



# Scope of the 2021 Access to Seeds Index



Access to Seeds  
Index



World  
Benchmarking  
Alliance



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The 2020 edition of the [State of Food Security and Nutrition in the World](#), published by the Food and Agriculture Organization of the United Nations (FAO), shows that climate-related shocks continue to accelerate food insecurity. Consequently, the world is 'off track' to achieve the goal of zero hunger by 2030. Success is still possible but only by ensuring all people's access not only to enough food but also to nutritious foods that make up a healthy diet.

Insufficient access to quality seeds of improved varieties is one of the many constraints smallholder farmers face to increased productivity, crop diversification and higher incomes. Improving smallholders' access to seeds is thus an essential part of the solution to global food and nutrition insecurity.

## The role of the seed industry

Improved crop varieties have enabled farmers in advanced agricultural systems to triple their yields. What is the seed industry doing to enable smallholders in developing regions to achieve similar results? The Access to Seeds Index aims to shine a light on this question. The index seeks primarily to identify leadership and good practices, providing an evidence base for the discussion on where and how the seed industry can do more.

Since its establishment in 2012, the Access to Seeds Index has set out to increase transparency around the seed industry and encourage the industry to enhance its contribution to key Sustainable Development Goals (SDGs). Two indexes have been published so far, in 2016 and 2019, with high and increasing participation by companies in data collection, significant media attention globally and a growing stakeholder group.

The third Access to Seeds Index, launching in 2021, will include three regional indexes: for South and South-east Asia (SSEA), Eastern and Southern Africa (ESA) and Western and Central Africa (WCA). The index will focus particularly on the contribution of local and regional companies in providing access to seeds for smallholder farmers alongside their global peers. The range of companies in scope reflects the industry's highly diverse and locally driven nature. The 2016 and 2019 indexes showed that small and medium national and regional companies outperform their global peers in multiple areas relevant for reaching smallholders. They also provide linkages between farmers and global players through research and distribution partnerships.

Although a lack of access to quality seeds in many emerging economies persists, with companies still only reaching 10% of the world's smallholders, the overall improvement in performance between 2016 and 2019 indicates the industry's growing recognition and responsive approach towards this significant client segment. Coupled with the rising number of homegrown and global seed companies in all regions, the 2021 index will evaluate the industry's improvement over the past years. This will also shine a light on the industry's ability to contribute to change in the coming decade, with possible substantial impacts on food and nutrition security in the countries that need it most.



## Integration with WBA for greater impact

Following the publication and positive reception of the second Access to Seeds Index in 2019, 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, to sustain and broaden this impact and embed the index in the wider sustainable development context, it was necessary to build partnerships with a broader coalition. As a result, the Access to Seeds Foundation decided to align and integrate its model with the World Benchmarking Alliance (WBA). The Access to Seeds Index will now be released as a 'spotlight benchmark' under WBA's food and agriculture transformation. The index's purpose has not changed, however. It will continue to focus on and provide deeper insights into the specific contribution of the seed industry to the SDGs, in particular SDG 2 (zero hunger).

WBA's food and agriculture transformation encompasses the [Food and Agriculture Benchmark](#) and two spotlight benchmarks: the Access to Seeds Index and the Seafood Stewardship Index. The Food and Agriculture Benchmark

will broadly assess the performance of 350 keystone companies – companies with a disproportionate influence on the food value chain – on their contribution to global food systems transformation. Among them are several large seed companies. 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 deepens insights into the contribution of the seed industry. This includes small- and medium-sized seed enterprises at local and regional level 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 sustainability 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, 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 smallholders 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 an end to hunger. So far, not enough progress has been made.

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 helps civil society actors and public sector bodies to 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 in the Food and Agriculture Benchmark. By demonstrating that agribusiness models that include smallholders are possible and profitable, seed companies can set an example for other companies in the global food chain, including beyond the seed industry, to follow.





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 the public breeding institutes of the Consultative Group for International Agricultural Research (CGIAR) use information provided by the index to identify private sector partners that can help them bring new varieties to market. The index's findings are also valuable for organisations like the Global Alliance for Improved Nutrition (GAIN), which is interested in increasing the availability of crop varieties with high nutritional value. The FAO team involved in promoting the conservation and use of genetic resources plans to build a long-term relationship with the index, using the index's data to advance its mission.

Among farmer organisations, support for the index continues to grow. At the start of 2013, during a roundtable event in Addis Ababa, Ethiopia, several farmer representatives expressed their reservations about working with seed companies, saying it could harm their autonomy. In 2016, during a second round of consultations, these reservations had disappeared. This was partly because farmer representatives realised that data provided by the index was helping them to engage in informed dialogue with seed companies on how these companies can better serve smallholder needs. In addition, the effects of climate change have brought home the fact that collaborating with seed companies could be a way for farmer organisations to strengthen smallholder resilience.

The African Union (AU) has backed the index from the start. At a seed sector event in Abidjan, Côte d'Ivoire in October 2016, Janet Edeme, the AU's Director of Rural Economy and Agriculture, 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 those of CORAF, and supported efforts by the Common Market for Eastern and Southern Africa (COMESA) to harmonise seed laws and policies.

According to industry magazine European Seed, the index 'has influenced the global seed sector in a lasting way'. Although the seed sector was initially sceptical of the index, the magazine wrote, 'the fact remains that the index created more awareness on access to seeds in developing countries and on the role seed companies can play in improving smallholder farmer productivity'.

In June 2019, the International Seed Federation invited the index to present its findings at the World Seed Congress. At this event in Nice, France, the secretary-general of the federation thanked the index for helping to put the role of the seed industry in sustainable development and global food systems transformation on its agenda.

## Media coverage of the 2019 Access to Seeds Index

The 2019 Access to Seeds Index was featured by over 450 international, regional, national and local media. These included mainstream and specialised media, such as seed magazines, agriculture news outlets and business and financial publications. This was an increase in coverage compared to the 2016 index, indicating a stronger interest from journalists and the broader public in the seed industry and its role in developing regions. With greater focus on the importance of inputs, including seeds, for the sustainable intensification of food production and renewed attention for nutritious diets, this interest is very likely to continue growing.

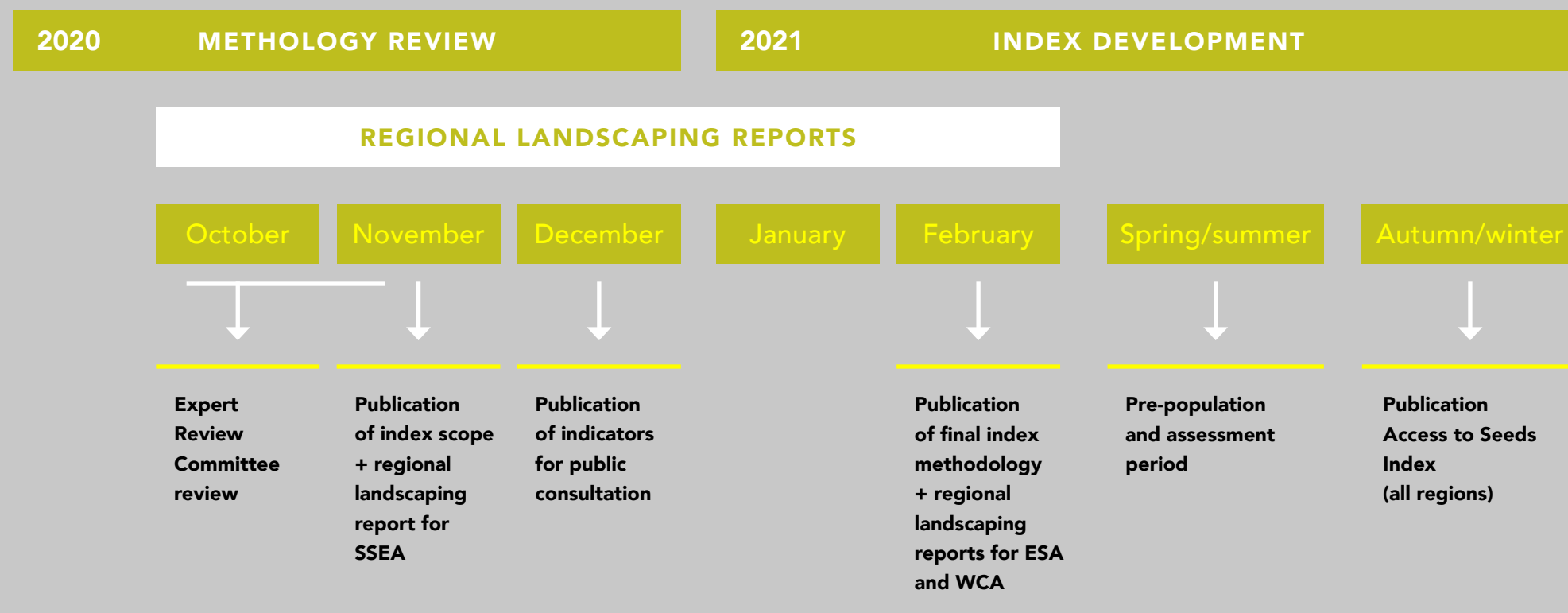
Members of the Access to Seeds Index team appeared on prime-time television in all three index regions, including [ANC News' morning show](#) in the Philippines covering the SSEA index, [Kenya's KBC One](#) for the ESA index and [The Senegalese evening news](#) (RTS1) for the WCA index.

The index also received extensive coverage in top-tier newspapers, including a double-page spread in [The Guardian Nigeria](#) dedicated to the ESA index. The piece was accompanied by an extended background article. In November 2018, Devex published an article titled '[Which seed companies are looking out for Asia's smallholder farmers?](#)' and the Thomson Reuters Foundation wrote '[Millions of small Asian farmers miss out on seeds resilient to climate change](#)'. An overview of the media coverage of the 2019 index can be found on the Access to Seeds Index [website](#).



# Timeline for the index development process

The timeline below outlines the 2021 Access to Seeds Index methodology development process, the next steps and the expected dates leading up to the index's publication at the 2021 United Nations Food Systems Summit.





## Scope of the index

The Access to Seeds Index assesses the efforts of seed companies to improve access to quality seeds for smallholder farmers. To ensure a fair and meaningful analysis, the research scope defines which countries, crops and companies are considered.

### Geographic scope

The geographic scope defines the countries in which the index evaluates company activity. As 'access' is primarily a challenge in developing countries, the index primarily focuses on low- and middle-income countries, in line with [WBA's framework](#) for assessing impact in developing countries. Recognising that seed companies generally take a regional approach when entering emerging markets, the Access to Seeds Index has from the outset identified four regions relevant for measuring companies' efforts to reach smallholders. These regions were identified by matching the challenge of hunger, poverty and yield gap with agricultural potential.

The geographic scope for the 2021 index will be similar to the 2019 index. To facilitate comparability and to measure the progress of the industry's approaches in these regions and countries, no major changes have been made to the geographic scope. According to the results of the 2020 [Global Hunger Index](#), 92% of the index countries have a moderate to alarming food security burden. Although a few countries have a lower food security burden, the challenges resulting from the COVID-19 pandemic are severely impacting multiple countries and territories in the regions, with grave concerns for the exacerbation of poverty and hunger levels.

#### Regions and countries included in the 2021 index

##### Latin America

Bolivia, Columbia, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras and Nicaragua, Paraguay, Peru

#### Change in geographic scope

No change

##### South and South-east Asia

Afghanistan, Bangladesh, Cambodia India, Indonesia, Laos, Myanmar, **Malaysia**, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam

Malaysia was added to the scope following the advice of regional stakeholders. Due to its location, the country is important for the South-east Asian seed trade

##### Eastern and Southern Africa

Angola, Burundi, Eswatini, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Rwanda, Somalia, South Africa, South Sudan, Uganda, Tanzania, Zambia, Zimbabwe

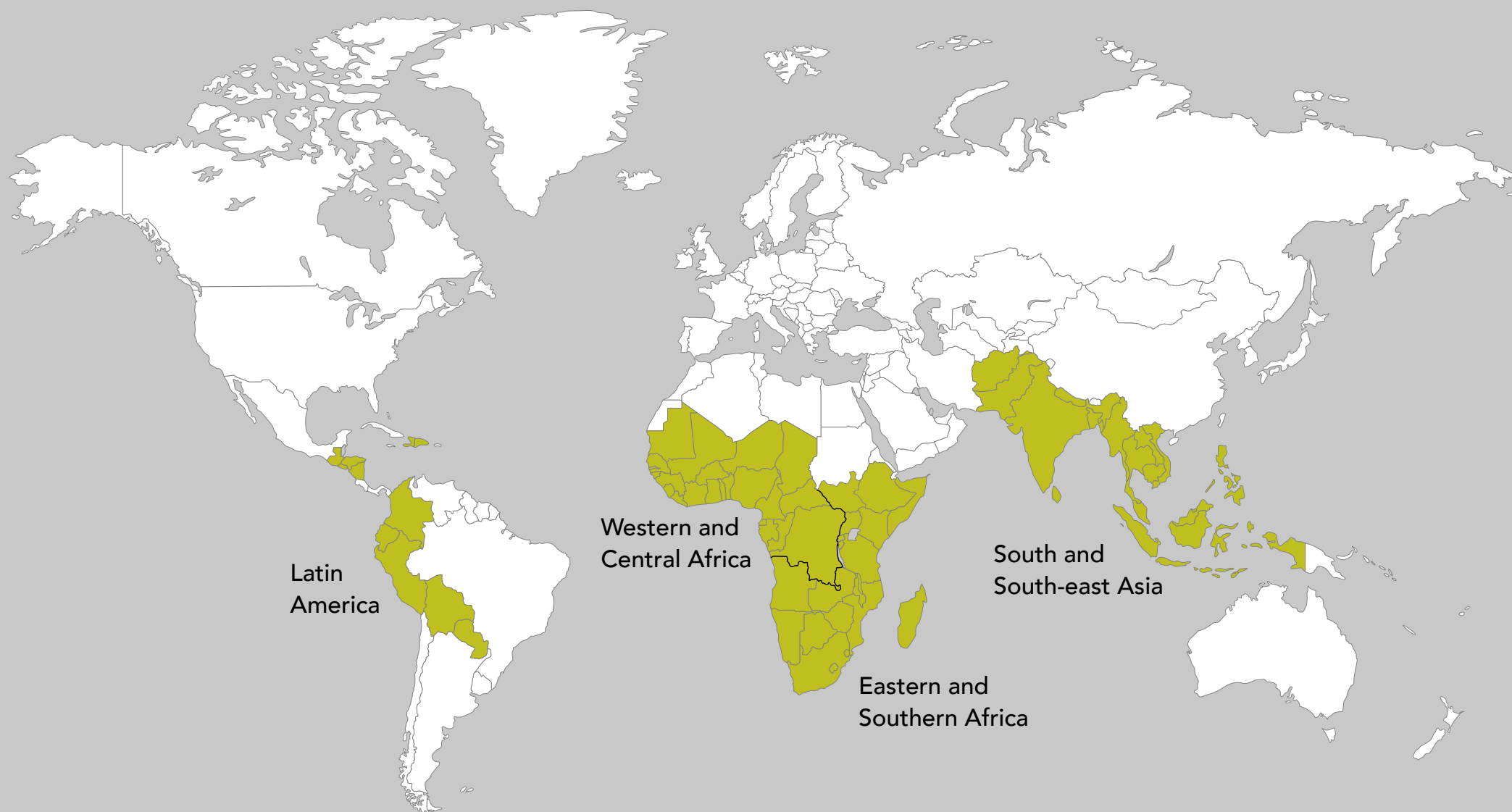
No change

##### Western and Central Africa

Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Democratic Republic of Congo, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Republic of the Congo, Senegal, Sierra Leone, The Gambia, Togo

No change

## Scope of the index





## Crop scope

The Access to Seeds Index focuses on smallholders' access to quality seeds for major field crops and vegetables (so-called global crops). In addition to global crops, the index also evaluates company activities in local crops, sometimes referred to as orphan or underutilised crops. While other crops are also relevant for smallholders, such as cotton and forage crops, the index's focus is on food crops for direct human consumption.

### Global field crops and vegetables

The Access to Seeds Index investigates whether companies have specific crops in their portfolios of value to smallholder farmers, as well as where companies see opportunities to develop suitable varieties tailored to regional conditions and preferences. Global crops were selected based on the total area harvested in index countries, according to FAOSTAT (2018). Field crops with a harvested area over 5 million hectares were selected, while vegetables with a harvested area over 150,000 hectares were selected. In addition, only crops that featured in at least two of the top 20 lists of major crops for each of the four index regions were selected. This review of area harvested has not resulted in any change to the list of global field crops and vegetables compared with the 2019 Access to Seeds Index.

## Global field crops

**Table 1:** Area harvested in index countries in sub-Saharan Africa, Latin America, and South and South-east Asia. Source: FAOSTAT, 2018

Field crop	Crop type	Area harvested in ha (2018)
<b>Rice, paddy</b>	Cereals	127,513,961
<b>Maize</b>	Cereals	65,577,919
<b>Wheat</b>	Cereals	44,618,700
<b>Millets</b>	Cereals	28,385,371
<b>Sorghum</b>	Cereals	28,257,072
<b>Beans, dry</b>	Pulses/legumes	26,085,394
<b>Soybean</b>	Pulses/legumes	20,091,990
<b>Groundnut</b>	Pulses/legumes	19,405,035
<b>Chickpea</b>	Pulses/legumes	13,631,692
<b>Cowpea</b>	Pulses/legumes	12,199,426
<b>Sesame</b>	Oil crops	7,591,022
<b>Pigeon pea</b>	Pulses/legumes	6,983,656
<b>Potato</b>	Roots and tubers	5,334,401
<b>Sunflower</b>	Oil crops	2,893,776

# Scope of the index

## Global vegetables

**Table 2:** Area harvested in index countries in sub-Saharan Africa, Latin America, and South and South-east Asia. Source: FAOSTAT, 2018

Vegetables	Area harvested in ha (2018)
Onion	2,766,388
Tomato	2,006,033
Okra	1,949,424
Pepper (hot)	1,570,632
Pumpkin	1,014,343
Squash	
Gourd	
Eggplant	863,884
Cabbage	801,621
Green pea	688,756
Green bean	623,322
Pepper (sweet)	615,525
Cauliflower	541,443
Watermelon	422,401
Cucumber	395,679
Lettuce	246,715
Carrot	201,387
Melon	175,013





## Scope of the index

### Local crops

Due to their geographic specificity, many local crops are currently not included or included only to a limited extent in the portfolios of commercial seed companies.

The list of local crops in Table 3 – as reportedly traded by seed companies in the 2019 Access to Seeds Index – is non-exhaustive and provides an indication of the kind of local crops seed companies could have in their portfolios.

**Table 3:** Non-exhaustive list of local crops in the index regions

Crop	SSEA	ESA	WCA
African eggplant		✓	✓
African hot pepper		✓	✓
Amaranth	✓	✓	✓
Black gram	✓		
Brede mafane		✓	✓
Bush sitao	✓		
Cassava		✓	✓
Celosia		✓	✓
Choisam	✓		✓
Cluster bean	✓		
Crotalaria		✓	
Ethiopian mustard		✓	
Faba bean		✓	
Hairy nightshade		✓	✓
Jew's mallow		✓	✓
Kaliaan	✓	✓	✓
Kangkong	✓		✓
Komatsuna	✓		

Crop	SSEA	ESA	WCA
Lab lab	✓		
Lentil	✓	✓	
Linseed		✓	
Mizuna	✓		
Mung bean	✓	✓	
Mustard (including heading and leaf mustard)	✓	✓	✓
Pea eggplant	✓		
Roselle		✓	✓
Spider plant		✓	✓
Sukuma wiki		✓	
Teff		✓	
Tinda	✓		
Vegetable chrysanthemum	✓		
Winged bean	✓		
Yam			✓
Yardlong bean	✓	✓	✓

## Company scope

The Access to Seeds Index assesses the efforts of seed companies to improve access to quality seeds for smallholder farmers. Although the ongoing mergers and acquisitions in the seed industry at the global level would suggest otherwise, the industry is highly diverse and locally driven. It is composed of a small group of global leaders and a long tail of small and medium regional and national companies. The index therefore also assesses the importance of regional and national companies.

The 2021 Access to Seeds Index is the third edition of the index. It will assess the performance of a total of 72 companies, providing insights at industry and company levels and from regional and country perspectives. It comprises three regional indexes: South and South-east Asia, Eastern and Southern Africa, and Western and Central Africa.

With the ongoing consolidation in the seed industry and the growth of regional seed companies, the 2019 company scope was reviewed to incorporate these changes. New companies were added to the list as a result of desk research and suggestions made by regional consultants. The selection criteria for the 2021 company scope are: (1) regional presence or a dominant position in one country, (2) physical presence and business activities in the region, (3) an integrated seed business model and/or (4) peer recognition as a leading company. To assess investments by globally active seed companies in the three regions, all global seed companies meeting the criteria will be included in the regional indexes for the regions where they have a presence.

## Seed-producing cooperatives

Seed sectors, notably in the Global South, are highly diverse. Seed-producing cooperatives play an important role in the seed sector, particularly in Western and Central Africa. Although their reach and capacity are relatively limited, their role in local communities is vital. Many cooperatives are part of the formal seed sector. Through their collaboration with (global) agricultural research institutes, they aim to increase smallholders' adoption of improved varieties. Moreover, cooperatives often focus on crops that are missing in company





## Scope of the index

portfolios but are important for local food security, such as legumes, plantains and cassava. 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. In 2021, the Access to Seeds Index aims to include an evaluation of the efforts of five advanced seed-producing cooperatives from Western and Central Africa. These cooperatives were selected based on input from local partners in the region. All of them partner with national or international research institutes to test and select varieties and work with local seed companies, NGOs or government agencies to distribute the seed.

**Table 4:** The 31 companies nominated for the 2021 SSEA Access to Seeds Index

Company	Country
<b>Acscen HyVeg</b>	India
<b>Advanta *</b>	United Arab Emirates
<b>BASF *</b>	Germany
<b>Bayer *</b>	Germany
<b>Bejo *</b>	The Netherlands
<b>Bioseed</b>	India
<b>BRAC Seed and Agro Enterprise</b>	Bangladesh
<b>Charoen Pokphand Group</b>	Thailand
<b>Corteva Agriscience *</b>	United States of America
<b>East-West Seed *</b>	Thailand
<b>Enza Zaden *</b>	The Netherlands
<b>Indo-American Hybrid Seeds #</b>	India
<b>JK Agri Genetics #</b>	India

Company	Country
<b>Kalash Seeds</b>	India
<b>Known You Seed</b>	Taiwan
<b>KWS *</b>	Germany
<b>Lal Teer Seed</b>	Bangladesh
<b>Limagrain *</b>	France
<b>Mahyco</b>	India
<b>Namdhari Seeds</b>	India
<b>National Seeds Corporation</b>	India
<b>Nongwoo Bio</b>	Republic of Korea
<b>Nuziveedu Seeds</b>	India
<b>Punjab Seed Corporation</b>	Pakistan
<b>Rallis India</b>	India
<b>Rasi Seeds #</b>	India
<b>Rijk Zwaan *</b>	The Netherlands
<b>Sakata *</b>	Japan
<b>Syngenta Group *</b>	Switzerland
<b>Takii *</b>	Japan
<b>Vinaseed</b>	Vietnam

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

# New regionally headquartered companies added to scope

# Scope of the index

**Table 5:** The 32 companies nominated for the 2021 ESA  
Access to Seeds Index

Company	Country	Company	Country
<b>Advanta *</b>	United Arab Emirates	<b>Seed Co</b>	South Africa
<b>BASF *</b>	Germany	<b>Starke Ayres</b>	South Africa
<b>Bayer *</b>	Germany	<b>Stewards Globe #</b>	Zambia
<b>Bejo *</b>	The Netherlands	<b>Syngenta Group *</b>	Switzerland
<b>Capstone Seeds</b>	South Africa	<b>Takii *</b>	Japan
<b>Corteva Agriscience *</b>	United States of America	<b>Victoria Seeds</b>	Uganda
<b>Darusalam Seed Company</b>	Somalia	<b>Zamseed</b>	Zambia
<b>Demeter Seed</b>	Malawi		
<b>EABC</b>	Ethiopia		
<b>East African Seed</b>	Kenya		
<b>East-West Seed *</b>	Thailand		
<b>Enza Zaden *</b>	The Netherlands		
<b>Equator Seeds</b>	Uganda		
<b>FICA Seeds</b>	Uganda		
<b>Hygrotech</b>	South Africa		
<b>Kenya Highland Seed</b>	Kenya		
<b>Kenya Seed Company</b>	Kenya		
<b>Klein Karoo Africa</b>	South Africa		
<b>KWS *</b>	Germany		
<b>Limagrain *</b>	France		
<b>Mukushi Seeds #</b>	Zimbabwe		
<b>NASECO</b>	Uganda		
<b>Novalliance Group</b>	France		
<b>Rijk Zwaan *</b>	The Netherlands		
<b>Sakata *</b>	Japan		

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

# New regionally headquartered companies added to scope



# Scope of the index

**Table 6:** The 37 companies and cooperatives nominated for the 2021 WCA Access to Seeds Index

Company	Country	Company	Country
<b>Advanta *</b>	United Arab Emirates	<b>Premier Seed</b>	Nigeria
<b>Agriplus Mali</b>	Mali	<b>Rijk Zwaan *</b>	The Netherlands
<b>Antika Company #</b>	Ghana	<b>Sakata *</b>	Japan
<b>BASF *</b>	Germany	<b>SEDAB</b>	Senegal
<b>Bayer *</b>	Germany	<b>Seed Co</b>	South Africa
<b>Bejo *</b>	The Netherlands	<b>SEEDPAG ◇</b>	Ghana
<b>BIHOLF</b>	Côte d'Ivoire	<b>SOPROSA</b>	Mali
<b>COOPROSEM ◇</b>	Mali	<b>Syngenta Group *</b>	Switzerland
<b>Corteva Agriscience *</b>	United States of America	<b>Takii *</b>	Japan
<b>Da-Allgreen Seeds</b>	Nigeria	<b>Coopérative Agricole de Bama ◇</b>	Burkina Faso
<b>East-West Seed *</b>	Thailand	<b>Union Madda Ben de Falwel ◇</b>	Niger
<b>Enza Zaden *</b>	The Netherlands	<b>Value Seeds</b>	Nigeria
<b>FAGRI #</b>	Burkina Faso		
<b>Faso Kaba</b>	Mali		
<b>Ferme Semencière AINOMA</b>	Niger		
<b>GAWAL</b>	Nigeria		
<b>Heritage Seeds</b>	Ghana		
<b>ICS-GROUP #</b>	France		
<b>Jirkur Seed Cooperative Society ◇</b>	Nigeria		
<b>KWS *</b>	Germany		
<b>Limagrain *</b>	France		
<b>M&amp;B Seeds #</b>	Ghana		
<b>Maslaha Seeds</b>	Nigeria		
<b>NAFASO</b>	Burkina Faso		
<b>Novalliance Group</b>	France		

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

# New regionally headquartered companies added to scope

◇ Seed-producing cooperatives

## Next steps

After each edition of the benchmark the methodology is reviewed based on feedback from stakeholders and to address new developments. We invite all interested parties to provide feedback on the proposed scope of the 2021 Access to Seeds Index. At present, the indicators for the Access to Seeds Index are being reviewed and the draft indicators will be published for public consultation in December 2020. The final methodology will be published in February 2021. Please reach out if you have any questions regarding the Access to Seeds Index. Contact details can be found below.

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