

Dutch Seeds Debate Report

Support smallholder farmers with seeds, services and education

SMALL FARMERS
BIG DEAL



“What can your organisation do to support smallholder farmers in developing countries?”

Kees Blokland, managing director of Agriterra, posed this question in his opening statement at the Dutch Seeds Debate, last April 5 in The Hague.

Blokland set the agenda for all stakeholders in the audience who turned up in large numbers. More than 90 representatives of the government, seed companies, research institutions and NGOs attended the debate. Blokland triggers them to think about what their organisation can do to support smallholder farmers. These farmers can grow their yields via a combination of better seeds, improved farming techniques and services such as financial support to build a business. By helping farmers with appropriate seeds, education and services, the Dutch can contribute to the economic transition of developing countries.

Strong smallholder farmers

To support the reflection on the question how to do this, the Access to Seeds Index (ASI) is a relevant tool. Published by the Access to Seeds Foundation (an independent organisation supported by the Bill & Melinda Gates Foundation and the Dutch Ministries of Economic and Foreign Affairs) ASI assesses and benchmarks leading global field crop and vegetable seed companies on their efforts to make their products available to smallholder farmers in developing countries. This first index shows that only 2.4 per cent of the seeds these farmers purchase, comes from certified companies. How to increase this percentage? How to improve seed quality? How to strengthen the position of small-

holder farmers and support their organisational structures? The higher seed companies rank on the ASI, the more positive impact they have.

Involving businesses

Ido Verhagen, Executive Director ASI, refers to the UN which stresses the importance of a strong agricultural sector as the cornerstone of a modern economy. In his view the business community has been neglected in the past, when the Millennium Development Goals were set. With Sustainable Development Goals put in place, businesses are involved. Their current and future contribution now and in the future is something ASI assesses. Collaboration of companies with smallholder farmers and farmers' organisations and improving these farmers' access to seeds is of vital importance. As it is now, the availability of seeds is often lacking and the variety and quality is not good at all. More varieties and improved quality for affordable prices in combination with improved farming techniques will dramatically grow farmers' yields.

Autonomous entrepreneurs

ASI distinguishes six dimensions of access: availability, affordability, suitability, capability, profitability and autonomy. The latter is very important, states Verhagen. Small farmers must be autonomous entrepreneurs, who are independent from



their seeds suppliers. Most activities now relate to the dimension of suitability. That's a first step which should be followed by exploring strategies in availability and activities in capability. Breeding, production and distribution are relevant for partnership programs between companies and local farmers' organisations. These should be long term engagements supporting an economic transition. Especially in West-Africa this is needed, as the ASI research learns that this region needs much more of such partnerships.

Healthy vegetables

Local crops, especially vegetables, offer most opportunities in this region. In general the ASI learns that vegetables are more important to local companies, while the large multinational players are more focused on corn and other large arable farming crops like wheat and rice. Vegetables are of highest importance. For economic development when smallholder farmers can set up their own business growing and selling vegetables. And for



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enhancing the health situation of the population in developing countries, as vegetables provide high nutritional value.

Battle against malnutrition

Building a vegetables sector in developing countries supports the health of people and the economy. This is a firm belief of **Maaïke Groot** of East West Seeds, a tropical seeds improvement company of Dutch origin. In her view malnutrition is a huge problem. A population with structurally too low intakes of vital nutrients and vitamins, suffers from limited brain growth. This is a threat to the development of a country and a society. Companies solving this problem also support the creation of a better economic structure. Dutch companies with a strong heritage in horticulture can have a manifold benefit to developing countries by giving smallholder farmers access to seeds and share knowledge about farming practices and fighting hazardous fungi and bacteria.

Show, don't tell

Groot points out that growing vegetables in the tropics is not easy. Show, don't tell is the right approach. Seeing is believing, so field demonstrations that show the difference made by improved seeds in combination with better farming practices are of vital importance. Catering to the



needs of local farmers is essential too. Farmers lacking irrigation opportunities that depend on rainfall are in a very uncertain position in times of climate change. Local breeding programs for vegetables that are resistant to longer periods of drought and that are quick and easy to harvest are a solution. Just like advice on pruning techniques, better pest management practices and products like seedling trays that protect the roots of plants and the use of plastic mulch on cropland. This retains water in the soil and limits the growth of weeds and therefore reduces the need for herbicides.

Value chain approach

In order to improve the availability and the affordability of better quality seeds to smallholder farmers, companies need to acknowledge that this is essentially a value chain approach. That's the core message of **Marja Thijssen**, senior advisor plant genetic resources and seed systems at Wageningen UR. She refers to the Integrated Seed Sector Development (ISSD) as the approach to improve the seeds sector at large. ISSD works threefold:

- Strengthening the capacities of seed value chain operators
- Developing and creating access to adequate seed services
- Improving an enabling environment of the seed sector

Providing farmers with good quality seeds is a challenge. Seeds need to be available at the right time, at the right place, in the required quantity, of acceptable quality, at an affordable price, of a variety well suited

to local agro-ecological conditions and at the demands of farmers and markets. To deal with these challenges, smallholder farmers use three systems: an informal system of seeds (e.g. sorghum, cassava or local leafy vegetables like amaranth or spider plant) that are easy to duplicate by farmers. A formal system of seeds for which improvement is essential to quality and yields (e.g. corn, tomatoes, sweet peppers, hybrid onions, cucumbers and cabbages). And an intermediate system of crops like beans or onions that are developed and multiplied in collaboration by farmers' cooperatives.

More involvement needed

These three systems are complementary and perform best when embedded in developing sectors for seeds and vegetables where yields and income for farmers grow via exchange of knowledge, best practices, services and improved quality of seeds. Also here seeing is believing, so Thijssen stresses the importance of demonstrations and the establishment of seedling nurseries. When it comes to knowledge transfer and sharing best practices and services, the current involvement of Dutch companies is not at par with their horticultural heritage. Therefore Thijssen appeals to Dutch companies and – in a broader perspective – the Dutch Diamond approach of government, private sector, NGOs and knowledge institutes to become more involved in this respect.



Workshop

Companies engaging with smallholder farmers

Besides plenary sessions, the Dutch Seeds Debate also comprised three workshops to dig deeper into specific topics and spur the debate. The first workshop focused on how companies can engage with smallholder farmers. What are the do's and don'ts? Support by sharing best farming practices and support in selling vegetables are required to continue selling good quality seeds to farmers. It is a shared interest. It helps farmers to generate an income and build a business and it allows seed companies to continue selling their products.

From project to structure

According to **Erik Juckers**, R&D Manager at Bakker Brothers Seeds, it is in the interest of all stakeholders that projects aim for continuity. When the project term expires and the support stops, a structure should be in place. Farmers in Zimbabwe for instance get an education in farming techniques and receive seeds. At first 470 farmers are trained to multiply dry beans and subsequently a group of 5000 smallholder bean farmers – half of them are females – receive a training in good agricultural practices, financing, market linkages and the nutritional benefits of dry beans. In the second year these farmers are expected to pay back the investment.

Training and knowledge sharing

Also Monsanto invests in training of farmers. **Rolf Folkertsma**, Global Lead Technology Development for Cucurbits at Monsanto Vegetables, points out that this works best in combination with demonstrations where farmers can compare the harvest of different types of seeds. Transparent education on hybrid and farmer saved seeds and what farming practices and investments are needed to generate a return on investment.

Here training is very important, and it is crucial to find efficient ways to quickly share information with a broad group of farmers. This can be done by training the best and most engaged farmers so each of them can train additional groups of farmers. This would also require support by farmers' cooperatives and organisations and NGOs. In recent years use of mobile phones has quickly advanced among African farmers. This also offers opportunities to exchange knowledge. Especially in more remote areas.



Workshop

The government as an enabler

The second workshop focused on government policy. What can the Dutch government do to help companies in their support of smallholder farmers? Both the Dutch and the local government in the country itself are important factors in the creation of an enabling environment.

Tools on demand

The tools the government offers are not set in stone, stresses **Tjeerd de Vries** of the Dutch Ministry of Foreign Affairs. In his view selecting the right tools for government support is demand based. How the current systems in the local seed sector are designed and the needs of stakeholders are elements that determine such demand. There are two types of tools coming from the Ministry he represents. Large tenders like the Facility for Sustainable Entrepreneurship and Food Security (FDOV) or the program Geodata for Agriculture and Water (G4AW), and local support programs facilitated by Dutch embassies.

Seeking consensus

Marien Valstar, representing the Dutch Ministry of Economic Affairs, distinguishes two major roles for the government: to provide financial support and to connect at peer level with the local government in order to support the creation of an enabling environment. Topics like intellectual property, adjusting the rights of farmers and breeders and the use of genetic engineering techniques are important themes to discuss upfront when creating a good climate for collaboration. In his view this is also a matter of mindset as stakeholders must be willing to leave the often dated controversies of the past behind in order to seek consensus.

Aligning efforts

Besides creating a level playing field when it comes to policy, companies can also benefit from governmental coordination of collaboration on non-competitive issues. Such coordination can facilitate knowledge exchange and prevent waste of resources if companies don't align their efforts. Such efforts can be about seed improvement, training and demonstration sessions, but also about finance and credit facilities and soil protection. The attendants concluded that a consortium of seed companies and government can help to get more impact in developing countries.



Workshop

The role of the farmers' cooperative

The third workshop looked at market entry and specifically the role of agricultural cooperatives. How do these cooperatives support the creation of a strong horticulture sector by providing better quality seeds and support farmers to collaborate and sell their crops?

Coordinating informal structures

Seed is extremely important to smallholder farmers, says **Giel Ton**, senior researcher at LEI Wageningen UR. Farmers often create informal structures for the production and purchase of seeds and to experiment with multiplication. Therefore farmers' support can best aim for lowering the risk for farmers who engage in such experiments. By creating a seed fair where farmers can exchange seeds. Or organizing a controlled fund for vegetable seeds under the coordination of farmers or their organisations. Such a fund can facilitate an exchange system, balancing supply and demand. Another option Ton suggests is creating small packages of vegetable seeds which enable distribution of quality products that are affordable to smallholder farmers.

Cooperatives are important enablers to coordinate such informal and experimental structures. Discipline in payments, commitment of individual farmers to respect contracts and refrain from side selling for short term cash and commitment to support quality control are important aspects for cooperatives to look at.

Cooperatives are the best partners

According to **Cees van Rij**, manager agri advice at Agriterra, cooperative organisations are the best point of contact for com-

panies that want to support farmers. The transition of developing countries to modern economies implies that agriculture will employ less people. At this moment there are 570 million family farms in these countries and their number will be significantly reduced. The involved and well organised farmers will remain active, but also their number will decline. Currently some 108 million farmers are organised. In the coming decades this number of engaged and organised farmers will be halved to 54 million.

These 54 million organised farmers are the best partners for seed companies that want to support the transition of developing countries from traditional agricultural economies to modern and future-proof economies. The fact that these farmers are organised in cooperatives is of crucial importance. Also for these dedicated farmers it is essential to build trust. So the experimental structures Ton already referred to, need to be coordinated and in collaboration turned into a sustainable system.

Seeds, support and services

Young farmers, female farmers, these are important target groups as long as they are organised in cooperative structures. Because efficiency of scale is needed, some 50 farmers or preferably more are numbers to start with. Supporting these farmers' groups is not only about providing them with better quality seeds in broader varieties, but also giving financial support with credit facilities which allows them to generate a return on investment. For this also education and support in marketing and sales of seeds and vegetables, logistics, quality control and farming practices is needed.



Building a solid business case for farmers

In a final wrap-up of the Dutch Seeds Debate, **Kees Blokland** concludes that it is good to hear nice words and success stories, but that all stakeholders learn most from what currently goes wrong. There companies and farmers can learn and improve. For seeds companies, action is needed for the future. To increase the only 2.4 per cent of the seeds small-holder farmers purchase from certified companies. Therefore organised partners are needed for companies and the acknowledgement that structural transition only works if it is a solid business case for farmers and seeds companies.



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Action points

- Developing the seed sector needs an integrated supply chain approach with better products (seeds) but also education and services that stimulate good farming practices, financing and market linkages.
- Projects need clear objectives and aim for a long lasting impact. They need a strong structure which remains in place after the project term has ended and support stops. This structure must be beneficial for farmers and seed companies.
- Leave old controversies behind and aim for building consensus between companies, NGOs, farmer organisations and farmers.
- Skip hi-tech solutions, but look at affordable farming techniques that can easily be implemented
- Collaboration must be geared towards creating cooperative structures of independent and autonomous farmers
- Focus on engaged organised farmers, especially on young people and females. This broadens and deepens the structural improvement
- Organise a consortium of government and seed companies to get more impact in developing countries.