

Cameroon Country Report 2024

The African Seed Access Index

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TASAI
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LIST OF ACRONYMS

ACOSEC	<i>Association du Commerce des Semences du Cameroun/ Association of Seed Companies in Cameroon</i>	MIDENO	<i>Mission de développement de la région du Nord-Ouest/ North-West Development Authority</i>
CEMAC	<i>Communauté économique et monétaire de l'Afrique centrale/ Economic and Monetary Community of Central Africa</i>	MINEPAT	<i>Ministère de l'Economie, de la Planification et de l'Aménagement du Territoire/ Ministry of Economy, Planning, and Regional Development</i>
CONSOV	<i>Conseil National des Semences et Obtentions Végétales/ National Council for Seeds and Plant Varieties</i>	MINADER	<i>Ministère de l'Agriculture et du Développement Rural/ Ministry of Agriculture and Rural Development</i>
CHEV	<i>Commission d'homologation des espèces et variétés/ Species and Varieties Approval Commission</i>	NDS	National Development Strategy
CMS	Cameroon maize series	OAPI	<i>l'Organisation Africaine de la Propriété Intellectuelle/ African Intellectual Property Organization</i>
DDA	<i>Direction du Développement de l'Agriculture/ Directorate of Agriculture Development</i>	PARPAC	<i>Programme d'appui au Renforcement de la Production Agricole au Cameroun/ Program to Strengthen Agricultural Production in Cameroon</i>
DRCQ	<i>Direction de la Réglementation, du Contrôle de Qualité des Intrants et Produits Agricoles/ Directorate for Regulation and Quality Control of Agricultural Inputs and Products</i>	SEMYR	<i>Société d'Expansion et de Modernisation de la Riziculture de Yagoua/ Yagoua Rice Expansion and Modernization Company</i>
DUS	Distinctness, Uniformity, and Stability	SOWEDA	South-West Development Authority
ECCAS	Economic Commission for Central African States	TAAT	Technologies for African Agricultural Transformation
IITA	International Institute for Tropical Agriculture	TASAI	The African Seed Access Index
IRAD	<i>Institut de Recherche Agricole pour le Développement/ Institute for Agricultural Research for Development</i>	UNVDA	Upper Noun Valley Development Authority
MEADEN	<i>Mission d'Etudes pour l'Aménagement de la Région du Nord/ Mission for the Development of the Northern Region</i>	VCU	Value for Cultivation and Use



INTRODUCTION

Improving food and nutritional security across Africa hinges on the adoption of productivity-enhancing technologies, including mechanization, irrigation, fertilizers, and high quality seeds. A competitive seed sector is critical for field crops, as it ensures that smallholder farmers have timely access to high-quality seeds of improved and context-appropriate varieties at affordable prices. These improved seeds provide transformative benefits, such as higher yields, resistance to pests and diseases, adaptability to climate change, reduced post-harvest losses, and enhanced nutritional value.

The African Seed Access Index (TASAI) conducts national-level seed industry assessments to guide efforts by public policymakers and development agencies to foster enabling environments. These efforts aim to accelerate the development of competitive formal seed systems that serve smallholder farmers and promote agricultural transformation in Africa.

This report presents the key findings of Cameroon's inaugural seed industry assessment, conducted in 2024-2025. TASAI studies collect information on four grain and legume crops, known as "focus crops," that are essential to the country's food and nutritional security and/or which the government has designated as priority crops. In Cameroon, the four crops are maize, rice, sorghum, and soya bean. According to the latest data in 2022 (FAOSTAT, 2024), they accounted for 78% of the area harvested for cereals and legumes. Of this, maize and sorghum accounted for 45% and 26% of the harvested area, respectively, while rice and soya bean together accounted for 7%. Although rice and soya bean are currently grown on a relatively small area, they were included in the study because Cameroon's National Development Strategy 2030 (NDS 2030) has prioritized them as a staple food and raw material for agro-industry (*Ministère de l'Économie, de la Planification et de l'Aménagement du Territoire (MINEPAT) 2020*). Additionally, maize and rice are identified as strategic crops for both domestic consumption and export.

Under the NDS 2030, the government seeks to boost agricultural productivity for the four crops, in line with its broader goals of increasing food security, economic diversification and fostering import substitution. By focusing on the four crops, this study provides actionable insights and recommendations to strengthen Cameroon's formal seed system, in turn enhancing farmers' access to seed of improved varieties.

OVERVIEW OF CAMEROON'S FORMAL SEED INDUSTRY

Cameroon's seed industry, like that of many African nations, operates through two primary systems: the informal and formal seed systems. While TASAI acknowledges the significance of pluralistic seed systems, this report focuses on the formal system as it is challenging to measure and obtain reliable data from the informal sector.

In the **informal system**, 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 quality¹. At present, most smallholder farmers in Cameroon operate in the informal sector and rely on farmer-saved seed.

1 See seed system definitions at <https://www.agrilinks.org/post/seed-system-definitions>





The **formal seed system** is a structured and regulated value chain to produce seed of improved varieties. This process involves multiple actors and institutions, whose responsibilities range from breeding varieties to the multiplication, processing, and distribution of certified seeds. Government regulates the different stages of improved seed production based on approved regulations and standards. In the formal system, seed is sold through limited distribution channels, such as registered seed companies, seed producers, and agro-dealers.

According to the SSPI 2023 Status Report for Africa, certified seed production meets 71% of national seed requirement for sorghum, 25% for maize, and 13% for rice (TASAI, 2024). The likely reason for the high utilization of certified sorghum seed is that it is relatively more difficult to conserve than seed of other crops like maize and rice.

Law N° 2001/014 of 23rd July 2001 (*Republique du Cameroun* 2001) guides Cameroon’s formal seed sector and its operations. The law established the National Council for Seeds and Plant Varieties (*Conseil National des Semences et Obtentions Végétales* (CONSOV), under the authority of the Ministry of Agriculture and Rural Development (*Ministère de l’Agriculture et du Développement Rural*) (MINADER) to advise on all matters relating to the production, marketing, quality control and certification of seeds and new plant varieties.

Table 1 lists the key players and the roles they play in Cameroon’s seed sector. The Agricultural Research Institute for Development (*Institut de Recherche Agricole pour le Développement*) (IRAD), has the mandate to produce basic seed. IRAD works closely with other international research centers, including the International Institute for Tropical Agriculture (IITA), the International Maize and Wheat Improvement Centre (CIMMYT), and AfricaRice, among others, to develop new varieties and to conduct adaptive trials of varieties developed in other countries. Variety release and registration are overseen by the Species and Variety Release Commission/ (*Commission d’homologation des espèces et variétés*) (CHEV). MINADER’s Directorate for Regulation and Quality Control of Agricultural Inputs and Products (*Direction de la Réglementation, du Contrôle de Qualité des Intrants et Produits Agricole*) (DRCQ) registers and regulates entities producing certified seed. Seed production and processing is undertaken by a variety of public and private sector entities. Representing the private sector’s interests is the Association of Seed Companies in Cameroon (ACOSEC). ACOSEC is a member of the African Seed Trade Association (AFSTA).

Table 1: Role of key players in Cameroon’s formal seed sector

ROLE	KEY PLAYERS
Research and breeding	Agricultural Research Institute for Development (<i>Institut de Recherche Agricole pour le Développement</i>) (IRAD), International Institute for Tropical Agriculture (IITA), the International Maize and Wheat Improvement Centre (CIMMYT) and the International Rice Research Institute (IRRI).
Variety release and regulation	Ministry of Agriculture and Rural Development (<i>Ministère de l’Agriculture et du Développement Rural</i>) (MINADER), <i>Conseil National des Semences et Obtentions Végétales</i> (CONSOV), Species and Variety Release Commission (<i>Commission d’homologation des espèces et variétés</i>) (CHEV), Directorate for Regulation and Quality Control of Agricultural Inputs and Products (<i>Direction de la Réglementation, du Contrôle de Qualité des Intrants et Produits Agricole</i>) (DRCQ)
Seed production and processing	The registered seed producers and processors include public and private companies, government project, cooperatives, and individual seed producers. The state-owned seed companies and projects include Yagoua Rice Farming Expansion and Modernization Company (<i>Société d’Expansion et de Modernisation de la Riziculture de Yagoua</i> (SEMRY), South-West Development Authority (SOWEDA), and Upper Noun Valley Development Authority (UNVDA), Study Mission for the Development of the Northern Region (<i>Mission d’Etudes pour l’Aménagement de la Région du Nord</i> (MEADEN), Northwest Region Development Mission (<i>Mission de développement de la région du Nord-Ouest</i>) (MIDENO) and the Project for Irrigated and Rainfed Rice Development by Reinforcing the Value Chain (PRODERIP-RCV).
Education, training, and extension	International and national research institutes (IRAD, IITA), MINADER, public companies and project (SEMRY, MIDENO, SOWEDA, UNVDA)
Distribution and sales	Registered seed producers; state seed companies; seed importers, agro-dealers

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** (Table 2). Most of the performance data reported in TASAI studies comes from the year preceding the one during which the study is conducted ("the study year"), because, for most indicators, that is the most recent data available. Accordingly, the data reported in this Country Report pertains primarily to 2023, but whenever 2024 or 2025 data are available, they are included in the report.

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 data includes both quantitative and qualitative measures; the latter comprise satisfaction ratings by industry stakeholders on a 0-100 scale, with the following brackets: 0-19.99% **extremely poor**, 20-39.99% **poor**, 40-59.99% **fair**, 60-79.99% **good**, and 80-100% **excellent**.



Since TASAI has conducted similar studies in 23 other African countries, this report also includes relevant cross-country comparisons. Additional comparisons are available through the online TASAI dashboard at <https://tasai.org/dashboard>.

Using TASAI survey tools, data collection focused on three key groups of seed industry players: seed producers, plant breeders, and government entities involved in seed sector development. Of these, seed producers were the study's primary source of information.

In Cameroon, seed producers encompass a variety of business entities, including private and public companies, producer groups, and individual producers. The TASAI study sample was based on the DRCQ's list of registered seed producers, which, in 2023, contained 203 entities. Surveying all 203 producers was beyond the scope of the TASAI study due to limitations on funding and time; instead, the goal of the study was to cover as much of the seed production as possible, starting with the largest producers. The size of a producer was based on the planned production volumes the producer declared to government ahead of the planting season. While the data were estimates, they were the best available information. Based on the range of declared production volumes, the following minimum cutoff points were established for inclusion in the sample: 10 MT for sorghum, 1 MT for soya bean, 20 MT for maize, and 12 MT for rice.

Using this sampling strategy, the study targeted 67 respondents, including 4 importers. The latter were included because, although they did not produce seed, their sales increased the volume of seed available on the market. Of the targeted respondents, the survey reached 60 (55 producers and 5 importers). Of note is that the surveyed entities included three public entities and one importer that were not on the government's list of registered entities. Table 3 provides a breakdown of registered and surveyed seed producers and importers in 2023. Collectively, the entities surveyed accounted for 64% of aggregate maize seed production, 80% of aggregate rice seed production, 80% of aggregate sorghum seed production, and 90% of aggregate soya bean seed production in 2023.

In addition to the seed producers, the study surveyed the IRAD, Cameroon's main public entity responsible for research and development of new varieties, as well as the DRCQ, the Directorate of Agricultural Development (DDA), and Directorate of Professional Agricultural Organizations and Support for Agricultural Holdings/ *Direction des Organisations Professionnelles Agricoles (DOPA)* in MINADER, and the Association of Seed Companies in Cameroon (ACOSEC).

Regardless of the type of entity, by law seed producers must register before they may engage in seed production. This registration is in addition to the business registration and is administered by the DRCQ. Producers register in the region² where they are located, following these steps:

- declare their seed activity to MINADER, including the crop(s) they plan to grow and the land area to be planted,
- pay a fee proportionate to the area indicated in the declaration,
- pass the inspection of seed premises by DRCQ seed inspectors - known as seed controllers – and
- obtain a seed lot conformity attestation.

Upon meeting these requirements, the producer receives a seed activity certificate at the beginning of the cropping season, which is valid for three years. However, as mentioned above, registrations are not tracked – or enforced – consistently, as evidenced by the presence of producers not on the government's list.

2 Cameroon is divided into 10 regions: Adamawa, Centre, East, Extreme north, Littoral, North, North-west, South, South-west, and West.



Table 3: Breakdown of registered and surveyed seed producers and importers (2023)

Type of producer	Number in DRCQ's list	Number included in sample	Number surveyed
Producer groups*	113	42	42
Individual producers	63	5	5
Private companies**	11	12	2
Public entities***	4	4	6
Other****	12	0	0
Total	203	63	55
Importers			
Importers	4	4	5
Total producers and importers	207	67	60

*Producer groups included cooperatives/ *cooperative* and common interest groups / *groupe d'intérêt commun* (GICs), business entities through which a group of producers engage in the production and sale of seed together. The surveyed entities included 24 cooperatives and 18 GICs.

**Private companies included entities registered under the labels of *établissement*, *société*, or *association*.

*** Public companies (in French as *société semencière publique*) - entities owned by the government and involved in the production and sale of certified seed. They included agencies, parastatals, and projects.

**** The government's list included 12 entites labeled 'Other,' 1 of which was a government research institution, while the rest were unspecified.



RESEARCH AND DEVELOPMENT

NUMBER OF ACTIVE BREEDERS

A functional seed system requires vibrant public and private breeding programs to develop improved crop varieties that address farmer and consumer needs. The number of active public breeders is an indicator of the level of investment in research and development³. This study tracked the number of breeders working on the four focus crops.

In 2024, Cameroon had one active maize breeder and no breeders for rice, sorghum, or soya bean. This was a drop from the previous total of three breeders for these crops, as one breeder had retired, and another had left to study abroad. Currently, no local universities offer graduate-level training in plant breeding. The maize breeder is supported by three doctoral students in plant biotechnology and agroecology, who have attended short courses offered by the International Institute for Tropical Agriculture (IITA) and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). The work of the breeder and the doctoral students is complemented by 11 support staff, who have also received training from breeders and international research institutes, such as IITA and CIMMYT (Table 4). Although the support staff do not have the requisite skills to develop new varieties, they are able to work on adaptive trials for varieties developed elsewhere, maintain existing varieties, and produce pre-basic seed and basic seed. Though these doctoral students and support staff are helpful, they cannot replace the need for fully trained plant breeders in the country.

3 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

While local plant breeding efforts are constrained by the lack of trained breeders, IRAD, IITA, and AfricaRice have been conducting adaptive trials with the goal of releasing new varieties. In 2024, IRAD and IITA were testing hybrid maize varieties slated for release in a few years. In addition, IRAD received 20 rice varieties from AfricaRice, all of which were placed into adaptive trials in 2024.





Besides the lack of breeders, the development of new varieties is limited by a lack of adequate facilities for variety development, irrigation for seed production, cold storage for the long-term conservation of varieties, and laboratory equipment and materials. In addition, the DRCQ noted the need for a policy framework to guide breeders’ efforts to generate revenue (royalties) from the commercialization of their intellectual property.

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.

At present information on varieties released in Cameroon may be found in one of three variety lists: List A, List B, and List C (*Republique du Cameroun 2005*). The Official Catalogue of Species and Varieties (*Catalogue Officiel des Espèces et Variétés Végétales du Cameroun*) /describes the three lists and their functions as follows:

Table 4: Number of active breeders and support staff in Cameroon (2024)

Crop	Number of active breeders in 2024			Number of support staff in 2024
	Public	Private	Total	
 Maize	1	0	1	3
 Rice	0	0	0	3
 Sorghum	0	0	0	3
 Soya bean	0	0	0	2
Total	1	0	1	11

- List A includes varieties that have passed the *Distinctness, Uniformity, and Stability* (DUS) and *Value for Cultivation and Use* (VCU)⁴ tests in Cameroon or in one or more other countries with the similar agro-ecological conditions and DUS test guidelines as in Cameroon. These varieties are accepted for certification as basic or certified seed;
- List B is a waiting list of varieties that have passed DUS tests in at least one other country with DUS test guidelines similar to those in Cameroon. Varieties on this list may be accepted for certification while awaiting the results of the VCU test.
- List C includes varieties and species known and widely used before the Decree 2005/3091/PM came into force on August 29, 2005, setting the requirements for seed production, quality control, and marketing. Seed of these varieties may be marketed as standard seed⁵ and is

subject to DUS tests. Once these varieties have passed the DUS tests, they are transferred to List A. VCU test results are assumed in the absence of evidence to the contrary (*Ministère de l'Agriculture et du Développement Rural (MINADER) 2018*).





Lists B and C should be seen as temporary lists that varieties should stay on for a limited time, and transition to List A once they have undergone the requisite DUS and VCU tests.

Table 5 shows that, for the four crops, a total of 85 varieties were added to the catalogue in 2018, the year the catalogue was last updated. Of the 85, 31 have no known release years, because they were commercialized prior to the publication of the catalogue, and information about their release could not be traced. They include varieties developed in Cameroon and in other countries. Twenty-five had been released prior to 2000, and 29 were released during the 2000-2018 period. Most of the varieties in the catalogue are owned and maintained by IITA, IRAD, and Africa Rice (for the rice varieties); only six varieties – all maize – are owned by private companies. Of the 85 varieties, 13 were hybrid – all maize – varieties.

4 In French: *Valeur Agronomique et Technologique* (VAT).

5 Standard seed is defined as those plants which have sufficient varietal identity and purity and are produced under the responsibility of a seed establishment (Decret N° 2005/3091 PM DU 29 AOUT 2005 section 6/1. *Fixant les modalités de production, de contrôle de qualité et de commercialisation des semences*. 2005).

Table 5: Varieties released as of 2018, the year the variety release catalogue was published

Crop	Varieties added to the catalogue in 2018			
	Year of development of variety not known	Varieties developed before 2000	Varieties developed between 2000 and 2018	Total
 Maize	18	10	10	38
 Rice	11	10	0	21
 Sorghum	2	5	0	7
 Soya bean	0	0	19	19
Totals	31	25	29	85

In the last three years (2022-2024), MINADER has released six varieties of the four focus crops: four hybrid maize varieties and two hybrid soya bean varieties. All are foreign-owned varieties currently marketed by seed importers. They were recommended for release by the CONSOV during its session in January 2024 and were officially registered by the seed authority (MINADER) in August 2024.

Under the Technologies for African Agricultural Transformation (TAAT) II project funded by the African Development Bank, IRAD is conducting adaptive trials for new rice varieties using imported breeder seed; the varieties include ART1453-B-B-1-5, a drought-tolerant and high-yielding variety, as well as FOFIFA 194, FOFIFA 195, and FOFIFA 196, which are all

tolerant to cold, resistant to blast disease, and can yield over 5 MT per hectare. Also under the TAAT2 project, IRAD's maize breeding program has developed four new hybrid maize varieties; all four are high yielding, while two are tolerant to low soil nitrogen, and two have a high level of resistance to ear rot. They are ready for release, and IRAD has set up demonstration plots to introduce them to the market. Looking ahead, still under TAAT2, IITA plans to introduce three soya bean varieties for testing in Cameroon – TGx 1444-2E, TGx 1951-3F, and TGx 1904-6F – while AfricaRice is looking to introduce up to 20 new rice varieties in the country. Under the Accelerated Varietal Improvement and Seed Delivery of Cereals and Legumes in Africa (AVISA) project, several sorghum varieties have also been introduced and are being evaluated for release.

VARIETIES WITH SPECIAL FEATURES

Varieties may have special characteristics, for instance, climate-smart,⁶ use-related (e.g., fast-cooking or nutrition-enhanced), or industry-demanded features (e.g., high-oil content or suitability as raw material for starch or livestock feed, etc.). Between 2022 and 2024, five out of the six varieties released in Cameroon had one or more special features that catered to the needs of farmers and consumers. Three of the maize varieties were drought-tolerant and early-maturing, making them suitable for areas with unpredictable or shortened growing seasons. These traits align with the increasing demand for resilient crops in the face of climate change. Further, all five varieties possessed use-related traits, such as short cooking times and nutritional enhancements. These features are beneficial for efficient food preparation and address nutritional deficiencies in rural communities. Two soya bean varieties and one maize variety were tailored for industrial applications, specifically forage and animal feed production. One soya bean variety was specifically noted for its high biomass content, making it a valuable source of livestock feed. *Table 6* summarizes the special features by variety, using information from available Value for Cultivation and Use (VCU) tests conducted by IRAD and the companies that developed the varieties.

Table 6: Number and percentage of varieties released that have special features

Feature	Description of feature	Number of varieties released 2022-2024				
		Maize	Rice	Sorghum	Soya bean	TOTAL
All varieties released		4	0	0	2	6
All varieties released with special features		3	0	0	2	5
Climate smart features	All climate-smart features	3	0	0	0	3
	Drought tolerant	3	0	0	0	0
	Early / extra-early maturing	3	0	0	0	0
Use-related features	All use related features	3	0	0	2	5
	Fast cooking	3	0	0	2	5
	Nutrition enhanced features	3	0	0	2	5
Industry-demanded features	All industry-demanded features	1	0	0	2	3

⁶ 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. Examples of climate-smart features are drought tolerance, early maturity, or extra-early maturity.

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 constrains seed companies' ability to scale up production.

In Cameroon, seed growers source basic seed by applying to the entity that produces or supplies the particular basic seed, specifying the crop, variety, and quantity needed. The entity invoices the grower for the basic seed, who receives the seed upon payment.

The primary source of basic seed for all four focus crops is IRAD, and, to a lesser extent, MINADER's seed farms in Koza, Garoua, and Gazawa, although even the latter rely on breeder seed from IRAD. A few rice seed producers source basic seed from AfricaRice and the International Rice Research Institute (IRRI). Table 7 presents the sources of basic seed for the four focus crops.

Table 7. Source of basic seed by crop, number of transactions and percentage of total transactions (2023)

Source of basic seed	Maize		Rice		Sorghum		Soya bean	
	Number of Transactions	% of total	Number of Transactions	% of total	Number of Transactions	% of total	Number of Transactions	% of total
IRAD	40	83%	9	56%	7	70%	6	60%
MINADER seed farms	8	17%	4	25%	3	30%	4	40%
AfricaRice/IRRI	0	NA	3	19%	0	NA	0	NA
Totals	48	100%	16	100%	10	100%	10	100%



IRAD produces basic seed in advance of the agricultural season and supplies it directly to seed producers and institutions. The IRAD Plant Production division estimates the demand for basic seed in collaboration with MINADER, the Ministry of Economic Planning and Development, and the Ministry of Scientific Research. The estimates are calculated twice a year, in advance of the country's two agricultural seasons. The estimates are based on the previous year's production and take into account any ongoing or planned project that requires basic or certified seed. Seed producers order basic seed directly from IRAD by phone or in writing. The fulfillment of orders is dependent on availability, but seed producers reported that basic seed was almost always available from IRAD. Sorghum seed is only available from the Garoua and Maroua stations in the north of the country, while seed of the other three crops may be obtained from any IRAD station. Orders may only be received upon payment.

IRAD also supplies seed to the government seed companies, which in turn sell the seed to other seed producers. Due to the fact their government seed companies tend to place large orders, they sign a contract with IRAD and place their orders in advance of the planting season.

Seed producers were asked to evaluate the sources of basic seed based on the quality of basic seed received, whether they received the quantity they had requested, and the timeliness of delivery of the seed. Table 8 shows that the overall average ratings by crop were all "good" - 71% for sorghum, 73% for soya bean, 75% for rice, and 77% for maize. The average satisfaction rating was particularly high with the quality of basic seed, with ratings ranging from "good" to "excellent" (79%-87%). The lowest ratings were given to the timeliness of delivery of basic seed, ranging from 60%-72%. A small number of seed producers complained of delays in receiving their basic seed order.

Table 8: Seed companies' assessment of the availability of basic seed (2023)

Aspect of availability of basic seed	Maize (n=41)	Rice (n=14)	Sorghum (n=7)	Soya bean (n=10)
Quality of basic seed received (out of 100%)	82%	79%	87%	81%
Quantity of basic seed received (out of 100%)	78%	75%	67%	73%
Timeliness of delivery (out of 100%)	71%	72%	60%	66%
Overall availability of basic seed (out of 100%)	77%	75%	71%	73%

extremely poor
poor
fair
good
excellent

INDUSTRY COMPETITIVENESS

NUMBER OF ACTIVE SEED PRODUCERS

Competition breeds excellence: the presence of more active seed producers increases competition and creates incentives for those entities to innovate and improve. A vibrant seed sector depends on a robust private sector in which seed businesses invest in developing, producing, processing, and marketing certified seed of improved varieties to farmers.

The exact number of active seed producers in Cameroon is difficult to ascertain because, while the government's list is the most complete, it is based on production estimates declared before the season. For its part, the TASAI study was able to survey - and thus verify activity by - only a portion of seed producers on the government's list. As such, the data presented in Table 9 is the best available estimate of the seed producers and importers active in 2023 for the focus crops. It combines government records and data collected by TASAI, including non-registered entities. Perhaps more importantly, the DRCQ emphasized that most seed producers in Cameroon are small and lack the human resources or logistical capacity to process, package, and label seed in line with government standards and requirements.

Table 9: Breakdown of active seed producers and importers by crop

Category of seed producers and importers	Maize	Rice	Sorghum	Soya bean	Total active
Producer groups	94	20	17	3	113
Individual seed producers	38	8	2	26	63
Private companies	9	1	3	1	12
Public entities	3	4	0	0	6
Other ⁷	11	0	0	0	11
Total (seed producers)	154	33	22	30	205
Importers	5	3	0	0	5
Grand total (seed producers and importers)	159	36	22	30	210

⁷ "Other" includes 11 registered entities (one as 'other', while 10 did not have a category).

The producers surveyed by TASAI were asked to share their opinion about the registration process. As shown in Table 10, on average, the surveyed seed producers were reasonably satisfied with the ease and cost of the registration process, rating the two aspects at 73% and 70%, respectively. Only 8 (15%) of the 55 seed producers gave a rating of 50% or lower on either of the two indicators.

Table 10: Number of registered seed producers and satisfaction rating with the registration process

Registration of seed producers	Percentage
Satisfaction with registration process (out of 100%)	73%
Satisfaction with the cost of the registration process (out of 100%)	70%

GENDER IN THE MANAGEMENT OF SEED BUSINESSES

TASAI studies track the number of women in management and ownership positions in seed companies that have clearly defined management structures and positions. Specifically, this indicator tracks the number of women holding management positions such as managing director/ chief executive officer, distribution manager, operations manager, finance and administration manager, research and development manager, country lead, and sales and marketing manager, or their equivalents.

The representation of women in leadership positions remains relatively low. Of the 55 entities surveyed, no company was owned by a woman, and only 10 (18%) had a female top manager. Women's participation in management roles overall was higher: of the 270 management positions across the surveyed seed producers, 106 (39%) were held by women. Furthermore, 81% of the surveyed entities had at least one woman in a management role, indicating broad but uneven representation (Table 11).

Table 11: Gender in management in seed businesses

Gender indicator	Number	%
Entities with female top manager (n=55)	10	18%
Number of entities with at least one woman in a management position (n=55)	38	81%
Women in management positions (n=270)	106	39%

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 focus crops. TASAI data capture aggregate production and sales volumes, in MT, reported by the surveyed seed producers. As mentioned in the Methods section, the TASAI study surveyed an estimated 64%-90% of the market, depending on the crop.





In terms of production volumes reported to TASAI, rice seed production was the highest, followed by maize, sorghum, and soya bean seeds (Table 12). The average seed production volumes by crop were 46MT for maize, 44MT for sorghum, and 16MT for soya bean, suggesting that the average seed producer in Cameroon is small-scale and producing low volumes of seed. The significantly greater average production volume for rice (216 MT) is explained by the presence of large-scale government producers. The table also shows sales figures, as reported by the surveyed seed producers. Rice was sold in the greatest quantity (1,874.5 MT), followed by maize (1,017.8 MT), sorghum (284.8 MT), and soya bean (103.22 MT). For all four crops, the volumes sold were below the reported volumes produced, with a particularly big difference (1,158 MT) in the case of rice. Although the TASAI survey focuses on certified seed sales, conversations with stakeholders revealed that seed producers likely sell uncertified seed if they have a buyer for it or if they have received financial support to produce the seed. The extent of the presence of uncertified seed on the market is not known.

Because the TASAI study did not cover all seed production for the four crops, Table 12 also provides a comparison with production data reported by the government. The main findings is that, while the number of producers in the government database is higher than the number surveyed by TASAI, the volumes of seed produced are either about same (in the case of maize) or significantly smaller (in the case of rice, sorghum, and soya bean). It is difficult to pinpoint the reasons for these differences, but one explanation may be that producers may under-report production estimated production volumes to government ahead of the cropping season. Indeed, stakeholders shared that seed producers are known to declare smaller than actual plot sizes and, accordingly, lower expected production volumes, in order to reduce certification costs.

Another likely explanation for the differences observed is that, during the certification process, the official count only includes seed that meets the certification standards. Further, in the case of rice, where the difference between government and TASAI data is particularly striking (2,000MT), the likely explanation lies in the fact that the two unregistered government seed companies were responsible for 50% of the rice seed produced in 2023 as recorded by TASAI; not being included in the government's count is likely to affect the accuracy of the data for rice seed.



Table 12: Seed production and seed sales (2023)

Crop	Government data		TASAI survey data		
	Number of registered seed producers	Seed production (in MT)	Number of surveyed seed producers	Seed production (in MT)	Seed Sales (in MT)
 Maize	154	1,786.35	38	1,783.9	1017.8
 Rice	29	1,039.5	14	3,033	1874.5
 Sorghum	23	240.4	7	299.1	284.8
 Soya bean	30	31.5	10	162.5	103.22

NUMBER OF VARIETIES PRODUCED IN 2023

The variety of certified seeds produced in a country reflects the choices available to farmers, which is critical to address diverse agricultural needs. An increase in the number of varieties produced in a country often results in an increased choice of varieties available to farmers.

In 2023, a total of 28 varieties were produced by certified seed producers for the four crops: 14 maize varieties, seven rice varieties, four sorghum varieties, and three soya bean varieties. Table 13 presents the number of varieties produced for the four focus crops in 2023. The table also lists the most commonly produced varieties, based on the number of seed producers growing the variety and the volume of seed produced. Government data was used for production volumes, because, even though it may have been understated, it was the most complete seed production data available in Cameroon.

The two most commonly produced maize varieties were the open-pollinated varieties CMS 8704 and CMS 9015, which collectively accounted for 68% of all the maize seed produced in 2023. These varieties gained popularity in the 1980s when MINADER had an active agricultural extension program and IRAD had a large cereal development project. In addition, seed producers reported that they prefer these varieties because of their yield and agroecological adaptability. For example, seed producers highlighted that CMS 9015 is early maturing, a useful trait when a crop is grown in the short rainy season. In some cases, the variety choice was informed by recommendations received from extension officers or the entities supplying the seed.

Of the 14 maize varieties, two - CHH 101 and CHH 108 - are hybrids; however, neither is included among the commonly produced varieties, as they accounted for a mere 1% of the total volume of maize seed produced in 2023. The market for hybrid seeds is limited to large-scale farmers who can afford it. In contrast, small-scale maize producers tend to prefer OPVs, which are more affordable and may re-used for multiple seasons.

All seven rice varieties produced in 2023 were of the NERICA series. The most commonly grown was NERICA L36, accounting for 87% of the rice seed produced. The reasons cited for its popularity were high yield, adaptability to various agro-ecological zones, and ready availability.





Of the four sorghum varieties produced in 2023, Zouaye and S35 accounted for 98% of the sorghum seed produced that year. Both varieties are high-yielding, have good agroecological adaptability, tolerance to lodging, is resistance to striga disease. In addition, Zouaye is liked for its good taste.

In the case of soya bean, three varieties account for all seed produced in 2023. The most commonly produced variety is TGX-14F, which, at 80% of production share, far outpaces the other two varieties, Houla 1 and Doko, which contribute 10% of production each. The main reason for the popularity of TGX-14F is its high yield. Doko is well-liked as it produces good quality flour, while Houla 1 is easy to cook and, according to one producer, achieves good yields even without fertilizer.

The production of certified seed in Cameroon remains concentrated around a small number of widely adapted and high-performing varieties.



Table 13: Varieties of focus crops produced, commonly produced varieties and number of seed producers and volumes produced (2023)

Crop	Number of varieties produced in 2023	Name of commonly produced variety	Number of seed producers producing variety	Volume of seed produced (MT)*
 Maize	14	CMS 8704	69	843
		CMS 9015	33	354.4
		CHC 202	19	151
		Shaba	14	129
		CMS 8501	20	91.7
 Rice	7	NERICA L36	8	903.2
		NERICA 3	16	89.4
		NERICA L56	4	5.7
		NERICA 8	2	13.7
		NERICA 4	1	10
 Sorghum	4	ZOUAYE	15	108.5
		S 35	10	127.9
		CS54	1	1
		Damougari	1	3
 Soya bean	3	TGX-14F	24	24.3
		Houla 1	3	3.1
		DOKO	1	3
Total	28			

*Government data.

AVERAGE AGE OF VARIETIES PRODUCED

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 varieties by crop.

Table 14 shows the age of the popular varieties produced in Cameroon along with the Weighted Average Varietal Age (WAVA) for each crop. WAVA is computed by weighting the ages of the varieties produced for a particular crop by the volume of seed produced for the same varieties.⁸ As In 2023, the ages of varieties produced in Cameroon ranged from 19 years to 58 years old, resulting in the highest WAVA for sorghum (39.8 years), followed by maize (33.9 years), and rice (29 years) (Table 14). The WAVA is not available for soya bean varieties because the varieties are not listed in the official catalogue, and therefore the year of creation and age are unknown.

⁸ This data on seed volumes may not be accurate due to the likely undercount of the government data, as explained earlier.

Table 14: Weighted average varietal age of varieties produced in Cameroon

Crop	Commonly produced varieties			Weighted average varietal age ⁹
	Name of variety	Year of creation	Age of variety in 2023	
🌽 Maize	CMS 8704	1987	36	33.9
	CMS 9015	1990	33	
	CHC 202	1992	31	
	Shaba	1990	33	
	CMS 8501	1985	38	
🌾 Rice	NERICA 3	1994	29	29.0
	NERICA L36	1994	29	
	NERICA L56	1994	29	
	NERICA 8	1994	29	
	NERICA 48*	n/a	n/a	
🌿 Sorghum	ZOUAYE	2004	19	39.8
	S 35	1965	58	
	CS54	1994	29	
	Damougari	1998	25	
🥵 Soya bean	TGX-14F*	n/a	n/a	n/a
	Houla 1*	n/a	n/a	
	DOKO*	n/a	n/a	

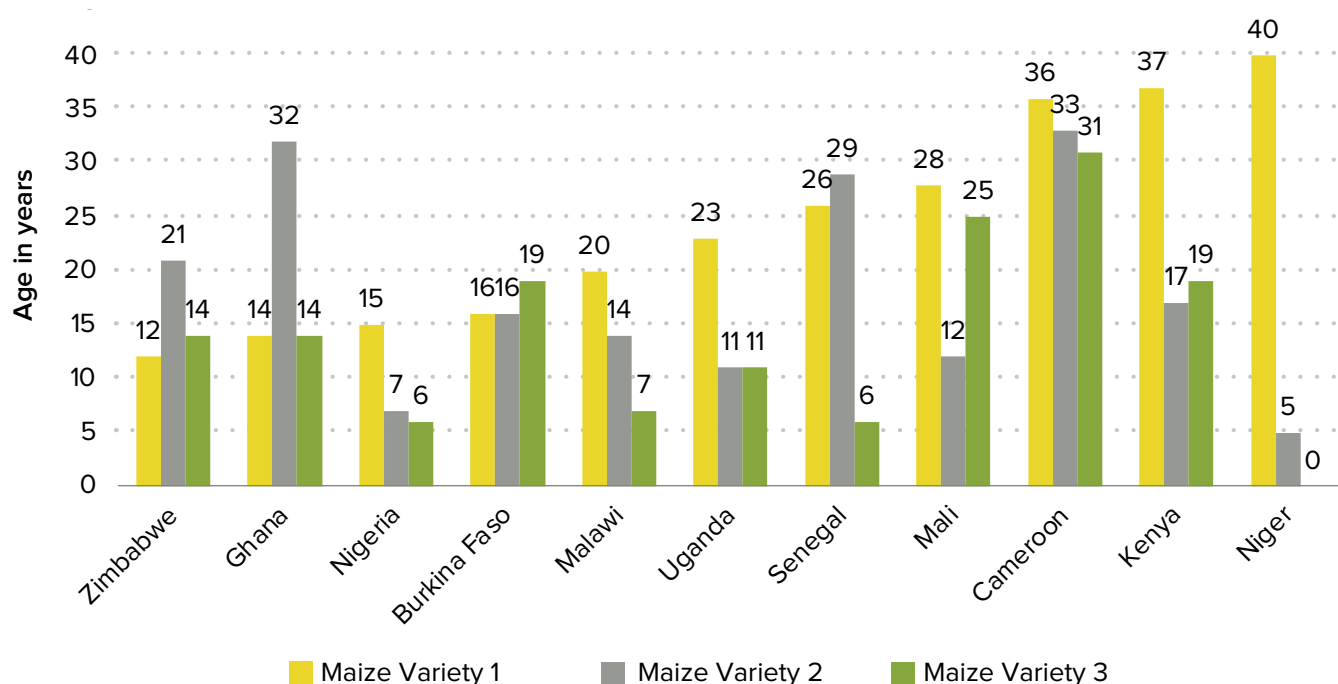
* Varieties not listed in the catalogue, therefore the year of creation and age are unknown.

⁹ The data on varietal age was obtained from the Official Catalogue of Plant Species and Varieties in Cameroon (Ministère de l'Agriculture et du Développement Rural (MINADER) 2018) and from the Catalogue of Species and Varieties of Food Crops of Common Interest in the CEMAC region, published in 2012 (PRASAC, FAO, and CEMAC 2012).

For a cross-country comparison, Figure 1 presents the three most commonly produced maize varieties in 11 countries surveyed by TASAI between 2020 and 2024. The selection is based either on the number of seed companies producing the varieties or on the volumes produced. The data shows that Cameroon has some of the oldest maize varieties among the countries compared. Notably, in most countries at least one of the top 3 varieties is under 15 years of age, while in Cameroon all three varieties are over 30 years of age.



Figure 1: Age of popular maize varieties in countries studied by TASAI between 2020 and 2024.



MARKET SHARE OF TOP SEED PRODUCERS

Competition among seed producers benefits farmers via lower prices, wider choices, increased innovation, and better customer service. To assess the level of industry market concentration, TASAI uses seed production and import data for each crop, as reported by seed producers, 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).¹⁰

Market share was assessed using a combination of government and TASAI data, because, as explained earlier, despite the lack of verified data, combining government and TASAI data still provides the most complete information available on Cameroon's seed producers. The more complete the available data, the more accurate the market share indicators of CR4 and HHI.





As shown in Table 15, the maize seed market is highly competitive with the top four companies controlling just 19% of market share. This leaves 157 producers to share the remaining 81% of the market; that is, no single producer or group dominate the market. The HHI score of 174 also shows a market with extremely low concentration. The government data also supports this finding: in 2023 117 of maize seed producers produced 10 MT or less.

The situation is similar for sorghum and soya bean, though the number of seed producers for these crops is significantly lower than the number of maize producers. Looking at the CR4 score, the top four seed producers control relatively large shares of the two seed markets, 65% and 72%, respectively. Based on the HHI, no single producer or group of producers dominates any seed market, implying a low level of market concentration. The analysis of the market concentration of these two crops needs to be taken with caution given that the aggregate volume of seed produced for the two crops is very low at 240 MT of sorghum seed and 34 MT of soya bean seed. With such low volumes, the HHI and CR4 scores are inconclusive, because all producers produce little volumes of seed.

The case of the rice seed market is different from the other three crops, because four out of six government parastatal seed companies produce rice seed. Moreover, two of the top four rice seed producers are government seed companies, contributing to a high CR4 of 89%. The HHI score of 2,660 indicates that the level of market concentration is moderate, supporting the conclusion that the rice seed market is less competitive than the seed markets for the other three crops since the top four rice seed producers are dominant.

¹⁰ 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.

Table 15: CR4 and HHI scores, using combination of government and TASAI data (2023)

Crop	Number of seed producers	CR4	HHI
 Maize	161	19%	174
 Rice	32	89%	2,660
 Sorghum	22	65%	1,429
 Soya bean	31	72%	2,143

extremely poor poor fair good excellent

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, public entities 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 Cameroon, six public entities are involved in seed production. Four are state companies: the *Mission de développement de la région du Nord-Ouest* (MIDENO), *Société d'Expansion et de Modernisation de la Riziculture de Yagoua* (SEMRY), the South-West Development Authority (SOWEDA), and the Upper Nun Valley Development Authority (UNVDA). The remaining two - *Mission d'Etude pour l'Aménagement et le Développement de la province du Nord* (MEADEN) and *Projet de développement de la riziculture pluviale et irrigué* (PRODERIP) - are government projects, with a limited time frame. The latter are included in this analysis because, although not companies *per se*, they are operated by the government and produce significant quantities of seed. Table 16 shows the production share of the public seed companies in 2023, as recorded by the TASAI survey. Five produced maize or rice seed only, while one company, UNVDA, produced seed of both crops. The data shows that the public entities accounted for 6% of the total maize seed and 60% of the total rice seed production in 2023. Indeed, three of the public seed companies are among the top 5 rice seed producers: MEADEN's production share is 24%, SEMRY's production share is 26%, and PRODERIP's production share is 8%.

Table 16: Market share of state seed companies in Cameroon

Name of public seed entities	Seed production share (%)	
	Maize	Rice
MEADEN	-	24%
MIDENO	2%	-
PRODERIP	-	8%
SEMRY	-	26%
SOWEDA	4%	-
UNVDA	0.1%	2%
Total	6%	60%

The prominence of public seed entities makes Cameroon a bit of an outlier among African countries, where government-owned companies are no longer dominant in national seed sectors. Of the 19 countries surveyed by TASAI between 2020 and 2024, only six (Cameroon, Ethiopia, Kenya, Tanzania, Uganda, and Zimbabwe) had active public seed companies that produced and marketed seed for the key priority crops (Table 17). They included government parastatals, regional (sub-national) parastatals, companies established under the national agricultural research institute, and public universities that have established seed companies. Among the six countries, state companies dominated over 50% of the market for one or more of the crops surveyed in Cameroon, Ethiopia, Kenya, and Tanzania.

Table 17: Market share of state seed companies in countries studied by TASAI between 2020 and 2024

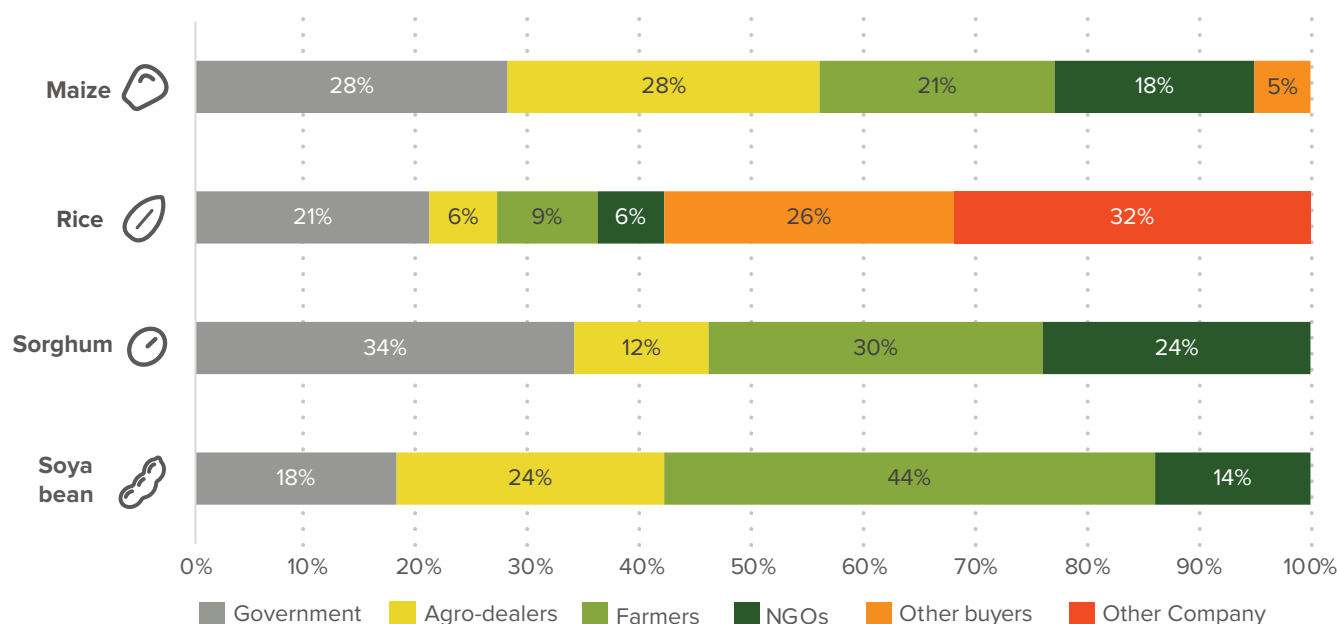
Country	Number of state seed companies for focus crops	Market share (%)		
		Maize	Rice	Sorghum
Cameroon	6	6%	60%	-
Ethiopia	4	41%	-	53%
Kenya	7	55%	-	29%
Tanzania	1	4%	97%	-
Uganda	1	3%	-	-
Zimbabwe	2	7%	-	9%

SEED SALES TO DIFFERENT CATEGORIES OF BUYERS

The TASAI study tracked six different categories of seed buyers in Cameroon in 2023: government, agro-dealers, farmers (through direct sales), NGOs, other companies, and other buyers. Figure 2 provides data on the share of the different categories of buyers by crop and shows that no single buyer was dominant across the four crops. In the case of maize, sorghum, and soya bean, the main buyers are the

government, agro-dealers, farmers through direct sales, and NGOs, who, in the aggregate, purchase 95% or more of the seeds across the four crops. NGOs account for between 14%-24% of sales, depending on the crop. The most prominent NGO buyers are the International Committee of the Red Cross, the Norwegian Refugee Council, the Lutheran World Federation - Cameroon, Catholic Relief Services, and the Food and Agriculture Organization of the United Nations. In the case of rice, the share of these four buyers is considerably lower (42% combined), while “other seed buyers,” which refers to a network of seed cooperatives, account for 26% of sales, and “other companies” account for 32% of sales.

Figure 2: Seed sales by category of buyers (2023)



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 Certificate¹¹, if applicable) and the number of days to clear seed at the border. It excludes transportation time.

To import seed into Cameroon, the importer must submit a request to MINADER and pay the required fees. Assuming the application meets the regulatory and administrative requirements, the permit is issued in about 2 days. When the seed arrives, it undergoes phytosanitary inspection and laboratory testing before it can enter the country. If the imported variety is not already in the Official Catalog of Species and Varieties In Cameroon, MINADER issues a special import permit.

TASAI surveys collect import data from the importing entities and from the government. Based on the TASAI data, in 2023, three companies imported a total amount of 204MT of maize seed from South Africa and Zambia (Table 18). In contrast, the data provided by government (DRCQ) was significantly lower, with 81 MT of maize. The government data was not disaggregated by importer, and thus did not allow for further comparisons. Nevertheless, even using TASAI data, the imported seed accounted for 11% of the total maize seed produced in Cameroon in 2023, showing that the contribution of imports to the overall seed market in Cameroon is small.

According to the seed importers surveyed by TASAI, the average duration of the import process was 12 days (five days for processing the relevant import documentation and seven days for clearing the seed at the border point of entry), with a range of 10-21 days. In contrast, the government's estimated length of the process was considerably shorter: a total of 3 days, 2 to process the import permit, and 1 to clear the seed at the border. Although the actual length of the import process appears to be longer than the government estimate, the three seed importers reported a high level of satisfaction with the seed import process, rating it "excellent" at 92% (Table 18). There were no reported exports of seed for the four crops in 2023.

Table 18: Seed import volumes and import process (2023)

Indicators	Government data	TASAI data
Seed import volumes (seed importers data), (in MT)	81	204
Country sources of imports (seed importers' data)	South Africa, Thailand	South Africa, Zambia
Average duration to obtain import documents (in days)	2	5
Average duration to clear seed at the border (in days)	1	7
Average duration of import process (in days)	3	12
Satisfaction with import process (out of 100%)		92%

¹¹ The International Orange Certificate is issued by a laboratory accredited by the International Seed Testing Association (ISTA) when both sampling from the seed lot and testing of the sample are carried out by the same laboratory.

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. Using data from the last three years (2022-2024), 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 excludes the time the breeder spends on developing the variety.

The release of new varieties in Cameroon is the mandate of the National Council for Seeds and Plant Varieties (CONSOV) under MINADER. The Directorate for the Regulation and Quality Control of Agricultural Inputs and Products (DRCQ) is the technical secretariat of the CONSOV and supervises the variety release process, including the Distinctness, Uniformity, and Stability (DUS) and Value for Cultivation and Use (VCU) tests. The Variety Release Committee (CHEV) receives and evaluates applications for variety release and sends recommendations for approval to the CONSOV. The legal statute guiding the variety release process is Decree No. 2005/153 of May 4, 2005 (Republique du Cameroun 2005b) on the functions and organization of the CONSOV. As a final step, as stipulated in Article 12 of Decree 2005/3091, the variety is officially registered in the catalogue by the Minister's pronouncement, following CONSOV's recommendation.

The DUS and the VCU tests, which all candidate varieties must undergo, are conducted by an accredited testing center, such as IRAD or the Faculty of Agronomy and Agricultural Science (FASA) at the University of Dschang. The DUS and VCU test requirements apply to imported seeds as well. The test results are reviewed by the CHEV, which in turn recommends suitable varieties for approval to the CONSOV. By law, the CONSOV is supposed to meet twice a year, but meetings have been less frequent and held when there are enough applications to review. The CONSOV last met in January 2024, when it approved the release of 10 new varieties.

TASAI studies record the average length of the variety release process based on information reported by breeders and other entities that have released varieties in the study year. In 2024, only seed importers released new varieties in Cameroon. The surveyed importers reported that the process took between 26-30 months, with an average of 27 months (Table 19). Seed importers were also asked to report their level of satisfaction with the variety release process, which they scored "fair" at 53%. The main reason cited for the relatively low rating was the lack of adequate coordination between IRAD and MINADER, resulting in a lengthy process. In addition, the testing centers at IRAD or University of Dschang lack adequate irrigation facilities to conduct the tests efficiently.

Table 19: Average length of the variety release process

Indicators	2024
Average length of variety release process (in months)	27
Satisfaction with variety release process (out of 100%)	53%

Figure 3 compares the average length of the variety release process in 13 African countries studied by TASAI between 2020 and 2024. The average length of the variety release process in Cameroon places it on par with Kenya and Tanzania but quite far behind Zimbabwe, Mozambique, Ethiopia, and Ghana, where the process takes about a year.

Cost of variety release process

In well-functioning seed systems, the cost of releasing a variety should not be so high as to disincentivize variety releases altogether. Based on the responses of the seed importers who released a combined three new varieties in the last three years, the total average cost was XAF 9.78 million (US¹²\$ 16,033), which the importers deemed very high (Table 20). Indeed, when compared to the cost of variety released in other countries (Figure 4) where TASAI has conducted a study, the cost of variety release in Cameroon is among the highest.

12 Average exchange rate during the study period is 1 US\$=610 XAF.

Figure 3: Country comparison of length and satisfaction of variety release process

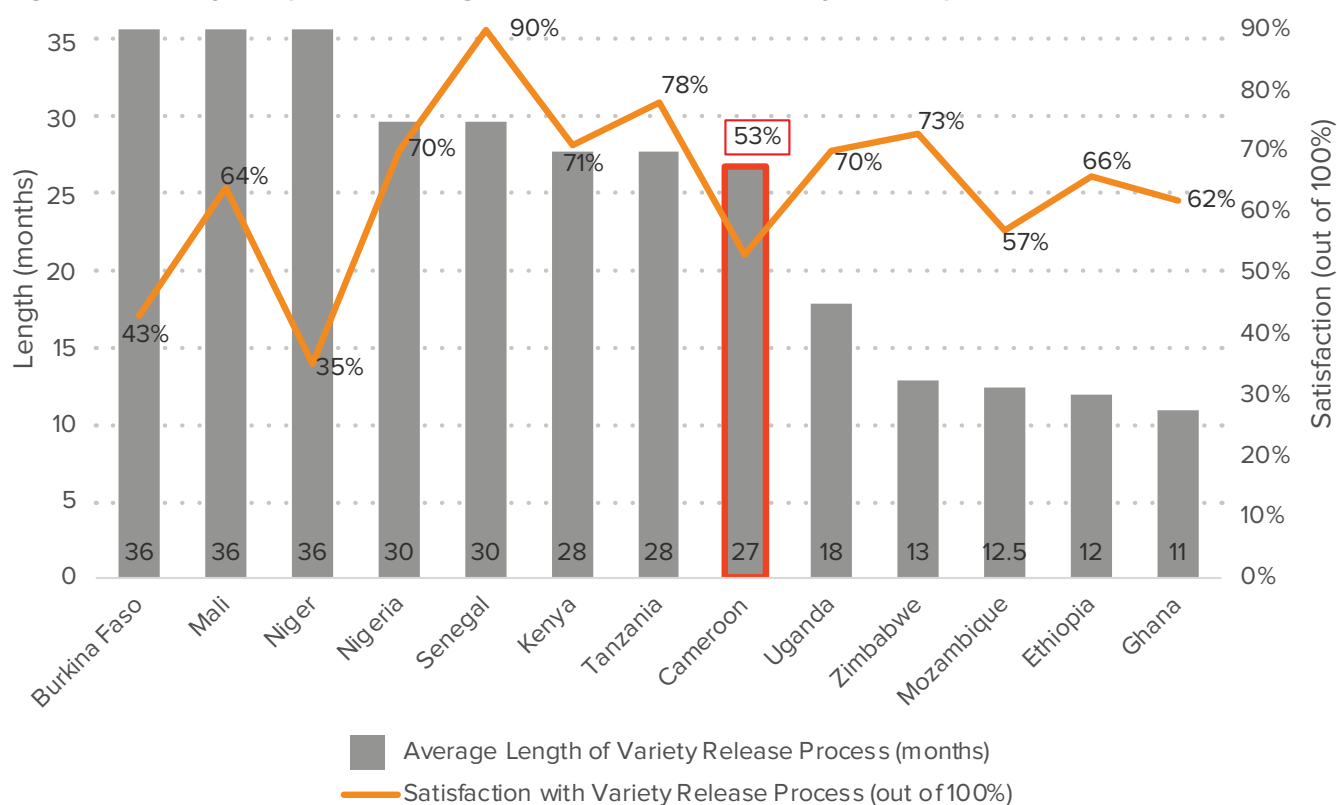
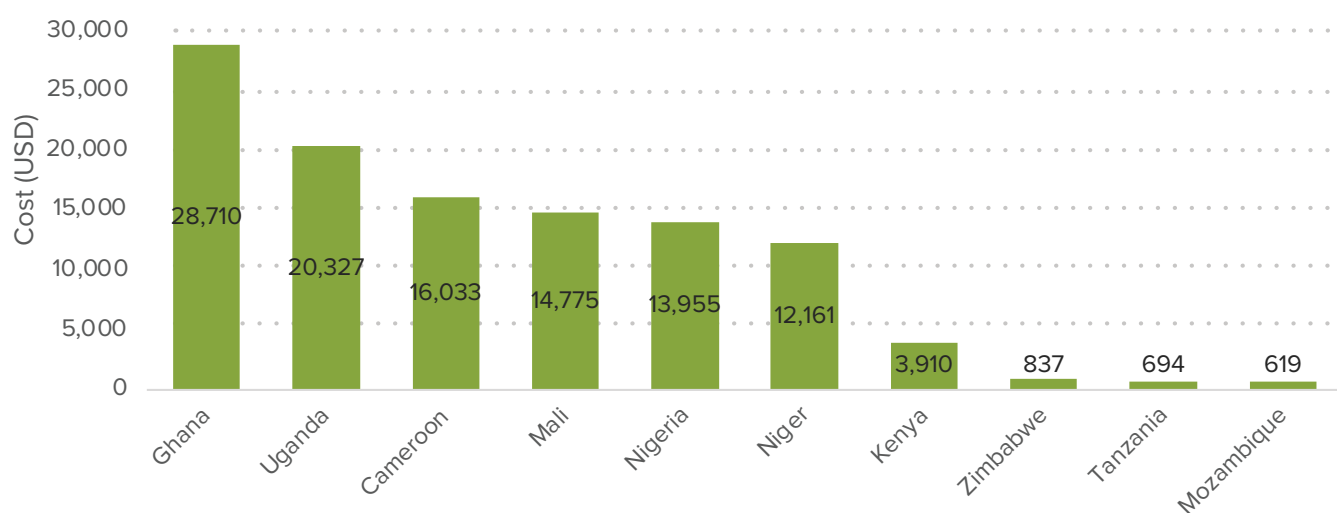


Table 20: Cost of the variety release process

Indicators	Cost range (in XAF)	Average cost (in XAF)	Average cost (in US\$)
Administrative Cost paid to MINADER	2,000,000	2,000,000	3,279
Cost of DUS tests (in XAF)	2,600,000 – 6,000,000	3,780,000	6,197
Cost of VCU tests (in XAF)	3,000,000 – 6,000,000	4,000,000	6,557
Total (in XAF)	7,600,000 – 14,000,000	9,780,000	16,033

Figure 4: Cross-country comparison of the cost of variety release



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. 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.

Table 21 lists the key seed policy instruments governing the seed industry in Cameroon and provides details on their current status and implementation. In addition, the table provides information on the status of harmonization efforts with the regional regulations of the Central African Economic and Monetary Community (CEMAC).

Table 21: Key seed policy instruments in Cameroon

Instrument	Description	Status/degree of implementation of policy instruments
National instruments		
National Development Strategy of Cameroon (2020-2030) (<i>Ministère de l'Économie, de la Planification et de l'Aménagement du Territoire (MINEPAT) 2020</i>)	Government's development strategy for the country overall. Its first pillar focuses on the Structural Transformation of the Economy, which targets increasing agricultural production and capacity for Cameroon to achieve food self-sufficiency and increase exports to the Economic Community of West African States (ECOWAS) and the Economic Commission for Central African States (ECCAS) regions. Seed is included under "agricultural inputs."	Strategy is being implemented.
National Agriculture Seed Development Plan (PNDSA) (2020-2025) (draft)	Developed by MINADER, the PNDSA contains the country's "Vision 2035" and aims to increase levels of agricultural productivity by developing agriculture into an intensive, modern, and mechanized sector. The PNDSA includes strategies on how to provide farmers with enough high quality and affordable.	The PNDSA is being implemented. MINADER's annual work plan, budget, and seed production targets are in line with the PNDSA.
Law N° 2001/014 of 23 July 2001 (MINADER 2001)	Main law governing seed activities in the country, it established the <i>Conseil National des Semences et Obtentions Végétales</i> (CONSOV), which has advisory and oversight functions over the seed sector.	The law is being implemented. The CONSOV is functional, but its variety release function is hindered by inconsistent application of the variety release process. MINADER plans to amend the law to harmonize it with the CEMAC Regulations of 2014.
Decree N° 2005/169 of 26 May 2005 (Republique du Cameroun 2005c)	Decree establishing a national seed fund.	The National Treasury earmarked funds to support the development of seed businesses, seed research, and the preservation and maintenance of local varieties. However, the account was closed in 2020 due to non-compliance with government financial guidelines issued in 2018. This has resulted in less funding for activities previously supported by the seed fund, such as seed certification or projects promoting the production of hybrid seed, negatively impacting government's ability to oversee/develop the seed sector.



<p>Decree n° 2005/118 of 15 April 2005 ((Republique du Cameroun 2005a)</p>	<p>Decree defining the organization and functioning of MINADER, with details specific to the seed sector under plant protection. The decree also establishes:</p>	
	<ul style="list-style-type: none"> • <i>Direction du Développement de l'Agriculture</i> (DDA) (Article 22), in charge of the development and implementation of seed sector policies, and • <i>Direction de la Réglementation, du Contrôle de Qualité des Intrants et Produits Agricole</i> (DRCQ) (Article 58), in charge of all aspects related to seed quality control. 	<p>The two Directorates are functional and performing their duties.</p>
<p>Decree N° 2005/153 of 04 May 2005 (Republique du Cameroun 2005b)</p>	<p>Decree that outlines the organization and functions of CONSOV, established by law N° 2001/014 of 2001.</p>	<p>CONSOV is operational, though financial constraints prevent it from carrying out its duties fully/always on time.</p>
<p>Decree N° 2005/3091 of 29 August 2005 (Decret N° 2005/3091 PM DU 29 AOUT 2005. Fixant les modalités de production, de controle de qualite et de commercialisation des semences. 2005)</p>	<p>Decree setting guidelines for seed production, quality control, and commercialization of varieties.</p> <ul style="list-style-type: none"> • Chapter 2 outlines recognized seed classes; • Chapter 3 details the variety registration process, including process to enter new varieties in the official catalogue; • Chapter 4 guides how seed producers declare various seed-related activities, including production, conditioning, marketing, import, and export; • Chapter 5 provides guidelines on the registration of seed actors. 	<p>The decree is being implemented by MINADER; however, there are gaps in the implementation, namely:</p> <ul style="list-style-type: none"> • Most seed actors are not registered, despite the requirement specified in the decree. • The entities charged with conduct DUS and VCU tests (IRAD and FASA) are not designated by decree of the Minister of Agriculture as stipulated in article 10 of decree 2/3091, because this Act is still awaited. • The official catalogue is not up-to-date, as it was last updated in 2018. • Although seed producers declare their seed activities, the declarations are not always accurate/complete.
<p>Decree N° 2019-075 of 18 Feb 2019 (Decret N° 2019/075 DU 18 Fev 2019. Portant réorganisation de l'Institut de Recherche Agricole pour le Développement. 2019)</p>	<p>IRAD, the main public entity in charge of the development and maintenance of varieties, was reorganized as an autonomous government entity in 2019. This decree provides guidelines for the entity's management and governance.</p>	<p>IRAD is functional, but its breeding activities are constrained by a lack of financial and human resources.</p>
<p>Order N°068/PM of 28 August 2019 (Republique du Cameroun 2019)</p>	<p>This Order provides guidelines for agricultural input subsidies.</p>	<p>The government is currently implementing the agriculture support program called <i>Programme d'appui au Renforcement de la Production Agricole au Cameroun</i> (PARPAC) [Program to Support the Strengthening of Agricultural Production in Cameroon].</p>



Regional regulatory instruments		
Instrument	Description	Status/degree of implementation of policy instruments
CEMAC Seed Regulations (No. 01/14-UEAC-224-CM-27) Harmonizing the rules governing the production, quality control, certification, and commercialization of seeds and seedlings in the Central African Economic and Monetary Community (CEMAC). (CEMAC 2014a)	Cameroon is a member of the CEMAC. The process to harmonize seed sector regulations has been initiated within the framework of the Regional Pole of Applied Research for the Development of Central African Agricultural Systems (PRASAC ¹³), an institution under CEMAC. The CEMAC Seed Regulations were approved by the Council of Ministers in October 2014.	The process to harmonize the seed sector regulations is ongoing.
Regulation No. 02/14-UEAC-224-CM-27 on the creation and organization of the Catalogue for Seed and Plant. ((CEMAC 2014b) Varieties in the CEMAC zone (CEMAC 2014b) .	This regulation created the CEMAC Catalogue of Plants and Species, published with support from FAO in 2012 (FAO, 2012).	The catalogue published in 2012 contained 194 varieties of 12 crops, of which 55 were from Cameroon. IRAD was the main developer or maintainer of these varieties. The catalogue has not been updated since 2012.
African accord on the protection of plant varieties under the African Intellectual Property Organization (OAPI) (African Intellectual Property Organization (OAPI) 2015)	OAPI covers intellectual property across all sectors, including the seed sector. Cameroon is a member of OAPI.	The OAPI accord is being implemented in Cameroon. In March 2012, IRAD patented 17 varieties with OAPI.

13 Regional Pole of Applied Research for the Development of Central African Agricultural Systems. <https://profalcam.com/european-union-sowing-the-mustard-seed-profalcam/> Accessed 3 June 2025

EFFORTS TO ERADICATE COUNTERFEIT SEED





Counterfeit seed threatens the seed sector in two important ways: first, it reduces farmers' confidence in certified seed after 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. In addition, seed companies report their level of satisfaction with government efforts to eliminate counterfeit seed. The figure is likely to be an underestimate, as selling counterfeit seed is illegal and, as is often the case with illegal activities, they are difficult to observe and track.

The DRCQ oversees seed quality control in Cameroon. Combating the production and sale of counterfeit seed is guided by Law N° 2001/014 of July 23, 2001, relating to seed activity (*Republique du Cameroun* 2001). Article 19 of the law outlines infringements pertaining to counterfeit seed, including refusing to submit to seed quality control, selling seed that does not meet the minimum quality standards,

falsifying seed variety details, and trading in varieties that are not listed in the Official Catalogue of Species and Varieties in Cameroon. Article 19 also prescribes the punishments for these and similar offenses, which include one-to-three months imprisonment and fines ranging from 50,000-2,000,000 XAF (US\$ 82-3,300) (*Republique du Cameroun* 2001). In addition, Decree 2005/3090 (*Republique du Cameroun* 2005d) authorizes MINADER to appoint seed inspectors, seed analysts, and seed controllers to perform seed quality control and certification functions. Seed inspectors carry out their duties at all levels, from production to storage and marketing. Article 6(2) of the decree empowers these officers to report violators to law enforcement.

Of the 60 seed entities surveyed, 12 reported encountering a combined total of 25 cases of counterfeit seed in 2023. In contrast, the DRCQ reported that it had received no reports of counterfeit seed in 2023. The same contrast was also evident when respondents were asked to estimate what percentage of seeds on the market was counterfeit: as shown in Table 22, seed producers estimated the figure to be 3-7 times what government sources said.

Table 22: Seed producer estimates of the percentage of counterfeit seed on the market

Crop	Average estimate of % of seed that is counterfeit	
	Seed producers' estimates	Government estimates
 Maize	32%	10%
 Rice	34%	5%
 Sorghum	29%	5%
 Soya bean	24%	5%

When asked to identify the likely sources of counterfeit seed, 21 of the 60 entities surveyed mentioned unregistered seed producers who did not follow the government's quality control process. The second key source of counterfeit seeds, reported by 20 of 60 respondents, was traders, including agro-dealers and importers, who may package grain as seed, especially when demand exceeds supply. Other likely sources of counterfeit seed mentioned were registered seed producers, government programs, and MINADER officials (including seed inspectors). In response to the same question, the DRCQ listed seed importers selling expired seeds and unregistered seed producers as the main sources.

To address the challenge of counterfeit seed, MINADER has set up controls at the border and at seed sales outlets across the country. In addition, through the DRCQ, MINADER conducts training sessions on seed quality for seed producers and on the promotion of quality-assured seed for extension agents. These efforts notwithstanding, seed producers' satisfaction with the government's efforts to address counterfeit seed is only "fair" at 55% (Table 23).

On their part, to address the challenge of counterfeit seed, some seed producers reported that they adhered to MINADER seed quality control requirements through regular seed inspections, sourced basic seed from approved sources like IRAD, and monitored their own seed production fields. Some seed producers reported providing training and advice to farmers and agro-dealers on the importance of seed quality. Yet others reported selling seed to trusted agents with a record of selling genuine seed. Two seed producers reported hiring seed specialists to improve their internal quality assurance systems; however, it is important to note the latter were both large companies, and smaller producers may not be able to afford the same.

Table 23: Industry satisfaction with the government's effort to address counterfeit seed

Indicators	2024
Number of cases of counterfeit seed (seed producers)	25
Number of cases of counterfeit seed (government)	0
Seed industry satisfaction with government effort to address counterfeit seed (out of 100%)	55%

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.

The *Programme d'appui au Renforcement de la Production Agricole au Cameroun* (PARPAC) is the government's agricultural input support program. Funded through the African Development Bank's African Emergency Food Production Facility (AEFPF),¹⁴ the objective of the program is to boost the production of eight priority crops (rice, maize, sorghum, millet, soya bean, potatoes, oil palm, and tomatoes) through the delivery of inputs, including seed, seedlings, and fertilizer. The program was approved in 2022, and it is currently set to run until the end of 2026. The total amount allocated to the program for the cropping year 2023/24 was XAF 26 billion (US\$ 43 million); of this, XAF 5.6 billion (US\$ 9.6 million) was reserved for seed, and the rest was allocated to fertilizer. The program's budget for the coming year is based on MINADER's assessment of the national requirement for seed for the focus crops.

To implement the program, MINADER contracts registered seed producers who meet the program's requirements, which includes access to sufficient land for production. The contracted producers deliver the seed either to MINADER's regional offices or directly to government projects/companies, which, in turn, distribute the seed to farmers. In 2023, 24 (40%) of the 60 surveyed seed entities sold seed to the government subsidy program. According to the DRCQ, the number of participating producers was constrained by the size of the budget allocated to seed production. In addition, IRAD indicated that not all seed producers met the requirements.

14 Source: Cameroon - Agricultural Production Support Programme - AEFPF/CAM - MapAfrica - African Development Bank Group (afdb.org)



Seed producers who participated in the program rated the transparency of seed procurement and the predictability of the procurement process as “good” at 73% and 69%, respectively. The efficiency of payments received a lower score of “fair” at 41% (Table 24). Most participating respondents (88%) indicated that, once they registered with MINADER, the process of supplying seed was clear and transparent. On the negative side, two seed producers felt that the process involved too much paperwork and that MINADER should have assisted seed producers with the paperwork. In addition, nearly all seed producers complained about delayed payments.

Overall, 23 of the 24 (96%) participating seed producers felt that the overall impact of the subsidy program was positive or neutral, with 50% reporting that it had a positive effect. Only 1 producer felt that the program had a net negative impact on the seed sector. Those who viewed the program favorably said that it offered a market for their seed, that it allowed their business to generate profit as the government offered higher than market price, and that the program helped increase farmers’ awareness about the importance of certified seed. Despite the neutral and favorable ratings, some producers noted that the subsidy program may discourage private investment in the sector. The producer who had a negative opinion on the program’s impact had also experienced long delays in receiving payment, which may have impacted their opinion of the program overall.

Table 24: Seed producers’ opinion of the implementation of the government subsidy program (2023)

Aspect of the government seed subsidy program	Opinion rating out of 100%
Openness and transparency of the seed procurement process	73%
Predictability of the seed procurement process	69%
Efficiency of payments	41%

Besides the subsidy program, the government supports seed producers in two other tangible ways. One is by allowing seed producers to lease land on government seed farms. The other form of assistance, available to maize and rice seed producers only, is access to government warehouses and seed processing units.



INSTITUTIONAL SUPPORT

QUALITY OF THE NATIONAL SEED TRADE ASSOCIATION

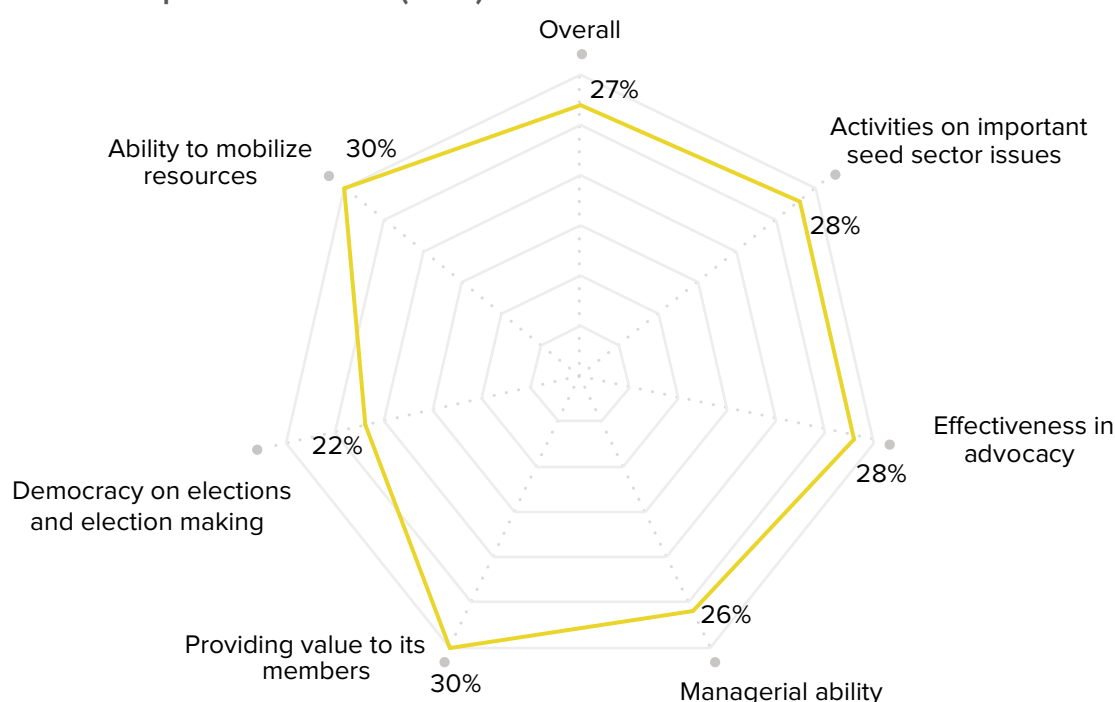
Well-functioning national seed trade associations play a key role in representing the interests of the industry and engaging with the government. The membership of the national seed associations includes seed companies, seed growers, seed cooperatives, seed associations, individual seed producers, and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

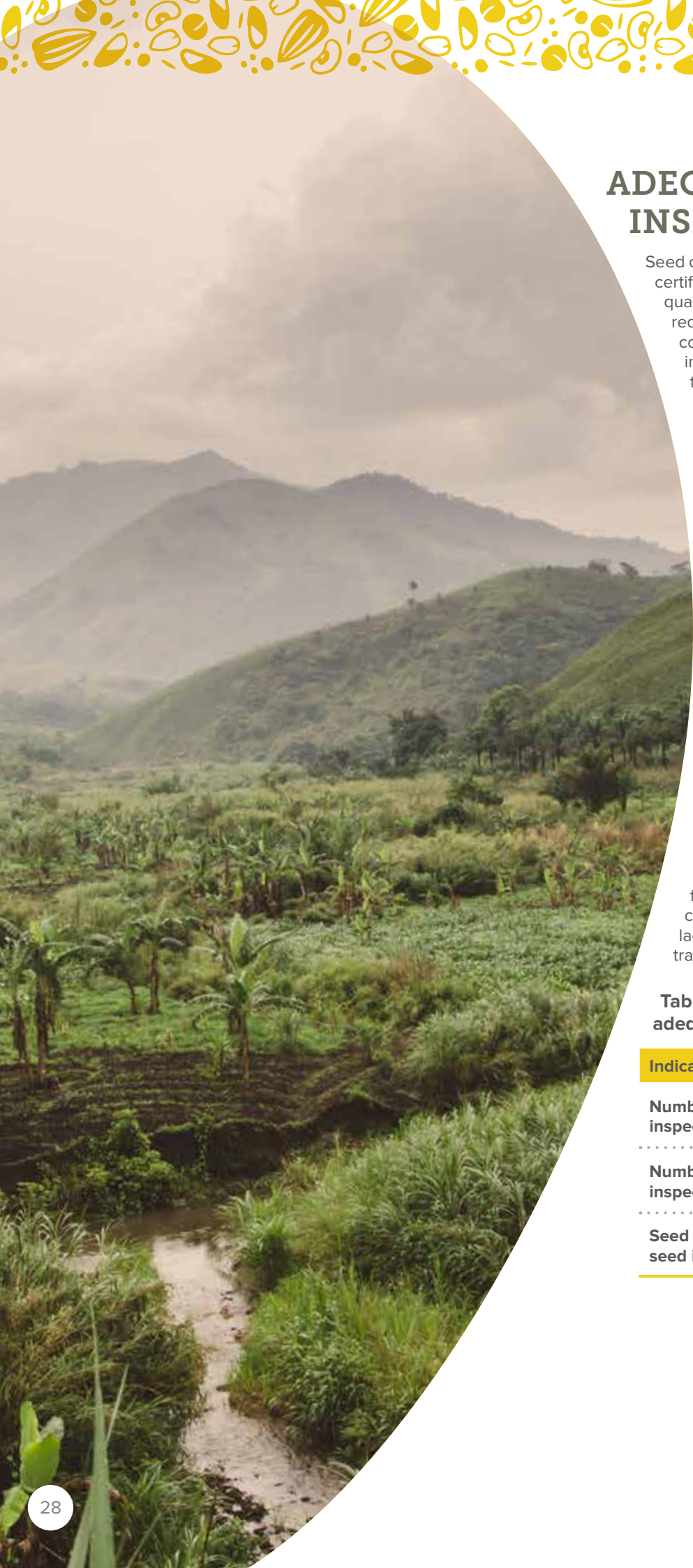
Cameroon's seed trade association, the *Association du Commerce des Semences du Cameroun/Association of Seed Companies in Cameroon* (ACOSEC) was established in May 1999 to represent the interests of value-chain actors involved in the seeds and seedlings sub-sector and to facilitate the production and sale of their products. Membership is open to all seed producers in the country. ACOSEC is a member of the African Seed Trade Association (AFSTA). The association's governed by a General Assembly, which includes all active and associate members, and which appoints the Board of Directors. The association is managed by an executive secretariat with seven staff members. An ACOSEC representative sits on both the variety registration committee (CHEV) and the National Council for Seeds and Plant Varieties (CONSOV).

Despite its 25 year history, ACOSEC was not widely known among the private-sector seed producers surveyed by TASAI. Of the 60 entities surveyed, only 5 were members of the association. Twelve reported that they were aware of its existence but were not members, while 39 did not know about ACOSEC at all.

The five members were asked to rate the organization's performance in six areas – activity in seed sector issues, effectiveness in advocacy, providing value to members, managerial ability, democracy in elections and governance, and ability to mobilize resources. The scores, shown in Figure 5, were “poor” for all six areas, ranging between 22–30%, with an overall average rating of 27%. The members' evaluation signals that ACOSEC is ineffective at representing the interests of the private seed sector. Indeed, when asked about their reasons for not joining ACOSEC, non-members mentioned that they thought the association was not active, that their membership requirements were restrictive, and that they did not respond when contacted. The lack of recognition and low scores track with the fact that ACOSEC was indeed inactive for several years and has only recently been revived.

Figure 5: Member's opinion of ACOSEC (2023)





ADEQUACY OF SEED INSPECTORS

Seed certification and control services ensure that certified commercial seed meets the regulatory quality standards. Providing these services requires enough well-resourced inspectors/controllers. 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 Cameroon, seed inspection and certification fall under the DRCQ in MINADER. In 2024, the country had 96 public seed inspectors (53 male and 43 female) (Table 25). According to the DRCQ, the current number is inadequate to cover the entire country. A related challenge, while the central laboratories in Yaoundé and Maroua are well-equipped, the regional laboratories lack adequate testing facilities.

The above problems notwithstanding, surveyed seed producers rated the adequacy of seed inspection services “good” at 74%. Most noted that the seed inspectors visited their seed fields regularly and were a useful source of advice. Only four out of 60 felt that the seed inspectors’ visits were too few and irregular. Nine seed producers reported that they were not inspected regularly: four cited the reason of being located in a conflict region, while five said that inspectors lacked adequate equipment and means of transportation.

Table 25: Number and rating of the adequacy of public inspectors

Indicators	2024
Number of public seed inspectors	96
Number of private seed inspectors	0
Seed industry satisfaction with seed inspectors (out of 100%)	74%

SERVICE TO SMALLHOLDER FARMERS

ADEQUACY OF EXTENSION SERVICES

Well-functioning agricultural extension services are critical to the successful adoption of improved seeds 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.

Cameroon has both public and private extension officers. The public extension agents are employed by MINADER. In 2024, Cameroon had a total of 1,888 extension officers working across the country's ten regions. While the officers are well distributed, they lack adequate training, which limits the quality of their service. Their work is also hindered by a lack of transportation; MINADER can afford only a limited number of motorcycles, leaving most extension officers to rely on their own transportation.

In addition to public extension services, private companies also offer extension. Of the 60 surveyed seed entities, 22 have their own extension officers, employing another 325 agent (229 men and 96 women). Of these, 239 are employed by two large state seed entities (SEMRY and PRODERIP) and are not part of the government extension program under MINADER. The private extension officers may serve as sales agents and provide agricultural advice to farmers. Further, MINADER occasionally collaborates with private companies and NGOs to provide extension services.

Table 26 shows the ratio of extension agents to agricultural households in the country. The ratio of 1:4,237 highlights a significant gap between demand and available support, suggesting that the current number of extension officers is insufficient to meet the needs of the country's large farming population. When asked to rate the adequacy of the public extension services in the country, seed producers rated it "fair" at 58%. While the seed producers acknowledged the government's efforts to provide extension services to farmers, they felt that agents should collaborate more with seed producers. These concerns reflect the challenge of inadequate transportation, which limits extension officers' ability to reach more farmers.

Table 26: Number and adequacy of agricultural extension services

Indicators	2024
Number of public extension officers employed by the government	1,888
Number of private extension officers employed by seed producers	325
Total number of extension officers	2,213
Number of agricultural households	3,061,201
Ratio of extension officers to agricultural households	1:4,237
Seed industry satisfaction with public extension officers (out of 100%)	58%

To increase the capacity of small producers, the government offers training on seed production, seed business management, seed storage, and seed packaging through its agriculture support programs called *Programme d'appui au Renforcement de la Production Agricole au Cameroon* (PARPAC)¹⁵ and the *Projet de développement de la riziculture pluviale et irrigué* (PRODERIP), specific to the rice value chain¹⁶. Other organizations like the Food and Agriculture Organization of the United Nations (FAO) also provide training to seed producers. In addition to training, the government has established four seed processing centers, where seed producers may access machinery to process and package seed for a variety of crops.

¹⁵ PARPAC is funded by the African Development Bank (AfDB) under the African Emergency Food Production Facility (AEFPF).

¹⁶ PRODERIP is funded by JICA and started in 2022 to 2027.

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.

Agro-dealers in Cameroon are required to register with the DRCQ, whose records included 28 registered agro-dealers in 2024. The government does not provide training for agro-dealers at present. Half of the seed entities surveyed (30 out of 60) reported selling seed through agro-dealers. Producers reported working with between 1-30 agro-dealers, except for one seed importer, who reported selling seed through 400, mostly unregistered, agro-dealers. Not counting this outlier, the average producer worked with five agro-dealers (Table 27).

Seed producers who did not sell through agro-dealers reported selling seed directly to the government or to farmers or through the producer groups they belonged to, where seed was marketed by the members or their agents. One of the large public seed entities had 26,000 such agents in 2024. Twenty-five of the 30 surveyed seed producers who used this arrangement rated it 6 or higher on the 0-10 satisfaction scale.

On average, surveyed seed producers rated the network of the 28 registered agro-dealers as "good" at 69%, with individual scores ranging from 30-100%.

Table 27: Number and satisfaction of agro-dealers network

Indicator	2024
Number of agro-dealers registered by MINADER	28
Range of number of agro-dealers working with one producer	0-30
Average number of agro-dealers per seed producer	5
Seed industry satisfaction with agro-dealer network (out of 100%)	69%

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, that is, 2 kg and below, 2-10 kg; 10-25 kg, and above 25 kg.

In Cameroon, Article 6 of Order N°381/MINADER/MINCOMMERCE of 7th August 2006 (*Republique du Cameroun* 2006) requires that all seed be packaged and include a MINADER-issued label. The TASAI survey found that, of the four focus crops, only sorghum producers reported 100% compliance with these requirements. For the other three crops, between 56% and 92% of producers said that they packaged their seed in 2024, while a somewhat lower percentage, 44%-71%, reported using the MINADER-issued label (Table 28). In short, despite the legal requirement, depending on the crop, between 8% and 44% of producers do not package their seed, and 29% and 56% do not use the MINADER-issued label.

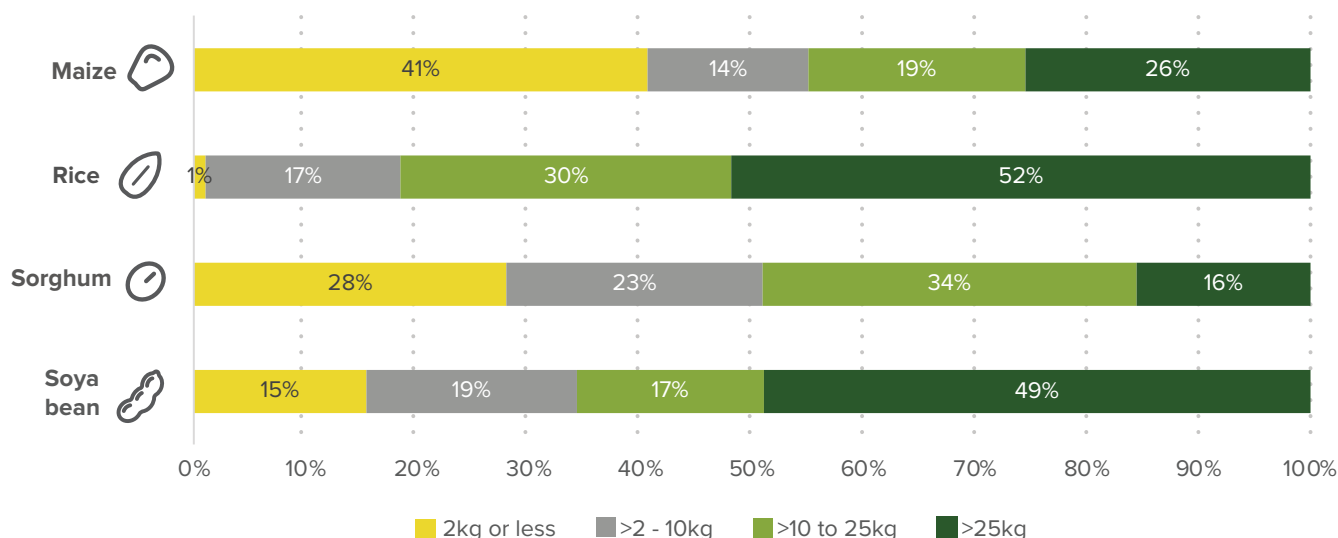
Table 28: Seed packaging and labeling

Seed packaging and labeling		Maize (n=34)	Rice (n=12)	Sorghum (n=6)	Soya bean (n=9)
Seed producers who package their seed	Number	24	11	6	5
	Percentage	71%	92%	100%	56%
Seed producers who add labels to the seed packages	Number	24	8	6	4
	Percentage	71%	67%	100%	44%

Figure 6 shows the breakdown of seed packages by crop and size, as reported by the 60 surveyed seed entities. Package sizes under 2 kg dominate maize sales, reflecting that many farmers who grow maize are smallholders. Package sizes over 25 kg dominate in the case of rice and soya bean, accounting for 52% and 49% of the seed, respectively. Large packages are prevalent for these crops because rice and soya bean

farms tend to be large scale. Sorghum package sizes are distributed more-or-less evenly, as this crop is grown by both small- and large-scale farmers. Farmers and seed producers rated the availability of small seed packages at 58% (“fair”), indicating moderate satisfaction. Farmers appreciated the affordability of small packages but emphasized the need for improved distribution to underserved areas.

Figure 6: Percentage of seed sold in different package sizes in 2023



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 making a choice 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 provided by the seed producer, vis-à-vis the market price of grain at the time of planting. The grain prices

were obtained from the agricultural product bulletin boards in the key markets in three regions: Adamawa, Far North, and North.

Table 29 shows the average seed and grain prices for the four priority crops in 2024. The price data for maize shows a nearly five-fold difference between the price of hybrid and OPV maize seeds. The former are nearly all imported varieties. Although not unexpected, this finding points to the fact that its high price likely places hybrid seeds beyond the reach of most smallholder farmers – and thus, most farmers - in the country. The data did not show significant variation by variety.

Table 29: Average seed and grain prices (2024)

Crop	Average seed price (XAF/kg)	Average seed price (US\$/kg)	Average grain price (XAF/kg)	Average grain price (US\$/kg)*
Maize (hybrid)	3,600	5.90	238	0.39
Maize (OPV)	749	1.23	238	0.39
Rice	982	1.61	423	0.69
Sorghum	787	1.29	230	0.38
Soya bean	792	1.30	345	0.57

* 1 usd to 610 XAF



CONCLUSION

The formal seed system in Cameroon is in the early growth stage of development (AUC, TASAI, and AGRA 2024), characterized by limited national breeding activity, few active small and medium-sized seed companies, many seed cooperatives, and Common Interest Groups, a complete policy framework, and under-developed seed distribution systems.

Under the **research and development** category, IRAD lacks trained breeders for the four priority crops. Further, IRAD does not have adequate resources and facilities for research and development, and maintenance of Early Generation Seed. As a result, IRAD's turnover in varieties being developed and released for commercialization is poor. Despite these challenges, seed producers were generally satisfied with the quality and quantity of basic seed that they received from IRAD. However, most of the varieties being produced for the four crops are very old, between 19 and 38 years old with one sorghum variety being 58 years old. In addition, production of hybrid varieties accounts for only 1% of maize seed production.

Under the **industry competitiveness category**, the study revealed that for all four crops, there are many small producers who produce and sell less than 5 MT of seed. Further, most seed producers lack the human resources and logistical capacity to process their own seed and rely mainly on government facilities. While several seed producers market seed through agro-dealers, many rely on the government as a buyer or sell their seed directly to farmers. Collectively, these inadequacies constrain the development of a competitive seed sector anchored on a robust private sector.

Due to the large number of small seed producers, the seed markets for the four crops are quite competitive. For maize, sorghum, and soya bean, there is no single seed producer or group of producers that dominates the market. However, the rice seed market is concentrated, with the top four seed producers accounting for 92% of overall seed production.

Cameroon's **seed policy** framework is mostly complete, although some provisions need to be revised. That is, the existing instruments, including the National Agricultural Seed Development Plan, the seed law, and multiple seed decrees provide an adequate regulatory framework for the development of a competitive seed sector in the country. The main challenges pertain to their implementation. The CONSOV, which has the mandate for overall monitoring of

the seed sector needs to be strengthened to perform its roles. In addition, the CHEV, which coordinates the variety release process needs more resources to enable it to undertake its activities. Further, after operating for a few years, the Seed Fund is no longer functional.

Based on the perceptions of seed producers and the number of cases reported by seed producers the seed industry faces the challenge of counterfeit seed. Although both seed producers and the government are implementing measures to address this challenge, there is a need to revamp them.

Under **institutional support** for the seed sector in Cameroon, the government's support for seed quality assurance through seed inspections, certification and control is notable. However, with 96 seed inspectors, the DRCQ has a modest human resource capacity for seed certification and control during the production and post-production stages. Although seed producers were satisfied with the DRCQ seed inspection, the government's performance needs to be enhanced by adding more seed inspectors, by increasing capacity, financial support to cover transport to support the movement of inspectors across the country

The ACOSEC, Cameroon's private sector national seed trade association, is performing below expectations. Most seed producers were not aware of its activities, and even members rated its performance as "poor." There is a need to revamp its activities.

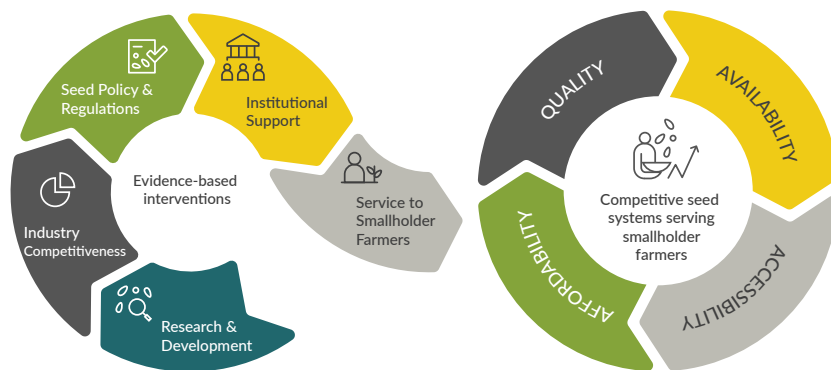
Under **service to smallholder farmers**, agro-dealers and agricultural extension officers both play key roles in last-mile seed distribution. MINADER's 1,888 agricultural extension officers provide an opportunity to deliver agronomic advice on new varieties. However, many of these officers lack the requisite resources to effectively perform their duties. In addition, the country has very few - 28 - registered agro-dealers, signaling a need to strengthen the capacity for MINADER's extension services.

Finally, one of the constraining factors in the adoption of new varieties is the price. This is because since smallholder farmers do not follow all the required agronomic recommendations, the hybrid varieties do not give better yields than the OPVs. The average price of hybrid maize varieties is more than four times the price of maize OPV varieties. Moreover, nearly all of the hybrids being marketed in the country are imported.

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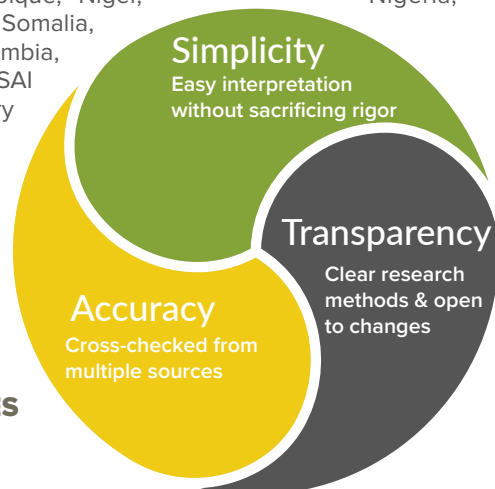
ABOUT TASAI



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, TASAI studies will have been completed in 25 African countries: Burkina Faso, Burundi, Cameroon, Côte 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 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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