

Better seed for smallholders

The Access to Seeds Index, developed in the Netherlands, maps seed companies' efforts to reach small-scale farmers.

What can seed companies do to enable small-scale farmers in developing countries to benefit from the work they are doing? For example, they could breed corn to develop traits that are particularly interesting to these farmers, such as drought resistance and salt tolerance. They can also breed other crops that are important for small-scale farmers, such as sorghum, millet, black-eyed peas or amaranth. This is what the Kenya Seed Company in East Africa is doing. This company also uses mobile seed shops – motorbikes with a cart behind them – to sell seed to farmers.

Multinational field-crop seed companies
These examples are from the Access to Seeds Index, a report compiled in the Netherlands which

compares seed companies' efforts to ensure small farmers have access to varieties that are suitable for them. The first Index was published in 2016. Written in an accessible way, this 200-page report sets out data showing which seed companies do well on which points. DuPont Pioneer was ranked the best of seven multinational field-crop seed companies. The Dutch-Thai company East-West Seed topped both the list of ten multinational vegetable-seed companies and the list of seventeen seed companies that are active in East Africa. "Seed companies are doing more to reach small-scale farmers than most people think," says Ido Verhagen, executive director of the Access to Seeds Index Foundation. "When we started our research in 2015, people said we wouldn't find anything. But



Access to Seeds Index

Reaching the village level: mobile seed shop in Uganda



East-West Seed

East-West Seed: training sessions and demonstrations

The originally Dutch company East-West Seed has been breeding vegetables for small-scale farmers in Asia since 1982, and for the African and Latin American markets since 2008. The company has grown to be the market leader in Indonesia, the Philippines, Thailand, Sri Lanka and Myanmar. About 18 million smallholders grow crops from East-West Seed, including bitter gourds, spicy peppers, watermelons, cucumbers and tomatoes.

Maaikje Groot, Company Representative for Europe, is proud of East-West Seed's high ranking in the Access to Seeds Index. "It's an incentive to step up our game even more. For example, we trained 43,000 farmers in 2016,

and we aim to double this number in the coming years." East-West has employed 130 knowledge transfer advisors to provide this training. With the aid of farmers, demonstrations and training sessions, they demonstrate how higher yields can be achieved using simple cultivation techniques and better seed. Groot: "Smallholders can recoup the costs of seeds by using better cultivation techniques. That's in our interest, but their key role in securing the global food supply and economic growth is in everyone's interest. That's why we have partnered up with local governments, knowledge institutes and NGOs in Asia and the Netherlands to encourage more widespread adoption of these techniques."

it wasn't anywhere near as bad as that. Apart from a few countries in West Africa, companies are selling seeds to smallholders in nearly all developing countries."

Completed surveys

The Access to Seeds index is based on surveys completed by seed companies and conversations with stakeholders, including farmers. The research was funded by the Dutch government and the Bill and Melinda Gates Foundation. The idea behind the initiative is that the good examples will encourage other companies to step up their efforts. Verhagen: "Companies think they won't be able to make any money from crops like amaranth or sorghum. If you're able to show that others already are, this can convince companies to start selling these seeds too." One of the most interesting innovations the researchers encountered was an insurance system developed by Syngenta. The seed bags that farmers buy contain a card with a code. The farmers can

text this code to Syngenta, free of charge, along with their location. The company then collects data from weather stations and satellite images. If it turns out it has been too dry or too wet on the farmer's land in the first two weeks after they sowed the seeds, they get an automatic refund.

Extreme weather

The plan is to publish a second Index in 2018, which will once again contain a global analysis and regional analyses of southern Africa and South Asia. In the meantime, the research team is continuing to gather new ideas. Verhagen: "More and more farmers tell us they want varieties that can withstand extreme weather. At the same time, we are seeing that institutes in developing countries have already developed a lot of good varieties. Seed companies can save time and money by using these."

www.accesstoseeds.org

Extension services by East-West Seed