons for the decline were twofold: both the long and short rainy seasons had less precipitation than in 2024, and the exit of some development projects that supported the seed sector in 2023.

MARKET SHARE OF TOP SEED COMPANIES

Competition among seed companies benefits farmers via lower prices, wider choices, increased innovation, and better customer service. To assess the level of industry market concentration, TASAI uses seed sales data for each crop, as reported by seed companies, to calculate the market share of the four largest firms, also known as the four-firm concentration ratio (CR4), as well as the Herfindahl-Hirschman Index (HHI).[13]

The market shares of the top four seed companies for maize, sorghum, and cowpea seed are 60%, 58%, and 58%, respectively (Table 12). This makes sense as the number of seed companies producing seed of these three crops is similar (13 or 14, depending on the crop). In contrast, sesame seed is produced by seven companies only, leading to the top four seed companies accounting for 96% of market share.

The HHI scores paint a similar picture. The scores for maize, sorghum, and cowpea are low, signaling that these markets have a low concentration. In contrast, the market for sesame seed is moderately concentrated. The CR4 and HHI scores show that no single seed company or group of companies dominates the market for maize, sorghum, and cowpea seed, while the market for sesame seed has less competition.

13 See Table 12 on the opposite page.

Table 12: CR4 and HHI scores (2024)

Crop	Number of seed companies producing seed	CR4 scores	HHI	Level of market concentration
Maize	14	60%	1,311	Low
Sorghum	14	58%	1,249	Low
Sesame	7	96%	2,869	Moderate
Cowpea	13	58%	1,251	Low

The HHI is a measure of market concentration and is calculated by squaring the market share of each firm competing in a market, and then adding up the results. It ranges from close to zero for perfect competition to 10,000 for monopoly. The scale for HHI scores, ranges from extremely low to extremely high levels of market concentration: less than 1,000 is extremely low, 1,000-1,999 is low, 2,000-2,999 is moderate, 3,000-3,999 is high, and greater than 4,000 is extremely high, i.e., monopoly or near monopoly.

MARKET SHARE OF GOVERNMENT PARASTATAL

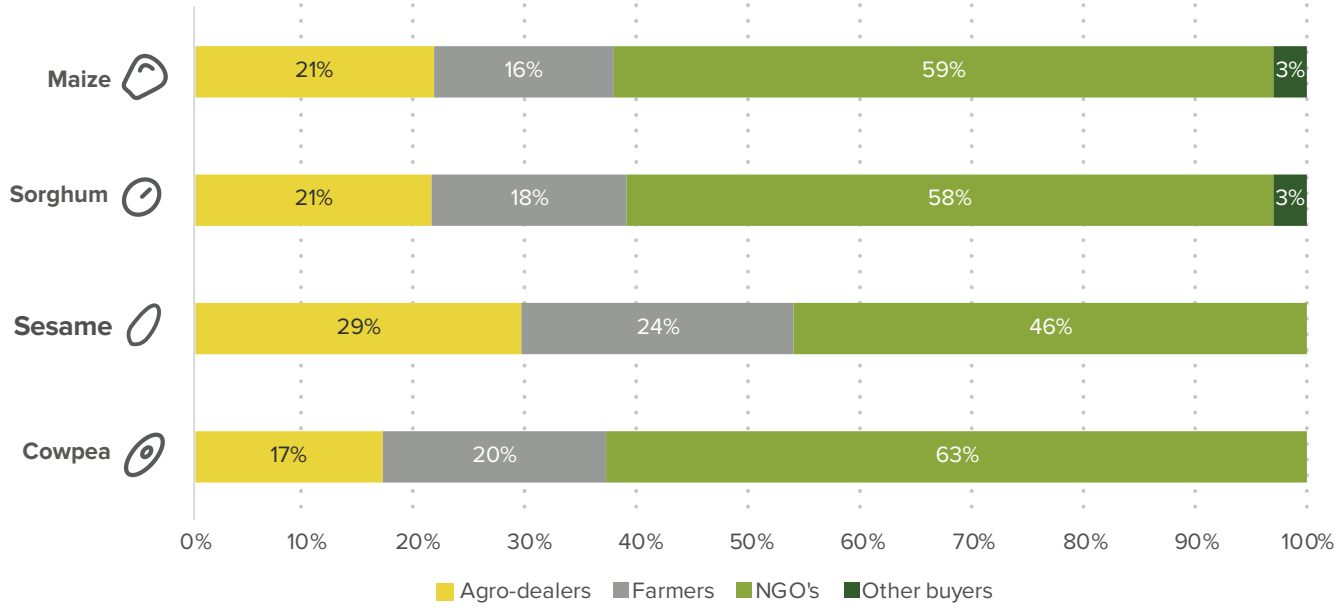
In some countries, public entities are still active players in the marketing and sale of certified seed. Public seed companies can play a critical role in meeting farmer demand for varieties that private seed companies deem less profitable. In addition to seed production, public companies may support other national objectives, such as university training and research. However, state-owned companies may benefit from preferential treatment, less stringent enforcement of regulations, access to competitor information, and indirect production subsidies. Collectively, these privileges can result in unfair competition against purely private seed companies.

In 2024, Somalia had no government parastatal engaged in the production or marketing of seed.

SEED SALES TO DIFFERENT CATEGORIES OF BUYERS

The TASAI study tracked four different categories of seed buyers in Somalia in 2024: agro-dealers, farmers (through direct sales), NGOs, and other buyers. Figure 3 shows the percentage of seed sold by the seed companies to the different buyers. NGOs are the main buyers of seed for maize, sorghum, and cowpea, accounting for between 58% and 63% of aggregate sales by seed companies. The survey recorded 12 NGO buyers: Concern Worldwide, Coopi, Danish Refugee Council, FAO, ICRC, Islamic Relief Somalia, Lifeline Gedo, Norwegian Refugee Council, Save the Children, Serving Together for Social Development, World Food Program, and the ZamZam Foundation. In contrast, sales to NGOs accounted for a lower share (46%) of sesame sales, as sesame is mainly an export crop. Farmers and agro-dealers are the next two largest buyers for all four crops, collectively accounting for between 37% and 53% of aggregate sales. “Other buyers” accounted for a minimal (3%) of buyers for maize and sorghum and did not feature in sesame and cowpea sales.

Figure 3: Seed sales by category of buyers (2024)



SEED IMPORT AND EXPORT PROCESS

Efficient seed import and export processes extend the seed market beyond national borders. While seed companies benefit from an expanded market, farmers can access a wider range of varieties from across the region. The length of the import process in days is measured as the sum of the number of days used to obtain import documentation (import permit, phytosanitary certificates, and an International Orange Certificate[14], if applicable) and the number of days to clear seed at the border. It excludes transportation time.

Although there were no recorded imports or exports of certified seed in 2024,[15] the country does have a process for importers to follow. The first requirement is registration, as only registered seed companies may import seed. The following documentation is required for an import permit:

- varietal description and relevant agronomic data,
- results of the Distinctness, Uniformity, and Stability (DUS) test from the exporting country,
- results of the Value for Cultivation and Use (VCU) tests from the exporting country,
- phytosanitary certificate from the national plant protection organization of the exporting country.

The required information must follow the standards of the Organization for Economic Cooperation and Development (OECD) and International Seed Testing Association (ISTA). Assuming the application is complete and accurate, SARIS issues an import permit. Imported seed must undergo phytosanitary inspection at the border point of entry, including laboratory testing to check that the seed meets ISTA standards for purity and germination and that it is disease-free.

TASAI studies also collect information from importing and exporting companies about the length of the import/export process and their satisfaction with the process overall. Since there were no recorded imports/exports of certified seed in Somalia in 2024, this information is not available.

14 The International Orange Certificate is issued by a laboratory accredited by the ISTA, when both sampling from the seed lot and testing of the sample are carried out by the same laboratory.

15 As mentioned earlier, one company imported seed for research purposes, but such imports are not included under imports.

SEED POLICY AND REGULATIONS

LENGTH AND COST OF THE VARIETY RELEASE PROCESS

Plant variety release is the process during which new varieties undergo various tests for yield, Value for Cultivation and Use (VCU), and Distinctness, Uniformity, and Stability (DUS). Varieties that perform satisfactorily in these tests are approved for release by the authority mandated to oversee the variety release process. A vibrant seed sector has a functional variety release system that is well understood by the relevant actors and is followed diligently. Lengthy and/or costly variety release processes can limit the number of released varieties, which can adversely affect farmer choice. The length of the variety release process is calculated from the date the variety is submitted to the variety release committee to the date when the variety is approved for release. The calculation does not include the time spent developing the variety by the breeder.

SARIS is the institution in charge of testing, releasing, and registering new varieties in Somalia. The agency was created in 2020, but it was not fully functional until the Seed and Plant Varieties Law was passed in December 2024. Prior to that date, the Plant Protection Department in the FMoAI implemented seed certification in an interim capacity. To date, these agencies have developed the relevant processes and guidelines, including those for DUS and VCU testing. However, the Variety Release Committee has not been formally constituted, and its membership and meeting schedule are both *ad hoc*.

The prescribed process of variety release includes the following steps:

- Applicant submits the official SARIS application form for variety registration.
- SARIS coordinates the DUS and VCU trials for two seasons and in 2-3 locations, each.
- SARIS presents the results of the DUS and VCU trials to the Variety Release Committee for evaluation. If the results are satisfactory, the committee recommends the variety for release and registration.
- Varieties that have been approved by the committee are added to the Somali National Seed Variety Catalogue (Federal Republic of Somalia 2025c), maintained by the SARIS.

Since the formal seed sector was revived in 2020 SARIS has released and registered six varieties of the four focus crops. All are included in the variety release catalogue published in February 2025 (Federal Republic of Somalia 2025c). The two seed companies that released varieties for maize, cowpea, and sorghum reported that the average length of the process was 16 months. They rated their satisfaction with the variety release process for the three crops as "good" (60%) and "excellent" (80% and 90%), resulting in an average rating of "good" (77%) (Table 13). When asked for suggestions for improvement, one company highlighted the need for the government to explain the process more clearly to participating companies. Another recommended that the government share the field trial data with the companies.

Table 13: Average length of variety release process

Indicators	2024
Average length of variety release process (in months)	16
Satisfaction with variety release process (out of 100%)	77%

extremely poor | poor | fair | good | excellent

Cost of the variety release process: In well-functioning seed systems, the costs of releasing a variety should not be so high as to disincentivize variety releases altogether. The two seed companies that released varieties reported that they paid $300 and $600 for their respective DUS tests, $600 and $900 for their respective VCU tests, making the total cost to release a variety $900 and $1,500, respectively. The difference in costs was due to the variety and the location of the trials.

STATUS AND IMPLEMENTATION OF NATIONAL SEED POLICY FRAMEWORK

Well-functioning formal seed sectors have effective coordinating institutions that work well together, following rules and procedures stipulated in clearly defined and regularly updated legal instruments. This section provides an overview of the seed policy instruments in Somalia. It highlights their main objectives/purposes and their status of implementation.

The key elements of the seed policy environment in Somalia are mostly in place. Since 2024, the government has passed two significant legislative instruments, the Somali Agricultural Regulatory and Inspection Service (SARIS) law #32, 2024 and the Seed and Plant Varieties Law #35, 2024 (Federal Republic of Somalia 2024b). In addition, the country has a draft National Seed Policy of 2025 (Federal Republic of Somalia 2025a), which sets the policy framework for the sector. The next step is for the FMoAI to develop Technical Regulations to define the detailed implementation arrangements for the laws. Table 14 provides a summary of the existing seed policy instruments in the country.

Table 14: Key seed policy instruments in Somalia

Name of policy instrument	Overview and main objectives	Status/ degree of implementation
Somali Agricultural Regulatory and Inspection Services (SARIS) law # 32, 2024 (Federal Republic of Somalia 2024b) .	The law established the Somali Agricultural Regulatory and Inspection Services (SARIS) as a regulatory agency within the Federal Ministry of Agriculture and Irrigation (FMoAI). SARIS's mandate covers the following seed sector functions: • plant protection and quarantine measures • seed inspection • certification of agricultural inputs (seed, fertilizer, and pest control products) • seed testing • registration of seed actors SARIS is responsible for the enforcement of: • Plant Protection and Quarantine Law (No. 34/2024) • Agrochemicals Control Law (No. 33/2024) • Seed and Plant Varieties Law (No.35/2024)	The SARIS law # 32 was drafted and passed by the Lower House of Parliament in 2024, passed by the Upper House of Parliament in November 2024, and signed into law by the President on 24 December 2024. Since 2020, SARIS' activities had been implemented by the Department of Plant Protection, until March 2025, when the Cabinet approved the appointment of a Director General and Deputy Director General for SARIS. To undertake its mandate, SARIS is expected to enact regulatory standards governing the sale, production, storage, and distribution of seeds and other agricultural inputs and products. SARIS has outlined the registration requirements for seed companies. Companies that meet these requirements may submit an application, and, if successful, receive a certificate of registration.
Seed and Plant Varieties Law # 35, 2024 (Federal Republic of Somalia 2024a)	The law regulates transactions in seeds and outlines provisions for testing, certification, variety indexing, variety evaluation and release, import/export of seed, and the granting of Plant Breeders' Rights. SARIS is the designated implementing entity of the law.	This law was enacted in 2024 by the Lower House of Parliament. It was subsequently passed by the Upper House of Parliament in November 2024 and signed into law by the President on December 24, 2024.

National Seed Policy of 2025 (Federal Republic of Somalia 2025a) (draft)	The primary goal of the policy is to outline a vision for Somalia's seed sector that provides farmers with access to high-quality seeds that meet reliable safety and quality standards. The policy supports the government's goal to transform Somalia's agriculture from a subsistence base to a market orientation. Some of the policy's objectives include enhancing access to high-quality seed, protecting breeders' rights, achieving seed security, and conserving plant genetic resources. The policy also proposes the establishment of the National Seed Council with oversight, advisory, and coordination roles in the sector.	Before the policy is passed, it should be updated to ensure consistency with the recently adopted laws, including the SARIS Act and Seed and Plant Varieties Law.
Guidelines for Seed Sector in Somalia (Federal Republic of Somalia 2021)	The objectives of the guidelines are to (a) monitor, regulate, and ensure the production of quality seeds under the certification program, and (b) popularize the use of certified seed varieties in the country. In addition to the guidelines, the Minister appointed the Department of Plant Protection as the enacting agency for SARIS.	The guidelines were issued, as a ministerial decree, by the Office of the Minister of the FMoAI in 2021. The guidelines were an interim measure to regulate the seed sector until the passing of the Seed and Plant Varieties Law.

QUALITY AND ENFORCEMENT OF SEED REGULATIONS

Seed regulations give structure to the formal seed sector. The TASAI study assesses stakeholder perspectives on various aspects of seed regulations, including whether they are supportive of the growth of the seed sector, the role stakeholders play in their design and implementation, stakeholders' awareness of the laws and regulations, the presence of an enforcement agency, the costs of regulation, and the effectiveness of punitive measures. This section outlines key services/activities outlined in the national seed instruments and provides a brief assessment of the extent to which they are being implemented.

Registration of seed companies: An important step in establishing a formal seed sector, SARIS has been working towards registering all entities that produce (or plan to produce) seed commercially. As of January 2025, SARIS had registered 18 seed companies, an increase from three companies in 2020.

Seed inspection and certification: According to the Guidelines for the Seed Sector in Somalia issued in 2021, certified seeds must undergo a three-stage inspection process, consisting of a field inspection during the seed growth stage, a second inspection during the seed processing and grading stage, and third inspection as part of the seed testing stage. In addition, prior to the three-stage inspection, a company must register its seed fields with SARIS. Companies receive an inspection certificate at each stage. Although the three-stage certification is clearly defined in the Guidelines, as shown in Table 15, across the four focus crops, about half of the registered seed companies reported selling uncertified seed in 2024, which points to a significant gap in implementation.

Table 15: Seed companies selling uncertified seed (2024)

Crop	Number of active seed companies	Number of active companies selling uncertified seed	% of active seed companies selling uncertified seed
Maize	14	6	43%
Sorghum	14	7	50%
Sesame	7	3	43%
Cowpea	13	6	46%

Seed testing: The National Seed Laboratory operated by SARIS was established in 2020, and, as of 2024, had three laboratory staff. As per the Seed Sector Guidelines of 2021, seed must undergo laboratory testing (Federal Republic of Somalia 2021). In 2024, the laboratory tested 71 seed samples, a slight decrease from the 73 samples tested in 2023. To alleviate the challenge of having to transport seed samples over long distances, the FMoAI plans to establish a satellite laboratory in each of the three states where currently registered seed companies are located.

Variety registration and release: The committee has released six varieties since 2021. Although the committee operates on an *ad-hoc* basis for now, the frequency of meetings appears adequate to keep up with the current number of applications.

Implementation of regional seed instruments: Somalia was a founding member of the Preferential Trade Area (PTA) launched in 1981 that transformed into the Common Market for Eastern and Southern Africa (COMESA) in 1994. Due to the ongoing civil war at the time, the country was not part of the transition to COMESA. Somalia applied for membership in 2018, but parliament is yet to ratify this decision. Once Somalia is officially a member of COMESA, it can align its seed policy instruments with the COMESA Harmonized Seed Regulations, making it easier to engage in the regional trade of seeds.

A relevant point is that the draft National Seed Policy (2025) has identified regional economic integration as a central objective, making multiple references to the regional seed certification system of the East African Community (EAC) and the regional seed standards used by COMESA. However, these regional instruments are not mentioned in either the SARIS Law or the Seed and Plant Varieties Law, which means that, as part of the harmonization, these laws will need to be revised to include language on regional integration.

EFFORTS TO ERADICATE COUNTERFEIT SEED

Counterfeit seed (also known as fake seed) threatens the seed sector in two important ways: first, it reduces farmers' confidence in certified seed, especially if farmers unknowingly plant inferior quality grain labeled as certified seed. Second, it threatens the success of efforts to increase the adoption of improved varieties. TASAI tracks the number of cases of counterfeit seeds reported by seed companies and the government in the data collection year. The figure is likely to be an underestimate, as most African countries do not have adequat surveillance mechanisms to track all cases of counterfeit seed. In addition, seed companies are asked to report their level of satisfaction with government efforts to eliminate counterfeit seed.

Guided by the SARIS Law of 2024 and the Seed and Plant Varieties Law of 2024, SARIS is the entity in charge of government efforts to combat counterfeit seeds. Given that SARIS only launched formal operations in early 2025, these efforts are in the early stages. Counterfeit seed is a significant challenge in Somalia in large part because it involves two related but distinct issues: one is that, indeed, there are seed producers, many unregistered, who knowingly market inferior quality seed. At the same time, it is important to recognize that much of what may be viewed as "counterfeit" seed in a formal system is seed of acceptable quality in a less formal system, which is what operated in Somalia for many years due to the civil war.

To assess the extent of the challenge in Somalia, the TASAI study gathered information from seed companies as well as government officials. When asked to list the likely sources of counterfeit seeds, both public and private sector sources named unregulated seed producers, agro-dealers/seed traders, and NGOs, whose large demand for seed may result in them issuing contracts to unregistered entities.

Regardless of the source, counterfeit seed is a significant problem because, at present, unregistered entities vastly outnumber the 18 registered seed companies, and unregistered entities – knowingly or unknowingly - do not follow government guidelines. While SARIS recognizes the presence of uncertified seeds on the market, it lacks sufficient human and financial resources to meet this challenge effectively. In addition, certain parts of the country are difficult for SARIS staff to access due to ongoing security concerns.

While SARIS acknowledges the problem, its estimate of its size appears smaller than what seed companies reported. Namely, according to government data, the number of cases of counterfeit seed in 2024 was three, based on the number of cases discovered by SARIS inspectors, in contrast to the 62 cases reported to TASAI by the surveyed seed companies (Table 16). While this seems like a big difference, the reality may be somewhat different, because seed companies and government appear to define counterfeit seed differently. Seed companies tend to consider any low-quality seed, including even farmer saved seed and grain, as counterfeit, while the government defines counterfeit seed more narrowly as seed sold under false pretenses, for example, through incorrect labeling, adulteration with different/inferior seed, or misrepresentation of the variety. This type of difference in interpretation is not uncommon in the early stages of seed sector development, and it highlights the need for awareness raising among seed sector actors as a way to reduce the incidence of counterfeit seeds. To gauge the industry's opinion about the challenge of counterfeit seeds in their country, TASAI studies track the level of companies' satisfaction with the government's efforts to address the issue. In Somalia, companies rated government's efforts as "fair" at 55%; however, this score needs to be considered in light of the above point about differing definitions.

Table 16: Industry satisfaction with government efforts to address counterfeit seed

Indicators	2024
Number of cases of counterfeit seed (seed companies)	62
Number of cases of counterfeit seed (government)	3
Seed industry satisfaction with government effort to address counterfeit seed (out of 100%)	55%

extremely poor | poor | fair | good | excellent

Government's response to the challenge of counterfeit seed. Since 2020, SARIS has been implementing a range of seed quality assurance activities to reduce the incidence of counterfeit seed in the industry. The following are examples of SARIS-led activities:

- In 2022, four SARIS staff members attended a certification and traceability training offered by the Kenya Plant Health Inspectorate Service (KEPHIS) in Nakuru, Kenya.
- In July 2023, two SARIS staff members (one inspector and one analyst) participated in a training program on the seed inspection and certification process, supported by the African Agricultural Technology Foundation (AATF) at KEPHIS in Nakuru, Kenya.
- In November 2024, two SARIS analysts attended seed health training sessions supported by the FAO, at KEPHIS in Nakuru, Muguga, and the headquarters in Nairobi.
- In Janury 2024, SARIS introduced QR codes on seed testing reports, which leads to an official verification document confirming that the seed has been tested, the quantity certified, the expiration date, and the owner of the certificate.

Given that these efforts are either training programs or recently launched activities, it is too early to register any impact, including that on seed companies' assessment of government efforts to combat the problem.

USE OF GOVERNMENT SUBSIDIES

Seed subsidies are intended as a short or medium-term measure to encourage farmers to adopt improved crop varieties. The design and execution of subsidy programs, in terms of the scale, targeting, distribution arrangements, and payment systems, may contribute to the development of the seed market in positive ways or they may be disruptive to market forces.

In 2024, there were no national government subsidies for the seed industry in Somalia. However, several organizations collaborate with the federal and state governments to provide agricultural inputs and other services to farmers, farming communities, and cooperatives across the country. For example, under the Somali Seed Systems Recovery Initiative (SSSRI)[16], the Seed Systems Group (SSG) has been working with the government to increase seed companies' capacity to produce and process certified seed, to establish agro-dealers and Village-based Advisors, and to promote certified seed by making seed available in small seed packs. The World Bank's Food Systems Resilience Project and the FAO's SEPAREF project[17], funded by the African Development Bank (AfDB) and implemented in collaboration with the FMoIA, both supply seed to farmers. Although all these projects are active in the seed sector, they do not meet the definition of a subsidy program and thus were not surveyed in the study.

16 https://sonna.so/en/somali-government-invests-usd2-million-to-revitalizing-national-seed-sector/#:~:text="This%20Seed%20Systems%20Recovery%20Initiative,capacity%20for%20years%20to%20come. Accessed 17 April 2025.

17 https://www.fao.org/environmental-social-safeguards/project-detail/multinational-strengthening-emergency-preparedness-and-response-to-food-crisis-(separef)-project-in-somalia/en Accessed 17 April 2025.

INSTITUTIONAL SUPPORT

QUALITY OF THE NATIONAL SEED TRADE ASSOCIATION

Well-functioning national seed trade associations play a key role in representing the interests of the industry and engaging with the government. The membership of the national seed associations includes seed companies, seed growers, seed cooperatives, seed associations, individual seed producers, and at times agro-dealers.

In February 2025, 13 registered seed companies set out to establish the nonprofit Somalia Seed Traders Association (SOSTA). The founding members have developed a leadership structure and a set of rules for the association. Membership is open to seed companies that are engaged in the seed business, are registered by SARIS, have an office and seed processing equipment, and comply with the association's rules. However, as of April 2025, SOSTA's registration was yet to be approved because the FMoAI had asked the association to broaden its membership criteria to include additional seed companies.

According to the current members of the association, the priority issues for Somalia's seed industry include:

1. Strengthening local seed companies through partnerships with government as well as regional and international firms to foster research and knowledge transfer, allowing Somali companies to adapt and commercialize existing and relevant seed technologies.
2. Improving the seed distribution network across the country, especially in the remote regions.
3. Increasing farmer awareness about the benefits of quality seed of improved varieties through training programs and farmer awareness campaigns; and
4. Exploiting opportunities for financing or subsidies to allow seed companies to scale their operations.

ADEQUACY OF SEED INSPECTORS

Seed inspection services ensure that certified commercial seed meets regulatory quality standards. Providing adequate inspection services requires sufficient numbers of well-resourced inspectors. TASAI studies track the number of inspectors and other information pertinent to their effectiveness, such as the availability of resources and the use of (new) digital tools.

In Somalia, seed inspection services are the mandate of SARIS. As of February 2025, SARIS employed nine seed inspectors, all men, who were distributed across seven districts in the three states of South West, Jubaland, and Hirshabelle where the registered seed companies are

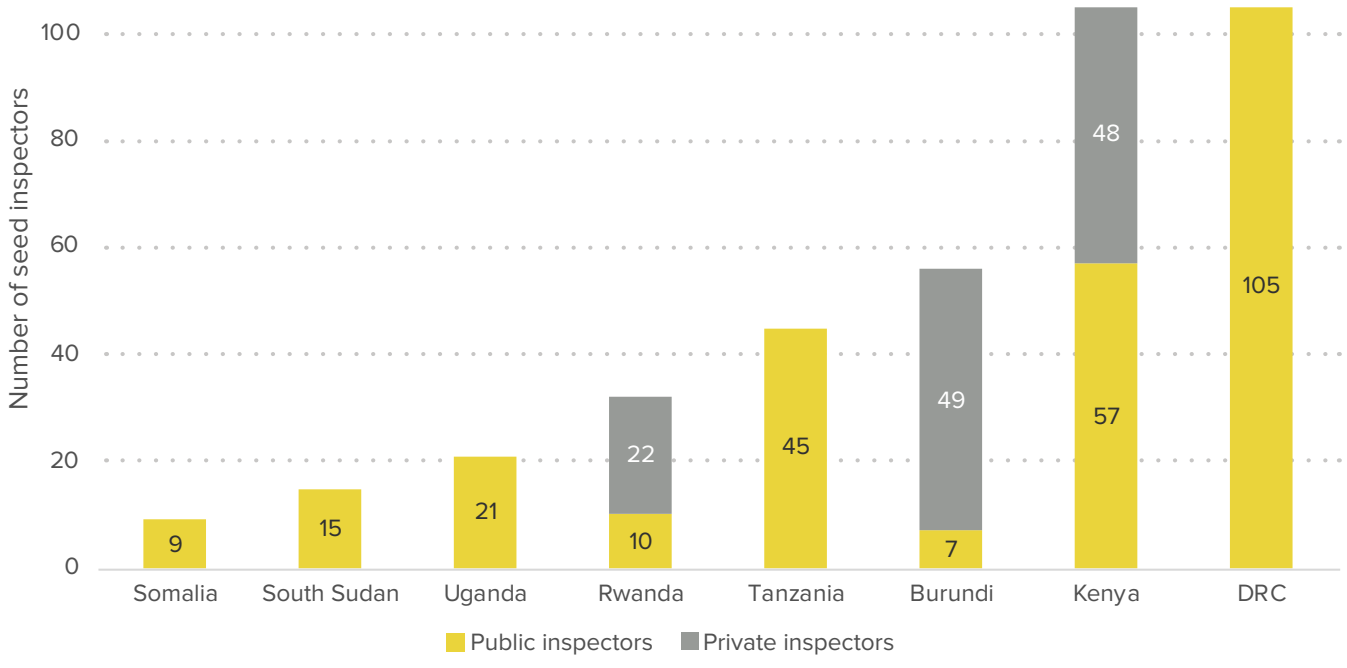
based (Table 17). As mentioned in the section on counterfeit seed, the seed inspectors have been trained in seed traceability and seed certification by KEPHIS. They routinely visit the seed companies to conduct inspections at the production, processing, packaging, and labeling stages. The seed companies rated the quality of public seed inspectors "good" at 61%. The country had no private seed inspectors at the time of data collection.

Table 17: Number and rating of the adequacy of public inspectors

Indicators	2024
Number of public seed inspectors	9
Seed industry satisfaction with seed inspectors (out of 100%)	61%
Interpretation of satisfaction	Good

Figure 4 shows the number of seed inspectors in eight EAC member states, with data from studies conducted between 2022 and 2025. The number of seed inspectors varies widely, from nine in Somalia to 105 in Kenya (AUC, TASAI, and AGRA 2024). The adequacy of the number of public inspectors is contingent upon various factors, such as the country's size and whether private inspectors are also authorized (as is the case in Burundi, Kenya, and Rwanda). However, it is evident that the current nine inspectors are insufficient to meet the requirements of a country Somalia's size. Consequently, it increasing the number of inspectors should be a priority for the government.

Figure 4: Number of seed inspectors in eight EAC member states (2022)



SERVICE TO SMALLHOLDER FARMERS

ADEQUACY OF EXTENSION SERVICES

Well-functioning agricultural extension services are critical to the successful adoption of seed of improved varieties by smallholder farmers. TASAI tracks the average number of agricultural households served by one extension officer. The lower this ratio, the better access farmers have to expert information and advice on how to access and use improved seeds and other relevant agricultural technologies. This indicator tracks the number of extension officers by sector (public and private) and gender; it is not crop-specific.

Agricultural extension in Somalia is under the mandate of the Department of Research and Extension in the FMoAI. The country's extension services, which collapsed during the war, have seen significant improvements in the last few years. These efforts include the construction of 18 extension facilities, due to be completed in the next five years as part of the national transformation plan (2025-2029), the planned drafing and publication of training manuals, and the launch of e-Fidiye, a mobile extension platform (Federal Republic of Somalia. 2025b), which, as of April 2025, was under testing.

In 2024, the government had 30 agricultural extension officers, all male (Table 18). The extension officers were spread across all six states. In addition, the 14 seed companies surveyed reported employing a total of 62 private extension officers in 2025: 53 men and 9 women. Other entities, such as universities and NGOs also have extension officers; however, the TASAI study did not include these entities and therefore cannot report their numbers.

The presence of alternative extension services notwithstanding, the government acknowledges that the number of public extension officers is low, and increasing the number of officers is one of the ministry's strategic priorities (Federal Republic of Somalia 2025d). In addition, the government extension services plan to build links with research institutions to promote knowledge transfer from the former to farmers and agricultural businesses.

Harnessing technology is also part of the government's efforts. The aforementioned e-Fidiye application will integrate various functionalities into a single platform, making it easier to share relevant information with seed sector stakeholders so they can make better decisions. Its features will include user registration and authentication, both linked to government databases, an agricultural marketplace, where input suppliers can market their products, real-time weather updates, market trend analysis, government advisory alerts, and a host of educational content, including training videos and manuals. The goal is to make e-Fidiye a useful source of information and a go-to communication channel for a variety of stakeholders, including farmers, agro-dealers, seed companies, extension agents, and Village-based Advisors.

While the above efforts are under way, they have yet to make a visible impact on the ground, at least this is what the opinion of seed companies surveyed in the TASAI study reflects. Respondents rated the adequacy of government extension services "extremely poor," at 22%. While this low rating communicates an urgent need for improvement, it can also serve as a useful baseline against which to measure the impact of new services like e-Fidiye.

Table 18: Number and adequacy of agricultural extension services

Indicators		2024
Number of public extension officers employed by the government	Male	30
	Female	0
	Total	30
Number of private extension officers employed by seed companies	Male	53
	Female	9
	Total	62
Seed industry satisfaction with public extension officers (out of 100%)		22%

extremely poor | poor | fair | good | excellent

CONCENTRATION OF THE AGRO-DEALER NETWORK

Agro-dealers play a key role in expanding the reach of Africa's seed distribution systems connecting seed companies to individual farmers, especially in hard-to-reach rural areas. They are often the main point of sale for certified seed. A higher concentration of agro-dealers means that smallholder farmers have greater access to improved seed. TASAI tracks the number of agro-dealers and, where possible, disaggregates registered from non-registered agro-dealers. This indicator is not crop-specific.

The registration of agro-dealers is the mandate of SARIS. At the time of data collection, the official registration process was not yet in place, so the agro-dealers operating across the country were unregistered. A key step in formalizing the registration process is the drafting of the seed Regulations, using the relevant details in Article 41 of the Seed and Plant Varieties Law. In a 2023 study, the FAO surveyed 279 agro-dealers across 15 districts (FAO 2024). According to the study, 76% of these agro-dealers sourced their seed from seed companies. In addition, they relied on other distributors, including wholesalers, farmers, and cooperatives, as sources of seed. Another useful reference for agro-dealer activity is the aforementioned Somali Seed Systems Resilience Initiative (SSSRI), which, in 2024 trained 125 agro-dealers and 200 Village-based Advisors in the states of Hirshabelle, South West, and Jubaland.

Thirteen out of 14 seed companies surveyed reported that they sold seed through agro-dealers in 2024, which corroborates the above sources of information on agro-dealers. The number of agro-dealers individual companies worked with ranged from five to 70, with two-thirds of the companies reporting working with fewer than 20 agro-dealers. Some of the companies mentioned that they saw the benefits of working with agro-dealers as an outlet for their seed, which bodes well for efforts to expand and formalize the agro-dealer network. Overall, the companies surveyed are reasonably satisfied with the adequacy of the agro-dealer network in Somalia, rating it "good" at 64% (Table 19).

Table 19: Number and satisfaction of agro-dealers network

Indicator	2024
Estimated number of agro-dealers (data from FAO survey in 2023)	279
Average number of agro-dealers per seed company	19
Seed industry satisfaction with agro-dealer network (out of 100%)	64%
Interpretation of satisfaction	Good

AVAILABILITY OF SEED IN SMALL PACKAGES

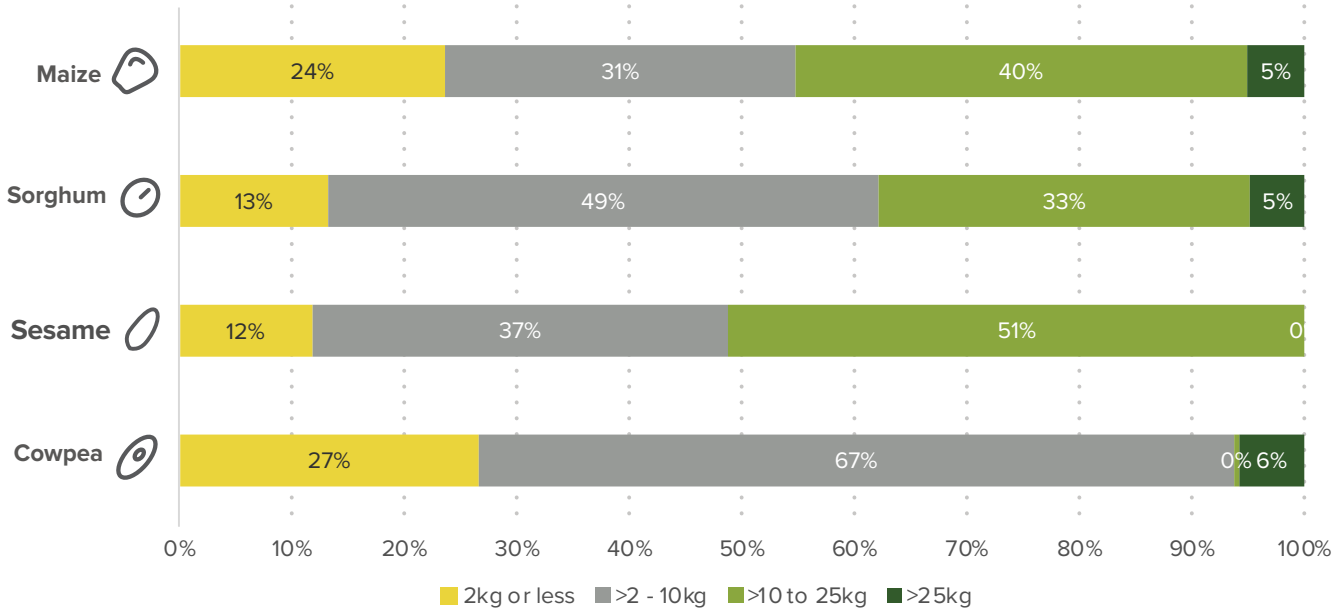
Because most farmers in Sub-Saharan Africa operate on a small scale, making seed available in small, more affordable packages is a good way to increase adoption rates. TASAI tracks the percentage of seed sold in different package sizes, i.e., 2 kg and below, 2-10 kg, 10-25 kg, and above 25 kg.

In 2024, all 14 seed companies surveyed reported packaging their seed.[18] Figure 5 shows the percentage of seed sold in different package sizes for the four crops. The package sizes are often determined by the order (or client). For example, most NGOs distribute seed to their beneficiaries who work on small land parcels of 0.5-1 ha, which will require a package size 10-20 kg for maize seed and 5-10 kg for sorghum and cowpea seed. The large combined share of package sizes greater than 2 kg but no more than 25 kg in the figure below illustrates the prevalence of NGO buyers.

In contrast, for variety adaptation and demonstration purposes, seed package sizes are limited to 2 kg or less. For instance, in the Somali Seed Systems Resilience Initiative (SSRI) farmers received small packs of 50g for Siman Hybrid maize, Somtux OPV maize, sorghum, and cowpea. In another program, DT Global provided farmers with 2 kg packages of maize, sorghum, and cowpea seeds.

18 It is important to keep in mind that, in Somalia, packaged seed is not necessarily certified. Because 44% seed sales reported were uncertified, it follows that a significant share of packaged seed is likely uncertified.

Figure 5: Percentage of seed sold in different package sizes (2024)



AVERAGE SEED AND GRAIN PRICES

The seed and grain prices at the time of planting are a good measure of the affordability of improved seed. These data points are important as many smallholder farmers end up choosing between purchasing seed from the formal sector or planting grain. The greater the price difference between the two, the less likely that resource-poor farmers will purchase certified seed. This indicator tracks the retail price of seed (at the agro-dealer level) vis-à-vis the market price of grain at the time of planting.

Table 20 compares the average seed and grain prices for the four focus crops in 2024. The data on seed prices were sourced from the surveyed seed companies, while the grain prices were shared by the Department of Crop Production in the FMoAI. Seed and grain prices vary by region, distance to urban centers (especially Mogadishu). Prices are also influenced by production costs, market competition and demand patterns (WFP 2025). The price of hybrid maize recorded was USD 3 per kg, double the price of OPV seed (USD 1.47). In contrast, the price of grain was USD 0.71, that is, less than a fourth and a half of the price of hybrid and OPV seeds, respectively. Similarly, the price of sorghum seed was double the price of grain, while the price of cowpea seed cost 80% more than grain. Sesame was an exception, where the price of grain was only 15% below the cost of seed. The higher cost of seed over grain is to be expected, as seed is supposed to produce higher yields and better results overall. However, a 2025 study published by the World Food Programme found that many farmers still found the prices of certified seed to be high, and thus a barrier to adoption.

Table 20: Average seed and grain prices (2024)

Crop	Prices in USD/kg	
	Average seed price	Average grain price
Maize (hybrid)	3.00	0.71
Maize (OPV)	1.47	0.71
Sorghum	1.34	0.67
Sesame	1.77	1.55
Cowpea	2.25	1.24

CONCLUSION

Somalia's government has been making concerted efforts to develop the formal seed sector after decades of stagnation due to conflict. The TASAI study provides an important read of the early stage of the sector's development that the government can use as a baseline against which to track their progress in the coming years.

The formal seed system in Somalia is in the early stage of development (Ariga et al. 2019). Currently, the system is witnessing the proliferation of seed companies, seed cooperatives and out-growers. An agro-dealer network is also emerging and providing smallholder farmers access to quality improved seed.

Somalia's national agricultural research programs are also being revived. Following the establishment of SARIS in 2019, recent efforts by the FMoAI and its partners have successfully launched adaptation trials and genetic resource recovery. However, the country lacks active public breeding programs and registered breeders. There are no functioning national breeding programs, and variety development primarily relies on imported germplasm and old local varieties. The available varieties possess climate-smart features, lacking use-related or industry-demanded features. While some universities and international partners are undertaking variety purification and adaptation, sustained investments in breeder training, infrastructure, and policy support are essential to revive local breeding capacity.

Somalia's seed industry is experiencing growth, with 18 active companies producing certified seed for major crops. The markets for maize, sorghum, and cowpea seed are competitive, while the sesame seed market is moderately concentrated. Most companies rely on their own basic seed, and uncertified seed production remains high due to the cost of certified seed, logistical challenges, and regulatory obstacles. There is no government parastatal distorting the market. While NGO procurement currently drives demand, expanding sales through agro-dealers and direct farmer engagement is crucial for sustainable growth.

Under the seed policy and regulations, Somalia has made significant progress with the enactment of the SARIS Law and Seed and Plant Varieties Law, both in 2024. SARIS now oversees seed regulation, seed inspection and certification, although staffing and operational coverage remain limited. Regulatory implementation is incomplete, as many seed companies are unregistered and/or sell uncertified seed, agro-dealer registration is pending, and SARIS lacks comprehensive nationwide reach due to capacity and security constraints. Despite certain improvements, e.g., the establishment of a seed laboratory and inspector training, the absence of finalized technical regulations and harmonization with regional standards impedes full system functionality. Counterfeit seed remains a prevalent issue, exacerbated by inadequate enforcement and regulatory gaps.

Institutional support shows a mixed picture of progress. The national seed association (SOSTA) was established in 2025, although its full implementation is pending. As of 2025, Somalia has nine seed inspectors to cover the entire country, a number that is inadequate to meet current demands, let alone those of a growing industry.

Under service to smallholder farmers, the TASAI survey finds that extension services are inadequate, with only 30 public extension officers serving the entire country. Consequently, seed companies and NGOs provide most of the support to farmers. While some digital innovations, such as the e-Fidiye platform, are about to be introduced, institutional support systems will require more coordination, funding, and outreach to effectively serve the seed value chain. Smallholder farmers still rely heavily on informal seed sources due to high prices, limited access, and low awareness. While the availability of small seed packages is growing and agro-dealer networks are emerging, there is a large gap in formal retail infrastructure. Broadening access, promoting awareness, and improving price competitiveness are critical to strengthening use of improved seed by smallholder farmers.

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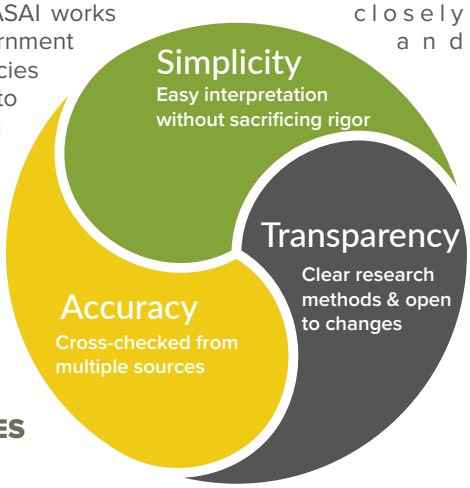
ABOUT TASAI

PILLARS OF COMPETITIVE SEED SECTORS

The African Seed Access Index (TASAI) is a seed industry research initiative that is coordinated by the nonprofit organization TASAI Inc. TASAI's goal is to encourage African governments and other seed industry players to create and maintain enabling environments that will accelerate the development of a vibrant private sector-led seed system serving smallholder farmers. It is this enabling environment that TASAI seeks to measure, track, and compare across African countries. The intended outcome of the index is improved access to locally adapted, affordable, and high-quality seed of improved varieties by smallholder farmers in Sub-Saharan Africa.

To assess the status of the seed industry value chain, TASAI tracks indicators in the following five categories: Research and Development, Industry Competitiveness, Policy and Regulations, Institutional Support and Service to Smallholder Farmers. By the end of 2025, 24 TASAI studies will have been completed in 25 African countries: Burkina Faso, Burundi, Cameroon, Cote d'Ivoire, the Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe. In each country, TASAI works closely and with local seed industry actors, government and international development agencies to share the TASAI findings and to identify the next steps for creating a vibrant national seed sector. TASAI's approach is guided by the principles of Simplicity, Transparency, and Accuracy.



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