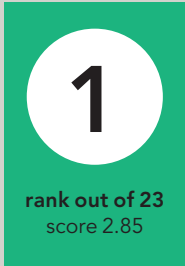




# Value Seeds

**Corporate data**  
Headquarters: Zaria, Nigeria  
Ownership type: Listed  
Group revenue (2017): USD 3,280,251  
[www.valuseedsltd.com](http://www.valuseedsltd.com)

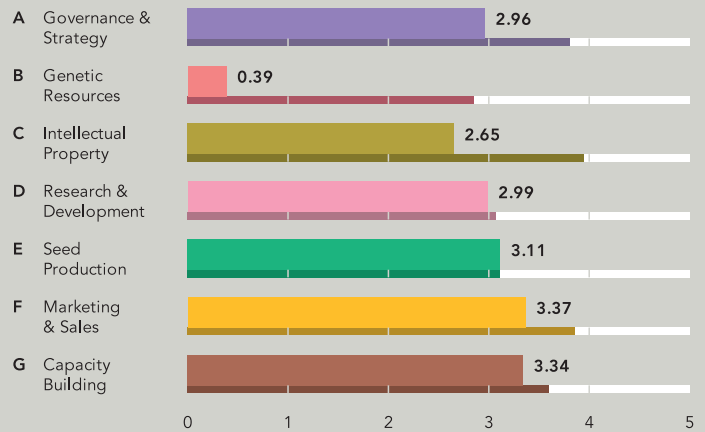
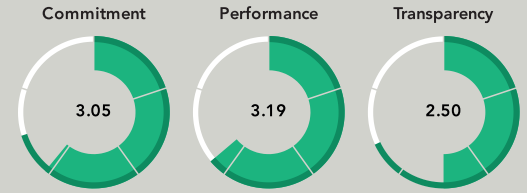
Value Seeds Ltd (Value Seeds) is a field crop and vegetable seed company incorporated in 2009. Grant-based support from Alliance for a Green Revolution in Africa in 2014 enabled the company to intensify its outreach to smallholder farmers and to develop 'value kits' for maize and rice, all-in-one input packages for farmers. Active only in its home market Nigeria, the company primarily engages in seed production and distribution but it is increasingly focusing on research and development. The company's portfolio mainly consists of open-pollinated varieties, while offering hybrid varieties for a few crops, including maize. Its main crops are maize, rice and soybean. The company partners with multiple international and national organizations in research and development.



## Western and Central Africa

Value Seeds tops the ranking for the 2019 Index for Western and Central Africa. With robust programs across all measurement areas, the company's collaborations with national and international non-governmental entities, governments and investors

have enhanced its capacities and offerings. The company has a wide distribution network in Nigeria, the only country where it is active. Its collaboration with the Partnership to Engage, Reform and Learn, funded by the UK's Department for International Development (DFID), has provided inputs and technical assistance to over 4,867 women smallholder farmers and youth, resulting in notable scores in Capacity Building. Value Seeds is one of the few index companies to provide linkages to output markets for smallholder farmers, by aligning with feed and rice mills, food processors and poultry farms, among others. The company also aims to reach 10 million smallholder farmers by 2035, a target reflected in its Governance & Strategy score. Similarly, Value Seeds demonstrates a high level of transparency compared to its regional peers. Although it is currently developing improved varieties of maize, the company can enhance its activities in Research & Development, broadening the scope of crops in its pipeline and develop activities related to the conservation and use of Genetic Resources.



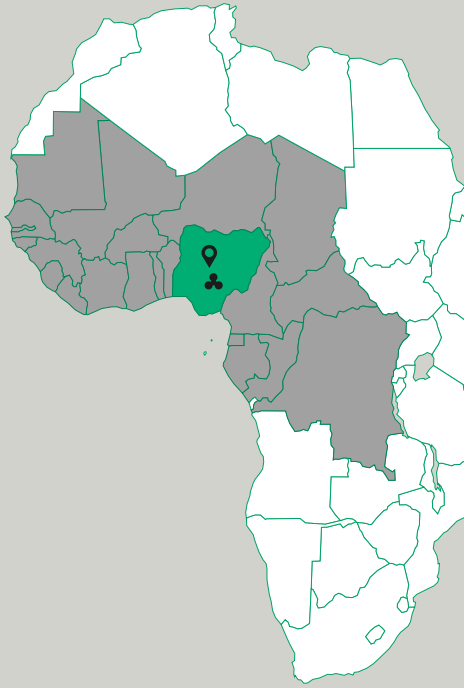
## Leading practices

- Building on its growth since its incorporation, Value Seeds aims to reach 10 million smallholder farmers by 2035, bridging the gap to this customer group through innovative technologies and by making seed more readily available to its target communities.
- The company services remote areas by distributing seed at village markets, placing mini kiosks in rural farming communities and collaborating with agro-dealers, farmer groups and governmental and non-governmental organizations. Further, the company distributes seed directly to farmers during visits to rural markets.
- The company includes pictograms on its seed packages to accommodate illiterate smallholder farmers. Further, the company offers 'value kits' for maize and rice. These include all the inputs farmers need for crop production on a quarter hectare of farmland, facilitating adoption of high-yielding varieties, notably by women and next-generation smallholder farmers looking to grow crops for sale.

- With the Partnership to Engage, Reform and Learn (PERL-ARC), funded by DFID, the company provides agricultural inputs and technical advice for women and next-generation smallholder farmers to help improve productivity and sustainable use of inputs.
- The company's subsidiary, Manoma Integrated Links Ltd, offers extension services to smallholder farmers, which include agronomic and crop protection advice. So far, 10,000 smallholders have been reached, 2,900 of them women.

## Areas for improvement

- While the company has an in-house code of conduct that covers policies on anti-corruption, and social and labor standards, it is encouraged to also include the company's stance on lobbying activities, and consider further aligning its policies with external standards or certification, and include regular training and monitoring of compliance. Value Seeds is further encouraged to make its codes of business conduct publicly available.
- Building on its recently started breeding efforts, the company is encouraged to introduce commitments and activities that support genetic conservation and use, for example in its home country Nigeria. It is further encouraged to develop a track and trace system for the genetic resources it uses in its breeding program.



## Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- 🌿 Breeding station/R&D

## Notable findings

Value Seeds is a member of the Technical Committee of the Seed Entrepreneurs Association of Nigeria, which steers the activities of seed companies in the country. The company states that it is responsible for advocacy activities with key partners and governments on behalf of the association.

The company refrains from using contractual clauses or other provisions to prohibit the use of commercial genetic material for further breeding, and mechanisms that prevent the practice of farm-saved seed by smallholder farmers.

The company tailors its pricing schemes in Nigeria by offering first-time customer pricing discounts as an initial outreach strategy to help smallholders to adopt improved seed, in addition to offering various other discounts on its products.

The company works with the following research institutes from which it obtains varieties, which it subsequently multiplies for sale: AfricaRice, the national Institute for Agricultural Research, the International Institute for Tropical Agriculture (IITA), the International Maize and Wheat Improvement Center (CIMMYT), the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and the National Cereals Research Institute (NCRI). The company collaborates with IITA and CIMMYT to develop maize that is resistant to fall armyworm, a significant pest specific in the region. The company has set up a breeding program to develop improved maize varieties for the Nigerian market.

The company partners with IITA and HarvestPlus on improving nutrition-sensitive agriculture by developing and commercializing provitamin A and quality protein maize varieties in Nigeria.

Value Seeds states that it elicits feedback from smallholder farmers, including women, to better tailor its varieties to the needs of specific customer groups. As such, smallholder farmers are engaged in the company's variety trials.

The company collaborates with smallholder farmer groups as well as large-scale farms (so-called Asma farms), local seed growers (such as Abhal Ltd) and farmer organizations (like the cooperative Ummusa Agro) on seed multiplication and production.

The company has a seed testing laboratory where seed is tested to ensure purity, germination capacity level, vigor and viability. The percentage benchmark for acceptability is 98%. These percentages are written on the company's and the National Seed Council's tags that are inserted in the packaging.

The company provides input loans to women smallholder and next-generation farmers, and allows farmers to pay back the loan in the form of harvested produce.

Value Seeds reports that in the last five years it has witnessed increasing changes in climate conditions, making it increasingly difficult for farmers to predict weather during the growing season. Through its partnership with CIMMYT, IITA and AfricaRice, the company reports facilitating the commercialization of drought- and flood-tolerant crop varieties alongside early and extra early varieties to provide resilience to early droughts. The company also aims to support farmers in dealing with climate change through improved farmer practices.

In collaboration with AfricaRice, Value Seeds uses the RiceAdvice app to collate information on rice-focused farming projects. RiceAdvice is a bilingual (French and English) Android app that advises rice farmers how to increase their production based on local conditions. Depending on the location, environmental conditions, rotation, cropping practices, expected sowing dates, available on-farm nutrients, desired yield increase, cost of fertilizer and expected rice market price, the app can help farmers maximize yields and/or profits and get assistance with linking to output markets.

## Portfolio information

Index crops in portfolio	Seed type			Source		
	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company
<b>Field crops</b>						
Cowpea		●			●	
Maize	●	●			●	
Millet		●			●	
Rice, paddy		●			●	
Sorghum		●			●	
Soybean		●			●	
Wheat		●			●	
<b>Vegetables</b>						
Cabbage	●					●
Carrot		●				●
Cucumber		●				●
Lettuce		●				●
Okra		●				●
Onion		●				●
Pepper (hot)		●				●
Pepper (sweet)		●				●
Tomato	●	●				●
Watermelon		●				●

## Local crops in portfolio

Amaranth | Cassava

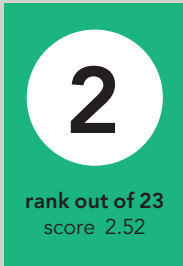


# Technisem

Access to Seeds Index

**Corporate data**  
Headquarters: Longué-Jumelles, France  
Ownership type: Private  
Group revenue (2017): EUR 16,790,000  
www.technisem.com

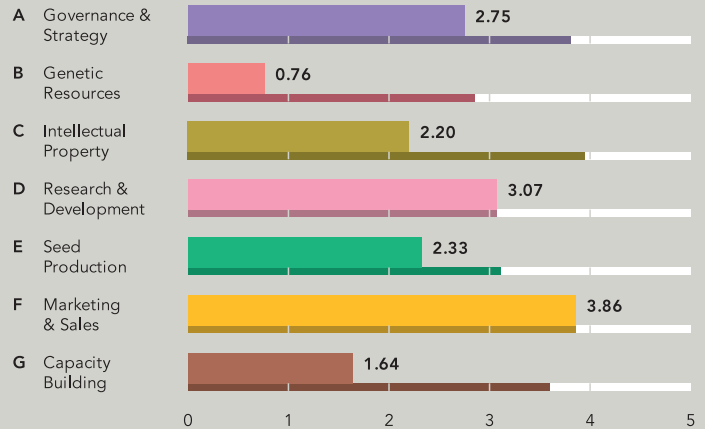
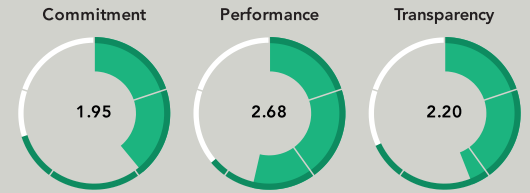
Established in France in 1985, Technisem is a vegetable breeding company that specializes in breeding, producing and distributing vegetable seed for tropical countries. It has extensive business activities throughout Africa and also operates in the Middle East, Caribbean and Latin America. The company focuses on Western and Central Africa, where the company's CEO played a central role in establishing Novalliance, a consortium of seed companies across the region. Group member collaborations include activities related to breeding, seed production, sales and capacity building. All of its customers are smallholder farmers, and its main crops are onion, cabbage and watermelon.



## Western and Central Africa

Technisem ranks second in the 2019 Index for Western and Central Africa. It performs particularly well in Research & Development and Marketing & Sales, where it is a leader among its peers thanks to its region-wide breeding efforts that encompass local crops and

its presence in over 80% of index countries. The company's unique partnership with several other West and Central African seed companies, through the Novalliance group, boosts its score in Governance & Strategy. The company's lowest score in Genetic Resources reflects a lack of reported positions on the conservation and use of genetic diversity in the region and benefit-sharing. In addition, Technisem's Transparency score could be improved if the company disclosed in greater detail its activities to improve access to seeds for smallholder farmers. With regard to formalization of company commitments in corporate policies and strategies, there is significant room for improvement.



## Leading practices

■ Through Novalliance, Technisem has been formalizing its collaboration with 45 seed companies worldwide, and primarily in West and Central Africa. Technisem states that the alliance was set up to help develop the seed sector in the region, in principle through the establishment of partnerships with local companies rather than the creation of subsidiaries in Africa. The alliance includes index companies Technisem, Tropicasem, Nankosem and Semagri. Novalliance aims to open around 200 stores across the region by 2025. The group is managed by job committees, each composed of managers from member companies.

■ Technisem has a broad breeding program, both in and outside of Western and Central Africa, which aims to adapt global vegetable crops to tropical conditions and improve local African crops. In the region, the company shares its breeding programs with its African Novalliance partner companies in Burkina Faso, Cameroon and Senegal, across various climatic conditions. Notably, the company has variety testing locations in about 60% of the index countries.

■ Technisem has capacity building activities in 60% of the index countries, more than any of its peers. It involves up to 32 staff per country, organizing training on good agronomic practices and appropriate input usage.

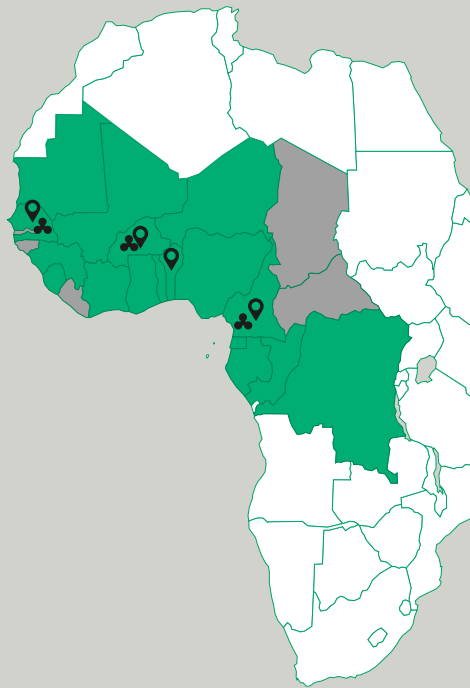
■ The company produces seed in Benin, Burkina Faso, Cameroon and Senegal.

## Areas for improvement

■ Technisem is encouraged to increase public disclosure regarding its access to seeds-related activities in Western and Central Africa.

■ The company has a broad breeding program with locations in multiple countries around the world. It is encouraged to articulate a strategy on the conservation and use of genetic resources, covering both crops in and outside its portfolio.

■ Building on its extensive experience in offering capacity building activities in Western and Central Africa, the company is encouraged to broaden these initiatives, orienting these toward next-generation and women smallholder farmers as well.



## Operations in scope

- Countries in scope
- Company presence
- Production locations
- ☘ Breeding station/R&D

## Notable findings

- Since 2013, through financial donations, skills donations and field visits, Technism has regularly supported the SEED Foundation, a non-profit endowment fund headquartered in France, that works with smallholder farmers in Africa to improve food security and living conditions.
- Technism acknowledges that the practice of saving seed for the next season is common among smallholder farmers in Africa. Although the company states that it does not limit the practice in countries where on-farm seed saving is legal, it emphasizes that because improved varieties are developed and the seed produced by professionals, this guarantees germination quality and varietal purity, which is not the case for farm-saved seed.
- Technism reports that it engages directly with smallholder farmers in the countries where it sells its seed, in order to understand smallholder market preferences and demand for breeding programs. The company's breeding program focuses on adapting global vegetables to regional specificities and on improving local African crops.
- The company follows a strict quality management procedure, whereby all seed is either tested in the four African production countries by an independent laboratory or in France by the company's own laboratory.
- In Burkina Faso, in collaboration with its Novalliance partner Nankosem, the majority (95%) of seed is produced by smallholder farmers. On these activities the company also collaborates with cooperatives.
- Out of all the index companies, Technism has the largest portfolio of local crops available in Western and Central Africa.
- The company reports that its portfolio considers the differing capacity levels of smallholder farmers. It offers open-pollinated varieties for all of its crops and hybrids for several crops. Its extensive local crop portfolio also reflects its focus on regionally important crops and varieties.
- Technism field staff provide guidance to smallholder farmers on good agronomic practices regarding the appropriate use of inputs, in particular by referring them to its sister company Jardinova, which markets natural solutions for the protection of soil and plants. The company highlights that using improved resistant varieties is key to reducing the use of pesticides.
- For the distribution of its seeds, Technism primarily works through its Novalliance partners. Through these local partnerships, Technism's seed is sold in 120 stores in Africa, while ensuring that remote areas are reached. The company however notes that security considerations regularly hamper the effective distribution of seeds in the region, especially in remote areas.
- Through its local partners, Technism collaborates with the African Intellectual Property Organization to tackle the sale and use of counterfeit seed on the continent. It also aims to protect smallholder farmers against counterfeits by providing them with the knowledge and means to denounce the practice.

## Portfolio information

Index crops in portfolio	Sales																Seed type			Source									
	BEN	BFA	CMR	CAF	TCD	CIV	COD	GNO	GAB	GHA	GIN	GNB	LBR	MLI	MRT	NER	NGA	COG	SEN	SLE	GMB	TGO	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company	
<b>Vegetables</b>																													
Cabbage	●	●	●			●	●	●	●	●				●			●	●	●					●	●				●
Carrot	●	●	●			●	●	●	●	●				●	●	●	●	●	●	●				●	●				●
Cauliflower	●	●	●				●			●				●			●	●	●										●
Cucumber	●	●	●			●	●	●	●	●				●	●	●	●	●	●	●				●	●				●
Eggplant	●	●	●			●	●	●	●	●				●	●	●	●	●	●					●	●		●	●	
Gourd	●	●	●			●								●											●				
Green bean	●	●	●			●	●	●	●	●				●	●	●	●	●							●				
Lettuce	●	●	●			●	●	●	●	●				●	●	●	●	●	●								●	●	
Melon	●	●	●			●								●					●						●				
Okra	●	●	●			●	●	●	●	●				●	●	●	●	●	●	●					●		●		
Onion	●	●	●			●	●	●	●	●				●	●	●	●	●	●	●					●		●		
Pepper (hot)	●	●	●			●	●	●	●	●				●	●	●	●	●	●	●					●		●		
Pepper (sweet)	●	●	●			●	●	●	●	●				●	●	●	●	●	●	●				●	●		●	●	
Pumpkin	●					●	●			●				●	●	●			●						●		●		
Squash	●	●	●			●	●	●	●	●				●	●	●	●	●	●					●	●				●
Tomato	●	●	●			●	●	●	●	●				●	●	●	●	●	●	●				●	●		●	●	
Watermelon	●	●	●			●	●	●	●	●				●	●	●	●	●	●						●				

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNO), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)

## Local crops in portfolio

Amaranth	African eggplant	Brede mafane	Celosia	
Hairy nightshade	Jew's mallow	Roselle	Spider plant	Yardlong bean

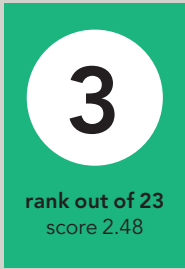


# East-West Seed

Access to Seeds Index

**Corporate data**  
Headquarters: Nonthaburi, Thailand  
Ownership type: Private  
Group revenue (2017): USD 150,000,000  
www.eastwestseed.com

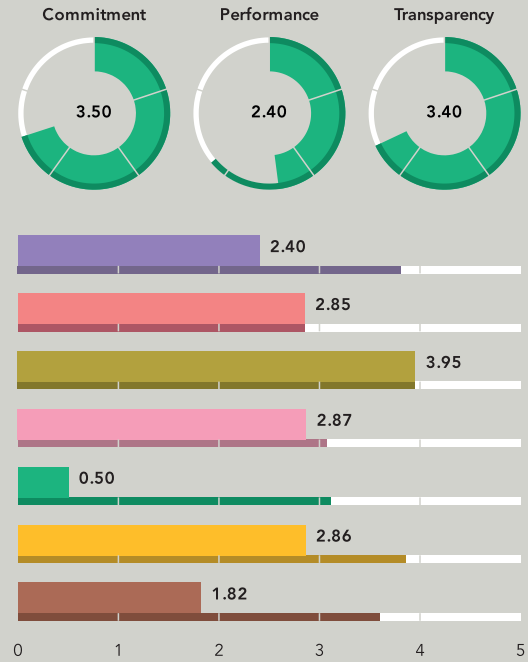
East-West Seed Company Ltd (East-West Seed) was founded in 1982 in the Philippines with a mission to improve the income of farmers through high-quality vegetable seeds. It led the 2016 Access to Seeds Global Index for vegetable seed companies as well as the Regional Index for Eastern Africa. East-West Seed's main clientele globally are smallholder farmers. Its portfolio contains over 900 hybrid and open-pollinated varieties. Now headquartered in Thailand, East-West Seed has about 5,000 employees.



## Western and Central Africa

East-West Seed ranks third in the 2019 Index for Western and Central Africa. A relative newcomer to the region, the company's strengths lie in its policies relating to Intellectual Property and Genetic Resources, as well as its Marketing & Sales activities. In Marketing & Sales, the company offers

agricultural inputs and demonstrates robust quality assurance mechanisms. In Intellectual Property, it does not impede the rights of breeders or farmers through contractual clauses or other mechanisms that impact innovation or smallholder farmer livelihoods. The company has a breeding station in Benin, where it develops improved varieties of local crops. It performs relatively poorly in Seed Production, as it does not produce seed in the region. There is also room for improvement in Capacity Building, particularly regarding next-generation farmers, programs for women smallholder farmers and access to output markets.



## Leading practices

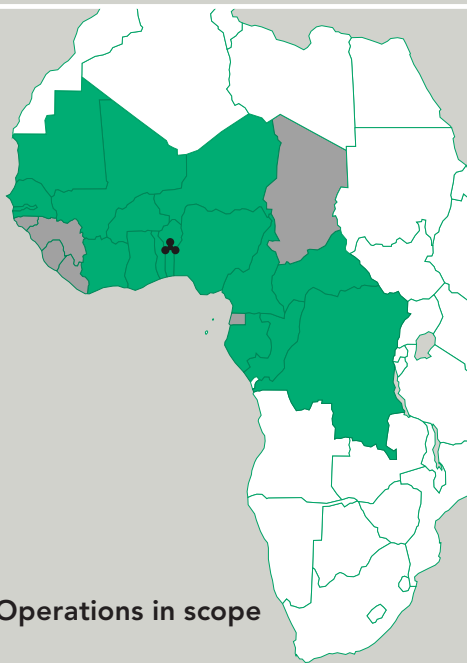
■ East-West Seed has a distribution network in 16 countries that also reaches remote areas. This is one of the widest distribution networks in the index.

## Areas for improvement

■ East-West Seed can improve its ranking by extending its commitment to the Sustainable Development Goals (SDGs) and linking its business activities to specific SDGs, as well as setting measurable targets and specifically tailoring these to Western and Central Africa.

■ The company has initiated a breeding program in Benin, with a focus on developing improved varieties of local crops. Building on its experience elsewhere, and given its regional growth plans, the company is encouraged to broaden its breeding activities in Western and Central Africa.

■ With extensive capacity building programs in other regions and reported plans to scale these up, the company is encouraged to leverage this knowledge and experience in Western and Central Africa.



## Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- ☘ Breeding station/R&D

## Notable findings

■ ■ In 2017, East-West Seed partnered with Tikola Ghana Ltd, its sole distributor in Ghana, to initiate a model farm project that teaches vegetable farmers good agricultural practices and how to get the most out of high-quality hybrid seed. The project has reached 1,500 farmers through ten strategically located demonstration farms. The project is supported by the Dutch government through the GhanaVeg Business Opportunity Fund.

■ ■ The company's code of business conduct, called '7 essentials', addresses various topics, including anti-corruption and social and labor standards. It contains an online quiz with real-life case studies to test employees' knowledge of the code.

■ The company recognizes the breeders' exemption on its PVP-registered varieties, and the farmers' right to save, use, sow, re-sow, exchange, share and sell farm produce, including seed of a protected variety under the Plant Variety Protection Act. It only restricts farmers from selling branded seed of the protected variety for commercial purposes.

■ The company has a breeding program for local crops in Benin.

■ The company trains its product distributors in Benin, Nigeria, Ghana, Mali and Côte d'Ivoire, enabling them to instruct their smallholder customers on the sustainable use of agro-inputs.

■ Through the company's Simon Groot Agriculture Scholarship, scholarships were given to farmers' children in Nigeria in 2017, equipping them with scientific and practical agricultural knowledge. Through the scholarships, the company aims to encourage these young farmers to carry on farming and establish thriving businesses and a sustainable source of livelihood to their communities.

■ The company's foundation, Knowledge Transfer, is in charge of most extension services and capacity building activities, particularly in pre-commercial areas outside Western and Central Africa. The company however reports that these activities have just expanded to Nigeria and Côte d'Ivoire.

## Portfolio information

Index crops in portfolio	Sales															Seed type			Source			
	BEN	BFA	CMR	CAF	CIV	COD	GNQ	GAB	GHA	MRT	NER	NGA	COG	SEN	GMB	TGO	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company
<b>Vegetables</b>																						
Cabbage	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					●
Carrot	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●				●
Cauliflower	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					●
Cucumber	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●		
Eggplant	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●		
Gourd	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●		
Green bean	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●				●
Lettuce	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●				●
Melon	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●		
Okra	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●		
Onion	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●		●		
Pepper (hot)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●		
Pepper (sweet)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●		
Pumpkin	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				●		
Squash	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				●
Tomato	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●		
Watermelon	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●		

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNQ), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)

## Local crops in portfolio

Amaranth | African eggplant | Celosia | Jew's mallow



# Syngenta

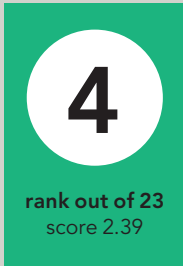
## Corporate data

Headquarters: Basel, Switzerland  
Ownership type: Private  
Group revenue (2017): USD 12,650,000,000  
Seed revenue (2017): USD 2,826,000,000

www.syngenta.com

Access to Seeds Index

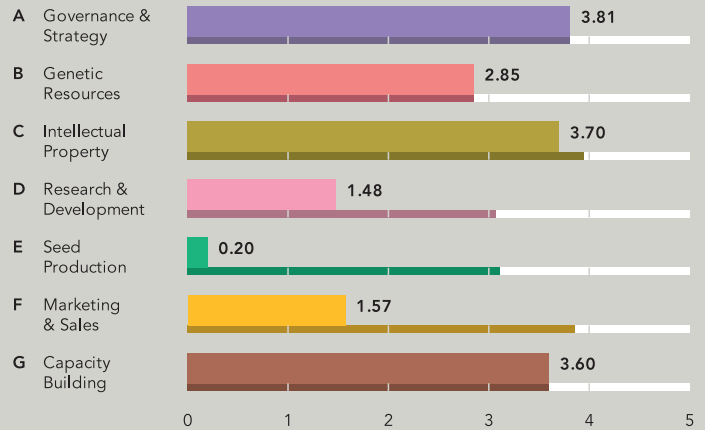
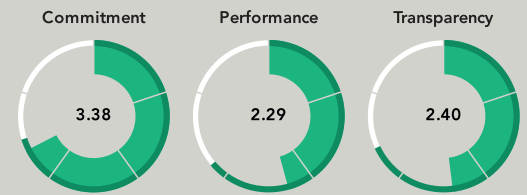
Syngenta AG (Syngenta) is a Swiss-based agrochemical company founded in 2000, following the merger of Novartis Agribusiness and Zeneca Agrochemicals. In October 2017, ChemChina secured a \$45 billion takeover after its participation in Syngenta exceeded 98% of Syngenta's share capital. Syngenta offers a wide range of field crops, vegetable and flower seeds and agrochemicals. Products are sold through independent distributors and dealers as well as directly to farmers. The company's non-profit organization, the Syngenta Foundation for Sustainable Agriculture, focuses specifically on pre-commercial smallholder farmers and has ongoing projects in Mali and Senegal.



## Western and Central Africa

Syngenta ranks fourth in the 2019 Index for Western and Central Africa, the result of leading performance in several measurement areas and below-average scores in others. The company leads the index in Governance & Strategy and Capacity Building. In the former, its global Good Growth Plan exhibits

strong smallholder and sustainability commitments, while in Western and Central Africa specifically, the company and its affiliated Syngenta Foundation are at the forefront of efforts to improve the enabling environment for the industry. In the latter, the Syngenta Foundation has a leading capacity building presence in Mali and Senegal, combining classical agronomic training with innovative information and communications technologies (ICTs) to improve smallholder productivity, as well as promoting farming as a viable livelihood to the next generation. At the other end of the scale, the company does not produce seed in the region and hence receives only minimal scores for its global commitment to Seed Production. A lack of disclosure on the specifics of its breeding programs results in a mediocre score in Research & Development, with a similar lack of information on portfolio availability in index countries resulting in a below-average score in Marketing & Sales. The company outperforms its regional peers in Genetic Resources and Intellectual Property, primarily as a result of conservation and benefit-sharing activities and robust and transparent corporate policies.



## Leading practices

■ The Syngenta Foundation's Seeds2B program focuses explicitly on improving access to seeds for smallholder farmers and has completed and ongoing initiatives across index countries. The program also works on policy harmonization and liberalization with the Economic Community of West African States (ECOWAS), the West and Central African Council for Agricultural Research and Development (CORAF/WECARD), national seed committees and national agricultural research systems.

■ The Syngenta Foundation, in partnership with AfricaRice, has developed the RiceAdvice app, which generates tailor-made recommendations that assist rice farmers in lowland areas to apply mineral fertilizer more efficiently. Between 2015-17, the foundation trained and engaged 230 actors as RiceAdvice service providers, who in turn guided 19,000 smallholders in Nigeria, Mali and Senegal through the rice-growing season.

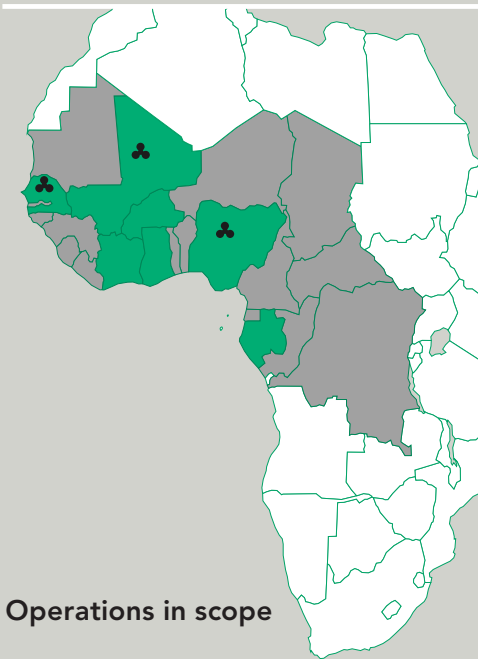
■ The Syngenta Foundation, the Technical Centre for Agricultural and Rural Cooperation and AfricaRice launched a project to foster youth entrepreneurship, strengthen market linkages and enhance livelihoods for next-generation rice farmers in Mali and Senegal. The program plans to target 15,000 rural youth through ICT channels.

## Areas for improvement

■ Syngenta, primarily through the Syngenta Foundation, demonstrates significant activities, programs and policies for smallholder farmers in Mali and Senegal. The company is encouraged to scale up and replicate these activities, where possible, in the other five index countries in which it reports having a presence.

■ Syngenta does not report having any seed production activities in the region, in contrast to Eastern and Southern Africa. The company is encouraged to consider undertaking these activities in Western and Central Africa as local seed production activities, and engaging smallholder farmers in such activities, have the potential to increase local capacity and develop local seed sectors.

■ The Syngenta Foundation publishes its variety catalog for Western Africa, demonstrating transparent reporting on the seed it makes available to smallholders. Syngenta itself is encouraged to follow this example and increase transparency around its portfolio availability in index countries.



## Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- ☘ Breeding station/R&D

## Notable findings

■ The Syngenta Foundation has two programs to help create an enabling environment for seed activities in Africa. Its Connect program identifies and assesses the performance of new varieties and de-risks entry for distribution, while its Build program facilitates the licensing of public-bred varieties for private companies and develops the market for smallholder farmers.

■ The Syngenta Foundation partnered with the New Markets Lab to undertake case studies to assess the pace of national efforts to implement regional seed policy harmonization. Ghana is one of three countries in which the studies were implemented.

■ The company informs its breeding program with the knowledge, preferences and feedback of local consumers, using its network of over 1,400 reference farms across 41 countries, including Côte d'Ivoire.

■ The Syngenta Foundation funded a project to train Malian government scientists to breed sorghum varieties better adapted to local conditions. The program has resulted in four new varieties, which will be offered to smallholder farmers by local Malian seed companies in the coming years, with the Syngenta Foundation assisting in registering these new varieties and establishing public-private partnerships between the local companies and government.

■ In 2016, Syngenta partnered with the Scaling Seeds and Technology Partnership, the United States Agency for International Development (USAID) and the Alliance for a Green Revolution in Africa (AGRA) to launch APRON@Star in Senegal, a two-year initiative to improve smallholder access to agricultural inputs, including seed and seed treatment technology, with the aim of strengthening food security and farmer livelihoods.

■ The Syngenta Foundation introduced the Center for Mechanized Services (CEMA) model in Mali and Senegal. This integrates new technology and training on rice cultivation, reaching 5,300 smallholder farmers through the former and over 5,000 across three projects through the latter.

## Portfolio information

### Index crops in portfolio

Field crops	Vegetables
Beans, dry	Cabbage
Chickpea	Carrot
Cowpea	Cauliflower
Groundnut	Cucumber
Maize	Eggplant
Millet	Green bean
Pigeon pea	Green pea
Potato	Lettuce
Rice, paddy	Melon
Sesame	Okra
Sorghum	Onion
Soybean	Pepper (hot)
Sunflower	Pepper (sweet)
Wheat	Pumpkin
	Squash
	Tomato
	Watermelon





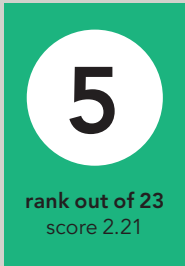
# Tropicasem

Access to Seeds Index

## Corporate data

Headquarters: Dakar, Senegal  
Ownership type: Private  
Group revenue (2017): EUR 8,676,387  
Seed revenue (2017): EUR 7,450,887

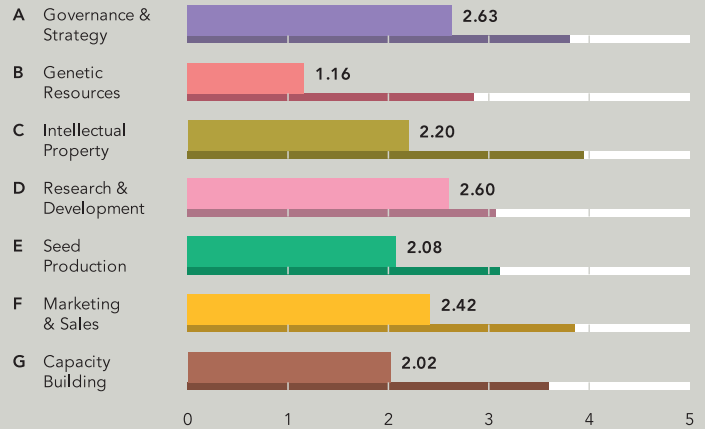
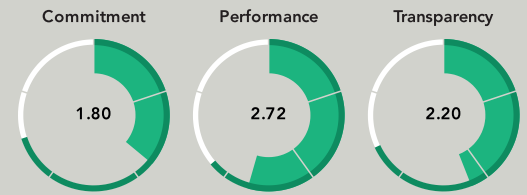
Founded in 1985, Tropicasem specializes in the supply of vegetable and maize seeds, agricultural inputs and equipment. With 83 employees, the company is present across Senegal, where it also has a breeding program. It partners with Technisem, also a member of Novalliance. Its main crops are onion, potato and cabbage. Smallholder farmers constitute its entire client base.



## Western and Central Africa

Tropicasem ranks fifth in the 2019 Index for Western and Central Africa, its strong performance attributable to consistent scores across all measurement areas. The company's joint commitment within the Novalliance group to establish 200 stores in the region is notable in

Governance & Strategy, but it also performs strongly in Research & Development, breeding vegetable varieties adapted for the Senegalese market. The company engages smallholder farmers in its seed production activities and provides agronomic training, resulting in solid scores in Seed Production and Capacity Building respectively. The company scores lowest in Genetic Resources, disclosing limited corporate positions and activities related to the conservation of local genetic diversity. In addition to Technisem-branded seed, Tropicasem also sells Limagrain seed as all as Gopex potato varieties.

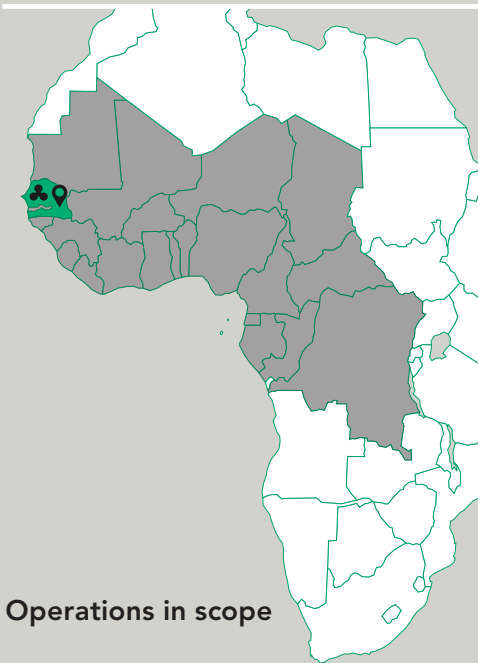


## Leading practices

■ The company offers a mix of marketing and capacity building activities in Senegal. It disseminates growing guides on varieties on offer, information on disease identification and agronomic advice on soil health. In addition, it offers soil kits and My Agri, an app with agronomic guides developed especially for smallholder farmers.

## Areas for improvement

■ Tropicasem can improve its performance by increasing public disclosure regarding its corporate access to seeds policies and activities, but particularly in relation to commitments and activities in Genetic Resources.



## Operations in scope

- Countries in scope
- Company presence
- Production locations
- Breeding station/R&D

## Notable findings

■ Through its activities, Tropicasem reports investing in the development of the Senegalese seed sector. It also reports working closely with the onion industry to support local production, with the aim of limiting imports of onions from Europe.

■ Tropicasem works with local farmer organizations, particularly in supporting the introduction of new cultivation methods. The company reports that it also provides administrative support to some of these organizations.

■ While the company's main focus is reaching smallholder farmers in the rural areas of Senegal, it has recently introduced a product range for micro-gardens dedicated to small producers in urban areas.

■ The company states that it invests in breeding programs for crops that are known for their nutritional value, for example certain leafy vegetables, and raising farmers' awareness of these crops through communications tools. It also states that it maintains a broad portfolio, enabling farmers to cultivate a range of crops and varieties, thus improving dietary diversity.

■ The company has three breeding sites in Senegal. It focuses on okra, tomato and short-day onions that are particularly adapted to tropical areas.

■ On its website, the company states that it works with 'pilot market gardeners' who test new varieties in different growing conditions before the company releases them on the Senegalese market. Feedback from the market gardeners at the end of each test are used to guide the selection programs.

■ Although the company's quality assurance system is not externally certified, the company reportedly follows a strict process to ensure quality, from basic seed to shipment. Technicians are actively involved with producers during pollination, harvesting and sorting, and germination tests are carried out before shipment.

## Portfolio information

Index crops in portfolio	Sales SEN	Seed type			Source		
		Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company
<b>Field crops</b>							
Maize	●	●					●
Potato	●		●				●
<b>Vegetables</b>							
Cabbage	●	●	●				●
Carrot	●	●	●				●
Cauliflower	●	●	●				●
Cucumber	●	●	●				●
Eggplant	●	●	●		●	●	
Lettuce	●		●		●	●	
Melon	●		●				
Okra	●		●		●		●
Onion	●		●		●		●
Pepper (hot)	●		●		●		●
Pepper (sweet)	●	●	●			●	●
Pumpkin	●		●				●
Squash	●	●	●				●
Tomato	●	●	●		●	●	
Watermelon	●		●				●

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNQ), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)



# Maslaha Seeds

Maslaha Seeds is a Nigerian field crop company, founded by onetime senator Alhaji Saidu Mohammed Dansadau in 2007. The company is only active in Nigeria. Since its modest beginnings producing rice seed, the company has expanded to build an extensive outgrower network, breeding program and capacity building services for smallholder farmers.

Access to Seeds Index

**Corporate data**  
Headquarters: Zamfara, Nigeria  
Ownership type: Private  
Group revenue (2017): NGN 4,500,289  
www.maslahaseeds.com

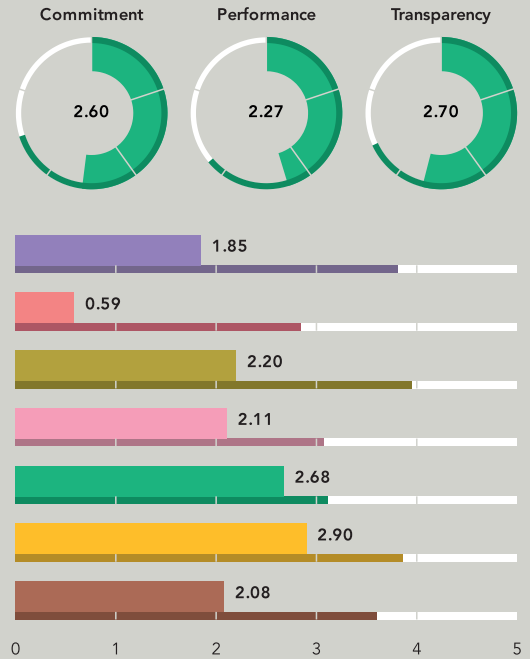
**6**

rank out of 23  
score 2.15

## Western and Central Africa

Maslaha Seeds ranks sixth in the 2019 Index for Western and Central Africa. It performs well in Seed Production, thanks to its engagement of smallholder farmers, and Marketing & Sales, for its strong smallholder-friendly policy and quality management system. The company could improve its score in

Governance & Strategy with more emphasis on policy development and stronger codes of business conduct. The company does not have mechanisms to incorporate local knowledge and feedback into its breeding activities, nor does it have a diverse portfolio, factors that affect its score in Research & Development. In other measurement areas, the company achieves average scores, demonstrating certain strengths as well as room for improvement.

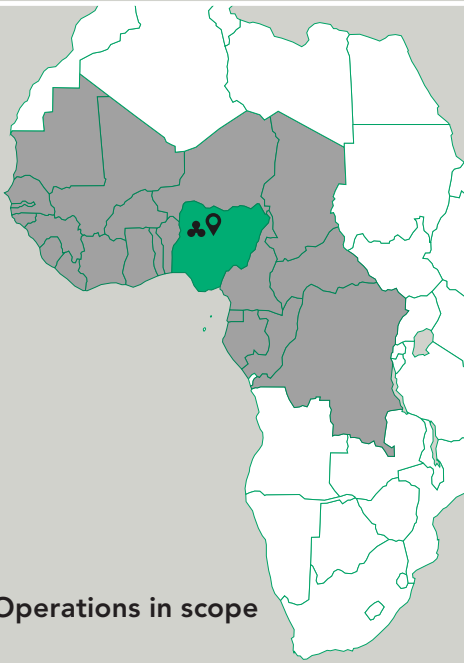


## Leading practices

- Maslaha Seeds advances the local seed sector by providing foundation seed to smaller companies, which helps these companies to produce regionally adapted certified seed.
- The company has an agripreneur program, through which it trains next-generation smallholders to become farmer leaders in their communities and share good agricultural practices and business skills with other youth. The company also states that it shows these youth how to use information and communications technology to maintain farm records and manage simple farm technologies.

## Areas for improvement

- Maslaha Seeds has a code of conduct defining its stance on anti-corruption. It is encouraged to develop codes of conduct that regulate other aspects of its business activities, in particular social and labor standards, accompanied by a robust monitoring mechanism to ensure compliance throughout its operations.
- The company reports that a corporate policy formulating its commitment to the Sustainable Development Goals is under development. It is encouraged to develop a policy incorporating measurable corporate targets, thereby increasing its accountability regarding its contribution to the goals.
- The company states that it is currently developing a policy for the conservation and use of genetic resources. To leverage this policy, the company is encouraged to develop related activities and partnerships with relevant national and international actors, such as public gene banks.
- Building on its efforts to reach smallholder farmers through capacity building activities and acknowledging their important role in Nigerian agriculture, the company is encouraged to develop programs and outreach services for women smallholder farmers.



### Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- 🌱 Breeding station/R&D

### Notable findings

- Maslaha Seeds is a member of the Seed Entrepreneurs Association of Nigeria and is registered with the African Seed Trade Association.
- The company refrains from using contractual clauses or other provisions to prohibit use of commercial genetic material for further breeding, and mechanisms that prevent the practice of farm-saved seed by smallholder farmers.
- The company has testing and breeding activities in Nigeria, focusing on breeding traits such as early maturation and multi-stress tolerance. It has also developed open-pollinated provitamin A varieties of maize.
- Maslaha Seeds states that it is affiliated with the International Institute for Tropical Agriculture's Stress Tolerant Maize for Africa project. The company produces early generation seed to hasten the production and marketing of stress-tolerant hybrids and open-pollinated varieties in Western Africa, in addition to producing foundation seed of stress-tolerant parental lines.
- The company involves smallholder outgrowers in its certified seed production activities in Nigeria, ranging from 200 to 2,000 farmers per year.

### Portfolio information

Index crops in portfolio	Seed type		
	Hybrid	OPV	GM
<b>Field crops</b>			
Cowpea		●	
Groundnut		●	
Maize	●	●	
Millets		●	
Rice, paddy		●	
Sorghum		●	
Soybean		●	

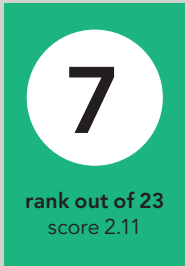


# Seed Co

Access to Seeds Index

**Corporate data**  
Headquarters: Johannesburg, South Africa  
Ownership type: Listed  
Group revenue (2017): USD 135,000,000  
www.seedcogroup.com

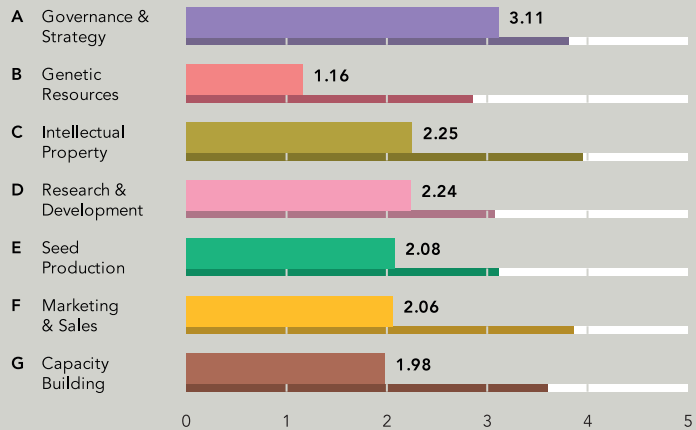
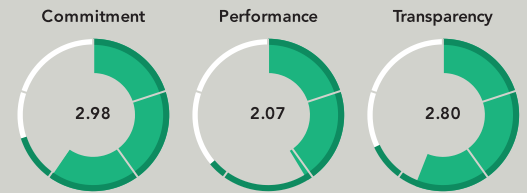
Seed Co Ltd (Seed Co) was founded in 1940 as the Seed Maize Association (SMA) of Zimbabwe. In 1983, SMA merged with Crop Seeds Association to form Seed Co and has since grown to have a presence throughout Africa. The company breeds, produces and markets hybrid field crops. As of 2017, Limagrain owns a 30.2% share in Seed Co. In collaboration with HM Clause, a business unit of Limagrain, Seed Co breeds and distributes vegetable seeds under the brand Prime Seed. Originating in Zimbabwe, the company recently moved its headquarters to South Africa. It has extensive operations in Eastern and Southern Africa and is expanding in Western and Central Africa.



## Western and Central Africa

Seed Co ranks seventh in the 2019 Index for Western and Central Africa. The company has a wide distribution network and various testing locations in the region. It performs strongly in Governance & Strategy, having invested in extension services operating in tandem with demonstration plots in

Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Mali and Ghana. With regards to Capacity Building and Research & Development, Seed Co bases most of its activities in Ghana. Overall, it is evident that the company is expanding its scope in the region, and it can broaden and extend its activities and reach across all measurement areas in all countries it is active.



## Leading practices

Seed Co has a target to reach 40 million smallholder farmers in sub-Saharan Africa by 2025. It also tracks its progress toward this target and shows the methods it uses to reach smallholders as customers. Moreover, it has a nascent, internal sustainability strategy linking its breeding, capacity building and sales activities to several specific Sustainable Development Goals (SDGs), including SDGs 2 (Zero Hunger), 5 (Gender Equality), 13 (Climate Action) and 15 (Life on Land).

The company has developed a wide distribution network across the region tailored to reaching smallholder farmers. It uses village-based sales agents, ambassador farmers and bike field officers to reach remote areas, and promotes the concept of buying groups to enable farmers to obtain seed at more favorable prices. The company further tailors its maize packaging with pictograms of various animals (Rabbit, Monkey, Zebra, Lion, Elephant and Giraffe) to visually demonstrate variable maturity ranges. This helps illiterate smallholder farmers recognize relevant varieties.

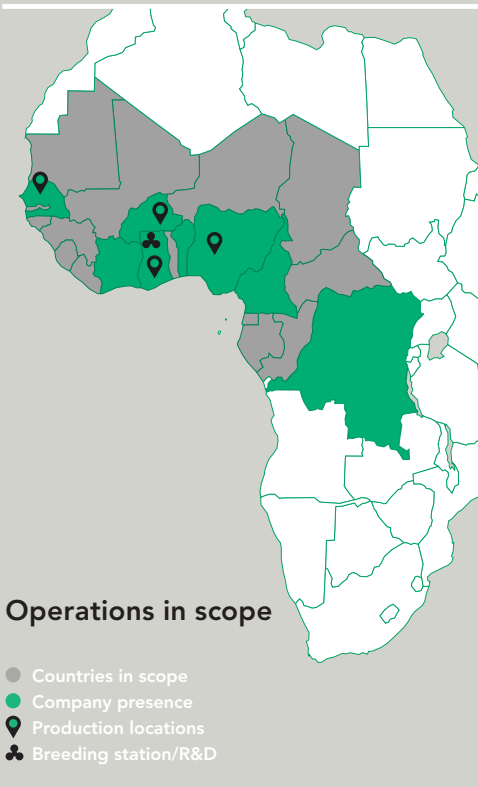
## Areas for improvement

Seed Co is a member of seed trade associations in Ghana and Nigeria. While the company contributes to policy harmonization through the Common Market for Eastern and Southern Africa and plays an active role in the African Seed Trade Association, it is encouraged to build on these experiences and leverage them throughout Western and Central Africa.

Through its country offices, the company is engaged in policy discussions around access and benefit-sharing. It is also encouraged to engage in policy development and activities for improving genetic conservation and use in Western and Central Africa.

The company has improved public disclosure of its activities significantly since the 2016 Index. Building on its stated aim to become more transparent, the company is encouraged to improve its transparency around policies and company positions on issues pertaining to intellectual property protection of its seed products.

The company is encouraged to clarify how it enforces social and labor standards within its seed supply chain and how quality management in all its seed production activities is maintained.



### Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- ⦿ Breeding station/R&D

### Notable findings

- Seed Co uses financial and non-financial resources to improve access to seeds for smallholder farmers, demonstrating a corporate-wide commitment. The company states that it is investing resources in demonstration plots in Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Mali and Ghana.
- The company does not use contracts or other mechanisms to prevent further breeding of its varieties, nor does it prohibit the practice of farm-saved seed by smallholder farmers.
- The company has variety testing locations in the Democratic Republic of Congo, Ghana and Nigeria and a breeding location in Ghana.
- In Ghana, women constitute 50% of the smallholder farmers participating in promotional and awareness-raising activities such as field days hosted on the company's demonstration plots.
- The company is collaborating with insurance institutions such as the Ghana Agricultural Insurance Programme and other relevant partners in the region to encourage smallholder farmers to insure their crops, in addition to negotiating with banks in Ghana to provide credit to smallholder farmers.
- The company supports next-generation farmers by involving young people in agronomic training on its demonstration fields. It also partners with MBC Africa, an regionally operating NGO based in Ghana with a mission to equip African entrepreneurs with the business solutions and support services, to offer agribusiness training to youth.

### Portfolio information

#### Index crops in portfolio

Field crops	Vegetables
Beans, dry	Cabbage
Cowpea	Cucumber
Groundnut	Eggplant
Maize	Green bean
Soybean	Green pea
Wheat	Lettuce
	Melon
	Okra
	Onion
	Pepper (hot)
	Pepper (sweet)
	Squash
	Tomato
	Watermelon

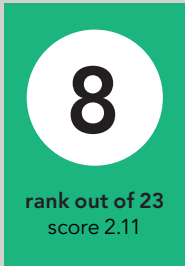


# Semagri

Access to Seeds Index

**Corporate data**  
Headquarters: Douala, Cameroon  
Ownership type: Private  
Group revenue (2017): XOF 1,800,000,000  
Seed revenue (2017): XOF 1,650,000,000

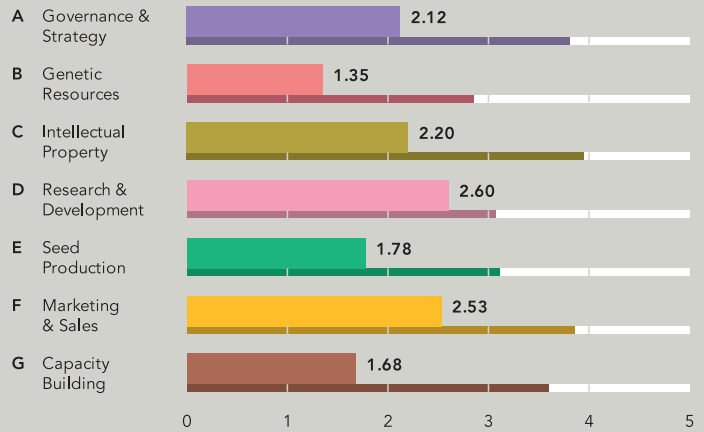
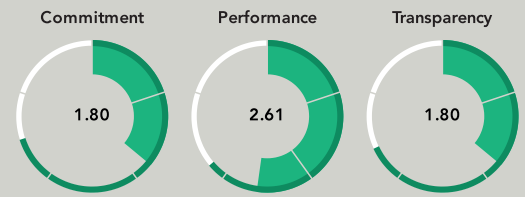
Created in 1996, Semagri is a vegetable seed company specialized in varieties adapted to hot climates, both humid and dry conditions. Part of Novalliance, Semagri maintains close ties with partner company Technisem, particularly on breeding and marketing activities. Based and exclusively active in Cameroon, its main crops are carrot and watermelon. Smallholder farmers constitute the company's only clientele.



## Western and Central Africa

Semagri ranks eighth in the 2019 Index for Western and Central Africa. It owes its solid performance to commitments in Governance & Strategy, supporting smallholder farmers and local seed sector development. It also shows strengths in Capacity Building, training

smallholder farmers on new farming techniques and encouraging youth to enter farming, and in Marketing & Sales, notably its promotion of adequate and sustainable use of inputs. Nonetheless, the company's Transparency and Commitment scores are lower than its Performance score, meaning that it could benefit from setting and publicly sharing robust corporate commitments and targets relating to smallholder farmers. In addition, like most of its regional peers, the company could develop and implement a strategy on the conservation and use of genetic resources.



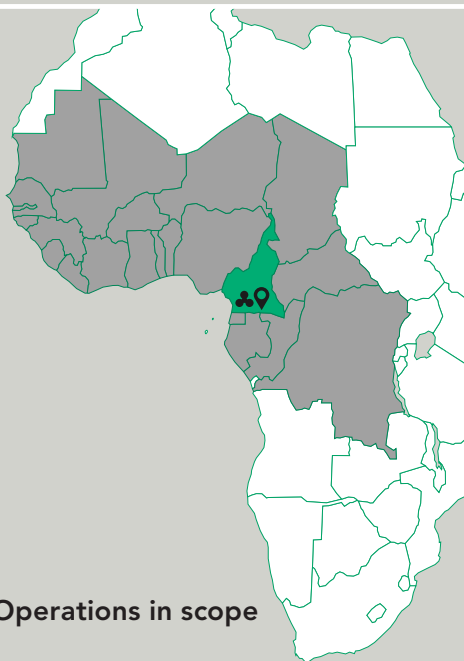
### Leading practices

Semagri participates in discussions around the development of a national seed catalog, a key instrument in the development and release of improved plant varieties in Cameroon. In addition, the company collaborates with local farming groups and supports their transformation into cooperatives by providing training on financial accounting.

### Areas for improvement

Semagri is encouraged to disclose the full scope of its access to seeds-related activities in Cameroon.

The company is encouraged to formalize a corporate position regarding the conservation and use of genetic resources. It could also publicly disclose further information on how it tracks and traces the genetic resources it uses in its breeding program.



## Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- 👥 Breeding station/R&D

## Notable findings

- Semagri conducts varietal testing on several smallholder farms in various climatic settings in Cameroon and collects feedback directly from farmers.
- The company collaborates with Technisem on a breeding program for several vegetable crops, namely okra, onion, hot pepper, pumpkin and tomato.
- The company relies on Technisem's laboratory in France for quality control.
- The company encourages the sustainable use of organic inputs and promotes these along with other equipment to farmers. Training is provided by company field officers on the safe and efficient use of seed and other inputs.
- The company regularly organizes field days to demonstrate new varieties and crops to smallholder farmers. Thirty field days were organized in 2017, with up to 100 farmers attending each. These events also serve as an opportunity to demonstrate cultivation techniques and share knowledge on good agricultural practices.
- The company cooperates with agricultural schools, organizing workshops and offering internships to students to encourage their interest in agriculture.

## Portfolio information

Index crops in portfolio	Sales	Seed type			Source		
	CMR	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company
<b>Vegetables</b>							
Cabbage	●	●	●				●
Carrot	●	●	●				●
Cauliflower	●	●	●				●
Cucumber	●	●	●				●
Eggplant	●	●	●				●
Gourd	●		●				●
Green bean	●		●				
Lettuce	●		●				●
Melon	●		●				
Okra	●		●		●		
Onion	●		●		●		
Pepper (hot)	●		●		●		
Pepper (sweet)	●	●	●			●	●
Squash	●	●	●				●
Tomato	●	●	●		●	●	
Watermelon	●		●				

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNO), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)

## Local crops in portfolio

African eggplant | Amaranth | Celosia | Hairy nightshade | Roselle



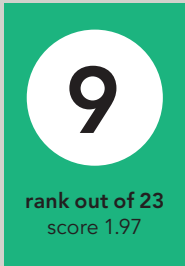


# Nankosem

Access to Seeds Index

**Corporate data**  
Headquarters: Ouagadougou, Burkina Faso  
Ownership type: Private  
Company revenue (2017): XOF 3,200,000,000  
www.nankosem.com

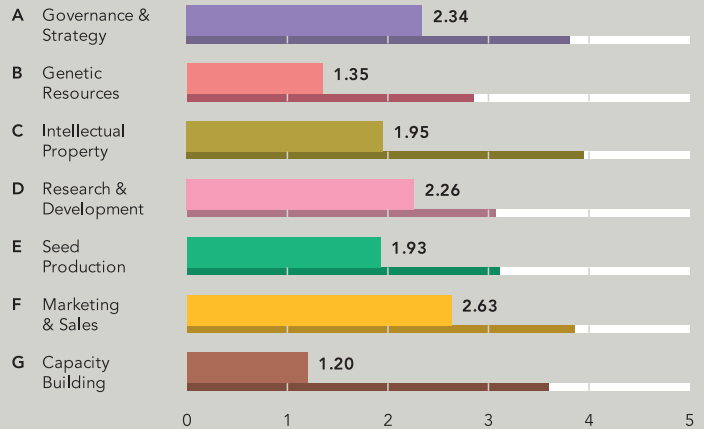
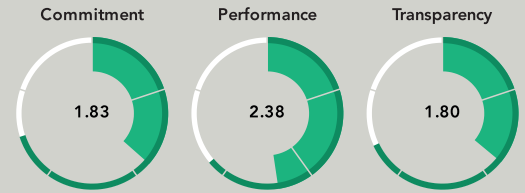
Nankosem was founded in 1991 and is headquartered in Ouagadougou, Burkina Faso. The company specializes in the production, import and distribution of vegetable seeds and other agricultural products. The company has 13 stores nationwide and seed production and research stations to complement these activities. The company is a member of Novalliance, a group of seed companies set up by the CEO of fellow index company Technisem in 2015. Alliance collaborations include activities related to breeding, seed production, sales and capacity building. Smallholder farmers represent 100% of Nankosem's clientele.



## Western and Central Africa

Nankosem ranks ninth in the 2019 Index for Western and Central Africa, reflective of consistent scores across all measurement areas. Through Novalliance, Nankosem scores strongly on its commitments to smallholder farmers in Governance & Strategy. The company also engages smallholder

farmers in Seed Production and formalizes these relationships with contracts, for which it gains credit. The company scores best in Marketing & Sales, where it combines robust distribution channels to remote areas in Burkina Faso with field days and demonstrations with a focus on smallholder farmers. The company provides agronomic training to smallholder farmers but does not incorporate information and communications technology or output market schemes or have specific programs for women and young farmers, resulting in a lower score in Capacity Building. The company discloses limited information and activities in relation to Genetic Resources, its lowest scoring area.



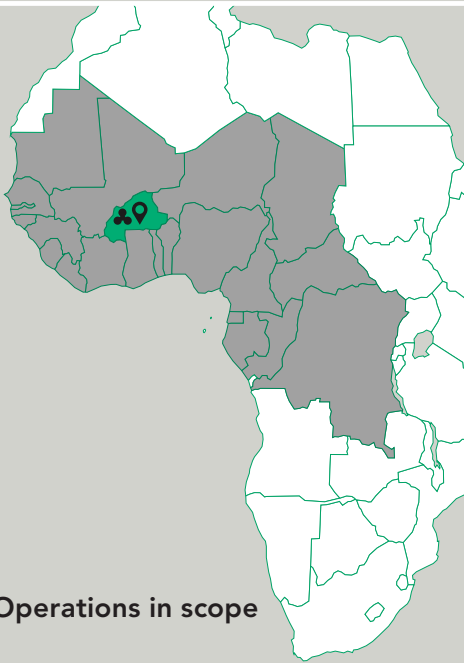
## Leading practices

■ Nankosem engages a notable number of local producers in seed production. In 2017-18, this included 94 eggplant seed producers, 104 for okra and 248 for green beans. In total, the company engages 446 smallholder farmers in these activities.

## Areas for improvement

- Nankosem is encouraged to publicly disclose the full scope of its access to seeds-related activities in Burkina Faso.
- Regarding genetic resources, the company, potentially through Novalliance, could improve alignment with international treaties, and increase integration and collaboration with other national and international partners, with the aim of contributing to the conservation and use of genetic resources.

■ The company reports complying with social norms relating to forced labor, minimum wages, and health and safety. It is encouraged to formalize these commitments with a transparent code of business conduct related to its seed production activities and introduce a robust monitoring mechanism.



### Operations in scope

- Countries in scope
- Company presence
- Production locations
- Breeding station/R&D

### Notable findings

- Novalliance, of which Nankosem is a member, has an objective to establish a distribution network of 200 stores across Western and Central Africa, as part of its mission to improve access to seeds for smallholder farmers.
- The company has contributed to local seed sector development in Burkina Faso by establishing a network of seed producers in the Sourou region and set up programs to enhance their productivity.
- The company employs technical agents and organizes farm visits to gather feedback from smallholder farmers, in turn incorporating farmer preferences and needs into its research activities. The company reports specifically considering women smallholder farmers within these activities, as they constitute an important customer group.
- The company has a commitment not to sell out-of-date seed. To achieve this, it combines quality assurance with strict inventory management. The company also takes steps to tackle counterfeit seed, albeit in a reactive rather than proactive way, by addressing issues when they arise, such as taking legal action against counterfeit seed sellers.
- The company invests heavily in field days and uses these events to provide samples to smallholder farmers to test new varieties. It also uses 'guided tours', whereby field agents collectively provide lessons to smallholder producers on good agricultural practices. Nankosem conducted 134 guided tours in 2017.
- The company uses radio adverts, including in the local languages Mooré and Dioula, to promote its products and reach farmers in remote areas.
- The company uses nursery plots to provide agronomic training to smallholder farmers, including disseminating specialized crop and phytosanitary guides.

### Portfolio information

Index crops in portfolio	Sales				Seed type			Source		
	BFA	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company			
<b>Vegetables</b>										
Cabbage	●	●	●				●			
Carrot	●	●	●				●			
Cauliflower	●	●	●				●			
Cucumber	●	●	●				●			
Eggplant	●	●	●				●			
Green bean	●		●				●			
Lettuce	●		●				●			
Melon	●		●				●			
Okra	●		●		●		●			
Onion	●		●		●		●			
Pepper (hot)	●		●		●		●			
Pepper (sweet)	●	●	●			●	●			
Pumpkin	●		●		●		●			
Squash	●	●	●				●			
Tomato	●	●	●		●	●	●			
Watermelon	●					●				

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNQ), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)

### Local crops in portfolio

African eggplant	African hot pepper	Amaranth	Brede mafane	
Celosia	Jew's mallow	Roselle	Spider plant	Yardlong bean



# Corteva Agriscience

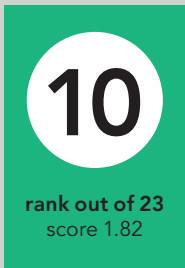
## Corporate data

Headquarters: Wilmington, Delaware, United States of America  
Ownership type: Listed  
Group revenue (2017): USD 14,342,000,000  
Seed revenue (2017): USD 8,250,322,000

www.corteva.com

Access to Seeds Index

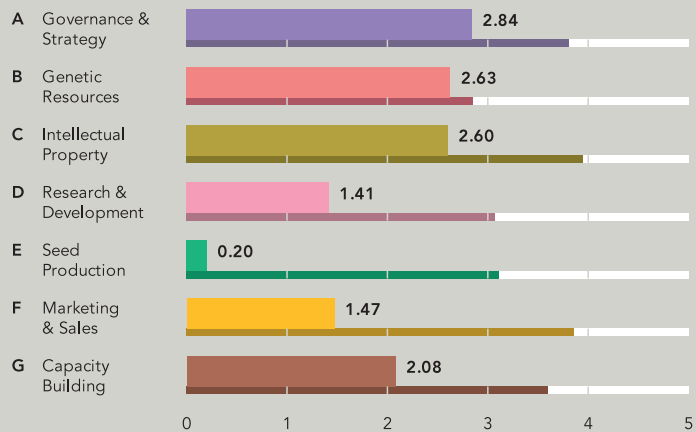
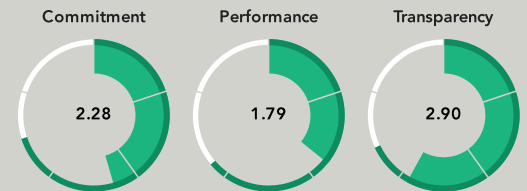
Corteva Agriscience™ (Corteva Agriscience) is the agriculture division of DowDuPont. DowDuPont was formed by the merger of Dow and DuPont, which was completed on August 31, 2017. The two companies merged their agriculture, materials science and specialty product portfolios. Corteva Agriscience was established by combining DuPont Crop Protection, DuPont Pioneer and Dow AgroSciences and will separate from DowDuPont to become a publicly traded company in June 2019. It supplies a diverse range of field crop hybrids and varieties alongside crop protection products. In all index regions, the company primarily works through its Pioneer brand, with maize, rice and millets considered its main crops. In Africa specifically, Pannar is considered a significant maize brand.



## Western and Central Africa

Corteva Agriscience ranks tenth in the 2019 Index for Western and Central Africa, demonstrating relatively consistent scores across most measurement areas and several notable leading practices. Its highest scores are in Governance & Strategy, Genetic Resources and Intellectual Property,

where its global policies and corporate positions outperform most of its regional counterparts. Of particular note is the company's licensing of proprietary transformation and CRISPR-Cas gene-editing technologies. Corteva Agriscience's hybrid maize adoption program in Ghana (GAMSAP) is an industry leader, albeit a relatively standalone program with respect to Capacity Building. The company does not produce seed in the region, consequently scoring only on Commitment in Seed Production. In Research & Development, the company has strong collaborative research projects, including with Nigeria's Institute for Agricultural Research, but does not have any breeding stations of its own. The company offers varieties of field crops across the region but does not demonstrate tailored approaches for smallholder farmers, such as adapted packages or affordability schemes, resulting in a below-average score in Marketing & Sales.



## Leading practices

■ Corteva Agriscience has licensed proprietary transformation and CRISPR-Cas gene-editing technologies to a number of research organizations for the purpose of improving food security crops. In its sustainability report, the company highlights the first use of the technology in a joint agreement with the International Maize and Wheat Improvement Center (CIMMYT) to combat maize lethal necrosis in sub-Saharan Africa.

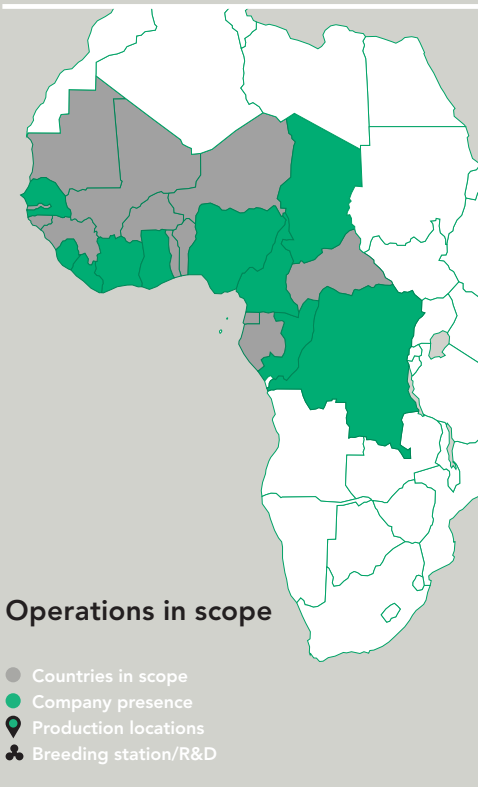
■ The company has a comprehensive approach to tackling fall armyworm, combining classical breeding, transgenics, entomology and insecticides to address the pest that predominantly affects index countries, particularly in sub-Saharan Africa.

■ In collaboration with the United States Agency for International Development (USAID), Corteva Agriscience has implemented the GAMSAP program in Ghana. The program aims to increase smallholder adoption of adapted hybrid maize varieties and provide training in good agricultural practices to raise productivity and profitability, as well as improve the input supply chain to enable greater access to technology. Notably, Corteva Agriscience has similar programs in Eastern and Southern Africa, in Ethiopia (AMSAP) and Zambia (ZAMSAP).

## Areas for improvement

■ Corteva Agriscience has a vast network of seed production locations throughout Africa in which it engages smallholder farmers, although not in any index countries in Western and Central Africa. The company is encouraged to expand its engagement with smallholder farmers in this region, which, if initiated, could assist with local seed sector development.

■ The company has distribution channels across the region, including to remote areas, but can consider more tailored approaches to meet the specific needs of smallholder farmers. This could include packaging with pictograms or local languages or affordability schemes to reduce the up-front costs for smallholder customers.



## Notable findings

■ The company's subsidiary Pannar was established in Greytown, South Africa in 1958. In 2013, Corteva Agriscience (under the former name DuPont Pioneer) acquired majority ownership of Pannar, strengthening its position in the continent. In Western and Central Africa, the Pannar brand is sold in the Republic of the Congo, Democratic Republic of Congo, Cameroon, Ghana, Senegal and Chad.

■ In 2018, the company signed a memorandum of understanding with USAID, as part of the agency's focus on increasing private sector partnerships. The five-year agreement will allow Corteva Agriscience and USAID's food security initiative Feed the Future to build on existing programs to scale agricultural technology for smallholder farmers in Africa.

■ The company has pledged to conserve and make available crop diversity by financially supporting the Global Crop Diversity Trust's projects and crop germplasm bank operations.

■ The company conducts collaborative research with, among others, Nigeria's Institute for Agricultural Research to develop micronutrient-rich (iron, zinc and vitamin A) sorghum. The program was originally funded by the Bill & Melinda Gates Foundation but is now funded entirely by Corteva Agriscience.

■ Corteva Agriscience, together with the Bill & Melinda Gates Foundation, collaborates with the 4-H movement, a US-based network of youth organizations that seeks to support the career development of millions of young people in various sectors including agriculture and is active in Cameroon, The Gambia, Ghana, Nigeria and Senegal.

■ Corteva Agriscience is working with Flour Mills of Nigeria to develop the Nigerian maize market, with a focus on promoting modern farming techniques, increased use of improved inputs and knowledge transfer for local smallholder producers.

## Portfolio information

Index crops in portfolio	Sales										Seed type			Source		
	CMR	TCD	CIV	COD	GHA	LBR	NGA	COG	SEN	SLE	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company
<b>Field crops</b>																
Beans, dry																
Maize	●	●		●	●		●	●	●		●			●		
Millets																
Rice, paddy																
Sorghum	●	●		●			●				●			●		
Soybean	●	●		●				●				●		●		
Sunflower																
Wheat																

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNO), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)

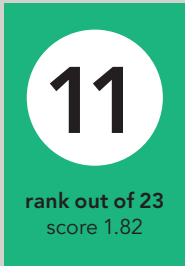


# Premier Seed

Access to Seeds Index

**Corporate data**  
Headquarters: Zaria, Nigeria  
Ownership type: Private  
Group revenue (2017): USD 4,115,226  
[www.premierseed.org](http://www.premierseed.org)

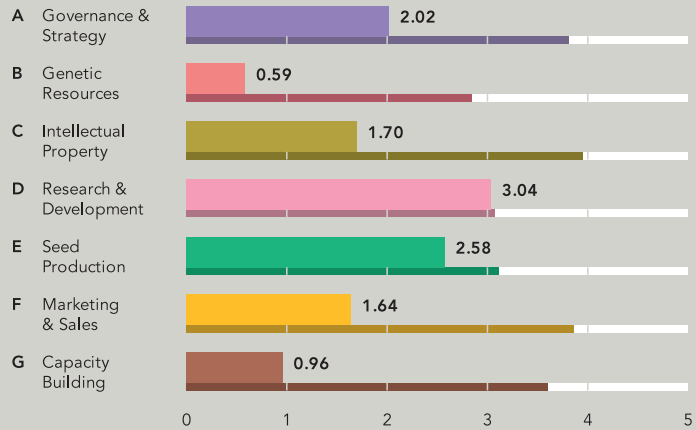
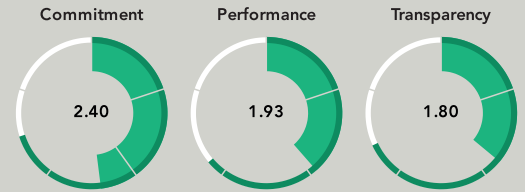
Premier Seed Nigeria Ltd (Premier Seed) was founded in 1984, initially as Agricultural Seed Ltd (AgSeed) owned by the Multinational Leventis Group of Companies. AgSeed was later acquired by Pioneer Hi-Bred Seed International and renamed Pioneer Hi-Bred Seed Nigeria Ltd. In 1994, it became a limited liability company and officially became Premier Seed Nigeria Ltd, now one of the largest seed businesses in Nigeria. It is a subsidiary of the conglomerate Obasanjo Holdings Ltd. It is involved in breeding and seed production activities. Maize, sorghum and rice are its main crops.



## Western and Central Africa

Premier Seed ranks 11th in the 2019 Index for Western and Central Africa. The company demonstrates strengths in Research & Development, marketing sorghum and maize varieties from its own breeding program throughout Nigeria, and Governance & Strategy, setting targets for improving access to

seeds for smallholder farmers. The company involves smallholder farmers in its seed production activities and has demonstration and promotion strategies in place for smallholder farmers, earning it points in Marketing & Sales. With limited activities reported around the conservation and use of Genetic Resources, this is a clear area for improvement for the company. It can further improve its Transparency score by clarifying the scope of its Capacity Building activities, the quality assurance of its products and its position on Intellectual Property.

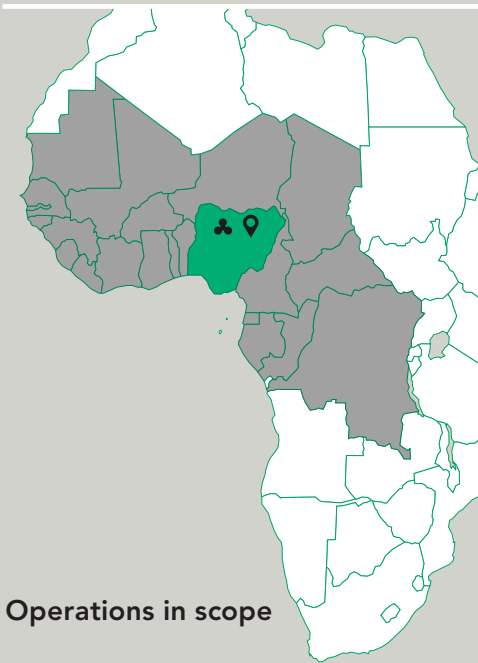


## Leading practices

- Premier Seed has an extensive mission statement outlining its commitment to developing new varieties and testing varieties appropriate to the local conditions and preferences of smallholder farmers. The company develops varieties that are suitable for either machine or hand planting and ecologically adapted to grow in various parts of Nigeria. The company also states that it recognizes the importance of hybrids for large and small-scale farmers alike.
- Premier Seed's seed production activities are noteworthy, particularly its production scheme for rice, known as the Rice Special Program. The program organizes area meetings three times each year to engage and train smallholder growers employed by the company in Nigeria.

## Areas for improvement

- While it assigns responsibility for its policies and targets related to access to seeds for smallholder farmers at the CEO/board level, Premier Seed can improve its Transparency and Commitment scores in Governance & Strategy by sharing policy statements on its codes of business conduct and formulating its commitments to the Sustainable Development Goals.
- Regarding genetic resources, the company could improve alignment with international treaties, and increase integration and collaboration with other partners. This would contribute to the conservation and use of genetic resources of crops, both the ones in its own portfolio and in general.
- The company could improve its intellectual property strategy, with specific attention paid to the affordability of its products through tailored pricing strategies for smallholder farmers.
- The company has seed production activities in Nigeria and engages smallholder farmers through outgrower schemes. It is encouraged to clarify how it ensures fair social and labor standards for these farmers and how it monitors compliance with these standards to ensure that minimum conditions regarding child labor, forced labor, health and safety, living conditions and minimum wages are met.
- The company could improve public disclosure of its capacity building activities, including its programs targeting women and next-generation farmers.



## Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- 🌿 Breeding station/R&D

## Notable findings

- Premier Seed is a member of seed associations and is engaged in seed policy reforms and advocacy as a member of the Seed Entrepreneur Association of Nigeria and the Africa Seed Trade Association.
- The company refrains from using contractual clauses or other provisions to prohibit the use of commercial genetic material for further breeding as well as mechanisms that prevent the practice of farm-saved seed by smallholder farmers.
- The company develops its own proprietary lines of maize and sorghum, with a focus on breeding for drought tolerance, biotic stress tolerance, shelf life and local tastes and cultural preferences in Nigeria. This has resulted in the release of three hybrid maize varieties, of which two were registered as quality protein maize (QPM), which in contrast to regular maize are high in lysine and tryptophan, amino acids that are essential for humans and monogastric animals. The company has also developed a quality protein open-pollinated maize variety.
- The company states that it has various collaborative experimental and on-farm trials, which aim to give farmers a direct opportunity to identify preferred varieties. Collaborative partners include national agricultural development programs, Sasakawa Africa Association, the International Institute for Tropical Agriculture (IITA), the West Africa Rice Development Association and the Nigerian Institute for Agricultural Research. Collaborations also cover genetic improvement of crops, multiplication of foundation seed and the company being supplied with breeder seed and parental lines of improved hybrid varieties developed by research institutes.
- The company's portfolio consists of field crops and vegetables, with many varieties younger than two years old that are sourced from public research institutes. The company markets seeds of maize and sorghum varieties treated with fungicides and insecticides in addition to other seed protection coatings.
- The company states that it has over 1,000 registered distributors and a minimum of three distributors in each of the 774 local government areas in Nigeria. It also states that it is collaborating with the National Agricultural Seed Council to include barcodes on the seed packages it distributes.
- The company reports that it actively involves youth in its seed production activities in Nigeria, as a way to engage this group in agriculture.

## Portfolio information

Index crops in portfolio	Seed type			Source		
	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company
<b>Field crops</b>						
Cowpea		●			●	
Groundnut		●			●	
Maize	●	●		●	●	
Rice, paddy						
Sorghum	●	●		●	●	
Soybean		●			●	
<b>Vegetables</b>						
Cabbage		●			●	
Carrot		●				
Cucumber		●				
Lettuce		●				
Melon		●				
Okra		●				
Onion		●				
Pepper (hot)		●				
Pepper (sweet)		●				
Tomato		●				
Watermelon		●				

## Local crops in portfolio

Jew's mallow



# Da-Allgreen Seeds

**Corporate data**  
Headquarters: Kaduna, Nigeria  
Ownership type: Listed  
Group revenue (2017): USD 983,813  
[www.daallgreenseeds.com](http://www.daallgreenseeds.com)

Da-Allgreen Seeds Ltd (Da-Allgreen Seeds) is a Nigerian company involved in the production, processing and marketing of field crop and vegetable seeds, including seedlings and cuttings. It also sells fresh vegetables and herbs. The company's main crops in its seed sales are rice, maize and sorghum, and it markets vitamin A-fortified cassava. Its portfolio includes open-pollinated varieties and hybrids for some crops.

**12**  
rank out of 23  
score 1.57

## Western and Central Africa

Da-Allgreen Seeds ranks in the middle of the 2019 Index for Western and Central Africa, in 12th place. The company shows some strengths in Governance & Strategy, particularly for assigning CEO/board-level responsibility for its access to seeds commitments, and throughout

Marketing & Sales. In Seed Production, the company is also strong in terms of engaging smallholder farmers and in testing varieties suitable for the market, related to Research & Development. However, the company does not have a breeding program, nor engages in activities concerning conservation and use of genetic resources, resulting in lower scores in Genetic Resources and Research & Development.



### Leading practices

No leading practices were identified.

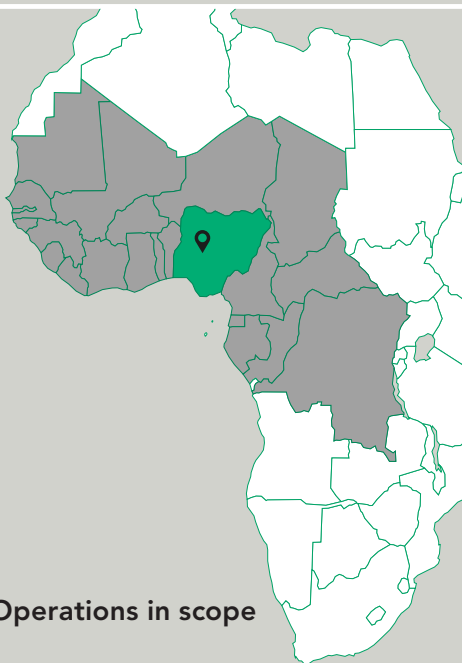
### Areas for improvement

■ Da-Allgreen Seeds is encouraged to publicly disclose the full scope of its access to seeds-related activities and to clarify the level of suitability of its products for smallholder farmers in the index region. The company could also develop and disclose formal commitments or policies to guide these activities.

■ The company does not report having codes of conduct in place for its business practices in the region. It is encouraged to set internal standards for anti-corruption, lobbying activities and social and labor standards. It is also encouraged to monitor compliance with social standards to ensure that the minimum working conditions relating to child labor, forced labor, health and safety, living conditions and minimum wages apply to its seed production activities in particular.

■ Da-Allgreen Seeds reports that it is a distributor for the Japanese vegetable seed company Sakata. It is encouraged to provide clarity on the extent to which its vegetable portfolio is licensed from Sakata, and potentially other companies as well.

■ The company offers capacity building activities to women and next-generation farmers through its extension and marketing networks. It is encouraged to clarify the full scope of these activities and how it reaches these target groups.



### Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- 🌱 Breeding station/R&D

### Notable findings

- Da-Allgreen Seeds invests in advocacy and awareness raising for farmers around the benefits of using improved seed. Further, as part of its mission, Da-Allgreen Seeds aims to increase the consumption of higher nutrient vegetables and herbs in Nigeria and to increase awareness of a healthy lifestyle.
- The company engages in local seed sector development by identifying potential farmer communities through which to engage farmer groups as contract outgrowers.
- The company is a registered member of the Seed Entrepreneurs Association of Nigeria and the African Seed Trade Association.
- The company conducts variety trials in Nigeria, the only country where it is active, testing varieties exclusively from agricultural research institutes.
- The company has seed production activities in Nigeria, in which it involves smallholder farmers. Its seed processing facility adheres to quality control standards stipulated by Nigeria's national regulatory agency.
- The company markets varieties from agricultural research institutes and other companies, receiving feedback on its products from smallholder farmers through field days.

### Portfolio information

Index crops in portfolio	Seed type			Source		
	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company
<b>Field crops</b>						
Maize					●	
Potato						
Rice, paddy		●			●	
Sesame		●			●	
Sorghum	●	●			●	
Soybean		●			●	
<b>Vegetables</b>						
Cabbage						
Carrot	●				●	●
Cauliflower						
Cucumber						
Lettuce						
Okra						
Onion						
Pepper (sweet)	●				●	
Squash	●	●			●	
Tomato	●	●			●	
Watermelon						

### Local crops in portfolio

Cassava | Yam

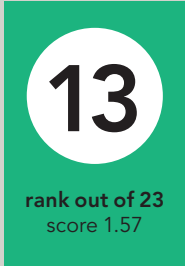




# Pop Vriend Seeds

**Corporate data**  
Headquarters: Andijk, the Netherlands  
Ownership type: Private  
Group revenue (2017): N/A  
www.popvriendvegetableseeds.com

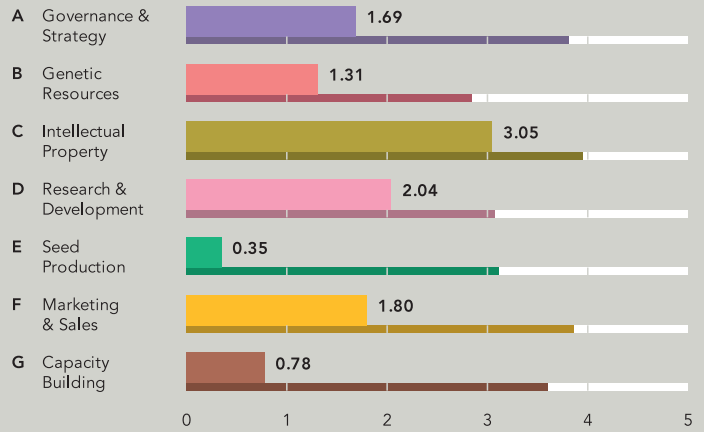
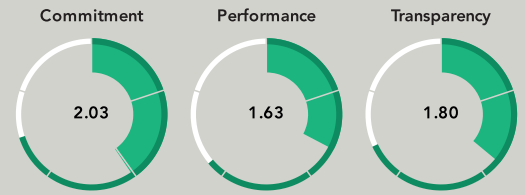
Pop Vriend Vegetable Seeds BV (Pop Vriend Seeds) is a family-owned company founded in 1956. It offers a wide range of open-pollinated and hybrid vegetable seeds that are adapted for tropical and sub-tropical conditions. Pop Vriend Seeds operates in over 100 countries worldwide, particularly in the Middle East, Africa and Central Asia. The company's main crops in Western and Central Africa are tomato, onion and watermelon.



## Western and Central Africa

Pop Vriend Seeds ranks 13th in the 2019 Index for Western and Central Africa. The company has an extensive distribution network in the region, and it exhibits a decent performance in most measurement areas. It has strengths in Intellectual Property, with policies that favor breeder and smallholder farmer

rights alike, and Marketing & Sales, where its quality assurance mechanisms in all its markets meet the standards set by the International Seed Testing Association (ISTA). The company also tailors its packaging to different markets and languages throughout the region. Capacity Building is an area for improvement, as the company's activities consist solely of partnering with local experts to deliver agronomic training to smallholder farmers.



## Leading practices

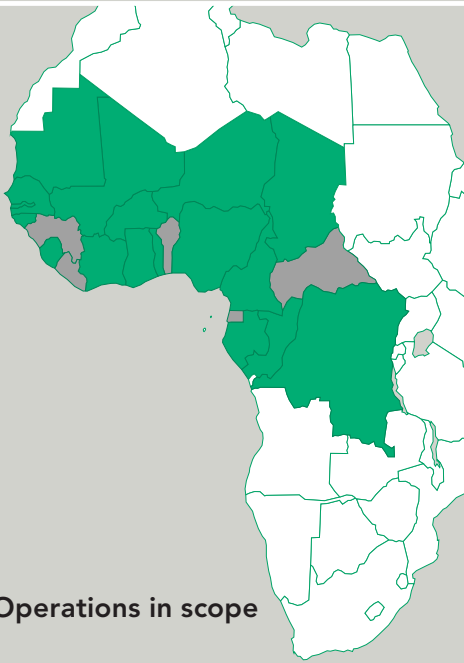
■ Pop Vriend Seeds has a wide sales presence in Western and Central Africa, with distribution channels in 14 index countries that also reach remote areas.

## Areas for improvement

■ Pop Vriend Seeds is encouraged to publicly disclose the full scope of its access to seeds-related activities in Western and Central Africa.

■ Although the company has an extensive sales presence in the region, it does not report having any activities to advance the local seed sector. The company is encouraged to employ its regional experience and presence to engage in initiatives to improve the enabling environment for both farmers and the seed sector.

■ The company works with a partner in Nigeria to provide extension services, which include product guidance, chemical use and water resource management. The company is encouraged to enhance its capacity building activities and to scale these to more countries where it is active.



### Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- 🌱 Breeding station/R&D

### Notable findings

- While Pop Vriend Seeds does not provide monetary or non-monetary contributions within the framework of access and benefit-sharing, it does fund seed collecting missions for the Centre for Genetic Resources (CGN) at Wageningen University & Research, the Netherlands. CGN manages the gene collection that is made available in accordance with the Standard Material Transfer Agreement of the International Treaty on Plant Genetic Resources for Food and Agriculture.
- The company offers discounts on seed to enable smallholder farmers to trial new varieties. Further, the company makes free samples of its F1 hybrids available for these farmers to try.
- The company refrains from using contractual clauses or other provisions to prohibit use of commercial genetic material for further breeding. Neither does it use contracts or other provisions intended to prevent the practice of farm-saved seed by smallholder farmers in the region.
- Pop Vriend Seeds' staff, including company breeders, regularly visit variety trial fields in Africa, including in Burkina Faso, Senegal and Cameroon, to inspect the product in the field and receive feedback from local agronomists and smallholder farmers.
- The company ensures that the seed it produces is tested in accordance with ISTA rules, and crops prone to cross-pollination are tested to ensure they are free of GMO contamination.
- Pop Vriend Seeds tailors its packages for smallholder farmers using a variety of languages (including English, French and Portuguese) and includes a QR code that directs farmers to variety descriptions and planting guides on its website. The company also gives each package a unique batch number that provides information on the origin of the seed and date of sale, allowing the product to be tracked and traced.
- The company organizes field days in Nigeria, where smallholder farmers receive sample seed packages and promotional items. Further, the company supports its distributors in other countries when fairs are held by supplying sample packages and promotional items. The company also includes promotional items and giveaways in its shipments to share with smallholder farmers.

### Portfolio information

Index crops in portfolio	Sales																Seed type			Source				
	BFA	CMR	TCD	CIV	COD	GNQ	GAB	GHA	GNB	MLI	MRT	NER	NGA	COG	SEN	SLE	GMB	TGO	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company
<b>Vegetables</b>																								
Cabbage	●	●	●		●			●	●	●	●	●	●		●				●	●				●
Carrot	●	●	●		●			●	●	●	●	●	●			●			●	●		●		
Cauliflower	●								●										●	●				
Cucumber	●	●						●	●	●		●	●		●	●		●	●	●				●
Eggplant	●	●			●			●	●	●					●				●	●				
Green bean	●	●						●	●	●					●				●	●		●		
Green pea		●													●					●				●
Lettuce	●				●			●	●	●					●					●				
Melon								●		●					●	●			●	●				●
Okra	●	●			●			●	●	●					●	●			●	●				●
Onion	●				●			●	●	●		●	●		●	●			●	●				●
Pepper (hot)	●	●	●		●			●	●	●			●		●	●			●	●				●
Pepper (sweet)	●	●	●		●			●	●	●		●	●		●	●			●	●				●
Pumpkin		●																		●				
Squash	●							●	●	●					●			●	●	●				●
Tomato	●	●	●	●	●			●	●	●	●	●	●		●	●		●	●	●				●
Watermelon	●		●	●				●	●	●		●			●			●	●	●				●

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNQ), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)

### Local crops in portfolio

African eggplant



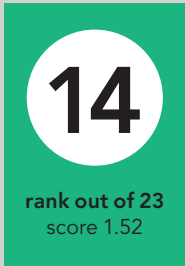
Access to Seeds Index

# SOPROSA

### Corporate data

Headquarters: Sikasso, Mali  
Ownership type: Private  
Group revenue (2017): n/a

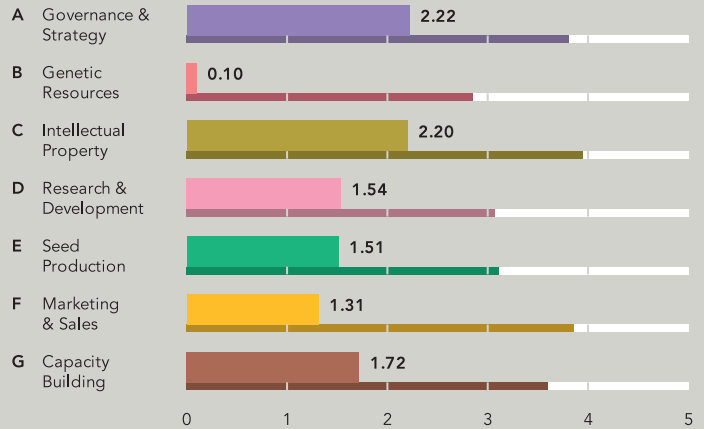
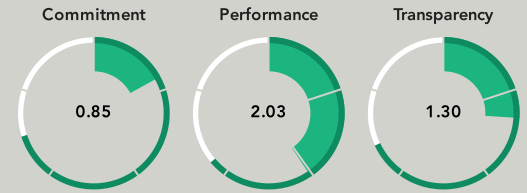
Société de Production de Semences Améliorées (SOPROSA) was established in 2012 in Sikasso, Mali. Its main activities are the production, processing, treatment and sale of quality seed of improved varieties in Western Africa. It has 16 employees and specializes in field crops, including legumes. The company reports reaching around 200,000 farmers, primarily in its home market. Its main crops are maize, rice and millets. SOPROSA collaborates with the Bill & Melinda Gates Foundation on farmer training and the World Bank in the framework of the West Africa Agricultural Productivity Program.



## Western and Central Africa

SOPROSA ranks 14th in the 2019 Index for Western and Central Africa. It owes this position to its support of smallholder farmers in the region and particularly in its home country of Mali, where it actively develops the local seed sector, resulting in solid scores in Governance & Strategy. In Capacity

Building, its efforts to reach youth and women smallholder farmers and its smallholder-focused strategies in Marketing & Sales also result in good scores in these measurement areas. The company works with smallholder farmers and cooperatives to produce seed, explaining its score in Seed Production. However, its public disclosure is limited, and its commitments do not match its performance when it comes to supporting access to seeds, indicating its main areas for improvement.

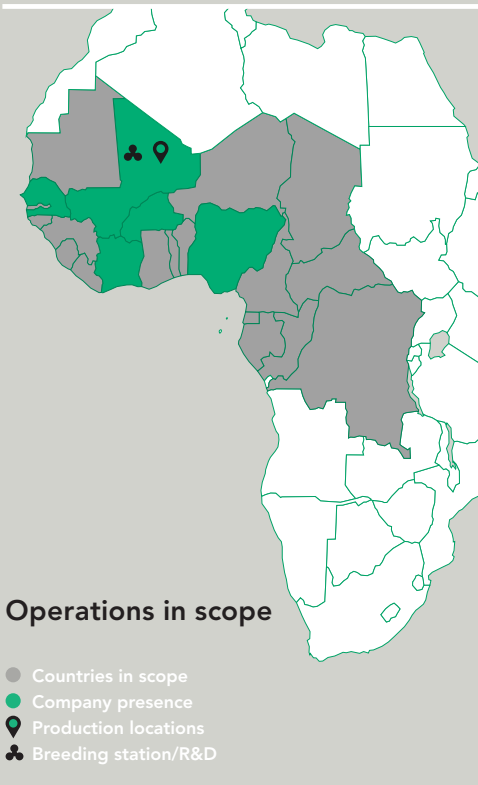


## Leading practices

■ SOPROSA is the only company outside of Nigeria and the companies in Novalliance with a breeding program, through which it is developing a variety of cowpea for the regional market. The company aims to collaborate with research institutes such as the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) on the development of its own hybrid varieties of maize and sorghum.

## Areas for improvement

■ SOPROSA is encouraged to publicly disclose the full scope of its access to seeds-related activities in Western and Central Africa.



## Notable findings

- One way SOPROSA works with local farmer organizations with limited financial means is by bartering seed for grains. The company provides seed to farmers, and farmers pay back the costs over time in the form of a portion of their production.
- The company is a member of the seed trade association of Mali, Association Semencière du Mali.
- The company offers contracts to smallholder farmers who are involved in its seed production activities. The contracts contain clauses on benefits and risks in case of calamities, cultivation areas, technical production details and selling price.
- The company's seed packages contain barcodes for track and trace purposes, allowing customers to verify product origin and quality. Instructions in French and Bambara, the most widely spoken languages in Mali, are both used on the packages.
- The company provides seed samples to the leaders of women producer groups for demonstration purposes, promoting improved varieties in their areas. These leaders are also invited to company field days and training sessions.
- The company provides extension services directly or through partnerships with other companies or NGOs. These services reach 2,800 smallholder farmers, including 840 women, in Mali.
- The company provides farming skills training for young men and women who are excluded from the formal education system, as well as to farmer organizations and cooperatives. These trainings cover techniques for producing quality seed.

## Portfolio information

Index crops in portfolio	Sales			Seed type			Source		
	BFA	MLI	SEN	Hybrid	OPV	GM	Own breeding program	Public research institute	Licensed from other company
<b>Field crops</b>									
Cowpea		●			●				●
Groundnut		●	●		●				●
Maize	●	●		●	●				●
Millets		●		●	●				●
Potato		●			●				●
Rice, paddy		●	●		●				●
Sorghum	●	●		●	●				●
Soybean		●			●				●

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNO), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)



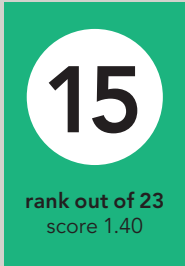
# AINOMA

Access to Seeds Index

### Corporate data

Headquarters: Niamey, Niger  
Ownership type: Private  
Group revenue (2017): USD 1,000,000

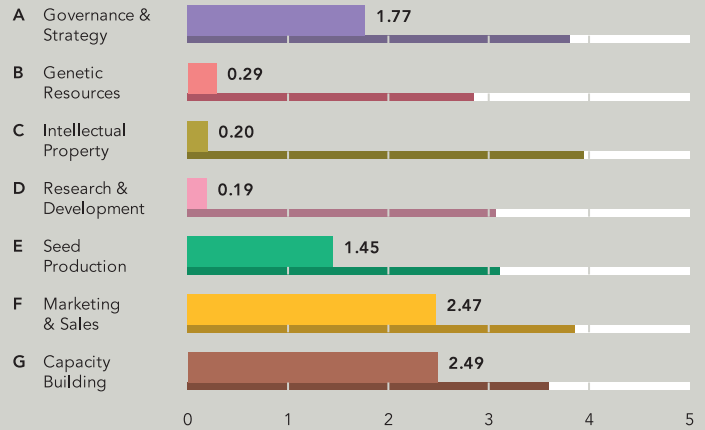
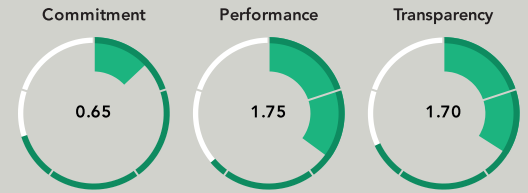
Ferme Semencière AINOMA (AINOMA) is a family-owned seed company, formally registered in 2006. It mostly produces and sells field crops but also has okra in its portfolio. It has around 100 permanent employees and produces about 800 tons of seed annually. Currently, it is one of the largest seed producers in Niger. Besides a seed farm, the company has a seed analysis lab.



## Western and Central Africa

AINOMA ranks 15th in the 2019 Index for Western and Central Africa. The company performs particularly strongly in Capacity Building, offering various extension services such as training while also addressing next-generation farmers through its school gardens. It also does well in Marketing & Sales,

thanks to its demonstration activities and affordability scheme. However, the lack of Research & Development activities, results in low scores in the related measurement areas. The company could improve its moderate score in Governance & Strategy and Seed Production by articulating corporate commitments to smallholder farmers.



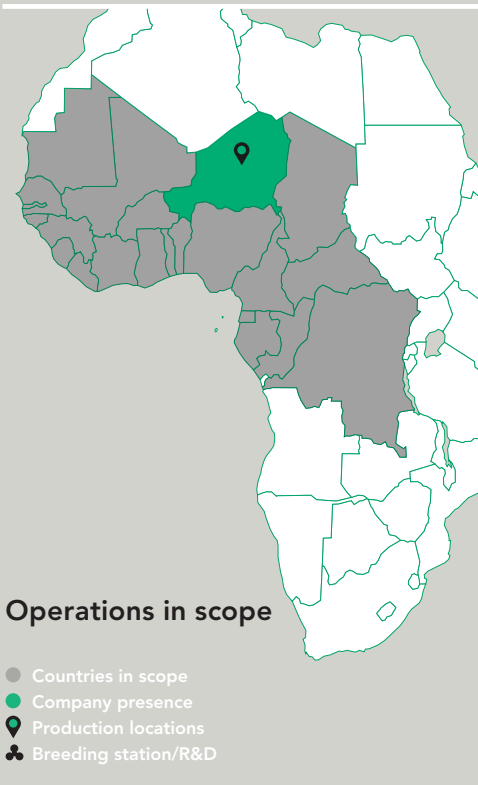
### Leading practices

AINOMA is at the forefront of regional efforts to promote farming as a viable livelihood choice. The company runs Operation School Garden, creating gardens in 40 schools across Niger to showcase agriculture and teach schoolchildren valuable lessons regarding nutrition and environmental sustainability.

### Areas for improvement

AINOMA is encouraged to improve disclosure regarding its operations in Niger.

Since the company has seed production activities in Niger, and it involves smallholder farmers in these activities, it is encouraged to clarify how it ensures fair social and labor conditions and to develop a robust monitoring mechanism to ensure compliance.



## Notable findings

- AINOMA has formal partnerships with Niger’s agronomic research institutions to test new varieties.
- The company is a member of the Association of Private Seed Producers of Niger.
- The company reports that national and regional policies discourage private seed companies from running independent breeding programs. As such, Niger relies on varieties from public research institutes and foreign seed companies.
- AINOMA is currently working with research institutes to increase the cultivation of biofortified crops for improved nutrition security in the country, with a particular focus on women and children.
- The company reports that it organizes several demonstration and promotion activities in Niger to introduce new varieties to farmers and improve the adoption of hybrid seed. In addition, it specifically includes women smallholder farmers in its marketing activities.
- The company has introduced a flexible payment system to enable farmers to purchase seed.
- The company’s seed is sold by over 100 sales agents across Niger.
- The company’s extension services have reached about 20,000 smallholder farmers in Niger with women being a particular target group.
- The company works with several partners to facilitate output market access for smallholder farmers, including STA, which processes peanuts, and Braniger, a sorghum-processing company.

## Portfolio information

Index crops in portfolio	Sales
	NER
<b>Field crops</b>	
Cowpea	●
Groundnut	●
Maize	●
Millets	●
Sesame	●
Sorghum	●
<b>Vegetables</b>	
Okra	●

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNO), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)



# Monsanto

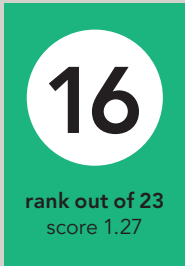
## Corporate data

Headquarters: St Louis, Missouri, United States of America  
Ownership type: Listed  
Group revenue (2017): USD 14,600,000,000  
Seed revenue (2017): USD 10,913,000,000

www.monsanto.com

Access to Seeds Index

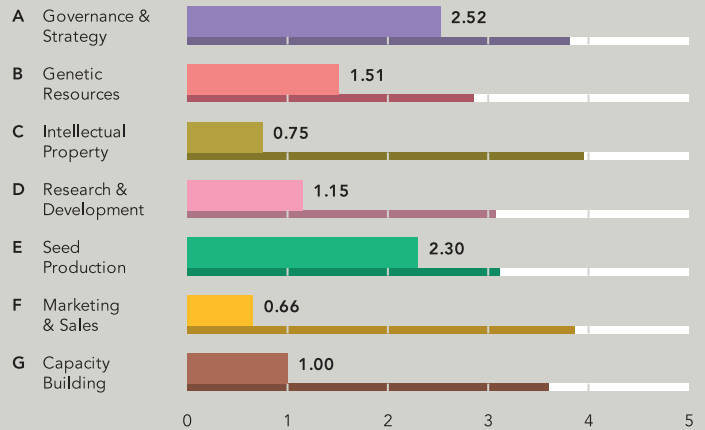
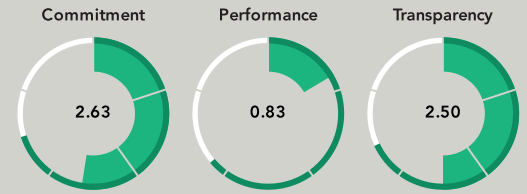
Monsanto is an agricultural company that operates in two segments: seeds and genomics, and agricultural productivity, which includes agrochemicals. The seeds and genomics segment covers both field crop and vegetable seeds under multiple brands, with DEKALB maize and Seminis vegetables among the most prominent, as well as developing biotechnology traits and licensing germplasm and traits to other seed companies. In Western and Central Africa, the company has a business location in Burkina Faso and also operates in Nigeria. In 2018, Bayer completed the \$66 billion acquisition of Monsanto. Activities to fully integrate Monsanto into Bayer are ongoing.



## Western and Central Africa

Monsanto ranks 16th in the 2019 Index for Western and Central Africa, with a clear disparity between the company's global Commitments and region-specific activities. Its strongest score, in Governance & Strategy, is reflective of its sustainability strategy Growing Better Together, which addresses

sustainability and smallholder farmer targets, albeit with a lack of clarity on how the company contributes to local seed sector development and improving the region's enabling environment. Monsanto also performs well in Seed Production, courtesy of production activities in Burkina Faso and stringent labor standards. The company exhibits moderate strengths in other measurement areas, including corporate positions on the conservation of genetic resources and benefit-sharing. It also demonstrates transparent positions in Intellectual Property, although none of these are favorable to smallholder farmers. Monsanto's donation of technology to the African Agriculture Technology Foundation to develop regionally adapted cowpea varieties is a leading Research & Development practice. Limited evidence was provided relating to Capacity Building. Similarly, little information was disclosed on the extent of portfolio availability and associated marketing activities in the region, resulting in the company's lowest score in Marketing & Sales.



## Leading practices

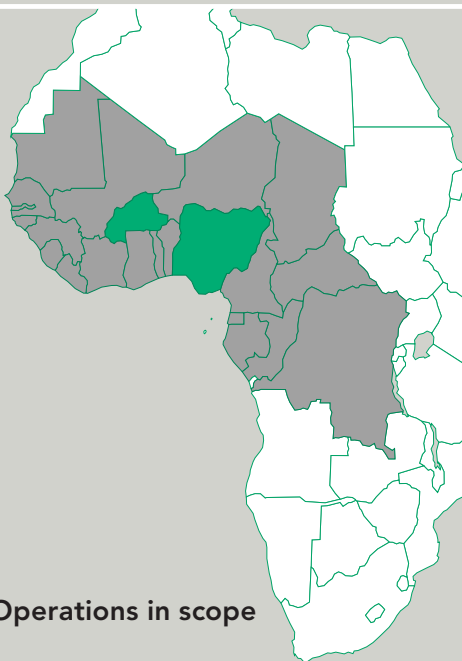
■ Monsanto donated technology to the African Agriculture Technology Foundation to develop cowpea varieties resistant to pests such as Maruca pod borer. In 2017, it expanded field trials into Burkina Faso, Ghana and Nigeria. In early 2019, Nigerian authorities approved the commercial release of a cowpea variety that resulted from this research and is genetically improved to resist the pest.

## Areas for improvement

■ Although Monsanto is transparent about its positions on patents, plant variety protection law and farm-saved seed, none are favorable to the needs of smallholder farmers. The company is encouraged to reconsider these positions with respect to the needs of smallholder farmers within its customer base.

■ The company does not disclose information related to its breeding programs for vegetables and whether these consider traits beneficial for smallholder farmers in Western and Central Africa. It is encouraged to disclose the scope of its breeding programs aimed at smallholder farmers.

■ The company discloses little or no information about the portfolio availability of its prominent brands, particularly DEKALB for maize and Seminis for vegetables. It is encouraged to improve disclosure of its sales activities in Western and Central Africa.



### Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- 🌱 Breeding station/R&D

### Notable findings

■ Following its takeover by Bayer, Monsanto will no longer be a company name. The acquired products will retain their brand names and become part of the Bayer portfolio.

■ Monsanto was given approval by national authorities to trial genetically modified maize for insect resistance and herbicide tolerance (and to commercially release genetically modified cotton, which is outside the scope of index crops) in Nigeria in the 2015-17 index period.

### Portfolio information

#### Index crops in portfolio

Field crops	Vegetables
Cowpea	Cabbage
Maize	Carrot
Sorghum	Cauliflower
Soybean	Cucumber
Wheat	Eggplant
	Gourd
	Green bean
	Green pea
	Lettuce
	Melon
	Okra
	Onion
	Pepper (hot)
	Pepper (sweet)
	Pumpkin
	Squash
	Tomato
	Watermelon



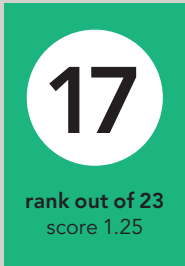


# Faso Kaba

Access to Seeds Index

**Corporate data**  
Headquarters: Bamako, Mali  
Ownership type: Private  
Group revenue (2017): XOF 500,000,000  
www.fasokaba.com

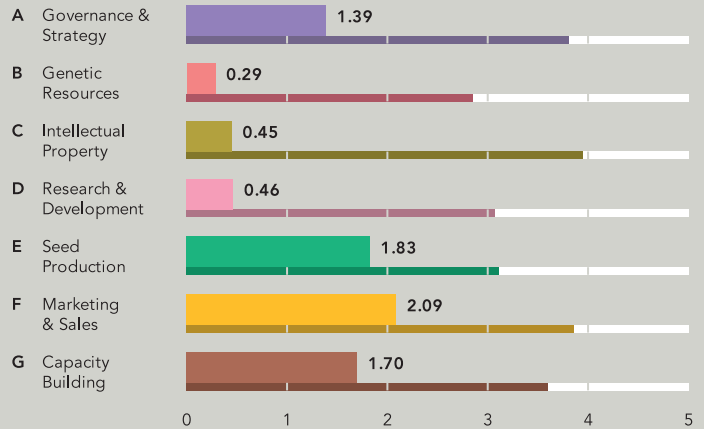
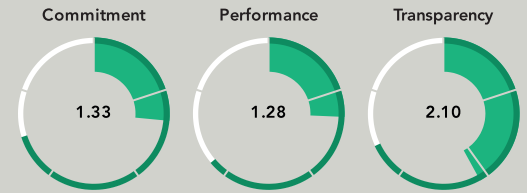
Faso Kaba was formally registered in 2007 and is one of the largest seed companies in Mali. It focuses on field crops and vegetables. It aims to tackle low adoption of improved seed, the large majority of the seed in Mali being reused and producing low yields. In addition to producing and selling seed, Faso Kaba works with various research institutes, such as the International Institute of Tropical Agriculture (IITA) and the Maize and Wheat Improvement Center (CIMMYT), to test new varieties. The company's portfolio contains a diverse set of field crops, including legumes, and vegetable seeds.



## Western and Central Africa

Faso Kaba ranks 17th in the 2019 Index for Western and Central Africa. The company scores highest in Marketing & Sales, thanks to numerous activities such as field days, an extensive network of stores across Mali and a wide presence in the region. In Seed Production, its activities involving

several local cooperatives are also noteworthy. However, the lack of a full-fledged Research & Development program leads to low scores in the related measurement area and in Genetic Resources and Intellectual Property. The Transparency score is also modest, and the company is encouraged to publicly disclose more details on its strategy to reach smallholder farmers.



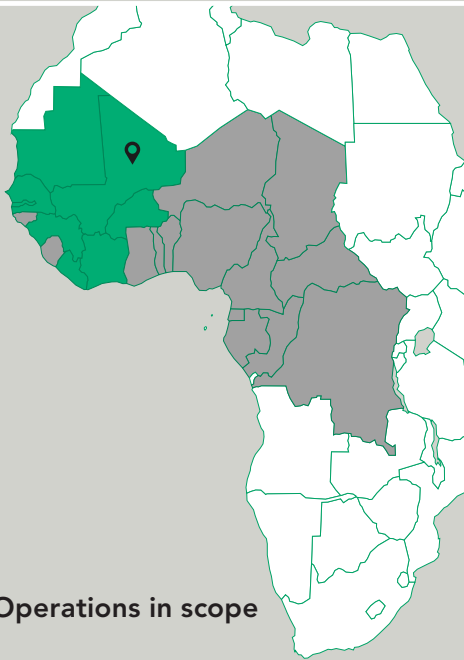
## Leading practices

■ Faso Kaba has distribution channels in eight index countries, which is high relative to its regional peers. The company also reports selling seed in Syria.

## Areas for improvement

■ Faso Kaba is encouraged to disclose the full scope of its access to seeds-related activities in Western and Central Africa.

■ The company has seed production activities in Mali in which it involves smallholder farmers. It is encouraged to disclose how it ensures fair social and labor conditions in these activities, and how it monitors compliance with social standards when working through farmer cooperatives.



## Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- 🌱 Breeding station/R&D

## Notable findings

- Faso Kaba's founder and owner, Maïmouna Sidibe Coulibaly, received the 2017 Africa Food Prize for her work on producing and distributing improved and high-yielding seeds in Mali and across West Africa. The Prize committee highlighted that Coulibaly, through Faso Kaba, has significantly improved the food security and incomes of smallholder farmers.
- Faso Kaba is a member of the Seed Association of Mali and the African Seed Trade Association.
- The company has a policy statement that encompasses the aims to improve food security and eliminate malnutrition in Mali and sub-Saharan Africa.
- The company has collaborative testing projects with the following research institutes: International Institute of Tropical Agriculture (IITA), International Maize and Wheat Improvement Center (CIMMYT), AfricaRice, Institute of Rural Economy (l'Institut d'Économie Rurale, IER), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and the World Vegetable Center.
- Faso Kaba works with 25 seed cooperatives in Mali, through which it engages smallholder farmers in seed production. The company provides fertilizers and pre-basic seed to the producers.
- The company's seed is certified by Mali's National Directorate of Agriculture, the official government body ensuring quality.
- The company has a network of 150 agro-dealers across Mali for the dissemination of its seed.
- The company regularly organizes field days to demonstrate to farmers the benefits of improved varieties and other inputs for increased productivity. It specifically targets women smallholder farmers, who make up about 40% of the participants.
- In addition to seed, the company sells fertilizers, herbicides, insecticides and postharvest equipment.
- The company reports reaching about 300,000 smallholder farmers annually through its marketing and capacity building activities such as field days and training.
- The company offers training opportunities such as internships for young graduates from farming schools to help integrate them into the farming community.

## Portfolio information

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNQ), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)

Index crops in portfolio	Sales									Seed type		
	BFA	CIV	GIN	GMB	LBR	MLI	MRT	SEN	SLE	Hybrid	OPV	GM
<b>Field crops</b>												
Cowpea						●					●	
Maize	●	●	●	●	●	●	●	●	●	●	●	
Millets						●					●	
Peanut						●					●	
Rice	●	●	●	●	●	●	●	●	●			
Sorghum						●				●	●	
<b>Vegetables</b>												
Eggplant						●					●	
Okra						●					●	
Onion						●					●	
Pepper (hot)						●					●	
Tomato						●					●	

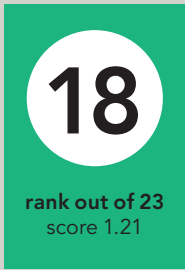


# Agriplus Mali

Access to Seeds Index

**Corporate data**  
Headquarters: Bamako, Mali  
Ownership type: Private  
Group revenue (2017): N/A  
www.agriplusmali.com

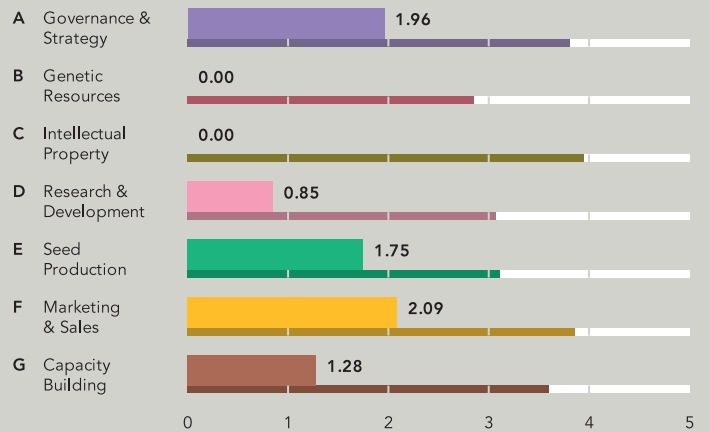
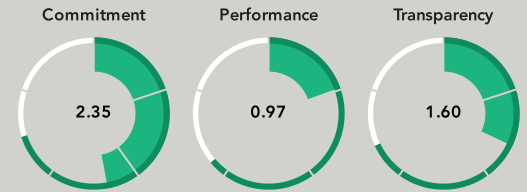
Agriplus Mali specializes in the production and sale of field crop and vegetable seeds, as well as importing and supplying fertilizers, pesticides and farming equipment. The company aims to promote improved varieties in Mali and across Western Africa by selling both domestically produced and imported seed.



## Western and Central Africa

Agriplus Mali ranks 18th in the 2019 Index for Western and Central Africa, its low position indicative of inconsistency across the measurement areas and a lack of disclosure. The company does not provide any information related to Genetic Resources or Intellectual Property. The company does not have its

own breeding program and provides limited information about the collaborative research in which it engages in relation to Research & Development. It owes a moderate score in Governance & Strategy to an access to seeds policy and board level accountability. In Seed Production, it provides evidence of production activities, although it does not engage smallholder farmers. Agriplus Mali's performance in Capacity Building is largely attributable to its collaborative projects with the European Cooperative for Rural Development (EUCORD), although the company's own contributions to these projects remain unclear.

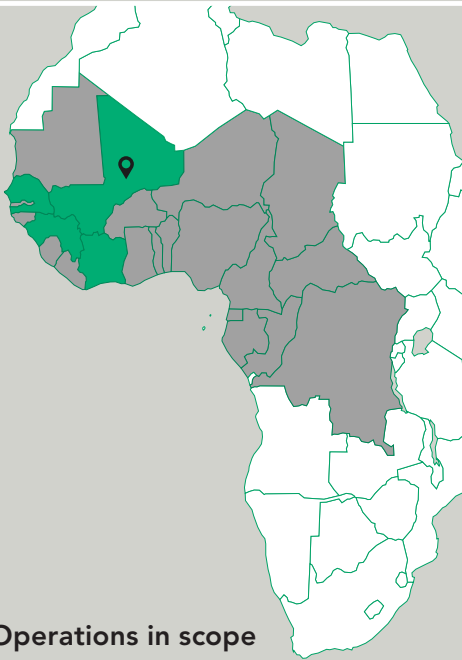


## Leading practices

No leading practices were identified.

## Areas for improvement

Agriplus Mali is encouraged to disclose the full scope of its access to seeds-related activities. Similarly, the company could develop and disclose formal commitments or policies to guide these activities.



### Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- ⊕ Breeding station/R&D

### Notable findings

- Agriplus Mali participates in a project coordinated by the European Cooperative for Rural Development EUCORD, called the Africa RISING program for Large-scale Diffusion of Technologies for Sorghum and Millet Systems (ARDT-SMS). EUCORD brokered a production contract between Agriplus Mali and seed cooperatives to increase access to improved sorghum and millet varieties in the Sikasso region.
- The company carries out variety testing at its own facilities and selects the most appropriate varieties based on market needs.
- Agriplus Mali sells certified seed on behalf of Sakata, a Japanese vegetable seed company.
- The company offers training and consulting services to farmers to improve agronomic practices.
- The company participates in a second EUCORD project called 'Mali: Improving smallholder farmers' incomes and food security through enhancing productivity and market access', which is funded by AGRA. The project aims to improve access to quality seed and inputs and to training on their use. The project specifically includes women smallholder farmers. However, the extent to which Agriplus Mali contributes is unclear.

### Portfolio information

#### Index crops in portfolio

Field crops	Vegetables
Cowpea	Cabbage
Groundnut	Carrot
Maize	Cucumber
Millet	Eggplant
Potato	Green bean
Rice, paddy	Lettuce
Sesame	Melon
Sorghum	Okra
Soybean	Onion
	Pepper (hot)
	Pepper (sweet)
	Squash
	Tomato
	Watermelon

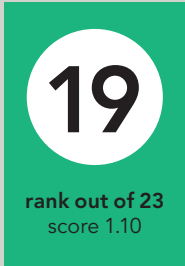


# BILOHF

Access to Seeds Index

**Corporate data**  
Headquarters: Dimbokro, Côte d'Ivoire  
Ownership type: Private  
Group revenue (2017): N/A  
www.bilohf.com

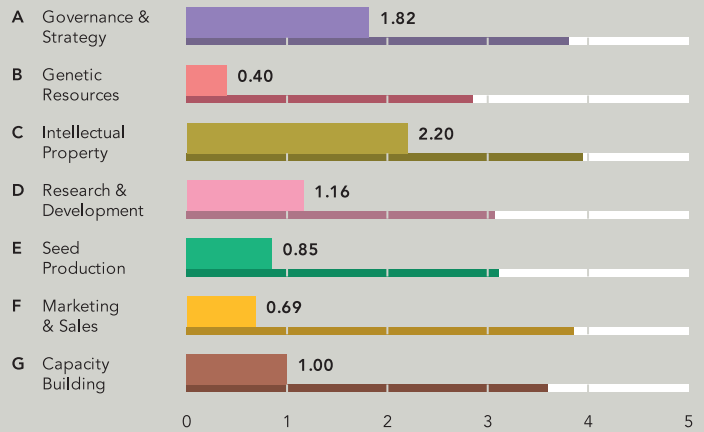
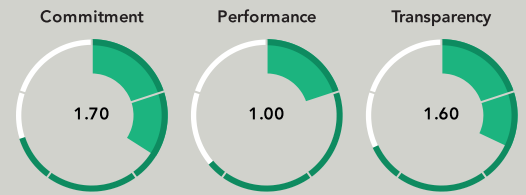
BILOHF produces and sells field crop seed in Côte d'Ivoire, with groundnut, maize, rice and soybean being its main business drivers. The company contributes to seed sector development in its home market, and smallholder farmers constitute an important customer group.



## Western and Central Africa

BILOHF ranks 19th in the 2019 Index for Western and Central Africa, displaying a below-average performance. The company scores well in Intellectual Property for not enforcing practices detrimental to smallholder farmers, and Governance & Strategy, where it contributes to seed sector development

and the enabling environment in Côte d'Ivoire. The company discloses limited information elsewhere, particularly with respect to Genetic Resources, and does not demonstrate strategies to engage smallholders in Seed Production or effectively reach them, particularly in remote areas, affecting its score in Marketing & Sales. With regards to Capacity Building, the company provides agronomic training and specifically includes women smallholder farmers in these activities.

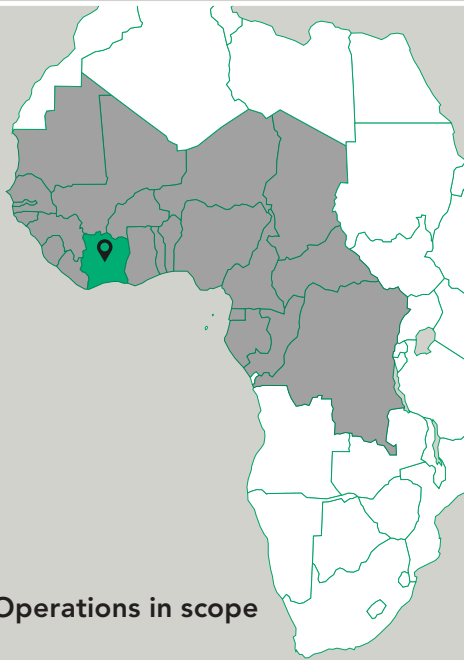


### Leading practices

■ BILOHF is the only regional company to publicly disclose its business code of conduct. It also publishes its ethical charter on its website, in which it outlines its responsibilities to employees, communities and shareholders, including firm commitments to improve the living conditions, health and education of citizens, govern environmental sustainability and provide employees with fair remuneration and secure working conditions.

### Areas for improvement

- BILOHF can improve its score in Transparency and across the measurement areas by disclosing the full scope of its access to seeds-related activities.
- The company is encouraged to engage with smallholder farmers in its seed production activities in Côte d'Ivoire, helping to develop the capacity of these farmers and the local seed sector.
- The company can diversify its strategies in Marketing & Sales to increase the adoption of its products by smallholders, for instance offering demonstrations and field days and/or running radio campaigns.



### Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- ☘ Breeding station/R&D

### Notable findings

- BILOHF has a target to reach 20,000 smallholder farmers as customers, although it has not set a deadline by which to achieve this target.
- The company reports being a member of the national seed trade association, through which it lobbies to reduce taxes on seed and participates in workshops on improving seed certification processes.
- The company collaborates with public research institutes, supplying the feedback it gathers from smallholder customers on the varieties it sells from these institutes, primarily on their culinary preferences.
- The company mostly produces seed on its own farms but sometimes contracts up to 1,500 outgrowers, including through local seed cooperatives.
- The company's seed is certified by LANASEM, Côte d'Ivoire's certification laboratory, which follows International Seed Testing Association standards.
- The company has varied capacity building activities. Its extension services have reached about 800 smallholder farmers. It shares weather data with farmers via SMS.

### Portfolio information

#### Index crops in portfolio

#### Field crops

- Groundnut
- Maize
- Rice, paddy
- Soybean

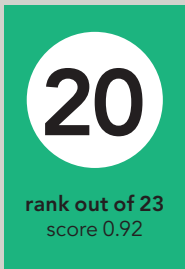


# NAFASO

Access to Seeds Index

**Corporate data**  
Headquarters: Bobo-Dioulasso, Burkina Faso  
Ownership type: Private  
Group revenue (2017): N/A  
Seed revenue (2017): N/A

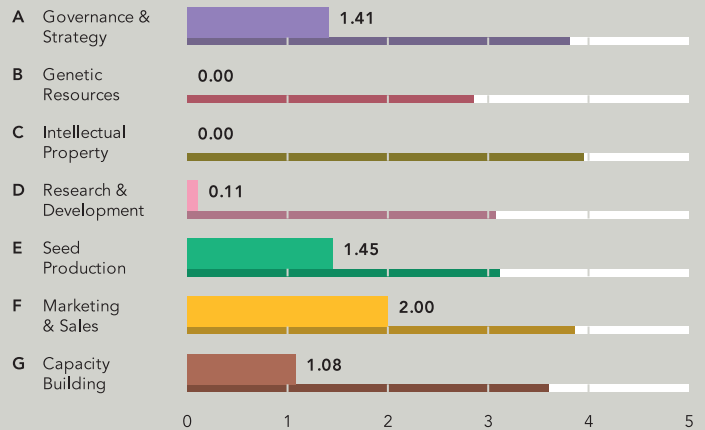
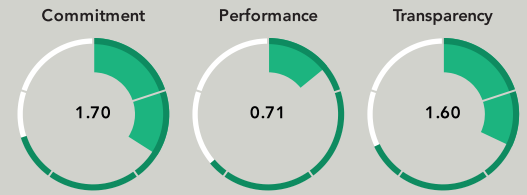
Neema Agricole du Faso SA (NAFASO) was founded in 2008 in Burkina Faso and now employs 40 permanent staff, 1,500 seasonal workers and 1,200 temporary workers. The company is active primarily in maize, sorghum and cowpea, producing 5,000 tons of seed per season. It has a broad distribution network of 50 stores and 450 retailers in 11 index countries.



## Western and Central Africa

NAFASO ranks 20th in the 2019 Index for Western and Central Africa, demonstrating clear disparities across the measurement areas. A lack of disclosure, public or otherwise, on policies, activities and positions concerning Genetic Resources and Intellectual Property results in zero

scores in both areas. Similarly, although the company does not have its own breeding program, it does not provide information on any collaborative research it undertakes. The best scores are primarily a result of successful partnerships, notably with West Africa Food Markets in Seed Production and the Alliance for a Green Revolution in Africa (AGRA) in Capacity Building. In Marketing & Sales, in which the company performs best, it demonstrates a broad distribution network in 11 index countries, including its home market of Burkina Faso, where it partners with agro-dealers to reach smallholder farmers across the country.



## Leading practices

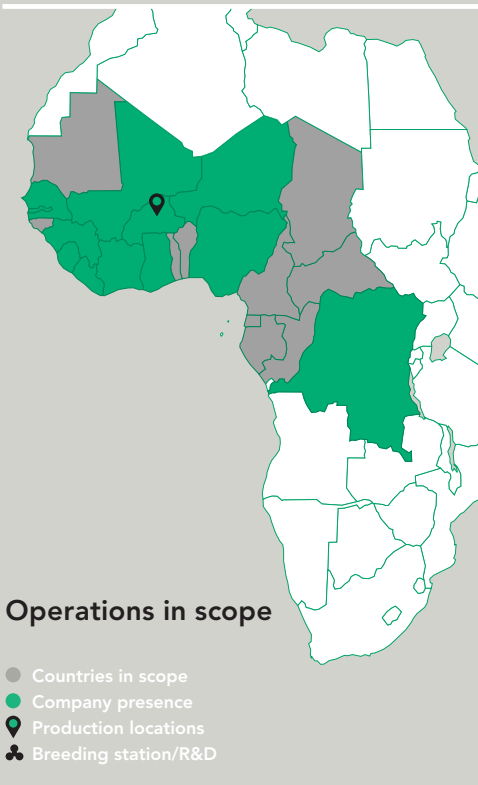
■ NAFASO partners with several organizations in the region, including the West and Central African Council for Agricultural Research and Development (CORAF/WECARD), AGRA and West Africa Food Markets. In the case of the latter, the company is a signatory of a project to increase the production and commercialization of maize, millet and sorghum varieties to tackle food security issues in Burkina Faso, Ghana and Niger. Specifically, NAFASO works with growers to test new varieties and distribute seed through village stores.

## Areas for improvement

■ NAFASO is encouraged to disclose its position on matters, such as the practice of farm-saved seed, related to Intellectual Property, and the activities it undertakes to conserve regional agrobiodiversity in relation to Genetic Resources.

■ The company is encouraged to adopt a corporate position regarding improving access to seeds for smallholder farmers, including setting corporate targets and implementing a robust tracking mechanism.

■ While the company performs best in Marketing & Sales, it can improve its performance by disclosing the availability of its portfolio in the index countries where it is present, outside its home market.



## Notable findings

■ NAFASO's CEO reports that the company is aiming to raise awareness of and produce seed adapted to the effects of climate change, citing climate change and demographic growth as the two major challenges facing the African continent.

■ The company has a corporate goal to make improved seed varieties more accessible to smallholder farmers, aiming to make 50% of smallholders in Burkina Faso aware of its seed by 2020.

■ The company produces certified seed, which it reports has the potential to improve local agricultural yields by 40%. Quality assurance is provided by state-approved laboratories that certify the seed. The company increased its production capacity from 100 tons to 5,000 tons per season between 2008 and 2016, using a network of 200 seed producers across eight regions in Burkina Faso (72 individuals and 18 farmer cooperatives).

■ The company has a broad distribution network across 11 index countries and uses demonstrations of good agricultural practices, radio advertisements and field days to increase its visibility. In its home market, NAFASO engages the Association of Agro-dealers in Burkina Faso and AGRIFARE, a large private agro-dealer, to create a sizeable network of agro-dealer shops to increase farmers' access to quality seed and other inputs.

■ The company reports that consulting, training and supervision are included in its development strategy. It partners with AGRA, using extension officials to organize seed production groups, promote the importance of certified seed and provide basic financial management training, to enable smallholders to build their farms into viable businesses.

■ NAFASO's CEO reported that the company is planning to establish an agricultural training center for young farmers, a key target group for regional capacity building.

## Portfolio information

Index crops in portfolio	Sales
	BFA
<b>Field crops</b>	
Cowpea	●
Groundnut	●
Maize	●
Millet	●
Potato	●
Rice, paddy	●
Sesame	●
Sorghum	●
Soybean	●
Sunflower	●
<b>Vegetables</b>	
Onion	●

Benin (BEN), Burkina Faso (BFA), Cameroon (CMR), Central African Republic (CAF), Tchad (TCD), Cote d'Ivoire (CIV), DR Congo (COD), Equatorial Guinea (GNQ), Gabon (GAB), Ghana (GHA), Guinea (GIN), Guinea-Bissau (GNB), Liberia (LBR), Mali (MLI), Mauritania (MRT), Niger (NER), Nigeria (NGA), Republic of the Congo (COG), Sénégal (SEN), Sierra Leone (SLE), The Gambia (GMB), Togo (TGO)



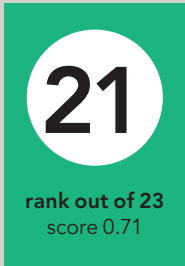


# SEDAB

Access to Seeds Index

**Corporate data**  
Headquarters: Dakar, Senegal  
Ownership type: Private  
Group revenue (2017): N/A  
Seed revenue (2017): N/A  
Website: N/A

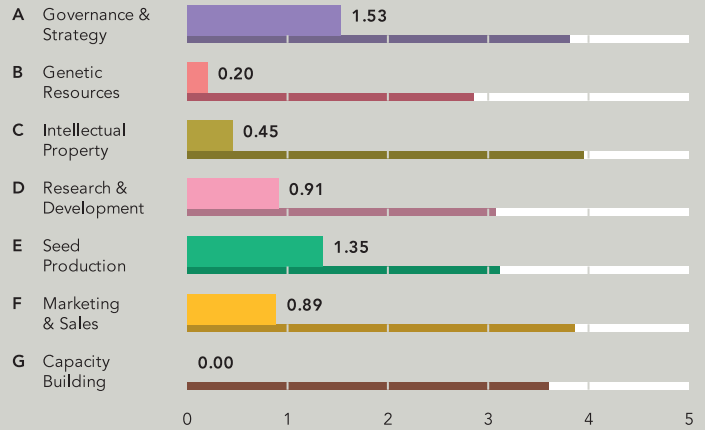
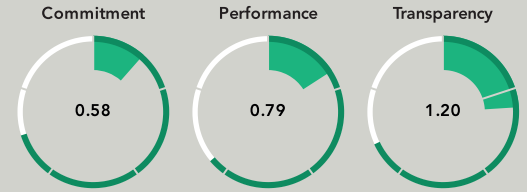
Sahélienne d'Entreprise de Distribution en Agro Business (SEDAB) is a Senegalese company specializing in the production and export of seeds for a select group of field crops. It also sells potato. Additionally, the company supplies fertilizers and phytosanitary products. Smallholder farmers are an important customer group for the company, which is only active in its home market.



## Western and Central Africa

SEDAB ranks 21st in the 2019 Index for Western and Central Africa, its position reflective of average or low scores across all measurement areas. The company performs best in Governance & Strategy, for assigning accountability for smallholder strategies at the board level, and Seed Production, for formalizing its

relationship with local farmer groups with contracts and engaging smallholders in production activities. The company discloses little or no public information, leading to a low Transparency score throughout. Limited reporting on commitments and activities related to Genetic Resources and Intellectual Property or its collaborative research activities in breeding results in relatively low scores in these areas. Information on the availability of the company's portfolio is lacking, as is information related to its marketing and capacity building activities.



## Leading practices

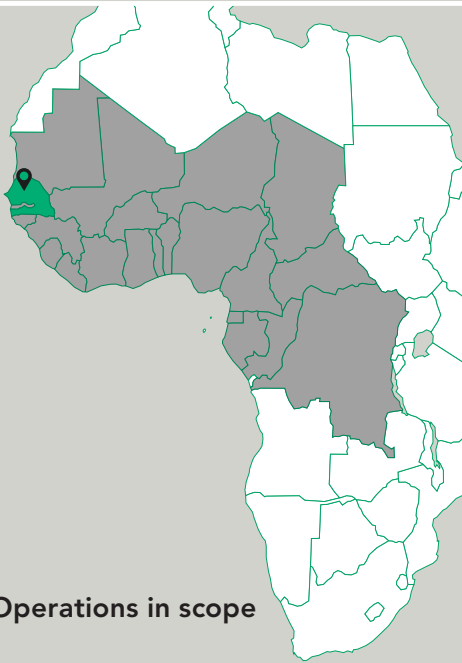
No leading practices were identified.

## Areas for improvement

■ SEDAB is encouraged to publicly disclose more information about its corporate strategies, activities and programs in relation to smallholder farmers. This includes publicizing its seed portfolio and availability thereof in the market, and providing further details on its research activities, including the organizations it collaborates with and how it considers the specific needs of smallholder farmers within these activities.

■ Despite scoring best in Governance & Strategy, SEDAB can significantly improve its performance in this area. The company is encouraged to develop and disclose a strategy on improving access to seeds for smallholder farmers that includes corporate targets to reach this customer group and a robust tracking system to monitor progress in the Senegalese market.

■ SEDAB does not report having any activities in Capacity Building. As one of the few companies in the index that does not appear to provide extension services, it is encouraged to integrate smallholder farmer training into its core business activities. Furthermore, it can consider engaging women and young farmers, both considered key target groups in the region, in training.



### Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- ⦿ Breeding station/R&D

### Notable findings

- SEDAB reports being an active member of the Senegalese National Union of Seed Workers.
- The company works with local farmer organizations in Senegal, providing inputs on credit and agronomic advice to smallholder producers through technical agents.
- The company conducts variety trials at the request of the Senegalese Agricultural Research Institute. Trials of new groundnut varieties are ongoing, and the company is engaging smallholders in these trials.

### Portfolio information

#### Index crops in portfolio

#### Field crops

- Groundnut
- Maize
- Potato
- Rice, paddy



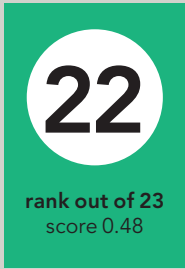
# Heritage Seeds

Heritage Seeds is a field crop seed company that focuses on northern Ghana. Established in 2010, it specializes in seed production and sales. Its portfolio includes hybrid maize. Smallholder farmers are the company's main clientele.

Access to Seeds Index

**Corporate data**  
Headquarters: Tamale, Ghana  
Ownership type: Private  
Group revenue (2017): N/A

[www.heritageseedscompanyltd.com](http://www.heritageseedscompanyltd.com)



## Western and Central Africa

Heritage Seeds ranks 22nd in the 2019 Index for Western and Central Africa, which places it second to last. The company exhibits some strengths in Seed Production by involving smallholder farmers in its activities, and in Marketing & Sales, thanks to its quality management system. Overall,

however, its disclosure is poor, resulting in a lower ranking.

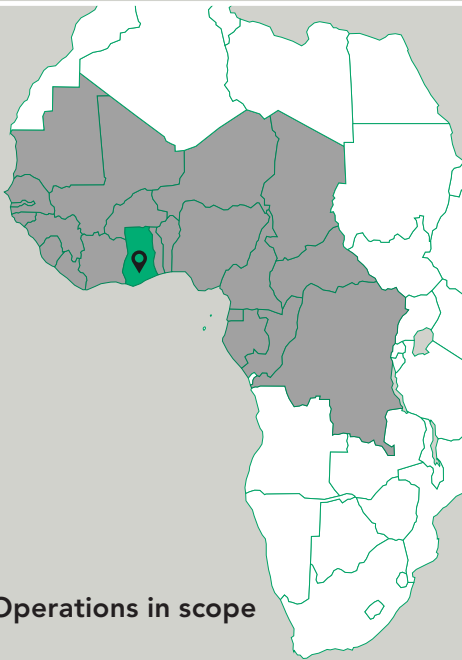


### Leading practices

No leading practices were identified.

### Areas for improvement

- Heritage Seeds can improve its score by publicly disclosing policies and activities related to improving access to seeds for smallholder farmers.
- With seed production activities in Ghana, the company could be clearer about the scope of these activities and the conditions under which seed growers, including smallholder farmers, are employed.



### Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- 🌱 Breeding station/R&D

### Notable findings

- Heritage Seeds is part of the Seed Trade Association of Ghana, a group established in 2014 with funding from the Alliance for a Green Revolution in Africa, the USAID-funded Feed the Future Agriculture Technology Transfer Project and the Ghanaian Business Sector Advocacy Challenge Fund.
- The company collaborates on the Tropical Legumes Project, a joint initiative with the International Institute for Tropical Agriculture (IITA), the International Center for Tropical Agriculture (CIAT) and the Bill & Melinda Gates Foundation, which aims to increase legume production in the region, specifically groundnut and cowpea.
- To reach remote areas in northern Ghana, Heritage Seeds uses company delivery trucks. Occasionally, it also works with government schemes to disseminate seed, although these are irregular and unpredictable and the company states that it struggles to plan accordingly.
- Although Heritage Seeds has experience in selling seed outside Ghana, it discontinued cross-border supply to focus on meeting local demand.
- The company engages over 350 farmers as outgrowers in Ghana, the majority of whom are women.

### Portfolio information

Index crops in portfolio	Seed type		
	Hybrid	OPV	GM
Field crops			
Cowpea			
Groundnut			
Maize	●	●	
Rice, paddy		●	
Soybean			

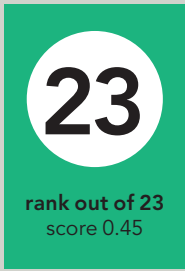


# GAWAL

Access to Seeds Index

**Corporate data**  
Headquarters: Abuja, Nigeria  
Ownership type: Private  
Group revenue (2017): N/A  
www.cgcocagric.com

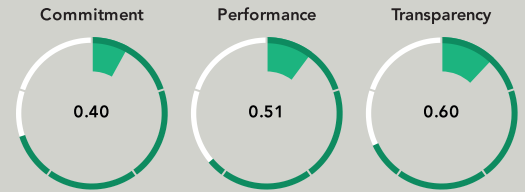
Green Agriculture West Africa Ltd (GAWAL) was jointly established by Yuan Longping High-Tech Agriculture Co and the Chinese state-owned CGCOC Group Co Ltd in 2008. Operating as a subsidiary of CGCOC Agriculture Development Co Ltd, GAWAL started seed production in 2011 and became a supplier of conventional certified rice and maize seed as well as foundation rice seed under the Growth Enhancement Support Scheme of the Nigerian Federal Ministry of Agriculture and Rural Development. In 2017, the company commercialized a rice hybrid.



## Western and Central Africa

GAWAL ranks at the bottom of the 2019 Index for Western and Central Africa. The company's seed production activities and extension services for its producers, coupled with commitments to ensuring food security in the region, give a small boost to its comparatively low score. Overall, the company

discloses little information, and it could do more to link its activities to the needs of smallholder farmers in the region.

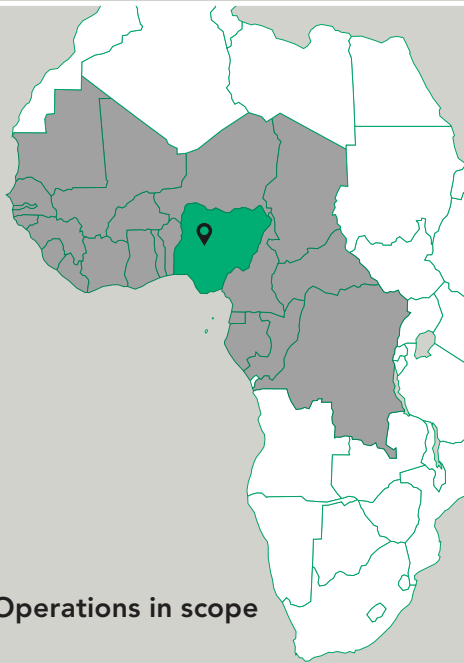


### Leading practices

No leading practices were identified.

### Areas for improvement

■ GAWAL is encouraged to disclose the full scope of its access to seeds-related activities in Western and Central Africa.



### Operations in scope

- Countries in scope
- Company presence
- 📍 Production locations
- 🌱 Breeding station/R&D

### Notable findings

- GAWAL is a member of the Seed Council of Nigeria.
- To promote the implementation of the China-Africa Ten Cooperation Plans aimed at improving agricultural development in Nigeria and achieving agricultural modernization, GAWAL's parent CGCOC Group organized the opening ceremony of the 2016 and 2017 Overseas Training Course on Agricultural Techniques for Nigeria in Abuja. The meetings were attended by Chinese and Nigerian government officials. Trainees from different states in Nigeria attended this program, which included courses on soil and fertilizer science, seed production, rice cultivation and agro-machinery practices.
- As Nigeria suffers from rice shortages – the crop is imported on a large scale – the company commenced conducting variety trials in Nigeria and has developed and introduced a rice variety, GAWAL R1. The variety is resistant to blast disease, reportedly increases smallholder farmer productivity and is distributed throughout Nigeria.
- As part of the Growth Enhancement Support Scheme of the Federal Ministry of Agriculture and Rural Development in Nigeria, GAWAL has established seed production cooperatives and training courses in rice and maize production. Through these cooperatives, it works with more than 5,000 farmers in seven communities in Nigeria.

### Portfolio information

Index crops in portfolio	Seed type		
	Hybrid	OPV	GM
Field crops			
Rice, paddy	●		
Maize	●		