



TASAI

THE AFRICAN SEED ACCESS INDEX



Burkina Faso Brief 2019 - The African Seed Access Index

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INTRODUCTION

A competitive seed sector is key to ensuring the timely availability of high-quality seed of improved, appropriate varieties at affordable prices for smallholder farmers. The African Seed Access Index (TASAI) seeks to encourage public policymakers and development agencies to create and maintain enabling environments that will accelerate the development of competitive formal seed systems serving smallholder farmers in Africa.

This country brief summarizes the key findings of the TASAI study conducted in 2018 to appraise the structure and economic performance of Burkina Faso's seed sector. The study evaluates the enabling environment necessary to build a vibrant formal seed sector, focusing on four food crops important to food security in Burkina Faso – maize, rice, sorghum and cowpea – the cultivation of which covers about 66% of the country's arable land (Food and Agriculture Organization of the UN, 2019). Cassava, though a vegetatively propagated crop, is included with a focus on its nutrition-enhanced characteristics. It is important to note that, while included in the study, not all TASAI indicators are applicable to cassava, as they are more suitable for seed-propagated crops. As such, the findings discussed in this brief in general apply to the four main focus crops. Where the findings apply to cassava, this is indicated.

The study covers 20 indicators divided into the following categories: Research and Development, Industry Competitiveness, Seed Policy and Regulations, Institutional Support, and Service to Smallholder Farmers. [Appendix 1](#) summarizes all 20 indicators.

Overview

The seed industry in Burkina Faso consists of two systems: the informal and the formal seed sector. This policy brief focuses almost exclusively on the formal seed sector.

The informal seed sector broadly refers to the traditional practices through which farmers produce and maintain local varieties. Under this system, farmers either retain seed from the previous harvest or source seed from neighbors, family members or food markets. Due to limited private sector investment in seed production and processing, about 85% of the smallholder farmers in Burkina Faso still rely on the informal seed sector for seed for most crops (Sanou, Savadogo and Sakurai, 2017).

The formal sector focuses on breeding and evaluating improved varieties, as well as producing and selling certified seed. The utilization rate of certified seed is very low, about 15% for maize seed (Sanou, Savadogo and Sakurai, 2017). Burkina Faso's formal seed sector comprises numerous institutions from the public and private sectors. Variety development falls within the remit of the *Institut de l'Environnement et de Recherches Agricoles* (INERA). Seed quality control, inspection and certification is conducted by the *Service National des Semences* (SNS), which is under the *Ministère de l'Agriculture et des Aménagements Hydrauliques* (MAAH). The *Comité National de Semences* (CNS) oversees variety release and registration. Seed production and marketing is conducted by seed companies, seed co-operatives and individual seed producers. The *Association Nationale des Entreprises Semencières au Burkina Faso* (ANES-BF) is the national seed association and brings together the seed companies under one umbrella. The ANES-BF serves as the platform for the private sector in the seed industry.

Key acronyms: ANES-BF - Association Nationale des Entreprises Semencières au Burkina Faso; AGRODIA - l'Association des Grossistes et Détaillants d'Intrants Agricoles du Burkina Faso; CGIAR – Consultative Group on International Agricultural Development; CIMMYT - International Maize and Wheat Improvement Centre; CNS - Comité National de Semences; DGPVC - Direction de la Protection des Végétaux et du Conditionnement; ECOWAS - Economic Community of West African States; ICRISAT – International Crops Research Institute for the Semi-Arid Tropics; INERA - Institut de l'Environnement et de Recherches Agricoles; IITA – International Institute of Tropical Agriculture; MAAH - Ministère de l'Agriculture et des Aménagements Hydrauliques; OPV – Open Pollinated Variety; SNS - Service National des Semences

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

ROLE	KEY PLAYERS
Research and breeding	INERA, CGIAR centers
Variety release and regulation	CNS
Seed production and processing	Individual seed producers, seed co-operatives, seed companies
Education, training, and extension	ANES-BF, MAAH, NGOs, extension officers
Distribution and sales	Seed co-operatives, seed companies, agro-dealers, NGOs



RESEARCH AND DEVELOPMENT

Number of active breeders

Burkina Faso has 9 active breeders for the five priority crops maize, rice, sorghum, cowpea, and cassava. All breeders are employed by the *Institut de l'Environnement et de Recherches Agricoles* (INERA), the government agricultural research institution. Three breeders work with rice, and two each work with maize, sorghum, and cowpea. The country has no dedicated cassava breeder at present. There are no privately employed breeders in Burkina Faso for any of the five crops.

Despite the low number of breeders, seed producers register a high level of satisfaction with the adequacy of breeders in the country. This is mainly because the breeders have been able to develop and release a sufficient number of varieties over the years. On average, seed producers rate their satisfaction with the number of active breeders as “excellent”¹ for maize (80%), sorghum (80%) and cowpea (80%), and “good” for rice (60%). (Cassava was not rated as the country has no cassava breeder at present.)

Varieties released in the last three years

Variety release in Burkina Faso falls under the mandate of the *Comité National de Semences* (CNS) under Law No. 010-2006/AN. The law was passed in 2006, and the CNS was officially formed in 2012. The CNS released the first National Variety Catalogue in 2014, which constituted the official release of all varieties developed up to that year. Before 2014, varieties were developed and released without going through a formal variety release and registration process. The catalogue includes 43 rice, 30 maize, 27 sorghum, 19 cowpea and 6 cassava varieties. It has not been updated since its first release. There were no variety releases between 2015 and 2017, but several are in the pipeline.

Number of varieties sold in 2017

In 2017, seed producers sold a combined total of 48 varieties of the five crops to farmers. The breakdown by variety was as follows: maize (12), rice (8), sorghum (17), cowpea (11) and cassava (2). Compared to other countries in the region where the TASAI study has been conducted, the number of rice varieties sold in Burkina Faso (8) is lower than the number of

varieties sold in other West African countries, for instance, in Ghana (16), Mali (18), Liberia (20) and Senegal (24) (Figure 1).

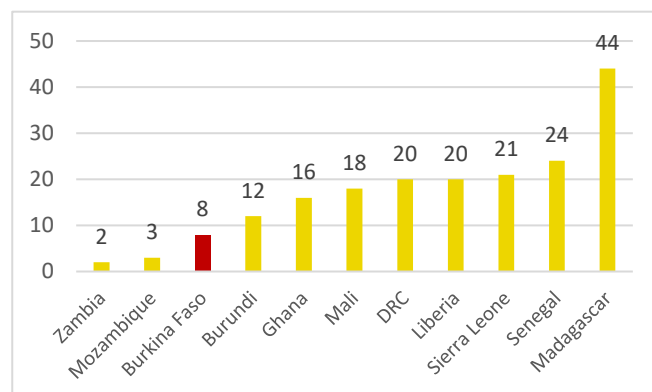


Figure 1: Number of rice varieties sold in African countries

The number of maize varieties sold in Burkina Faso is in the middle of the pack when compared to other West African countries where maize is a relatively important crop, such as Senegal (3), Sierra Leone (5), Liberia (8), Mali (17), and Ghana (18). However, not surprisingly, the number of maize varieties sold in Burkina Faso (12) is low compared to countries in East and Southern Africa (e.g., Kenya, Tanzania, Zambia and Zimbabwe), where maize is a staple crop (Figure 2).

Number of varieties dropped over the last 10 years

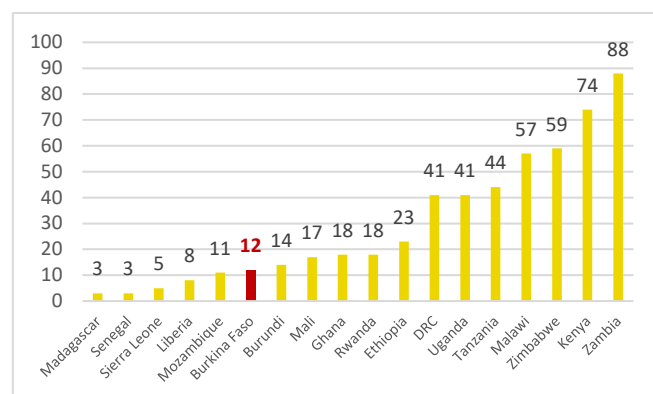


Figure 2: Number of maize varieties sold in African countries

The TASAI survey asked seed producers to indicate if they had dropped (i.e., stopped producing) certain varieties between 2008 and 2017². Across the crops, seed producers reported dropping 44 varieties in all: 12 maize, 9 rice, 11 sorghum, and 12 cowpea varieties (Table 2). No cassava varieties were dropped during this period. The main reasons cited for dropping varieties were low yield, lack of basic seed, lack of a market and weak resistance to various pests and diseases.

¹ All scores are based on industry self-reporting of satisfaction on the following scale: 0-19.99% (extremely poor), 20-39.99% (poor), 40-59.99% (fair), 60-79.99% (good), and 80-100% (excellent).

² Note: a variety may be dropped by one seed producer, but still be cultivated by another.



Table 2: Number of, and reasons for dropping varieties

Crop	No. of varieties dropped	Examples of varieties dropped	Reasons for dropping varieties
Maize	12	BARKA; BONDOFA; ESPOIR; FBC6; KEB; KEJ; KOMSAYA; KPB KPJ; MASSONGO; SR21; SR22; WARI	Lack of access to basic seed; Late-maturing varieties; low-yielding varieties; adoption of new high-yielding varieties; lack of a market
Rice	9	FKR19; FKR28; FKR33; FKR43; FKR45N; FKR49N; FKR56N; FKR62N; TS2	Lack of water for irrigation; Lack of basic seed; lack of a market
Sorghum	11	FRAMIDA; GRINKAN ICSV1049; IRAT204; KAPELGA; NONGOM-SOBA; SARIASO11; SARIASO14; SARIASO15; SARIASO16; WEDZOURE	Susceptibility to fungal diseases; low demand for certified sorghum seed; newly released higher-yielding varieties
Cowpea	12	GOURGOU; IT81D-997; IT98-K-205-8; KVV30-309-6G; KVV396-4-4; KVV396-4-5-2D; KVV414-22-2; KVV61-1; KVV745-11P; MELAKH; NAFI; TILIGRE	Susceptibility to pests and diseases; lack basic seed; lack of a market

Availability of basic seed

Seed producers rate their satisfaction with the availability of foundation seed as “good” for maize (63%), rice (67%), sorghum (64%) and cowpea (64%). The producers are less satisfied with the availability of planting materials for cassava (58%). All seed producers source foundation seed for all the crops from INERA, except for one seed producer who sourced basic seed for one rice variety from another source. The high satisfaction ratings for maize, rice, sorghum and cowpea were due to INERA supplying the foundation seed for these crops in a timely manner.

Despite a good average satisfaction rating, a sizeable portion of the seed producers are dissatisfied with the availability of basic seed: namely, 43% of maize seed producers, 37% of rice seed producers, 42% of sorghum seed producers, and 45% of cowpea seed producers registered a satisfaction rating of 50% or lower (“poor” or “fair” on the TASAI rating scale) with the availability of basic seed for the different crops. Some seed companies surveyed felt that they should be permitted to produce basic seed. However, Article 5(7) of the Seed Law (No. 010 -2006/AN) limits the production of basic seed to research institutions under strict quality control provisions by the seed certifying agency. INERA is aware of companies’ dissatisfaction with the availability of basic seed and is working to remedy the issue by investing in a cold storage facility that will help minimize supply disruptions.

Average age of varieties sold

The average age of the varieties currently on the market is as follows: 17 years for maize, 16 years for rice, 16 years for sorghum, and 12 years for cowpea. However, the ages of some of the most popular varieties for maize, rice and sorghum seed sold to farmers are notably older. Most of the popular varieties are at least 10 years old (Table 3).

Table 3: Age of the most popular varieties in Burkina Faso

Crop	Most popular varieties	Year released	Age in 2018
Maize	Barka	2007	11
	KPB	1998	20
	Wari	2007	11
	Espoir	2004	14
	SR22	1998	20
Rice	FKR19	1984	34
	FKR62N	2006	12
	FKR 45N	2006	12
Sorghum	Koplega	2001	17
	Sariaso11	1992	26
Cowpea	Komcalle	2012	6
	Tiligre	2012	6
	Nafi	2012	6

Varities with climate-smart features

To be classified as climate-smart, a crop variety must meet at least one of two criteria – early maturity and/or tolerance to extreme weather conditions such as drought, flooding, or frost. At least half of the varieties sold in 2017 – 75% of maize varieties, 50% of the rice varieties, 59% of the sorghum varieties and 73% of the cowpea varieties – had climate-smart characteristics (Table 4).

Table 4: Varieties with climate-smart characteristics sold in 2017

Crop	Number of varieties sold in 2017	Number of varieties with climate-smart characteristics	%
Maize	9	12	75%
Rice	4	8	50%
Sorghum	10	17	59%
Cowpea	8	11	73%



INDUSTRY COMPETITIVENESS

Number of active seed producers

In 2017, 864 seed producers were registered by the *Service National des Semences* (SNS), the seed-certifying agency in Burkina Faso. The seed producers fall into one of three categories – 786 are individual seed producers, 61 are seed co-operatives, and 17 are seed companies (Table 5). Out of the 864, 63 were interviewed for the present TASAI study, including all of the registered seed companies (17), 20% of the all registered seed associations/co-operatives and 4% of all registered individual seed producers. Most of the seed associations or co-operatives that were not interviewed produce seed for other co-operatives or seed companies; they were excluded from the sample because including this group would have resulted in double counting.

Table 5: Number of active seed producers by category

Type of seed producer	Number of registered seed producers	Number of interviewed seed producers
Individual seed producers	786	33
Seed associations/ co-operatives	61	13
Seed companies	17	17
Total	864	63

In 2017, across the four crops, the estimated aggregate volumes of seed produced were 4,723 tons of maize seed, 4,334 tons of rice seed, 606 tons of sorghum seed, and 684 tons of cowpea seed (Table 6).

Table 6: Seed production and sales in 2017

Crop	Volume of seed produced (in tons)	Volume of certified seed sold (in tons) ³
Maize	4,723	5,893
Rice	4,334	5,007
Sorghum	606	869
Cowpea	684	647

Maize and rice are the most commercial seeds in terms of volumes sold. However, Burkina Faso's seed sales are low when compared to sales in other African countries. Figure 3 shows the aggregate sales of the top four maize seed producers/companies in countries where TASAI has collected data thus far. The volume of seed sold is an

indicator of producer/company strength in these countries. The graph shows that the companies in eastern and southern Africa are significantly more productive than the companies in western and central Africa. For example, the top four companies in Zambia, South Africa, Zimbabwe and Kenya, in total, sold more than 30,000 tons of maize seed in a given year. This is significantly higher than the top four maize seed producers in Burkina Faso, Senegal, Mali, Ghana and Sierra Leone, which sold less than 4,000 tons of maize seed in a year.

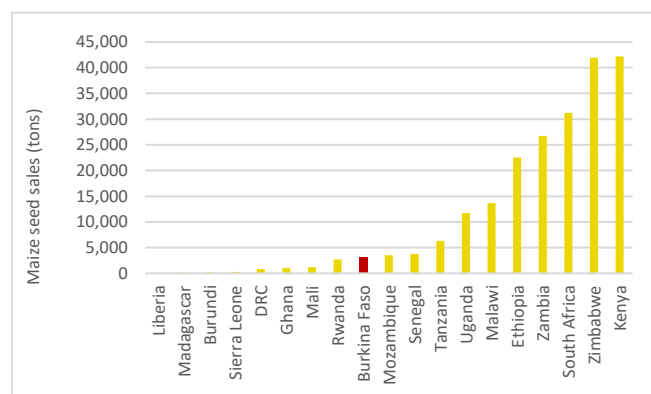


Figure 3: Aggregate sales of top four maize seed producers by country

On the other hand, the top rice seed producers in West Africa are generally more productive than their counterparts in East and Southern Africa. The top four rice seed producers in Burkina Faso sold 3,381 tons of rice seed in 2017 and are among the most productive rice seed producers among those that were surveyed (Figure 4).

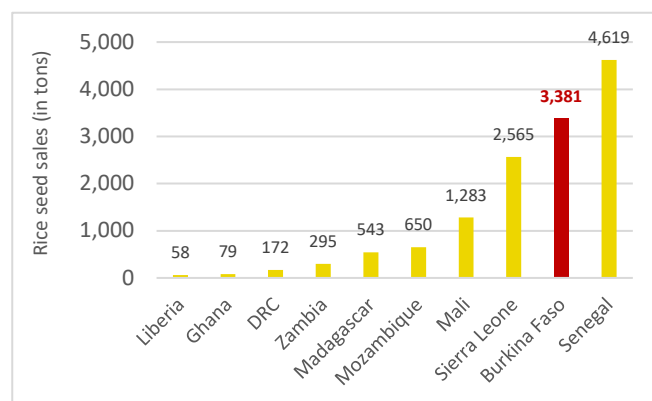


Figure 4: Sales of top four rice seed producers by country

³ Seed sales are not expected to be the same as seed production, because seed that is produced in year 1 is sold in year 2. In addition: (i) seed sales

includes imports, which are not part of local seed production; and (ii) seed sales may include carry-over stocks from the previous season.



Market share of top seed producers

The market share of the top four seed producers is calculated using the volume of seed sales as reported by producers. By crop, the market shares for the top four producers are: 69% for maize, 78% for rice, 60% for sorghum and 54% for cowpea (Figure 5).

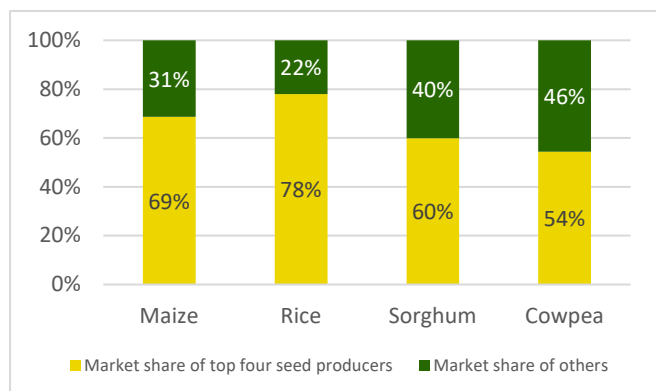


Figure 1: Market share of top four seed producers

The Herfindahl-Hirschman Index (HHI) was also used to quantify industry competitiveness. The index, a sum of squared market shares, ranges from near zero for perfect competition to 10,000 for a pure monopoly⁴. The HHI was calculated for all seed producers for each crop. The seed market is extremely competitive for cowpea (945), competitive for maize (1,555) and sorghum (1,124) but highly concentrated for rice (4,267).

The market shares of the top four companies and the HHI results both indicate that, in Burkina Faso, the seed markets for maize, sorghum and cowpea are competitive, as they are not dominated by a few players only. In contrast, a small number of players control a large portion of the rice seed market, making it significantly less competitive.

Market share of government parastatal

There is no government parastatal involved in the production and marketing of certified seed in Burkina Faso.

Length of import/export process for seed

In 2017, only two seed producers imported seed of any of the four focus crops into Burkina Faso. The imports were rice (7 tons) and came from Cote d'Ivoire and Mali.

The seed trade in Burkina Faso is governed by Law No. 010-2006/AN of March 31, 2006⁵ (*Portant Règlementation*

des Semences Végétales au Burkina Faso)⁶ which regulates plant seed. Under this law, seed importers must apply for authorization as an importer, after which they must apply for an import permit from the Directorate of Plant Protection, which falls under the Ministry of Agriculture. The application must include the relevant details about the seed to be imported, including variety, seed class, quantities to be imported and a phytosanitary certificate.

Seed importers reported that, on average, it takes 22 days to complete the relevant import procedures and clear seed at the border, with a range from 15 to 31 days. Seed importers are dissatisfied with the import process, rating it as "poor" (35%). Their main concern is that obtaining the phytosanitary certificates takes too long.

Four seed producers exported seed from Burkina Faso in 2017. In total, 657 tons of seed was exported: 456 tons of maize seed, 200 tons of rice seed, and 1 ton of sorghum seed. The destinations were Guinea, Cote d'Ivoire and Ghana (for maize), Senegal (for rice), and Niger (for sorghum).

Seed exporters reported that, on average, it takes 14 days to export seed and obtain documents to clear the seed at the border, with a range of 7 to 21 days. The exporters are satisfied with the export process, rating it as "good" (60%).

SEED POLICY AND REGULATIONS

Length of variety release process

The length of the variety release process is the period of time from the submission of an application for a variety release to the time of its release by the relevant authority. Applications for variety release are submitted to the *Comité National de Semences*⁷ (CNS). Applications are reviewed by the Sub-committee for Agricultural Crop Varieties Registration (SCHV). The application includes a description (origin, breeder details, etc.) of the variety, a seed sample and the reports of the Distinctness, Uniformity and Stability (DUS) and Value for Cultivation and Use (VCU) tests. The chairperson of the sub-committee works with two external evaluators to assess the application. Their joint recommendation is forwarded to the Chair of the CNS, who makes the final decision. If the

⁴ Scale for HHI scores, ranging from extremely low to extremely high levels of market concentration: <1,000 (extremely competitive), 1,000-1,999 (competitive), 2,000-2,999 (average), 3,000-3,999 (high concentration), >4,000 (extremely high concentration, i.e., monopoly or near monopoly).

⁵ *Direction de la Protection des Végétaux et du Conditionnement*

⁶ Law regulating plants and seeds in Burkina Faso

⁷ National Seed Committee



variety is approved, it is automatically included in the National Catalogue of Plant Varieties and Species.

Since no varieties have been released under the new variety release process, the duration of variety release is difficult to determine.

Status of seed policy framework

The seed policy framework in Burkina Faso consists of two main instruments: Law No. 010-2006/AN (*Portant Règlementation des Semences Végétales au Burkina Faso*) passed on March 31, 2006, and the ECOWAS Seed Regulation (C/Reg.4/05/2008) (ECOWAS, 2008). The seed law includes sections on plant protection, seed production, seed marketing, seed quality control and the import and export of seed. In addition, the law establishes the CNS as the government agency responsible for the promotion of the seed sector in Burkina Faso.

In addition, the government has passed 12 decrees and regulations aimed at implementing various aspects of the law. These include Decree N° 2008-680 / PRES / PM / MAHRH / MECV / MESSRS of October 27th, 2008 concerning attributions, composition and functioning of the National Committee of the Seeds; Decree N°. 2008-705 / PRES / PM / MAHRH / MECV / of 17th November 2008 on the organization and operation of the Seed Sector Support Fund; Ministerial Order N° 2011-017 / MAHRH / MEDD / MEF of 15th March 2011 determining the titles and functions of agricultural or forestry agents in charge of quality control for the certification of plant seeds; and Ministerial Order N° 2010-22 / MAHRH / MEDD / MICPIPA / MRSI / CAB of 15th March 2011 outlining the categories of actors in the seed sector in Burkina Faso.

Quality of seed regulations and enforcement

Seed producers in Burkina Faso are generally satisfied with the quality of the current seed law, rating it as “excellent” (84%). This high rating is due to several programs that have been implemented in the past decade, such as the West Africa Agricultural Productivity Program (WAAPP) and the West Africa Seed Program (WASP), which placed a significant focus on strengthening the regulatory arrangements in the seed sectors in West Africa. When it comes to the enforcement of the law, however, ratings by seed producers drop to “good” (70%).

Adequacy of seed inspectors

In 2017, the Ministry of Agriculture employed 45 seed inspectors. There were no private seed inspectors working in Burkina Faso. To complement the government seed inspectors, the Ministry has assigned technicians to assist the seed inspectors. The ECOWAS Seed Regulations require seed technicians to work closely with seed producers who do not have the necessary technical capacity in seed production (ECOWAS, 2008). The Ministry intends to train more seed inspectors in 2019.

Potential seed inspectors must, at a minimum, hold a diploma in agriculture and are required to attend a seed inspector training provided by INERA. After the training, the inspectors take an oath of office, promising to be impartial in carrying out their duties.

Seed producers are satisfied with the adequacy of seed inspection services in the country, rating this as “good” (78%). The rating is primarily due to the fact that seed inspectors are generally available when their services are requested.

Efforts to stamp out fake seed

Seed producers in Burkina Faso have indicated receiving a total of 14 reports of fake seed sales in 2017. However, this number is likely to be an underestimate, as most seed producers interviewed indicated that they had heard of cases of fake seed – although exact numbers were not available, as there is no official system to track counterfeit seed. Seed producers identified a wide range of seed industry players as the sources of fake seed, including seed producers and agro-dealers who are looking to exploit weak seed quality control systems, seed inspectors who approve poor quality seed after conducting field inspections, and INERA, which, some seed producers alleged, sells counterfeit basic seed that is not true-to-type. INERA receipts are not usually provided against such sales.

Though not a direct source of fake seed, the government seed procurement system also provides opportunities for the sale of counterfeit seed. The government purchases seed that is produced and distributes this as a subsidy, without verifying whether the seed had been certified or grown by registered seed producers. Nevertheless, the seed producers rated the government’s effort to stamp out fake seed as “good” (67%) in recognition of the government’s efforts in addressing the problem.



Use of smart subsidies

The government of Burkina Faso has been operating a seed subsidy program since 2008. The program is called 'Opération 100 000 charrues' or 'Operation of 100,000 ploughs'. The objective of the program is to increase agricultural production and productivity.

In 2017, the government, with the financial support of several partners including the World Bank, spent over 19 million FCFA (about US \$55,000 at the time of the study) on a subsidy program for seed, fertilizer and agricultural equipment. Seed producers reported that, on average, 77% of their maize seed sales, 81% of rice seed sales, 73% of sorghum seed sales, and 71% of cowpea seed sales in 2017 were accounted for by sales to the subsidy program. However, there is a notable difference between sales by seed companies and other seed producers (Table 7). As a percentage of their total sales, seed companies sold proportionally less seed to the subsidy program than individual seed producers and seed co-operatives.

Table 7: Percentage of seed sales to the subsidy program

Crop	Average % of sales to govt. subsidy program	
	Seed companies	Other seed producers
Maize	60%	85%
Rice	63%	96%
Sorghum	62%	80%
Cowpea	55%	82%

The main reasons why seed companies sold proportionally less seed to the government subsidy program are: (i) unpredictability of the subsidy program in terms of seed quantity requirements and (ii) the late payments by the government. Seed companies have the financial capacity to sell seed through other sources like agro-dealer networks, and therefore reduce their sales to the government.

These reasons are reflected in the seed producers' rating of different aspects of the seed subsidy program. Seed producers rate the transparency in the procurement process (68%) and the clarity in the procurement guidelines (70%) as "good". However, they are very dissatisfied with the predictability of the procurement process (38%) and

the efficiency of the payments (35%), rating both as "poor".

INSTITUTIONAL SUPPORT

Availability of extension services

At present, the country has 1,822 agricultural extension workers, of whom 134 are employed by the private sector. The rest work under the Ministry of Agriculture. This translates to a ratio of roughly one extension officer per 944 agricultural households.

Seed producers rate their satisfaction with the extension services as "good" (73%). The ratio of households to one agricultural extension officer in Burkina Faso is among the lowest in the countries surveyed by TASAI (Figure 6).

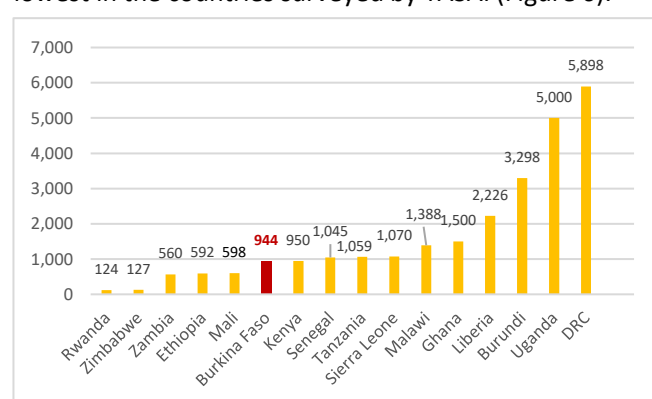


Figure 6: Number of agricultural households served by one agricultural extension officer

Quality of the national seed trade association

Established in 2014, *Associational National des Entreprises Semencières au Burkina Faso* (ANES-BF) serves as the national association of seed companies in Burkina Faso. Another association, called the *Union Nationale des Producteurs Semenciers du Burkina* (UNPS-B⁸) represents seed producers. The ANES-BF is recognized by the National Seed Committee and is an active member of the African Seed Trade Association (AFSTA). The ANES-BF is run by an executive, which was appointed in 2018.

In 2018, the ANES-BF had 12 members, all of which were seed companies. However, not all active seed companies are members of the association. Six of the active seed companies interviewed were not members. When interviewed, they said that they had not joined either because were not aware of the association's existence, or because they did not see the value in joining. One seed company

⁸ The National Union of Seed Producers of Burkina Faso



owner mentioned that he had submitted an application to join but has yet to receive a response.

As shown in Figure 7, the ANES-BF members rate the overall quality of the association as “good” (65%). The main concerns raised by members were the need for the association to be a more effective advocate for the seed industry (59%) and the need to improve the association’s fundraising capacity (50%). Members rate the association highly on democracy and governance (71%) and providing value to members (74%). Figure 7 illustrates the seed producers’ level of satisfaction with the ANES-BF’s performance in six service areas.

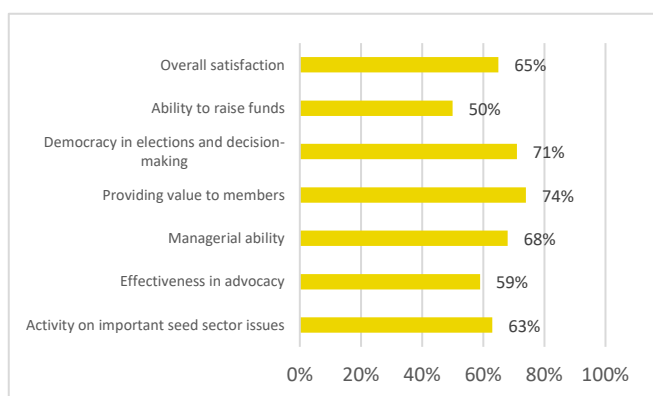


Figure 7: Member satisfaction with the ANES-BF

SERVICE TO SMALLHOLDER FARMERS

Concentration of rural agro-dealer network

There were 1,460 agro-dealers spread across Burkina Faso in 2018 (IFDC, 2018). This translates to a ratio of one agro-dealer for every 1,178 agricultural households. The agro-dealers are fairly evenly distributed across the six main growing regions - West-Center (14.6%), Boucle-du-Mouhoun region (12.8%), Hauts-Bassins (12.5%), Central-East (10.1%), Central-Plateau (7.7%) and Center (7.5%). The Sahel region has the lowest number of agro-dealers in the country (1.9%).

The agro-dealers are organized under *l'Association des Grossistes et Détaillants d'Intrants Agricoles du Burkina Faso* (AGRODIA)⁹, which was formed in 2004. The ratio of agro-dealers to agricultural households is relatively high compared to these ratios in other countries surveyed by TASAI (Figure 8).

Seed companies serve as the primary source of seed for agro-dealers. Most of the seed companies (14 of 17)

surveyed reported using agro-dealers to distribute seed. In contrast, only 12 out of 46 seed cooperatives or individual seed producers did the same. The 26 seed producers (of all categories) who used agro-dealers rated their satisfaction with the agro-dealer network as “good” (71%).

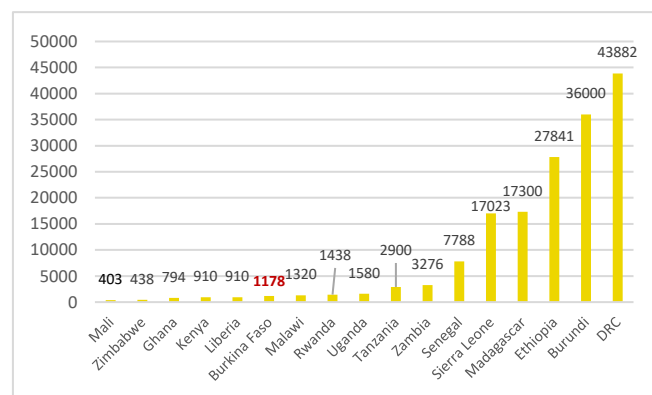


Figure 8: Number of farming household served by one agro-dealer

Availability of seed in small packages

The ECOWAS Seed Regulations require seed producers to package (Article 52) and label (Article 62) all seed destined for the market (ECOWAS, 2008). However, in Burkina Faso, only slightly more than half (55%) of the seed producers interviewed sold their seed in packages. This contravenes the ECOWAS Seed Regulations.

Of the seed that is packaged, only 11% was sold in small packages (2kg or less) in 2017. By crop, the percentage of packaged seed that was sold in small packages was 16% for maize seed, 3% for rice seed, 19% for sorghum seed and 23% for cowpea seed. Most of the packaged seed for all the crops was sold in large packages of at least 25kg: maize (51%), rice (83%), sorghum (50%) and cowpea (54%) (Figure 9).

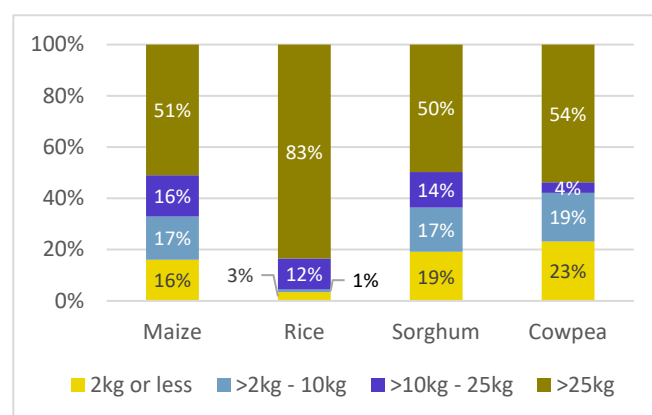


Figure 9: Percentage of seed sold in different package sizes

⁹ The Association of Wholesalers and Retailers of Agricultural Inputs



On average, seed companies rate their satisfaction with the volumes of seed sold in small packages as “good” (75%). By crop, the satisfaction is “good” for maize (75%), rice (66%) and sorghum (76%) and “excellent” for cowpea (82%).

Seed-to-grain price ratios

The seed-to-grain price ratios are an indication of the affordability of seed for farmers. The seed prices are calculated as the average price of seed charged by the major sellers in the market. The grain prices are calculated as the average prices from across the different regions at the time of planting.

The seed-to-grain ratio is highest for hybrid maize seed (9.9:1), due to the high cost of production of hybrids. The ratios for the other crops are 4.2:1 (sorghum seed), 3.3:1 (OPV maize seed), 2.8:1 (cowpea seed) and 1.3:1 (rice seed).

CONCLUSION

The seed industry in Burkina Faso is in the early stages of growth. The low adoption rates (less than 15%) of certified seed for key food crops and the low volume of seed sales imply that there is room for development.

On the positive side, the country has a well-defined policy and regulatory environment. Key policy instruments are up to date and the ECOWAS Seed Regulations have been ratified.

The supportive policy environment notwithstanding, substantial challenges remain. These need to be addressed to ensure that the country develops an enabling environment for seed sector development. Based on the TASAI country study findings, the priority challenges are:

Several interventions are required to address the problem of the low utilization of certified seed by farmers, including **increasing efforts of raise farmers’ awareness of the importance of utilizing improved varieties**. These efforts should be made through a close collaboration between seed producers and INERA and should aim to **empower agricultural extension officers** with the knowledge and tools they require to provide relevant information to farmers in a timely manner.

While Burkina Faso has adopted the ECOWAS Seed Regulations, most standards for seed quality control are not

being followed. There is a **need to ensure the complete implementation of the ECOWAS regulations**. Some of the relevant clauses in the regulations include: Article 33 on field inspections, which requires a field to be inspected four times in each cycle; Article 37 on seed technicians, which requires seed producers who do not have sufficient capacity to work closely with seed technicians; and Articles 52, 54, 59 and 62, which require the packaging and labelling of certified seed.

Strengthen the SNS to effectively implement its mandate.

The SNS’s activities include the registration of seed producers, seed sampling and analysis, seed inspection and seed certification. However, the SNS is understaffed and underfunded, and therefore unable to adequately fulfil this mandate. The SNS needs to: (i) hire more seed inspectors and seed analysts to ensure that the seed that is marketed to farmers is tested and of the required quality, (ii) ensure that all seed producers are registered, have the requisite skills for seed production and are routinely inspected in accordance with the regulations, and (iii) work closely with other actors to increase the level of awareness of the seed law, ministerial orders and ECOWAS regulations among seed industry actors.

SNS and MAAH should start exploring an appropriate arrangement for private seed inspection services. To do this, the government will need to work closely with the private sector. Other African countries have tried and tested different models that Burkina Faso may adopt. One option is to employ seed inspectors inside seed companies. A second option is to have the seed inspectors work under the national seed association. A third option is a system whereby inspectors are employed by a third-party organization.

With any of these options, the government will need to develop guidelines for private seed inspection services, which should include, among others, requirements for and procedures employed by private seed inspectors, the role SNS will play in the supervision and audit of private inspectors, and conditions for withdrawing inspectors.

Despite seed producers rating the availability foundation seed for the four crops as “fair”, between 63% and 67%, they still highlighted the need to **strengthen INERA’s access to financial resources for variety development, production and storage of quality basic seed**. To address this challenge, INERA should: (i) follow through with plans to establish a cold storage facility for basic seed for the key



crops, and (ii) work closely with seed producers to forecast their demands for basic seed.

The MAAH needs to **improve the procurement process and efficiency of payments to seed producers who supply the government seed subsidy program**. Seed producers complain about delayed payments, which have led to seed companies to reduce the volumes of seed that they sell to the government. In addition, the government should **conduct an independent evaluation of the seed subsidy program** to assess whether it is achieving its intended objectives.

There is a need to **strengthen the ASNES-BF to serve as an effective platform for private sector engagement with the government** on all matters related to the seed industry. The first step to achieving this would be for the ASNES-BF to participate in all the key seed sector-related activities in the country.

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APPENDIX 1.

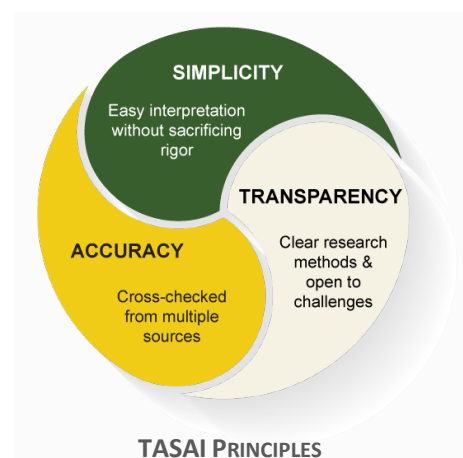
For a comparison of TASAI Indicators across different countries, please visit: <http://tasai.org/wp-content/uploads/TASAI-Appendix-CURRENT.pdf>



ABOUT THE AFRICAN SEED ACCESS INDEX

The **African Seed Access Index (TASAI)** is a seed industry research initiative housed at **Market Matters Inc.** (MM 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.

To assess the status of the seed industry value chain, TASAI employs **20 indicators** grouped into five categories: **Research and Development, Industry Competitiveness, Policy and Regulations, Institutional Support and Service to Smallholder Farmers.**



PILLARS OF COMPETITIVE SEED SECTORS

By the end of 2019, TASAI studies will have been completed in **21 African countries**: Burkina Faso, Burundi, Cote d'Ivoire, the Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mozambique, Nigeria, Rwanda, Senegal, Sierra Leone, 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.

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