Room for improvement:

new index ranks
seed companies' efforts
for small farmers



The Access to Seeds Index gives an indication of how much effort seed companies are making to reach poor farmers. The first Index was published nearly a year ago and the initiators looked back: 'Seed companies do more than we thought.'

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Extension services, Mali

The American multinational DuPont Pioneer breeds maize seed with properties that are attractive for small farmers in Africa and Latin America, such as drought resistance and salt tolerance. The company's aim is to have helped three million small farmers to improve their income with these seeds by 2020. Kenya Seed Company breeds crops consumed in East Africa such as sorghum, millet, black-eyed beans and amaranth. The company also has a good distribution network through which it sells these seeds to small farmers – most of whom are women. The Thai company East-West Seed trains small farmers in South-East Asia to produce seeds, and at the same time provides them with other products such as fertilizer and plastic sheeting to cover their crops.

These are three examples from the Access to Seeds Index, a ranking list that compares seed companies' efforts to make adapted varieties available to small farmers. The Index was published in February 2016. A clearly written 200-page report, it describes which seed companies are doing well on which aspects. The companies are also benchmarked and compared to each other: DuPont Pioneer was ranked top of seven multinational arable seed companies. East-West Seed tops the list of ten multinational vegetable seed companies, as well as the list of 17 seed companies active in East Africa.

'Seed companies are doing more than we thought to reach small farmers,' said Ido Verhagen, director of the Access to Seeds Index. 'When we started our research in 2015 we thought that few seed companies were active in developing countries. But it wasn't that bad. Seed companies are present in nearly all developing countries, except for a few West African countries. And they're not just working with maize, but also with local staple crops such as millet and sorghum and local vegetables.'

Inspiration

The Access to Seeds Index is funded by the Dutch government and the Bill & Melinda Gates Foundation – they jointly put up one and a half million euros for the first two years, and talks are now underway on a follow-up. 'We are satisfied with the results,' said Johan

Gatsonides, a member of the food security management team at the Ministry of Economic Affairs. 'This Access to Seeds Index is very promising.'

The Index was inspired by the Access to Medicine Index, which is funded by the British and Dutch governments and the Gates Foundation. For the first seed-sector Index, independent researchers were hired by the small Access to Seeds Foundation to compare companies' policies on paper for a period of two years. They looked at what the companies are doing to breed adapted varieties, at their marketing and distribution, and training of farmers in good practices. They gathered the data for the Index from annual reports and company websites, and from a questionnaire they sent to the companies. The researchers also talked with farmers to find out what they want from the seed industry.

'We came across some really interesting innovations,' said Coosje Hoogendoorn, head of research for the Access to Seeds Index. 'Innovations where companies have really looked at what small farmers want.' These include a simple insurance system for poor famers developed by Syngenta. In the seed packets that the farmers buy there's a small card with a code. The farmers can send a free text message to Syngenta with the code, which also transmits their location coordinates. These are used to collect data from weather stations and satellite images. If it turns out that the farmer's field was too wet or too dry in the first two weeks after sowing, the farmer automatically gets his or her money back.

Initial scepticism

Many companies were initially sceptical about the Index. They weren't sure what the point was. But after the results were published Verhagen spoke to all the seed companies: 'And I started to notice that people appreciated the exercise,' he said. 'Some people use the report internally to get a discussion going. Why aren't we doing more of this? Others used their high score to get more internal funding for a project. Although, of course, there were also companies that said they wouldn't be making more effort because of

the report.'

'The report confirmed the good things we are already doing to reach small farmers,' said Maaike Groot, the Europe representative for East West Seed. 'It makes us proud, and that encourages us to do even more. In 2015 we trained 28,000 farmers to train other farmers. And now we're going to double that figure by the end of 2017.' About 30 million small-scale farmers grow East-West Seed varieties and 12,000 contract farmers produce seed. The company also employs about a hundred people who give demonstrations via model farmers.

'The index can encourage big companies to make advanced technology and skills more available.'

An interesting finding was that East African seed companies in particular are already doing very well at selling vegetable and arable seeds to small farmers. In East Africa companies were selected that work on breeding, production and distribution in several countries. The researchers found the companies by talking to farmers, NGOs and other stakeholders. Eleven African companies, three multinationals (DuPont Pioneer, Monsanto and Syngenta) and three smaller seed companies from outside the region (East-West Seed, the Dutch Pop Vriend and the French Technisem) met the criteria. Many of the African companies breed staple crops and vegetables that are important for the local population, such as millet, beans and sorghum, and they also have an extensive distribution network. Victoria Seeds in Uganda has mobile seed shops – motorbikes with a cabin on the

Seed production, Uganda



back - so they can reach remote villages.

Another interesting company is Seed Co, with headquarters in Zimbabwe. This company supplies seeds for 12 staple crops and 21 different vegetables in 12 countries. Seed Co visits farmers to find out what is important for them so that it can adjust its breeding accordingly. The company is 30% owned by the French Limagrain. Hoogendoorn: 'What we are seeing is that global companies have a share in regionally operating companies, or have agreements with them.'

The plan is to publish the second Index in 2018. Because the current regional Index provides so much information on East Africa, when the second Index is published it will probably also include a regional Index for South-East Asia.

Choice for farmers

Jitu Shah, director of East African Seed (third place in the regional index), believes that the Index itself encourages companies to do better. But he has his doubts about the reliability of the ranking. 'Our company has been supplying seeds to small farmers for 40 years with no subsidies at all. How can companies that have only just started score better than us?"

Estimates suggest that still only 2.4 percent of the seeds used in developing countries come from seed companies. Unfortunately the potential yields from locally produced seed are often far lower than those of seed from specialized seed companies. One of the aims of the Index is to improve access to formal-sector seed, so that farmers have a choice. The Index provides facts about what companies really do for small farmers. And the idea is that these facts can inspire other companies, NGOs and governments. For example, a company may not see training farmers as its role. But if the Index shows that this works well for other companies, the company might change its mind and start offering training too. And an NGO working in a particular region might approach a seed company in the same area to suggest collaboration.

Samuel Kugbei is a Seed Policy Advisor for AfricaSeeds, an organization that implements the policies of the African Union Seed Programme. Kugbei thinks that the Index does motivate companies. It can encourage the big companies to make their advanced technology and skills more available, he said. And that would benefit the whole seed sector. He thinks the Index is a good initiative and, in his view as many companies as possible should participate. He would like to see the Index stimulate more dialogue: not just between companies, but also with politicians, policymakers and farmers. Kugbei: 'The more different sources of information there are, the higher the quality of the Index will be.'

Room for improvement

Kouame Miezan, director of AfricaSeeds, agrees. He welcomes the Index and would like to see more African companies taking part. He sees room for improvement as well, suggesting that the Index should also examine the public sector, for example the seed policy of governments and their national research institutes in African countries. The Index could also devote more attention to the informal sector. Because it is not so easy to get reliable information, Miezan would like to see partnerships with organizations that could do fieldwork for the Index. Organizations that know a lot about African seeds, such as AfricaSeeds itself. 'The complexity of the seed sector in Africa demands this.'



Joseph Mukopi uses his cell phone to check the weather in Kikwameti village, Kenya

Seed production, Uganda

Gigi Manicad runs Oxfam Novib's sustainable development programme and she too likes the Index. 'Businesses are needed to supply better seed to small farmers,' she said. But in her opinion the Index first needs a lot of improvement.

Like many NGOs, Oxfam Novib is worried about the increasing amount of power multinationals like Monsanto (fourth in the ranking) and Syngenta (second place) are gaining in developing countries, certainly now that they are patenting more and more varieties, which seems to be the trend. Regionally operating seed companies cannot use patented varieties freely for further breeding purposes, whereas they can use varieties with breeders' rights. Manicad, who is also a member of the technical advisory committee for the Index, would also like to see the Index give penalty points for undesirable activities such as patenting varieties.

Flexibility

Verhagen doesn't exclude the possibility of giving a negative score to undesirable activities in a future Index. But ranking patenting is tricky, he admitted. Many developing countries do not yet have intellectual property legislation. Companies cannot even apply for breeders' rights there, let alone patents. And that's a problem for many companies because they want to protect their intellectual property. Verhagen: 'If a company can't patent its seeds in Africa, you can't ask them not to patent at all. However, we have asked companies if they are prepared to be flexible on their intellectual property rights when it comes to farmer-saved seeds. And we did take their flexibility into account when ranking.'

Multinational seed companies mainly sell hybrid varieties. Hybrids often have higher yields than open-pollinated varieties, but the seed they produce is not good quality. So farmers have to buy new seed each year to grow hybrid varieties, whereas they can keep seed from open-pollinated varieties to use again.

Manicad is not against hybrid varieties, as long as farmers have a choice between high-yielding hybrids and cheaper, open-pollinated varieties. And as long as farmers are also involved in seed production. 'We have a programme running in Vietnam where farmers in the Mekong Delta are producing hybrid rice seeds. They now supply 30 percent of the rice seed in the region. In fact they are so successful that seed companies are now hiring them for seed production.' Manicad would like the indicators in the second Index to focus more explicitly on hiring in farmers as seed producers. She'd also like to see more attention devoted to how well seeds really are

adapted to the diverse agro-ecological systems in which smallholders farm.

These two criteria – autonomy and seed suitability – were also mentioned as important by farmers when they were interviewed by the Index researchers. Other criteria mentioned were availability and affordability of seed, training and education opportunities, and the possibilities for growing profitable crops.

The power that multinationals have can also be expressed through the market share they have in a region. For example if a multinational provided more than 90 percent of the seeds for a crop in an African region, it could keep the price of seed artificially high. Verhagen is not sure whether taking into account market share should be the Index's role. 'This seems to be more something where a government or a competition authority should intervene."

Second Index

The first Index already had 70 indicators and companies had to fill out extensive questionnaires. Most companies in East Africa did complete the questionnaire, but of the thirteen multinationals, six did not participate. In this case the Index has to rely on a company's annual reports and website. Because completing the questionnaire is such a lot of work, in the next round the entire packet of indicators will be evaluated for relevance and efficiency.

But however many indicators are included, Verhagen expects that the second round will provide more information from companies, whether directly or via websites and reports. 'Companies now understand that they do undertake certain activities, but they hadn't reported these and thus got a lower score. So the second time round they will report these activities.' Verhagen thinks that the scores will change quite a lot in two years. Companies may start a new research project, or start to offer more farmers training, or open up a new market, all of which are activities that can give them extra points.

Finally, it was noticeable that not one single company sold yam or cassava propagating material, even though these are crucial staple foods for many poor families. Coosje Hoogendoorn thinks this is because cuttings are difficult to store and transport. Farmers can also easily propagate their own cuttings, so it's less profitable for companies to produce them. 'It's logical that companies don't invest very readily in these.' However, she does see a lot of potential in legumes such as beans, chickpeas and cowpea, crops that few companies still pay much attention to. 'Legumes are just as important as a food source, and they are potentially profitable.' •