Regional landscaping report For Western and Central Africa

Access to Seeds Index

February 2021

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Acronyms

AGRIPEL: Ministry of Agriculture, Fisheries, Livestock

ANADER: L'Agence National d'Appui au Développement Rural

CAADP: Comprehensive African Agriculture Development Program

CEMAC: Central African Economic and Monetary Community

CGIAR: Consultative Group for International Agricultural Research

CILSS: Permanent Interstate Committee for Drought Control in the Sahel (Comité permanent inter-État de lutte contre la sécheresse au Sahel)

COMESA: Common Market for Eastern and Southern Africa

CONAPAC: Confédération Nationale des Producteurs Agricoles du Congo

CONASEM: Comité National des Semences et Plants

CORAF: Conference des Responsables de Recherche Agronomique Africains

CRNA: Centre National de Recherches Agronomiques

CTAC: Commission Technique d'Admission au Catalogue des Variétés

CVRRC: Crop Varieties Registration and Release Committee

ECCAS: Economic Community of Central African States

ECOWAS: Economic Community of West African States

FAO: Food and Agriculture Organisation

FIRCA: Inter-professional Fund for Research and Advisory Council

FMARD: Federal Ministry of Agriculture and Rural Development

GAIN: Global Alliance for Improved Nutrition

GPS: Groupements de Production Semencière

GRAINE: Gabonaise des Réalisations Agricoles et des Initiatives des Nationaux Engagés

ICRA: Central African Institute for Agronomic Research

ICRISAT: International Crops Research Institute for the Semi-Arid Tropics

IITA: International Institute of Tropical Agriculture

INERA: Institut de l'Environnement et de Recherches Agricoles

ITPGRFA: International Treaty on Plant Genetic Resources for Food and Agriculture

NARI: National Agricultural Research Institute

NARIs: National Agricultural Research Institutes

NASC: National Agricultural Seed Council

NGO: Non-Government Organisation

NIPA: National Agricultural Investment Plan

NSC: National Seed Council

OAPI: Organisation Africaine de la Propriété Intellectuelle / African Intellectual Property Organization

OECD: Organisation for Economic Co-operation and Development

OHADA: Organization for the Harmonization of Business law in Africa

ONASEM: Comité National des Semences et Plants

ONDR: Office National de Développement de la Riziculture

OSP: Office of Seeds and Plants

PFAG: Peasant Farmer Association in Ghana

PNIASAN: Plan National d'Investissement Agricole de Sécurité Alimentaire et Nutritionnelle

R&D: Research and Development

RECs: Regional Economic Communities

ROPPA: Réseau des Organisations Paysannes et des Producteurs Agricoles de l'Afrique de l'Ouest

SDCA: Development and Certification Agency

SDG: Sustainable Development Goals

SEEDPAG: Seed Producer Association of Ghana

SLARI: Sierra Leone Agricultural Research Institute

STU: Seed Technology Unit

UEMOA: Union économique et monétaire ouest-africaine)/ West African Economic and Monetary Union

UNPSB: Union Nationale des Producteurs Semenciers du Burkina Faso

UPOV: Union for the Protection of New Varieties of Plants

USAID: United States Agency for International Development

VSLA: Village Savings and Loan Association

WBA: World Benchmarking Alliance

WCA: Western and Central Africa

WECARD: West and Central African Council for Agricultural Research and Development

Introduction

The Regional Access to Seeds Index for Western and Central Africa (WCA) is part of the 2021 Access to Seeds Index. It will evaluate leading seed companies in Western and Central Africa (WCA) to improve smallholder farmers' access to seeds. Improving smallholder productivity through better access to quality seeds of improved varieties is one of the key targets of the United Nations' 2030 agenda for sustainable development. By providing clarity on leadership and good practices in the seed industry on its contribution, the Access to Seeds Index aims to achieve this goal.

The first Regional Access to Seeds Index for Western and Central Africa was published in 2019 and evaluated the efforts of 23 leading seed companies in the region. Value Seeds, a young Nigerian company working in collaboration with several development organizations and research institutes, topped the 2019 Index for Western and Central Africa. The local company has an access to seeds strategy focusing on smallholder farmers, mainly through its marketing and sales, capacity building activities, and reaching youth and women smallholder farmers. Furthermore, Value seeds tailored a maize 'value kit' for smallholders and the company is actively breeding and working towards releasing its varieties.

Seed cooperatives play an important role in Western and Central Africa because although their reach and capacity are relatively limited, their role in local communities is vital. Most cooperatives are part of the formal seed sector, and through their collaboration with (global) agricultural research institutes, they aim to introduce improved varieties to farmers. Furthermore, cooperatives focus on crops which are usually missing from company portfolios but are essential for local food security, such as legumes, plantains, and cassava. Cooperatives were not included in the 2019 Access to Seeds Index, as their business models were considered to be too narrow relative to private seed companies. Nevertheless, at the request of the regional Expert Review Committee for Western and Central Africa, a scoping report on seed cooperatives was published as part of the documentation of the 2019 Access to Seeds Index. As a result of this study, in 2021 the Access to Seeds Index will include evaluations of the efforts of five advanced seed-producing cooperatives from Western and Central Africa.

The second Regional Access to Seeds Index for Western and Central Africa will be launched during the 2021 United Nations Food Systems Summit. The regional index will evaluate 37 globally active, regional and local companies, including five advanced seed-producing cooperatives (Table 1). The Access to Seeds Index scope for Western and Central Africa covers 20 countries: Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of Congo, Gabon, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Republic of Congo, Senegal, Sierra Leone, The Gambia, and Togo.

Companies were selected based on the following criteria: (1) regional presence or at least a regional influence; (2) physical presence and business activities in the region; (3) integrated seed business model; and/or (4) peer recognition as a leading company. The selection of the seed-producing cooperatives was based on peer recognition as leading players in the WCA seed sector by local partners in the region. The seed producing cooperatives all partner with national or international research institutes to test and select varieties and work with local seed companies, NGOs, or government agencies to distribute seed.

This landscaping report provides an overview of the seed sector in the region and a snapshot of seed-producing cooperatives in each country. In addition to the main seed industry players identified for benchmarking in the 2021 WCA Access to Seeds Index, the report summarises the region's main crops, the enabling environment, observations on the results of the 2019 WCA Access to Seeds Index, and recent events affecting seed sector development, notably the COVID-19 pandemic.

Table 1: 37 companies and cooperatives selected for the 2021 Regional Access to Seeds Index for Western and Central Africa

Company	Country
Advanta*	United Arab Emirates
Agriplus Mali	Mali
Antika Company#	Ghana
BASF*	Germany
Bayer*	Germany
Bejo*	Netherlands
BIHOLF	Côte d’Ivoire
COOPROSEM◊	Mali
Corteva Agriscience*	United States of America
Da-Allgreen Seeds	Nigeria
East-West Seed*	Thailand
Enza Zaden*	Netherlands
FAGRI#	Burkina Faso
Faso Kaba	Mali
Ferme Semencière AINOMA	Niger

GAWAL	Nigeria
Heritage Seeds	Ghana
ICS-GROUP#	France
Jirkur Seed Producers Cooperative Society ◊	Nigeria
KWS*	Germany
Limagrain*	France
M&B Seeds#	Ghana
Maslaha Seeds	Nigeria
NAFASO	Burkina Faso
Novalliance Group	France
Premier Seed	Nigeria
Rijk Zwaan*	Netherlands
Sakata*	Japan
SEDAB	Senegal
Seed Co	South Africa
SEEDPAG ◊	Ghana
SOPROSA	Mali
Syngenta Group*	Switzerland
Takii*	Japan
Coopérative Agricole de BAMA ◊	Burkina Faso
UNION MADDA BEN DE FALWEL ◊	Niger
Value Seeds	Nigeria

* Globally active companies assessed for their investments in all 3 regions

New regionally headquartered company added to scope

◊ Seed-producing cooperatives

Integration with the World Benchmarking Alliance for greater impact

The Access to Seeds Index has been developed by the Access to Seeds Foundation since 2012. By the publication of the 2019 edition, it was clear that the index had significantly improved the transparency of the seed industry, encouraged a range of improvements and provided a welcome evidence base for dialogue. However, linking these achievements to the global Sustainable Development Goals (SDGs) required partnering with other benchmarks. As a result, the Access to Seeds Foundation decided to align and integrate its model with the World Benchmarking Alliance (WBA)'s food and agriculture transformation, assessing the role business against key global agendas, including the 2030 Agenda and the Paris Agreement. Within this transformation, the 2021 Access to Seeds Index is a 'spotlight benchmark', providing deeper insights into the contribution of the seed industry to the SDGs, in particular SDG 2 (zero hunger).

WBA's food and agriculture transformation encompasses two spotlight benchmarks: the Access to Seeds Index and the Seafood Stewardship Index. The Food and Agriculture Benchmark will broadly assess the performance of the 350 largest and most influential companies within the food value chain, including seed and input companies, on their contribution to global food systems transformation. Where keystone companies shape markets, smaller companies play a central role in the last mile delivery of products in specific markets. In the case of the Access to Seeds Index, they are crucial for reaching smallholders and building their capacity.

The Access to Seeds Index will focus on and deepen insights into the contribution of the seed industry. This will include small- and medium-sized seed enterprises in South and South-east Asia and sub-Saharan Africa, both of which face high levels of hunger and rural poverty. The seed industry, with its key position at the start of the global food chain, is vital for realising multiple development goals. Chief among them is the goal of doubling smallholder productivity and incomes as part of efforts to achieve food security and end hunger (SDG 2), which the seed industry is well positioned to support.

Theory of change

A sustainable future for all, as outlined in the SDGs, can only be achieved through transformational change. Business can play a key role in leading this transformation by introducing sustainable, inclusive and innovative solutions.

Benchmarks provide an essential tool for measuring and comparing corporate performance on the SDGs. They equip financial institutions, companies, governments, civil society and individuals with the information they need to exert their full influence and encourage others to do the same. By supporting the private sector in its role to deliver on the SDGs, WBA can help companies move from aspiration to action to achievement.

By focusing its core benchmarks on keystone companies (companies with a disproportionate influence on a specific market or value chain) WBA aims to bring the transformations that are fundamental to achieving the SDGs beyond the tipping point: the point at which a series of small changes becomes significant enough to cause a larger, transformational change.

Through spotlight benchmarks, WBA aims to accelerate change around a specific critical challenge in each of the seven identified transformations. Ensuring that smallholder farmers in South and South-east Asia and sub-Saharan Africa have access to quality seeds for food crops is one such critical challenge. Addressing the challenge can unlock the potential for resilient farming systems and ending global hunger. So far, not enough progress has been made. A multi-stakeholder approach involving both the public and private sector is needed, with an important role for seed companies to address the multiple burdens of food insecurity and malnutrition.

The Access to Seeds Index contributes to accelerating change in three ways: (1) by illuminating the private seed sector - this can inform policy decisions but also help civil society actors and public sector bodies build partnerships with private seed companies; (2) by ranking and comparing companies to channel the competitive spirit that drives performance in every industry; and (3) by inspiring the keystone companies

Background to the landscaping report

This landscaping report is an update of the 2018 landscaping study covering 20 countries: Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of Congo, Gabon, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Republic of Congo, Senegal, Sierra Leone, The Gambia, and Togo. It provides an overview of the outcomes of country studies to identify leading seed companies in the region. In addition, background is provided on developments in seed harmonization and seed policies on a regional and country level to reflect the environment in which the seed industry operates in the region. As such, multiple sources were used and developments in the sector monitored. Relevant updates have been incorporated throughout the country studies.

Under the framework of the Regional Economic Communities (RECs), the processes of developing and implementing regional harmonized seed policy covering all countries within such communities is ongoing. In May 2008, the Economic Community of West African States (ECOWAS) Council of Ministers adopted the harmonized Seed Regulation (C/REG. 4/05/2008) which is geared towards facilitating the production, quality control, certification and marketing of plant seeds and plant seedlings. The regulation covers the regions of the ECOWAS, the Union Economique et Monétaire Ouest Africaine (UEMOA) and the Comité Permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel (CILSS). By the end of 2019, with the exception of 3 countries, all ECOWAS member countries, in addition Chad and Mauritania, had formally adopted the harmonized regional regulation.

In Central Africa, the Economic Community of Central African States (ECCAS) and the Central African Economic and Monetary Community (CEMAC) are conducting several consultative meetings to develop a regional harmonized regulation. Similarly, with the support of organizations such as the Food and Agriculture Organisation (FAO), countries have developed and adopted national seed policies and seed acts to regulate their national seed industry. These reforms are being developed and implemented to create favourable conditions necessary for the private sector, to ensure the regular supply of certified seeds in appropriate quantity and quality to farmers.

The World Bank's Enabling the Business of Agriculture project assesses laws and regulations that impact the business environment for the agricultural sector, covering 62 countries in 2019. It covers country seed schemes as one of the 12 topics, whereby it assesses laws and regulations applicable to the development (plant breeding), release (variety registration), and quality control of seeds and international harmonization of these laws and regulations.

Collaboration with key actors

The socialisation process for the Access to Seeds Index methodology is done through roundtables and dialogues that bring together stakeholders and experts from the regional seed industry. This process enables the exchange of knowledge within and between organisations, encourages learning, and contributes to enhancing awareness and understanding about seed companies' roles and performance. It also promotes the use of the index results by different stakeholder groups.

The Access to Seeds Index aims to strengthen collaboration with regional partners to ensure their data needs inform the methodology review, as well as to use existing channels, events, and conferences to disseminate the index results. Partners in Western and Central Africa range from seed sector development actors, including CORAF and ASIWA in West Africa, ROPPA, an initiative of farmers organizations in West Africa, to industry federations such as AFSTA in sub-Saharan Africa.

To meet the needs of those most impacted by the seed industry, the Access to Seeds Index aims to influence decision-makers by including and amplifying farmers' voices through dialogues with farmer organisations in the region. These organisations are identified and recommended by the index's Regional Expert Review Committee, regional partners, and a growing number of WBA Allies.
WBA Allies represent a broad cross-section of sectors and industries committed to using benchmarks to incentivise, measure, and monitor corporate performance on the SDGs. To ensure the seed industry is represented, the Access to Seeds Index welcomes interested actors to join the movement.

Unique resource for stakeholders

The Access to Seeds Index is a unique resource in the public domain for anyone interested in seed industry activity in the Global South. Research organisations like CGIAR use the index's information to identify private sector partners that can help bring new varieties to market. The Global Alliance for Improved Nutrition (GAIN), which is interested in the availability of crop varieties with high nutritional value also used the index's findings.

Among farmer organisations, support for the index is strong. The index's data helps farmers engage in informed dialogue with seed companies on how these companies can better serve smallholder needs. Also, the effects of climate change have brought home the fact that collaborating with seed companies could help farmer organisations strengthen smallholder resilience.

The African Union has backed the index from the start. At a seed sector event in Abidjan, Côte d'Ivoire, in October 2016, Janet Edem, Director of Rural Economy and Agriculture at the African Union, said: "for achieving food and nutrition security, there is a continued need to measure the performance of the seed sector and keep our heads of state as well as all partners informed of the latest developments. We are fortunate that professional initiatives like the Access to Seeds Index are already contributing to that path." In recent years, the index has informed various regional seed sector development initiatives, such as AfricaSeeds and CORAF, and supported COMESA's efforts to harmonize seed laws and policies.

The 2019 WCA Access to Seeds Index results were widely reported by mainstream and specialised media such as seed magazines, agriculture news outlets, business and financial publications. Members of the index team also appeared on prime-time television in the region, including The Senegalese evening news (RTS1) for the WCA index. Furthermore, seed companies, mainly those who achieved a high ranking, included items on the index in their company communications.

The seed sector in Western and Central Africa

An overview of main seed sector findings of the 20 countries included in this landscaping report is presented below.

Benin

In Benin, cooperatives dominate seed production and supply systems. Except for companies importing vegetable seeds, very few enterprises operate in the formal seed sector. Multinational companies hardly employ seed activities in the country.

Five index companies included in the 2019 Index had a presence in Benin.

Burkina Faso

Burkina Faso has a seed policy and regulations in place as well as a functional seed committee, certification agency, updated national catalogue, and active private sector association.

Seventeen index companies included in the 2019 index had a presence in Burkina Faso.

Cameroon

The formal seed system is comprised of government entities, agricultural institutions, NGOs, small enterprises, and private sector companies involved in different seed-related activities. The private seed sector in Cameroon is slowly emerging as it collaborates with local actors.

Thirteen index companies included in the 2019 Index had a presence in Cameroon.

Central African Republic

The reconstitution of the national seed supply is only carried out through introductions and imports from abroad. Non-governmental organizations and government institutions dominate the seed landscape.

One index company included in the 2019 Index had a presence in Central African Republic.

Chad

The introduction of improved seeds, fertilizers, pesticides, and agricultural mechanization have increased agricultural productivity. While utilization of improved or certified seeds is low, various actors, government, cooperatives and NGOs focus on the dissemination of certified seed in the country.

Only two index companies included in the 2019 Index had a presence in Chad.

Côte d’Ivoire

In Côte d’Ivoire, there is limited private company activity specializing in the production, packaging, and marketing of certified seeds.

Seventeen index companies included in the 2019 index had a presence in Côte d’Ivoire.

Democratic Republic of the Congo

Compared to actual need, certified seed production is low in the Democratic Republic of the Congo (DRC) while demand is high, and most available seeds are non-certified. Similarly, the foreign seed supply has not yet been formally established.

Eleven index companies included in the 2019 index had a presence in Democratic Republic of Congo.

Equatorial Guinea

Agriculture contributes to only about 2 percent of the Gross Domestic Product (GDP), reflecting the predominance of the petroleum industry. Even though Equatorial Guinea only cultivates about 10% of its land most people in Equatorial Guinea earn their income through subsistence farming. No detailed data is available on national seed-producing actors.

One index company included in the 2019 index had a presence with a presence in Equatorial Guinea.

Gabon

The seed sector in Gabon is relatively underdeveloped; the bulk of companies active in the country are mostly involved in the marketing and sale of seed. The availability of quality and certified seed for Gabonese farmers is low. The country's seed patrimony mostly consists of uncertified seeds, regular seeds from producer's reserves, and seeds purchased from local markets.

Five index companies included in the 2019 index had a presence in Gabon.

Ghana

Prior to 1990, the public sector thoroughly dominated the seed sector. Multiple local seed producers and companies are now active in Ghana with a focus on the production and distribution of field crops.

Seventeen index companies included in the 2019 index had a presence in Ghana.

Guinea

There are several public actors that provide seeds to farmers. Multinational companies do not have substantial activities. Cooperatives play an active role in providing seeds to farmers. These groups are regionally organized or grouped around specific crops.

Five index companies included in the 2019 index had a presence in Guinea.

Guinea-Bissau

The seed sector in Guinea-Bissau is composed of cooperatives, seed producer associations, non-governmental organizations, and small local private actors. The fragility of the country is one reason why foreign companies have not invested in Guinea-Bissau’s seed industry.

Only one index company included in the 2019 index had a presence in Guinea-Bissau.

Liberia

Farmer organizations, community-based organizations, cooperatives and private companies are involved in the seed sector in Liberia.

Four index companies included in the 2019 index had a presence in Liberia.

Mali

Mali has liberalized its economy over the past decade, resulting in a more interactive seed system with several active players from the public and private sectors, farmers' organizations, and non-governmental organizations. The role of private seed companies remains relatively low, supplying only a small portion of the seeds that farmers use.

Seventeen index companies included in the 2019 index had a presence in Mali.

Mauritania

No data is available on national seed-producing actors.

Only four index companies in included in the 2019 index had a presence in Mauritania.

Niger

In recent years, Niger’s seed industry has been characterized by an upswing in private actors involved in the production and supply of quality seeds to farmers. This has been made possible by an increasingly favourable institutional and regulatory environment.

Ten index companies included in the 2019 index had a presence in Niger.

Nigeria

Unlike many countries in West Africa, the role of the private sector has been vital to the transition and growth of Nigeria’s seed industry. Private sector participation in breeding and variety release has led to an increase in its share of variety release in the country, which the public sector dominated until 2000.

Four index companies included in the 2019 index had a presence in Nigeria.

Republic of the Congo

Since the end of state-owned enterprises with the structural adjustment programs of the 1990s, the agricultural sector has mainly been based on traditional practices. The private seed sector's involvement in the rural sector is limited and mainly involves selling vegetable seeds.

Seven index companies included in the 2019 index had a presence in the Republic of the Congo.

Senegal

The seed sector in Senegal is well developed, with a relatively complete legal and regulatory framework. This framework has been reinforced by ECOWAS' harmonized seeds framework. Senegal has a strong infrastructure of seed-producing cooperatives.

Twenty-one index companies included in the 2019 index had a presence in Senegal.

Sierra Leone

Private sector involvement in Sierra Leone is emerging, with private enterprises accounting for more than half of the certified seeds produced in the country. The government is open to private investors and public-private partnerships in all agricultural sectors, starting with the seed industry.

Six index companies included in the 2019 index had a presence in Sierra Leone.

The Gambia

Quality seeds are recognized as a prime prerequisite in agriculture and the basis of agricultural productivity by the government of The Gambia, which recognizes that the national economy and food and nutrition security depend on a thriving local agriculture.

Eight index companies included in the 2019 index had a presence in The Gambia.

Togo

The Togolese Agricultural Research Institute produces and markets basic seed, while commercial certified seed of crops are mainly produced by seed enterprises, cooperatives, or individual seed producers.

Seven index companies included in the 2019 index had a presence in Togo.

Seed sector Covid-19 response

The seed industry in Western and Central Africa responded to the outbreak of the COVID-19 pandemic by successfully lobbying governments to declare seeds an essential product that was not subject to movement restrictions during the lockdown, thereby reducing farmers' risk of being unable to buy seed in time for planting. However, delays in acquiring documents and certificates necessary for cross-border trade have hampered the international seed movement. Also, local travel restrictions on farmers themselves mean some have struggled to access input and output markets or acquire seed even through their social networks.

In the region, ECOWAS and its partners mobilised a coordinated regional response that included seed. The agriculture ministers of ECOWAS, UEMOA, and CILSS virtually met and approved a regional emergency action plan acting on ministers' recommendations. The plan set out measures to support the action of the member states with four strategic focuses: facilitating access to agricultural inputs and setting up effective social safety nets for food security, increasing the distribution capacity of the Regional Food Security Reserve and other reserves to 300 000 tonnes of food, preventing, monitoring and controlling crop pests, and finally preventing, monitoring and controlling cross-border animal diseases.

The review and dialogue during the development of the methodology for the Access to Seeds Index included how the index should address the impacts of COVID-19 pandemic on seed businesses and corporate responses to it. The 2021 Access to Seeds Index survey will include questions about the pandemic lockdowns' implications and corporate responses in relation to relevant indicators. However, data collected will not be used for company assessment.

Area harvested for global crops

The Access to Seeds Index focuses on smallholders’ access to quality seeds for major field and vegetable crops (so-called global crops). All are food crops. The index uses this data to evaluate whether companies have specific food crops which are of value to smallholders in their portfolios, and where companies see opportunities to develop suitable varieties tailored to regional conditions and preferences.

The area harvested for these crops in hectares (ha) was collected for all 20 index countries and is based on data published by the FAO in 2018. These are listed below.

Table 2 – Area harvested for global field crops in ha (2018)

Field crops	Area harvested in ha (2018)
Sorghum	16,773,411
Millets	16,264,861
Maize	15,908,309
Cowpea	11059762
Rice	10,871,502
Groundnut	9,068,860
Sesame	1,754,026
Bean, dry	1,656,170
Soybean	1,200,909
Potato	455,889
Wheat	102,572
Pigeon pea	9,419
Chickpea	2,177

Table 3 – Area harvested for global vegetables in ha (2018)

Vegetables	Area harvested in ha (2018)
Okra	1,407,471
Tomato	836,895
Onion	462,562
Cucumber	270,251
Pumpkin Squash Gourd	192,456
Pepper (sweet)	181,798
Pepper (hot)	137,341
Watermelon	57,580
Carrot	31,185
Eggplant	30,748
Cabbage	24,788
Green bean	19,586
Lettuce	13,235
Melon	6,081

Green pea	6

Country profiles

Country profiles provide an overview of national seed sectors and list the main seed companies selected for 2021 Western and Central Africa Access to Seeds Index with headquarters in the respective countries. This section's information is based on country profiles published by the Access to Seeds Index in 2019, additional recent literature, and updated databases such as the 2020 Global Hunger Index (GHI).

Benin

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	23
Employment in agriculture % of total employment	39
Country position on GHI severity scale (2020 score)	Serious Hunger (22.4)
UPOV Membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM Crop Approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	33/100
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAP

Main crops

The main crops in Benin were identified based on the area harvested in 2018. The table below lists the top five index field crops and the top four index vegetables.

Maize is the major field crop, followed by sorghum, groundnut, soybean and beans, dry. Tomato, pepper (hot), pepper (sweet) and okra are widely grown vegetables.

Field crop	Area harvested in ha (2018)
Maize	1,157,805
Sorghum	292,898
Groundnut	226,130
Soybean	199,844
Beans, dry	160,547
Vegetables	**Area harvested in ha (2018)**
Tomato	37,850
Pepper (hot)	21,052
Pepper (sweet)	21,052
Okra	16,310

Overview of the seed sector in Benin

In 1989 Benin restructured the seed sector with the implementation of a national seed plan for 1990–1995. A second plan was drawn up for 1995–2000, followed by a further restructuring of the sector. In 2020 Benin established the National Agricultural Research System (NARS), composed of public, private, and indigenous innovators active in Benin's agricultural research.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Benin

None

Burkina Faso

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	29
Employment in agriculture % of total employment	26
Country position on GHI severity scale (2020 score)	Serious Hunger (25.8)
UPOV Membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	Cotton
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	35/100
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Burkina Faso were identified based on the area harvested in 2018. The table below lists the top five index field crops and the top three index vegetables.

Sorghum constitutes the most important staple food crop, followed by millet, cowpea and maize. Vegetables harvested include okra, pepper (sweet) and tomato.

Field crop	Area harvested in ha (2018)
Sorghum	1,907,650
Millet	1,393,878
Cowpea	1,307,336
Maize	1,019,181
Sesame	438,941
Vegetables	**Area harvested in ha (2018)**

Okra	3,656
Pepper (sweet)	1,656
Tomato	1,325

Overview of the seed sector in Burkina Faso

Successive governments have introduced various reforms to develop agriculture in the long run. Notably, two regulations seek to promote the widespread adoption of improved varieties: the 2006 law on seeds and the harmonized seed regulation from ECOWAS, UEMOA, and CILSS. The private seed sector faces multiple technical, infrastructural, and financial challenges. Against this backdrop, three structures were set up to support the production, marketing, and distribution of seeds in the country: l'Association des Grossistes et Détaillants d'Intrants Agricoles, l'Association Nationale des Entreprises Semencières du Burkina Faso, and l'Union Nationale des Producteurs Semenciers du Burkina.

Burkina Faso's public institute for agricultural research, the Institut de l'Environnement et de Recherches Agricoles (INERA), is tasked with (among other things) increasing the general uptake of quality seeds throughout the country. In 2016, INERA designed a framework agreement on future public-private partnerships for producing early generation seed.

Burkina Faso's agriculture sector represents the primary source of economic growth and is key to food security and nutrition. Cooperatives are part of the national seed trade association. Coopérative Agricole de Bama works in close partnership with the national agricultural research agency INERA. NAFASO, a private seed company with a regional presence, contracted the cooperative to produce foundation seed. This means that Bama's seeds indirectly reach international markets. With NAFASO, the cooperative has introduced two new rice varieties and aims to have them registered in the national catalogue. With INERA, the cooperative trains about a dozen new seed producers annually and formally register them to strengthen the current production capacity.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Burkina Faso

Company/Cooperative	Crops in portfolio		Business Model		
	Field crops	Vegetables	Breeding	Seed Production	Marketing and Sales
NAFASO	✓	✓	X	✓	
FAGRI	✓	✓	✓	✓	✓

Coopérative Agricole de Bama ◊	✓	X	X	✓	✓

◊ Seed-producing cooperative selected for 2021 Access to Seeds Index

Cameroon

Region	Western and Central Africa
Development status	Lower Middle-Income Country and Territory
Participation in trade blocs	CORAF/WECARD, SADC
GDP share of agriculture (%)	14
Employment in agriculture **% of total employment**	43
Country position on GHI severity scale (2020 score)	Moderate Hunger (19.1)
UPOV membership status	Member of the African Intellectual Property Organization (OAPI) and UPOV
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	22/100
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Cameroon were identified based on the area harvested in 2018.

The table below lists the top three index field crops and the most harvested index vegetable. Maize, sorghum and groundnut constitute the most widely harvested field crops. Among vegetables, cucumber, pumpkin, squash, gourd and tomato are the most harvested.

Field crop	Area harvested in ha (2018)
Maize	1,315,953
Sorghum	866,510
Groundnut	455,775
Beans, dry	298,795
Rice, paddy	288,637
Vegetables	**Area harvested in ha (2018)**

Cucumber	260,917
Pumpkin Squash Gourds	174,022
Tomato	93,762

Overview of the seed sector in Cameroon

Cameroon established a seed law in 2001 relating to seed production and marketing. In 2005 the National Seed Council (NSC) was established to promote, organize, and stimulate a dependable seed industry. It seeks to enact the development and promotion of new plant varieties as part of the national seed policy.

The National Agricultural Investment Plan (NIPA) aims to develop research on improved high yielding seeds and increase competitiveness among farms. The Ministry of Agriculture and Rural Development ensures regulation of seeds and the breeding of various crop varieties.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Cameroon

None

Central African Republic

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	31
Employment in agriculture (% of total employment)	77
Country position on GHI severity scale (2020 score)	Insufficient data provisionally categorized alarming
UPOV membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	Not included
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Central African Republic were identified based on the area harvested in 2018. The table below lists the top five index field crops and the top four index vegetables.

Maize constitutes the most important staple food crop, followed by sesame and sorghum. Vegetables with a significant harvested area include pumpkin, squash and gourd.

Field crop	Area harvested in ha (2018)
Groundnut	115,291
Maize	98,773
Sesame	39,304
Sorghum	31,564
Millet	9132
Vegetables	**Area harvested in ha (2018)**

Pumpkin Squash Gourd	3,691
Pepper (hot)	73

Overview of the seed sector in Central African Republic

Due to the Central African Republic's military unrest in the past decade, the Central African Institute for Agronomic Research (ICRA) only resumed activities in 2014. ICRA is the primary public institution for the production and propagation of plant material. It explores, introduces, characterizes, and evaluates food crops and provides varietal creation and production of pre-basic and basic seed under contract with specialized producers. The Central African Agency for Agricultural Development, the National Seed Office, and agricultural services at the central and prefectures or sub-prefectures are all responsible for agricultural monitoring and supervision.

The recent 2019 -2024 Agriculture Recovery and Agribusiness Development Support Project aims to contribute to the capacity building of ICRA. The project includes rebuilding ICRA's seed bank, adopting nutrition and climate-sensitive technologies, and strengthening the National Seed Office (Office National de Semences, ONASEM) capacity for seed control and certification. The project will also support the Ministry of Agriculture and Rural Development's capacity to implement key provisions under the Seed Law to spur the development of seed markets such as R&D, trials, registration, control, and certification.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Central African Republic

None

Chad

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	20
Employment in agriculture (% of total employment)	77
Country position on GHI severity scale (2020 score)	Extremely alarming (44.7)
UPOV membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	Not included
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Chad were identified based on the area harvested in 2018. The table below lists the top five index field crops and the top index vegetable.

Millet, sorghum, groundnut, maize and sesame constitute the most widely harvested field crops. Onion is the most harvested vegetable.

Field crop	Area harvested in ha (2018)
Millet	1,221,948
Sorghum	1,138,787
Groundnut	786,890
Maize	341,872
Sesame	325,114
Vegetables	Area harvested in ha (2018)

Onion	1,855

Overview of the seed sector in Chad

In 2020 Chad ranked as the world's most food-insecure country in the Global Hunger Index despite the government's objectives to increase the availability of field crop seeds and give impetus to agricultural production. Chad's 2006–2015 Master Plan for Agriculture (SDA) to sustainably increase agricultural productivity promotes the modernization of agriculture, reflecting the government's will to transfer production and marketing functions to the private sector.

Chad's current development priorities are embedded in "Vision 2030: The Chad We Want" a strategic framework to be implemented through consecutive development plans, beginning with the national development plan for 2017–2021. Since 2012, Chad has been working towards joining ECOWAS and has recently adopted the regional seed harmonization law.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Chad

None

Côte d'Ivoire

Region	Western and Central Africa
Development status	Lower Middle-Income Country and Territory
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	20
Employment in agriculture **% of total employment**	40
Country position on GHI severity scale (2020 score)	Serious Hunger (24.5)
UPOV membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	46/100
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Côte d'Ivoire were identified based on the area harvested in 2018. The table below lists the top four index field crops and the top three index vegetables.

Rice, maize, sorghum and millet are the most harvested field crops. The most widely cultivated vegetables are okra, pepper (dry) and eggplant.

Field crops	Area harvested in ha (2018)
Rice	775,048
Maize	473,143
Sorghum	92,924
Millet	77,673
Vegetables	**Area harvested in ha (2018)**
Okra	57,361

Pepper (hot)	19,804
Eggplant	17,619

Overview of the seed sector in Côte d'Ivoire

In 1984, the national government created the Office of Seeds and Plants (OSP) within the National Seed Plan framework of 1984-1990. Before 1984, food crops were not subject to special seed programs, and the state-run Agricultural Projects Technical Bureau managed seed-producing farms. By 2013, a National Plant Varieties catalogue and the Comité National des Semences et Plants (CONASEM) were established for the promotion, guidance, and monitoring of agricultural production activities and the control and marketing of agricultural plant seed species.

The public agency Centre National de Recherches Agronomiques (CRNA) plays an important role in the production and dissemination of basic seeds. The Office National de Développement de la Riziculture (ONDR) plays a similar role in the supply of rice seed. Cote d'Ivoire's agricultural R&D is funded based on an innovative tax arrangement through the Inter-professional Fund for Research and Advisory Council (FIRCA). In 2020, Côte d'Ivoire signed an agreement for tighter collaboration with AfricaSeeds, the implementing agency for the African Union seed program, to provide substantial support for the sustainable development of the Ivorian seed sector.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Cote d'Ivoire

Company	Crops in portfolio		Business Model		
	Field crops	Vegetables	Breeding	Seed Production	Marketing and Sales
BILOHF	✓	X	X	✓	✓

Democratic Republic of the Congo

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD, SADC, COMESA
GDP share of agriculture (%)	20
Employment in agriculture % of total employment	66
Country position on GHI severity scale (2020 score)	Insufficient data provisionally categorized as alarming.
UPOV membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	30/100
Law on plant variety protection	No

Main crops

The main crops in the Democratic Republic of the Congo were identified based on the area harvested in 2018.

The table below lists the top three index field crops and top three index vegetables. Maize is the most important field crop. Other widely cultivated crops include rice and groundnut. Pepper (dry), onion and tomato are the most widely cultivated vegetables.

Field crop	Area harvested in ha (2018)
Maize	2,680,413
Rice	1,303,223
Groundnut	451,588
Vegetables	**Area harvested in ha (2018)**
Pepper (hot)	10,523
Onion	10,475
Tomato	6,694

Overview of the seed sector in Democratic Republic of the Congo

The Democratic Republic of the Congo (DRC) does not have a seed law in place. The DRC is a member of both the COMESA and SADC, and the government has taken steps over the years to draft a domestic legal framework aligned with the harmonized seed trade regulations established by these organizations. However, these commitments remain only theoretical as the government has yet to enact a national seed law.

The lack of political commitment to the sector is further evidenced by poor financial support to SENASEM, the seed inspectorate under the Ministry of Agriculture, Fisheries, Livestock (AGRIPEL), and the National Institute for Agricultural Research and Studies (INERA) to carry out their mandates.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Democratic Republic of the Congo

None

Equatorial Guinea

Region	Western and Central Africa
Development status	Upper Middle-Income Country and Territory
Participation in trade blocs	ECCAS/ CEMAC
GDP share of agriculture (%)	2
Employment in agriculture (% of total employment)	43
Country position on GHI severity scale (2020 score)	No data
UPOV Membership status	Member of the African Intellectual Property Organization (OAPI) and UPOV
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	No
Enabling the Business of Agriculture (2019 rank)	Not included
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

Numerous filed and vegetables are grown, but no crop-specific area or production data are available for Equatorial Guinea.

Overview of the seed sector in Equatorial Guinea

Even though Equatorial Guinea only cultivates about 10% of its land most people in Equatorial Guinea earn their income through subsistence farming.

While food insecurity and hunger still plague Equatorial Guinea, the rise of new programs, efforts and resiliency in how the nation tackles nutrition bodes well for the nation. In 2017, Guinea graduated out of the 'Least Developed Country' status a step forward for Equatorial Guinea to progress further into a more food secure state.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Equatorial Guinea

None.

Gabon

Region	Western and Central Africa
Development status	Upper Middle-Income Country and Territory
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	5
Employment in agriculture (% of total employment)	33
Country position on GHI severity scale (2020 score)	Moderate Hunger (18.2)
UPOV Membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM Crop Approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	Not included
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Gabon were identified based on the area harvested in 2018. The table below lists the top two index field crops and the top two index vegetables.

Maize and groundnut cultivation are the most important agricultural activities in Gabon. The most cultivated vegetables are eggplants and tomato.

Field crop	Area harvested in ha (2018)
Maize	29,291
Groundnut	18,107
Vegetables	Area harvested in ha (2018)
Eggplant	46
Tomato	45

Overview of the seed sector in Gabon

The availability of quality and certified seeds for Gabonese farmers is low. The country's seed capital mainly comes from producers themselves, as well as agro-industrial companies and public development projects.

Gabon’s 2015 Plan National d'Investissement Agricole de Sécurité Alimentaire et Nutritionnelle (PNIASAN) aims to significantly reduce its dependence on imported goods by increasing domestic agricultural production. PNIASAN has several projects organized to develop the agricultural sector through the Green Gabon pillar which are expected to yield inclusive and shared growth. The program, Gabonaise des Réalisations Agricoles et des Initiatives des Nationaux Engagés (GRAINE), also launched in 2015, is a public-private partnership aimed toward expanding domestic agricultural production.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Gabon

None

Ghana

Region	Western and Central Africa
Development status	Lower Middle-Income Country and Territory
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	19
Employment in agriculture (% of total employment)	30
Country position on GHI severity scale (2020 score)	Moderate Hunger (15.2)
UPOV membership status	No
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	50/100
Law on plant variety protection	No

Main crops

The main crops in Ghana were identified based on the area harvested in 2018. The table below lists the top four index field crops and the top three index vegetables.

Maize is the most important field crop. Other widely cultivated crops include sorghum, rice and millet. Tomato, hot pepper and sweet pepper are the most widely cultivated vegetables.

Field crop	Area harvested in ha (2018)
Maize	1,184,363
Sorghum	280,725
Rice	272,407
Millet	179,332
Vegetables	**Area harvested in ha (2018)**
Tomato	49,716
Pepper (hot)	15,299

Pepper (sweet)	13,174

Overview of the seed sector in Ghana

Ghana's 2010 Plants and Fertilizer Act facilitates the private sector's role in the country's seed industry. The private sector is represented in the National Seed Council as well as the National Variety Release and Registration Committee. Ghana has a national seed policy as well as a trade association, called the National Seed Trade Association of Ghana. In 2011, the country passed a biosafety law, which led to field testing a range of genetically modified crops. In 2016, Ghana ratified the ECOWAS-UEMOA-CILSS regulations and initiated the National Seed Plan, which defined 10 priority projects that are in implementation to grow the seed sector.

The 2010 Plants and Fertilizer Act promoting the private sector's role in the seed industry has limited attention for the cooperative model. Many seed-producing farmers operate individually in out-grower schemes, producing seed for local enterprises. These farmers can join the Seed Producer Association of Ghana (SEEDPAG) and the Peasant Farmer Association in Ghana (PFAG). These organizations have the potential to support the further development of the cooperative model in Ghana.

SEEDPAG was incorporated in 2009 and provides a forum for interaction and information exchange among registered seed producers in Ghana. It organizes training programs and other capacity-building activities for its members. In 2016, only 14 of the 197 members were women farmers. After a period of working as an outgrower, some of the members set up their own small businesses and joined NASTAG as individual companies (32 in 2017). SEEDPAG members produce certified seed or propagation material for crops such as maize, rice, soybean, cowpea, sorghum, groundnut, cassava, millet and common bean. The bulk of the foundation seed is provided by the Grains and Legumes Development Board of the Ministry of Food and Agriculture.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Ghana

Company/Cooperative	Crops in portfolio		Business Model		
	Field crops	Vegetables	Breeding	Seed Production	Marketing and Sales
Antika Company	✓	X	X	✓	✓
M&B Seeds	✓	X	✓	✓	✓
Heritage Seeds	X	✓	X	✓	✓

Seed Producers Association of Ghana (SEEDPAG) ◊	✓	X	X	✓	✓

◊ Seed-producing cooperative selected for the 2021 Access to Seeds Index for WCA

Guinea

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	24
Employment in agriculture (% of total employment)	62
Country position on GHI severity scale (2020 score)	No 2020 data; provisionally categorized as serious hunger
UPOV Membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	34/100
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Guinea were identified based on the area harvested in 2018. The table below lists the top index field crops and vegetable.

Field crop	Area harvested in ha (2018)
Rice	238,090
Groundnut	7,901
Vegetables	Area harvested in ha (2018)
Tomato	196

Overview of the seed sector in Guinea

Guinea has various legal measures and established a National Seed Committee to promote quality seeds, but it has not yet been fully implemented. The Ministry of Agriculture's Seeds, Plants and Fertilizers Division handles seed certification. The government recognizes the critical role that the private sector can play in supplying farmers with seeds at a reasonable cost, encouraging private operators to invest in implementing a seed policy. Together with the FAO and the Permanent Interstate Committee for drought control in the Sahel (CILSS), Guinea is preparing a national variety catalogue and an overarching seed policy.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Guinea

None

Guinea-Bissau

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	47
Employment in agriculture (% of total employment)	68
Country position on GHI severity scale (2020 score)	No 2020 data; provisionally categorized as serious hunger
UPOV Membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	Not included
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Guinea-Bissau were identified based on the area harvested in 2018. The table below lists the top four index field crops. Numerous other vegetables are grown, but no crop-specific area or production data are available.

Rice, groundnut, sorghum and millet constitute the most harvested field crops.

Field crop	Area harvested in ha (2018)
Rice	118,660
Groundnut	41,267
Sorghum	19,316
Millet	12,577

Overview of the seed sector in Guinea-Bissau

The government's National Institute of Agricultural Research, with the support of the Food and Agriculture Organization, West and Central African Council for Agricultural Research (CORAF/ WECARD), and the United States Agency for International Development (USAID), restructured the seed sector by training seed inspectors and seed multipliers. The mandate given by the national research institute also includes quality control of field seeds in 40 locations selected for seed production. This mandate, exercised by the various research centres, concerns farmers and seed producers and seed companies, cooperatives, and associations (national or foreign).

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Guinea-Bissau

None

Liberia

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	37
Employment in agriculture (% of total employment)	43
Country position on GHI severity scale (2020 score)	Alarming Hunger (31.4)
UPOV membership status	Member of the African Regional Intellectual Property Organization (ARIPO); initiated the procedure for acceding to the UPOV Convention
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	16/100
Law on plant variety protection	No

Main crops

The main crops in Liberia were identified based on the area harvested in 2018. The table below lists the top index field crops and vegetable.

Rice constitutes the most important staple food crop, followed by groundnut. The vegetable with a significant harvested area is tomato.

Field crop	Area harvested in ha (2018)
Rice	238,090
Groundnut	7,901
Vegetables	Area harvested in ha (2018)
Tomato	196

Overview of the seed sector in Liberia

Within the past decade, Liberia's Ministry of Agriculture (MOA) improved its plans and strategies for regenerating the seed sector through several pathways supporting the Comprehensive African Agriculture Development Program (CAADP) compact signed in 2009. Liberia adopted a set of seed regulations formed and guided by the Economic Community of West African States (ECOWAS) C/REG.4/05/2008. The Liberian government also established an autonomous agency Liberia Seed Development and Certification Agency (SDCA), to coordinate, regulate, administer, and carry out all the functions of the seed certification and control agency, and conduct seed development activities for the benefit of the seed industry of Liberia.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Liberia

None

Mali

Region	Western and Central Africa
Participation in trade blocs	CORAF/WECARD
Global Hunger Index Score	24
GDP share of agriculture (%)	39
Employment in agriculture (% of total employment)	63
Country position on GHI severity scale (2020 score)	Serious Hunger (22.9)
UPOV membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	34/100
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Mali were identified based on the area harvested in 2018. The table below lists the top index four field crops and three index vegetables.

Important field crops are millet, sorghum, maize, and rice. Among vegetables, okra, tomato and pepper (sweet) are the most harvested.

Field crop	Area harvested in ha (2018)
Millet	2,158,250
Sorghum	1,346,544
Maize	1,128,779
Rice	969,519
Vegetables	**Area harvested in ha (2018)**
Okra	24,333

Tomato	12,354
Pepper, sweet	9,600

Overview of the seed sector in Mali

Mali's 2010 Seed Law governs its seed sector. This law is based on the 2006 Loi d'Orientation Agricole, aiming to increase agricultural productivity and improve access to high-quality seeds. The law is in line with the ECOWAS seed regulation, though the available certified seed remains low. The informal seed system (traditional or peasant) is recognized by law (Article 3 and 4 of Law No10-032 of July 12, 2010) relating to plant-based seeds.

Mali’s seed sector transitions from a traditional government ruled system to a more liberal structure in which private seed companies play an expanded role. Various types of seed-producing cooperatives are also occupying a significant role in the seed supply chain. Seed-producing cooperatives produce certified seeds while the organizations oversee commercialization.

With roughly half of its 90 members involved in seed production, COOPROSEM produces OPV and hybrid sorghum, maize, groundnut and cowpea seeds. COOPROSEM produced about 32 tons of seeds in 2017. The cooperative collaborates with ICRISAT on varietal testing and partners with seed company Faso Kaba on seed sourcing and sales, extending its reach from the local to the national level. It also regularly organizes training sessions on topics such as good agricultural practices, production and certification of seeds, storage and seed conservation. COOPROSEM also specifically targets women for groundnut seed production. It uses a variety of communication channels (videos, posters, website, radio) to raise awareness among seed producers about new varieties.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Mali

Company/Cooperative	Crops in portfolio		Business Model		
	Field crops	Vegetables	Breeding	Seed Production	Marketing and Sales
AGRIPLUS Mali	✓	✓	X	✓	✓
Faso Kaba	✓	✓	X	✓	✓
SOPROSA	✓	✓	✓	✓	✓
Coopérative pour la Promotion de la filière	✓	X	✓	✓	✓

Semencière du Mandé (COOPROSEM) ◊					

◊ Seed-producing cooperatives selected for the 2021 Access to Seeds Index for WCA

Mauritania

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	26
Employment in agriculture (% of total employment)	52
Country position on GHI severity scale (2020 score)	Serious Hunger (24.0)
UPOV membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	Not included
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the African Intellectual Property Organization

Main crops

The main crops in Mauritania were identified based on the area harvested in 2018. The table below lists the top four index field crops. Numerous other vegetables are grown, but no crop-specific area or production data are available.

Field crop	Area harvested in ha (2018)
Sorghum	175,030
Rice	43,712
Pea, dry	25,860
Maize	22,539
Cowpea	22,404

Overview of the seed sector in Mauritania

The Access to Seeds Index currently has no data available on the seed sector in Mauritania.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Mauritania

None

Niger

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	39
Employment in agriculture (% of total employment)	75
Country position on GHI severity scale (2020 score)	No 2020 data; provisionally categorized as serious hunger
UPOV membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	No
Enabling the Business of Agriculture (2019 rank)	29/100
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Niger were identified based on the area harvested in 2018. The table below lists the top index three field crops and three vegetables.

Agriculture is dominated by cultivation of field crops such as millet, sorghum and groundnut. Important vegetables are okra, onion and cabbage.

Field crop	Area harvested in ha (2018)
Millet	7,033,751
Sorghum	3,896,366
Groundnut	919,834
Vegetables	**Area harvested in ha (2018)**
Okra	151,627
Onion	34,798

Cabbage	12,704

Overview of the seed sector in Niger

In 2008 Niger adopted the regional seed regulation ECOWAS-UEMOA-CILSS and a regional catalogue was published. In 2015, the National Seed Committee was created, which swore in 90 seed inspectors throughout the country and created an administrative foundation to implement seed legislation.

Niger has a strong political will to combat hunger and poverty with the 3N Initiative (Nigeriens Nourish Nigeriens), food security, nutrition, and sustainable agricultural development (2011-2015, 2016-2021). Investment in the private sector's capacity development aims to supply certified seeds based on local communities' requirements. However, Since August 2020, the Niger has been facing the worst floods in its history and has worsened the food security given the widespread damage to agricultural land. The Government’s response plan includes resuming distribution of seeds in affected regions.

Seed producing cooperatives constitute the basis of the private seed sector and are exclusively composed of organizations of an associative and cooperative nature. Union Madda Ben de Falwel was founded in 2000 and is a union of producer organizations (POs) comprising 69 groups of 46 villages in the town of Falwel. It has its own distribution points in the region. It is one of the few cooperatives that can claim it has an ICRISAT seed variety named after it. This reflects the far-reaching cooperation with ICRISAT’s millet breeding program.

Union Madda Ben de Falwel members not only work together with ICRISAT in participatory variety selection, variety testing and demonstration in field schools, but they also produce foundation seed for ICRISAT’s Seed Unit. Union Madda Ben de Falwel is a member of Moriben, a federation of farmers’ unions. Through its partnership with ICRISAT, Moriben and outgrower contracts with three seed companies the cooperative’s certified seed reaches farmers throughout the country.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Niger

Company/Cooperative	Crops in portfolio		Business Model		
	Field crops	Vegetables	Breeding	Seed Production	Marketing and Sales
Ferme Semencière AINOMA	✓	✓	X	✓	✓

Union Madda Ben de Falwel◊	✓	X	X	✓	✓

◊ Seed-producing cooperatives selected for the 2021 Access to Seeds Index for WCA

Nigeria

Region	Western and Central Africa
Development status	Lower Middle-Income Country and Territory
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	39
Employment in agriculture (% of total employment)	75
Country position on GHI severity scale (2020 score)	Serious Hunger (29.2)
UPOV Membership status	Initiated the procedure for acceding to the the 1991 UPOV convention.
Participation in OECD Seed Schemes	No
GM crop approval for cultivation	Cotton, Cowpea
ITPGRFA contracting party	Only signature
Enabling the Business of Agriculture (2019 rank)	49/100
Law on plant variety protection	No

Main crops

The main crops in Nigeria were identified based on the area harvested in 2018. The table below lists the top five index field crops and top three index vegetables.

Sorghum and maize are most important field crops followed by rice, groundnut and dry cowpea and groundnut. Okra, tomato and onion are widely cultivated compared to other vegetables.

Field crop	Area harvested in ha (2018)
Sorghum	6,125,132
Maize	4,853,349
Rice	3,345,969
Groundnut	2,911,705
Cowpea (dry)	2,853,097
Vegetables	Area harvested in ha (2018)
Okra	1,116,331

Tomato	608,116
Onion	374,316

Overview of the seed sector in Nigeria

Private sector participation in breeding and variety release has increased in its share in variety release in the country, dominated by the public sector until 2000.

The National Agricultural Seeds Council (NASC) under the Federal Ministry of Agriculture and Rural Development (FMARD) and the Crop Varieties Registration and Release Committee (CVRRC) run the public seed sector. The CVRRC is responsible for varietal evaluation, release, and registration in the national catalogue of registered and released varieties. The national agricultural research institutes (NARIs) play a significant role in the agriculture sector. NARIs, among others, produce foundation seed.

In 2017, the National Agricultural Seeds Council of Nigeria requested the International Union for the Protection of New Varieties of Plants (UPOV) for assistance to develop a plant variety protection law and guidance on the procedure to join UPOV. Following the UPOV council's favourable decision, Nigeria initiated accession to the 1991 UPOV Convention on 11 July 2019. Nigeria is keen on the domestication and adoption of legislation for Plant Variety Protection (PVP), Plant Breeder's Rights (PBR) in Nigeria, and creating a platform for the sustainable production of early generation seeds for the seed industry. If adopted, these pieces of legislation will enable breeders and foundation seed production companies to produce, process/store, and sell early generation seed for commercial seed companies, grow parent seeds on behalf of seed companies and, where applicable, collect plant breeders' rights licenses and fees on their behalf.

A 2016 survey by the National Agricultural Seed Council (NASC) found that only 24% of seed in Nigeria is supplied by the formal sector. This suggests that up to 76% of farmers’ seed requirements is met by the informal seed sector. Jirkur Seed Cooperative Society in Nigeria was set up by a group of community seed producers in Borno State to continue the sustainable supply of quality seed in the region after an IITA-supported project ended. It was officially registered with the Borno State Ministry of Cooperatives in 2008, with NASC in 2010 and with the Corporate Affairs Commission in 2014. Initially consisting of ten members, it has now grown to 200 members. Its production has also increased, from 50 tons to nearly 1,000 metric tons annually of maize, rice, soybean, cowpea and groundnut seed. NASC certifies and approves the quality of seeds produced for dissemination to farmers and also assists in capacity building

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Nigeria

Company/Cooperative	Crops in portfolio		Business Model		
	Field crops	Vegetables	Breeding	Seed Production	Marketing and Sales
Da-Allgreen Seeds	✓	✓	X	✓	✓
Maslaha Seeds	✓	X	✓	✓	✓
Premier Seed	✓	✓	✓	✓	✓
Value Seeds	✓	✓	✓	✓	✓
GAWAL	✓	X	X	✓	✓
Jirkur Seed Cooperative Society ◊	✓	X	X	✓	✓

◊ Seed-producing cooperatives selected for the 2021 Access to Seeds Index for WCA

Republic of the Congo

Region	Western and Central Africa
Development status	Lower Middle-Income Country and Territory
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	7
Employment in agriculture (% of total employment)	34
Country position on GHI severity scale (2020 score)	Serious Hunger (26.0)
UPOV membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	No
Enabling the Business of Agriculture (2019 rank)	Not included
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in the Republic of the Congo were identified based on the area harvested in 2018. The table below lists the top three index field crops and two vegetables.

Groundnut, millet and maize are the most important field crops. Green bean and tomato are the most widely cultivated vegetables.

Field crop	Area harvested in ha (2018)
Groundnut	49,589
Millet	16,109
Maize	14,187
Vegetables	**Area harvested in ha (2018)**
Green beans	1,014
Tomato	847

Overview of the seed sector in the Republic of the Congo

The Republic of the Congo currently does not have a national seed policy. However, a regional project is being established to harmonize seed policy in the Central African Economic and Monetary Community area. Since the agricultural sector is embryonic, there is no national catalogue of plant species and varieties. For now, a seed law is being drafted and will be submitted to the national assembly.

The country gets support from the FAO through the Project to Support the National Seed Plan's Development. In 2020 specialists and actors of the Congo seed value chain met to validate all the texts that will constitute the legal and regulatory framework, creating a favourable environment for the emergence of a robust national seed sector, capable of ensuring farmers a regular supply of quality seeds and plants, in sufficient quantity and at affordable prices.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in the Republic of the Congo

None

Senegal

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	17
Employment in agriculture (% of total employment)	30
Country position on GHI severity scale (2020 score)	Moderate Hunger (17.1)
UPOV membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	Yes
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	44
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Senegal were identified based on the area harvested in 2018. The table below lists the top four index field crops and top three index vegetables.

Groundnut and millet are mostly cultivated field crops, followed by maize and rice. Onion, tomato and cabbage are widely cultivated compared to other vegetables.

Field crop	Area harvested in ha (2018)
Groundnut	962,905
Millet	817,901
Maize	179,610
Rice	174,126
Vegetables	**Area harvested in ha (2018)**
Onion	12,883

Tomato	7,615
Cabbage	3,631

Overview of the seed sector in Senegal

Senegal's research institution, the Institute Sénégalais de Recherches Agricoles carries out plant research and varietal improvement which produces breeder and foundation seeds for all main field crops. The Division des Producteurs de Semences is responsible for seed quality control.

Senegal has a legal and regulatory framework governed by law related to variety registration, production, and certification of seeds and plants. The country established the National Advisory Committee for Seeds and Plants, which oversees the regulation of the production, certification, and trade of seeds and plants. It has also implemented related decrees for establishing a directory of species and plant varieties cultivated in Senegal. The national framework has been reinforced by implementing the Economic Community of West African States' harmonized seeds framework.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Senegal

Company	Crops in portfolio		Business Model		
	Field crops	Vegetables	Breeding	Seed Production	Marketing and Sales
SEDAB	✓	✓	X	✓	✓

Sierra Leone

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	17
Employment in agriculture (% of total employment)	30
Country position on GHI severity scale (2020 score)	Alarming Hunger (30.9)
UPOV membership status	Member of the African Regional Intellectual Property Organization (ARIPO); initiated the procedure for acceding to the UPOV Convention
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	28
Law on plant variety protection	No

Main crops

The main crops in Sierra Leone were identified based on the area harvested in 2018. The table below lists the top index field crops and vegetables.

Rice is the most important field crop followed by millet, groundnut and sorghum. Among vegetables, tomato and pepper (hot) are the most harvested.

Field crop	Area harvested in ha (2018)
Rice	796,354
Millet	41,769
Groundnut	40,872
Sorghum	33,529
Vegetables	Area harvested in ha (2018)
Tomato	2,086

Pepper (hot)	1,340

Overview of the seed sector in Sierra Leone

Agriculture in Sierra Leone was once well-developed, and there were vibrant research facilities with many private investors in the sector. All of this changed after the civil war from 1991-2002. Since the end of the war, very little support has been given to agricultural research, and private seed supply is yet to take off. As a result, farmers have little or no access to improved seed, and research institutions lack the funds and infrastructure required to operate effectively.

Private sector involvement in Sierra Leone is emerging with private enterprises accounting for more than half of the certified seeds produced in the country. The formal sector focuses mainly on rice seeds because more improved varieties are available than for any other crop. The government is open to private investors and public private partnerships in all agricultural sectors, starting with the seed industry.

In the public sector, the Sierra Leone Agricultural Research Institute and the Seed Multiplication Programme (SMP) are key actors. The government’s intention to privatize the SMP has not yet materialized. The Sierra Leone Seed Certification Agency (SLeSCA) Act was passed in 2017, it is yet to be implemented fully, and as such, it currently operates with only three seed inspectors.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Sierra Leone

None

The Gambia

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	20
Employment in agriculture (% of total employment)	27
Country position on GHI severity scale (2020 score)	Moderate Hunger (17.8)
UPOV membership status	Member of the African Regional Intellectual Property Organization (ARIPO); initiated the procedure for acceding to the UPOV Convention
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	No
Enabling the Business of Agriculture (2019 rank)	Not included
Law on plant variety protection	No

Main crops

The main crops in The Gambia were identified based on the area harvested in 2018. The table below lists the top five index field crops. Numerous other vegetables are grown, but no crop-specific area or production data are available.

Regarding field crops, groundnut, millet, rice, maize and sorghum are widely grown.

Field crop	Area harvested in ha (2018)
Groundnut	118,641
Millet	114,568
Rice	68,961
Maize	44,479
Sorghum	32,285

Overview of the seed sector in The Gambia

The Gambia has been defining and implementing poverty alleviation and reduction strategies to operationalize the country's Vision 2020 program. In each policy process, the Agriculture and Natural Resources (ANR) sector have featured prominently. The national seed effort commenced in the 1970s when the Seed Technology Unit (STU) was formed as part of the National Research Institute (NARI). The STU went through a series of transformations that resulted in the National Seed Plan 2019 to promote production, availability, and utilization of quality seed to improve agricultural productivity and contribute to the Gambia.

Under the Ministry of Agriculture's authority, the National Seed Council (NSC) was established to advise the Gambian government on seed policy, all subsequent legislation, protocols, and seed industry planning and implementation. The Council follows the Seed Quality Control and Marketing Act of 2014 and the National Seed Policy of 2014.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in The Gambia

None

Togo

Region	Western and Central Africa
Development status	Least Developed Country
Participation in trade blocs	CORAF/WECARD
GDP share of agriculture (%)	23
Employment in agriculture (% of total employment)	38
Country position on GHI severity scale (2020 score)	Serious Hunger (24.1)
UPOV membership status	UPOV member through the African Intellectual Property Organization (OAPI)
Participation in OECD seed schemes	No
GM crop approval for cultivation	No
ITPGRFA contracting party	Yes
Enabling the Business of Agriculture (2019 rank)	25/100
Law on plant variety protection	Annex X of the 1999 agreement revising the Bangui Agreement on the creation of the OAPI

Main crops

The main crops in Togo were identified based on the area harvested in 2018. The table below lists the top two index field crops and the most harvested index vegetable.

Maize is the major field crop, followed by bean (dry) and sorghum. Pepper (hot) is the widely grown vegetable.

Field crop	Area harvested in ha (2018)
Bean (dry)	378,775
Sorghum	318,834
Vegetables	**Area harvested in ha (2018)**
Pepper (hot)	8,130

Overview of the seed sector in Togo

Between 2010 and 2015, the Togolese government implemented its National Agricultural Investment and Food Security Program (PNIASA). The PNIASA aimed to support producers in accessing agricultural inputs, facilitate financing for producers through credit lines and supporting research, and also to provide extension services to producers in the development and transfer of technology.
Following the end of PNIASA in 2016, the Ministry of Agriculture launched a process to develop the National Plan for Agricultural Investment, Food and Nutrition Security from 2017 to 2026, which includes measures that incentivize the establishment of seed producers and companies in the country.

The Togolese Agricultural Research Institute produces and markets basic seeds, while those of certified crops are mainly insured by seed enterprises, cooperatives or individual seed producers.

Main seed companies selected for the 2021 WCA Access to Seeds Index with headquarters in Togo

None

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