

A woman with blonde hair, wearing a white blouse with small holes and a black skirt, is leaning over a tray of seedlings in a greenhouse. She is looking down at the plants with a focused expression. The greenhouse has a complex metal structure with many pipes and lights. In the background, there are more trays of plants, some with yellow tags. The overall scene is bright and professional.

Good seeds produce a better harvest

No less than one in ten people worldwide do not have enough to eat. Access to quality seeds of crops and varieties that have been adapted to local conditions is important to increase crop yields and food production in Africa. How is the WUR making improvements in the seed production sector? ►

*Marja Thijssen,
Senior Seed Consultant
at WUR.*

WUR

Problem: rapid population growth, climate change and low crop yields in Africa threaten food and nutrition security in the world.

TO2 Solution: WUR is working to improve a well-functioning seed production sector as a contribution to sustainable and higher agriculture and food production. This is done through a sector-based approach: researchers are working in partnerships on the study and implementation of technical innovations, but also on better coordination and seed policy.

Impact: on a worldwide scale, this leads to higher food production and greater food security. In Ethiopia, for example, new varieties have been introduced into the agricultural system, which has increased local food production.

In recent decades, much has been invested in the development of new varieties of important agricultural and horticultural crops, but it is often not yet possible to get these varieties to the farmer. From the start of the development of a new variety to the use of that variety's seed by the farmer other parties are involved, each of them having their own expertise and interests. In addition, each crop needs its own approach. WUR researchers work together with public authorities, research institutes, companies, NGOs and farming organisations to ensure that farmers in Africa get better seeds.

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Strategy development

“It all starts with the development of a common vision and strategy for the seed production sector”, says Marja Thijssen, Senior Seed Consultant at WUR. She and her colleagues created a ‘National Seed Roadmap’, a document to support policy makers and companies in a coordinated and structured way in strengthening the sector. On this basis, she collaborated with Dutch public authorities and the business community on a programme to improve the quality of the seeds in Nigeria. “We then, together with Dutch organisations, established which priorities we are able to contribute based on Dutch knowledge and expertise,” she says. This resulted in a Dutch-funded seed programme that is coordinated by WUR. Based on these and similar experiences in Ethiopia, Uganda, Mali and Niger, Wageningen scientists decided to create a guide for the development of national seed roadmaps.

Pivotal role

In national seed programmes like in Nigeria and Ethiopia, WUR plays a pivotal role as a knowledge partner, also to match up science and practice, to introduce innovative approaches, to support action research and to link local African and Dutch seed experts, organisa-



Marja Thijssen

tions and companies to each other. Thijssen: “In Nigeria, we work in conjunction with researchers, companies and farmers to find out what is preventing the use of improved seeds, varieties and cultivation methods of vegetable crops. We test new approaches to accelerate the registration and acceptance of new varieties into the market and to strengthen the capacity of local companies to promote new varieties.” Thijssen and her colleagues collaborate a lot with international research teams. For example, they conduct research into the effectiveness of seed policy,

farmer access to genetic diversity in relation to climate change, and access to seeds in emergency situations such as conflicts and war. For example, last year they organised a major conference in Rwanda on the future of the seed production sector in Africa. There, 170 people in the sector gathered to endorse new insights and approaches, and to discuss priorities and ambitions. “We can achieve the goal of increasing farmers' access to quality seeds in various ways”, says Thijssen.

Higher production

What have all these efforts achieved so far, for example in Ethiopia, where the research group has been working already for thirteen years? “We have introduced more than 170 varieties to the men and women in farming households. Over a period of four years, more than four million farmers in Ethiopia were given access to quality seeds,” says Thijssen. “This increased local food production.” ■

Who: WUR

Duration: ongoing.

Follow-up: with local partners and financiers, there are ongoing projects

to increase food security by way of better seeds.

View the videos here

