

SeedNL Annual Event

Conference Communiqué 2023



Introducing SeedNL

SeedNL is a Public-Private Partnership (PPP) between the Ministry of Foreign Affairs, Ministry of Agriculture, Nature and Food Quality, seed association Plantum and the Dutch Potato Organisation (NAO). The common aim of the four partners is to provide all farmers in Low- and Middle-Income Countries with access to quality seed. Improved access to quality seed raises farm productivity and household incomes contributing to the realization of SDG 2: zero hunger.

The SeedNL partnership seeks to increase farmers' access to quality seed through:

- Sharing knowledge and experiences within and beyond the SeedNL community;
- Promoting and building innovative partnerships in the seed sector;
- Initiating new and providing support to ongoing Flagship initiatives;
- Increasing the impact and visibility of public and private investments in seed sector development.

Each year, the SeedNL team organizes an annual event to bring together its community around these four objectives. This year, there is plenty to celebrate as following the evaluation of SeedNL, the four covenant partners decided to extend the SeedNL partnership for the coming years!



Frontiers in Seed Sector Development

The theme of this year's annual event was *New Frontiers in Seed Sector Development*. Frontiers are defined as the limits of something or someplace; the concept refers especially to the *limits of what is known and unknown*. Frontiers are unexplored areas where exciting discoveries are made, pushing the boundaries of knowledge, innovation, and development. During the SeedNL annual event, we zoomed in on two types of frontiers, which our community aims to explore in the coming years: geographic frontiers and technological frontiers. Important crosscutting themes for all frontiers are sustainability and digitalization.

Geographic frontiers refer to areas where seed sector development activities are right now being initiated or scaled. The Dutch Foreign Trade and Development Cooperation policy recently published a list of partner countries and so-called 'combination' countries. In both partner and combination countries, new programs are developed that pay attention to seed sector development. In combination countries, initiatives are specifically designed at the nexus of aid, trade, and investment with a special focus on sustainability and digitalization. Important partner and combi countries are Bangladesh, Benin, Egypt, Ethiopia, Ghana, India, Indonesia, Mozambique, Nigeria, Senegal, South Sudan and Uganda.

Technological frontiers refer to innovations being developed or introduced within our Community of Practice to foster seed sector development. Technological developments transform different functions of the seed system within the potato and vegetable sector: variety development, seed production, processing, marketing, and finally crop production. These innovations might still be at the stage of R&D or perhaps attempts are being made for commercialization.

At the SeedNL Event, we took stock of progress achieved along our geographic and technological frontiers improving access to quality seed of smallholder farmers. Covering a wide range of topics, the annual event is an occasion to learn from and share with others about the frontiers they are pushing. This conference communiqué summarizes key takeaways from the keynote speakers and break-out session. These findings can become the basis of new coalitions and partnerships, which SeedNL can support.



Opening speeches were made by Sjsukje Heimovaara and Guido Landheer

Keynote speech by Ndidi Okonkwo Nwuneli

Sahel Consulting Agriculture & Nutrition

UNLOCKING NEW FRONTIERS IN AFRICAN AGRICULTURE: THE POWER OF SEED SYSTEMS

The keynote of Ndidi focused on demographic and economic opportunities offered by the African continent: where others see challenges, Ndidi sees entrepreneurial potential. *"As the world's demand for food continues to rise, Africa, with Nigeria as one of its agricultural powerhouses, stands at the forefront, not just as a producer but as a frontier for innovation and sustainable growth."* Ndidi calls herself a serial entrepreneur and has founded several companies to address societal challenges. She strongly believes the focus should be on local private sector development for long term sustainability. The local private sector has a vested interest to build working business models for its country. Ndidi founded Sahel Consulting (SCAN) to advise on the implementation of development projects in the agricultural sector. SCAN is now involved in the Nigeria-Netherlands Seed Partnership and several other projects. Furthermore, Ndidi founded AACE Food Processing & Distribution as a catalyst in the SME food processing landscape providing smallholders market access. Responding to questions, Ndidi stated that she considers foreign and local private sector actors to be complementary in terms of expertise and experience, but that development cooperation should mostly focus on local actors for sustained impact.



*If I tell you my dream,
you might forget it.
If I act on my dream,
perhaps you will remember it,
But if I involve you,
it becomes your dream too.*

Tibetan quote

Panel discussion with Dr. Sylvaine Coulibaly (Rijk Zwaan), Michel de Bruin (Agrico) and Tonny Okello (Equator Seeds)

NEW FRONTIERS IN VARIETY DEVELOPMENT, SEED PRODUCTION AND DISSEMINATION



The discussion started with the three panelists sharing a picture representing a transformative innovation in their area. Sylvaine chose a picture of a hybrid pepper breeding trial of Rijk Zwaan Tanzania and explained why local breeding in *Africa for Africa* is such an important development. The picture of Michel showed seed potato production in Kenya using drip irrigation. He explained they now have the system in place to produce quality seed, but the next challenge is to scale up. Tonny's picture featured three moto-drivers doing last-mile distribution of seed. His company simultaneously seeks to create jobs for young people and reach farmers in remote areas.



Break-out sessions on geographic frontiers

Egypt's seed sector: increasing access to climate smart varieties

Hosted by Wageningen Center for Development Innovation and Bakker Brothers

KEY QUESTION

How do we get climate smart varieties in the hands of Egyptian farmers?

OPPORTUNITIES

- Investment in climate and water-smart agriculture, including increasing farmers' access to quality seed of adapted climate-resilient varieties, is key for a sustainable and future proof agricultural sector in Egypt. There is lots of interest in Egypt to explore further partnerships with the Netherlands in this area.
- The Dutch sector has ample expertise, researching new farming systems and practices, and developing and introducing new varieties, especially for vegetables and potatoes. Also, opportunities can be explored further for specific climate resilient crops like faba bean.

BOTTLENECKS

- Some companies indicate that they are hesitant to introduce their varieties in Egypt because of the illegal copying of varieties, which causes unfair competition. Egypt and the Netherlands are collaborating on the implementation of a Plant Variety Protection (PVP) system and Egypt has become a member of UPOV. However, awareness about PVP in the seed sector is generally low.

ROLE OF SeedNL

- Discussions on opportunities for effective Egypt-Netherlands seed sector collaboration are needed. The Netherlands Embassy in Cairo can facilitate such discussions with support of SeedNL.



Regulatory innovations in Uganda: zooming in on Quality Declared Seed & farmer variety registration

Hosted by ISSD Uganda and Oxfam Novib

KEY QUESTION

How can we foster pluralism and ensure accessible, diverse and affordable inputs through alternative seed quality assurance services?

OPPORTUNITIES

- Farmer varieties have always existed, are widely used by Ugandan farmers, and form the basis of Plant Genetic Resources. These populations have greater heterogeneity and are adapted to local circumstances. They can increase resilience against adverse conditions.
- Alternative seed systems are gaining attention from seed sector stakeholders in Uganda. Progress has been made regarding the recognition of alternative quality management systems. Both Quality Declared Seed (QDS) as well as the registration of farmer varieties are considered viable alternatives to the formal system and QDS is now considered a standalone seed class.
- Stakeholders in Uganda, Ministries, research institutes, breeders, NGOs, and farmers, are closely working together to strengthen the seed sector. The initiatives are highly diverse: developing the formal sector, piloting a digital seed information system, facilitating local seed businesses, and organizing initial discussions about the recognition, registration and trade of farmer varieties.

BOTTLENECKS

- A lot of change is still needed to create a truly 'enabling' enabling environment for alternative systems. Whereas QDS has been around for a while, the registration of farmer varieties (or land races and heirloom seed) is still a relatively new concept. So far, the formal legal system does not allow for the registration of these varieties.



ROLE OF SeedNL

- During a roundtable discussion with Ugandan stakeholders SeedNL discussed next steps. The participants confirmed that changes in the enabling environment are top priority, including capacitating the regulatory services of the government.
- A second meeting may be organized in Kampala to discuss the findings of two seed laws toolbox projects and design follow-up activities.

Rethinking gender-focused research and extension in agriculture in Nigeria

Hosted by East-West Seed Knowledge-Transfer (EWS-KT) and Wageningen University & Research (WUR)

KEY QUESTION

Which common myths are associated with women in agriculture and how can we challenge them?

OPPORTUNITIES

- The private sector can benefit from an improved understanding of women farmers' buying behavior, which has been shown to be invariably different from their male counterparts. For example, a woman is likely to commit more to one brand or variety and is likely to opt for varieties that are less labor-intensive. Other studies show that most men take more risks and try out many different varieties. When talking about gender we need to look beyond women and focus on gender differences (and inequalities).
- Companies, NGOs, and academics can bring on board gender specialists to ensure that the (research) project is conducted in a gender-sensitive manner. Specialists can help with the development of gender-sensitive indicators to measure gender-specific experiences.
- Stakeholders should be transparent about their gender targets. Be clear whether the target is gender-mainstreaming, gender-accommodative, or gender-transformative.

BOTTLENECKS

- It is important to recognize the diverse experiences of women. Women are often considered to be one coherent group with the same set of challenges and behavior, but this assumption does not reflect reality. Within the same country women farmers also have different experiences: cultural stigma is different in Northern and Southern Nigeria for example.
- Often, there are hidden costs or challenges for women when implementing projects. For example, it costs money to pay for a man to drive a woman to the field or permission needs to be asked from the husband. These aspects are often not considered.

ROLE OF SeedNL

- SeedNL can raise awareness about different gender targets and approaches. Moreover, SeedNL can help educate stakeholders to avoid negative impact due to false gender differentiations.
- By mobilizing stakeholders to work on gender issues, and proactively linking private sector entities to (gender) researchers, SeedNL can help spread gender-sensitive approaches and foster innovative projects, which are truly gender transformative.
- SeedNL could mobilize and support private companies to create a digital extension tool on pests and diseases to increase access to knowledge for women farmers specifically.

Mozambique as an emerging seed market: how can quality seed strengthen farming systems?

Hosted by Resiliência Mozambique and Wageningen Center for Development Innovation

KEY QUESTION

Which opportunities exist in Mozambique to integrate seed sector development activities in projects focused on farming systems?

OPPORTUNITIES

- The Embassy of the Kingdom of the Netherlands in Mozambique has set new priorities for the coming five years focusing on farming systems, food security and nutrition, and private sector development. Seed sector development is located at the intersection of these areas.

BOTTLENECKS

- Issues related to the regulatory systems remain largely unaddressed and a thriving seed sector requires a conducive enabling environment. Willingness of international seed companies to enter the Mozambican market will likely remain low in the absence of clear regulations around topics such as Plant Variety Protection and phytosanitary measures.



ROLE OF SeedNL

- An analysis of the Mozambican seed sector was conducted years ago. It is unclear whether this assessment is still relevant and accurate. SeedNL could initiate a new assessment supported by the Mozambican and Dutch government that takes into account the interests of the Dutch and local private sector.
- SeedNL can advocate for ongoing and new projects across the priority areas to focus on seed systems and use a seed systems lens.
- As the enabling environment remains an important bottleneck, SeedNL could invest in working streams to improve the regulatory system. Moreover, its own funding mechanism the 'Seed Laws Toolbox' could be used to finance an initial project.

Break-out sessions on technological frontiers



Assessing the potential impact of new genomic techniques on smallholder livelihoods

Hosted by AgKnowledge Partners and Plantum

KEY QUESTION

Which opportunities and challenges for smallholders are associated with genome-edited crops?

OPPORTUNITIES

- There is enthusiasm about the potential contribution of genome-edited crops to address challenges related to climate change, food security and healthy food production.
- New Genomic Techniques (NGTs) can be useful for emerging markets but are not revolutionary in terms of resolving global food security. NGTs can create 'nature-like' mutations and gene transfers within species (cis-genesis); the same techniques can also create transgenic plants when they are used to transfer functional genes between non-related species.
- Also, NGTs speed up conventional breeding, which is useful, given changes in ecology and crop protection policies. They were considered useful initially for rather simple mendelian traits such as disease resistance.
- NGTs are sometimes presented as 'another tool in the toolbox of breeders'. However, they could be game changers for 'difficult' crops like banana, cassava, and potato, which happen to be major smallholder crops.

BOTTLENECKS

- Different regulations are currently being implemented in different parts of the world, which may negatively affect their use across borders.
- Moreover, a risk associated with NGTs is the fact that both the technology itself and its products are prone to patenting, which can increase inequality referring to the gap between rich and poor countries as well as rich and poor farmers within countries.
- Many (innovative) products of private and public plant breeding do not reach smallholders, which means the impact of NGTs on their livelihoods will be small as long as dissemination is limited. Let's focus on seed diversity and farmers' access to their preferred varieties first!
- Environmental safety, public health and biodiversity are often topics of concern when discussing NGTs. However, the break-out participants did not consider these to be issues: if there would be an impact, it is expected to be similar to the impact of existing plant breeding techniques.

ROLE OF SeedNL

- SeedNL could facilitate discussions on NGTs at the policy level: making sure that patents will not decrease access in emerging markets, and different biosafety rules in different countries do not decrease breeding efforts and transfer of potentially useful varieties.
- Moreover, SeedNL could specifically focus on the use of NGTs to improve smallholder crops like banana, cassava and potato and introduce smallholder traits.

The future of digital extension and its potential impact on seed potato farmers in low-tech markets

Hosted by Smartfarming and Wageningen Plant Research

KEY QUESTION

How can digital innovations realistically help overcome challenges in seed potato production?

OPPORTUNITIES

- 6 billion people have mobile phones, this can be a gamechanger for information dissemination. Improved connectivity in rural areas offers opportunities for improved access to and collection of data.
- Digital extension can be used for marketing and support related to good agricultural practices (GAP) creating opportunities for innovative and impactful business models. Once seed potato growers are connected to a digital platform, services can be added continuously and delivered to them easily.
- It is interesting to study how artificial intelligence and machine learning can be used in the development of digital innovations building on different types and complex datasets.
- Feedback loops should allow for two-way communication between users and stakeholders in digital innovations development.

BOTTLENECKS

- Digital extension still needs to be an add-on to in-person extension, and it always needs to be tailored to a specific context in terms of crop, region, and challenges. A user-centered approach requires tools to be tailored to specific farmers. Hence, scaling efforts are perhaps smaller than expected.
- There is also a need to cater for the needs of non-smartphone users: otherwise, digital extension might not benefit the farmers with the greatest need. This can be done by collaborating with mobile network providers for farmers to receive SMS.
- It is necessary to develop sustainable business models for digital innovations before starting the projects. Otherwise, a product may be developed, which is not financially sustainable.

ROLE OF SeedNL

- SeedNL can facilitate new partnerships for the development of sustainable digital innovations. It can mobilize 'anchor companies' and development organizations willing to partner up and fund digital innovations. These stakeholders could also work with farmer cooperatives.



Innovative approaches for professional seedling production in Africa

Hosted by Truvalu and Ethiopia-Netherlands Seed Partnership

KEY QUESTION

How can you build a sustainable business case from vegetable seedling production in rural Africa?

OPPORTUNITIES

- Large differences exist in the level of professionalism in seedling production in East Africa, e.g., the sector is relatively well-developed in Ethiopia and Kenya, but this is not the case in Uganda and Tanzania. Emerging markets represent opportunities for the solutions such as Growpact.
- Close collaboration between seedling producers, (Dutch) vegetable seed companies and their distributors can be helpful for the demonstrations of new varieties and sufficient supply of seed. Dutch companies are interested in a long-term relationship.
- Isolated seedling production is a difficult business case: establishing a professional nursery in East Africa requires a value chain approach from sourcing the right substrate to raising awareness amongst farmers regarding the benefits of quality seedlings of improved or hybrid varieties through demonstration and training activities and/or diversification in technologies and services.

BOTTLENECKS

- The market for seedlings still needs to be developed and the costs of (pre-competitive) market development are high. It requires patient capital and calls for blended finance solutions.
- One example of this approach is Growpact's venture into tissue culture and lab testing.
- There is a trade-off between one nursery that distributes seedlings over a larger geographical distance versus smaller nurseries that are located closer to the farmers. Growpact is in favor of the first, as this will lead to operational excellence and economies of scale. In such an approach technology supports, but human capability leads the speed and scale of development.

ROLE OF SeedNL

- Considering the need for a value chain approach and blended finance solutions, SeedNL can help to link different types of private and public stakeholders to facilitate new partnerships.
- Seedling solutions can be integrated in existing and new Flagship projects of SeedNL. This also addresses a broader recommendation of the SeedNL evaluation that seed sector services can be more prominently included in SeedNL's Community of Practice.

Innovative ways to protect and monitor agrobiodiversity: local potato markets and farmer-based conservation networks in the Peruvian Andes

Hosted by International Potato Center and Leibniz Center for Agricultural Landscape Research

KEY QUESTION

Which markets stand out in terms of their diversity and which attributes of market channels best support family farmers' agrobiodiversity systems?

OPPORTUNITIES

- In the Peruvian Andes, farmers contribute greatly to the maintenance of agrobiodiversity and seed systems. Effective projects have been launched to support efforts like: a nationwide scheme for Payment for Ecosystem Services (PES), AGUAPAN, and partnerships with the private seed sector.
- Farmer-based mechanisms for monitoring and protecting agrobiodiversity represent promising pathways to ensure maintenance of ancestral knowledge and crops. Participation of farmers is crucial for integrating local knowledge, perspectives, and aspirations. Innovation and success do not always equal bringing external ideas but rather strengthening local initiatives.
- Science can show the importance of markets for agrobiodiversity systems studying complex socio-cultural and economic aspects. The hosts themselves applied a broad range of methods stemming from anthropology, geography, and agricultural economics, such as participatory mapping, to generate their (visual) research results.
- Storytelling can be a very powerful tool to voice local realities, conveying emotions and urgency.

BOTTLENECKS

- In the context of the ongoing global food crisis, farmers are becoming older, and the youth increasingly abandons agriculture.
- Securing reliable market-linkages for their (traditional) produce remains among the greatest challenges for farmers.
- There is no high-value (EU) export market for native potatoes being local culturally valued products. There would only be Willingness to pay (WTP) on some small artisanal markets, but opportunities for scale.

ROLE OF SeedNL

- SeedNL can raise awareness regarding successful farmer-based mechanisms for the protection and maintenance of agrobiodiversity, which represents an important aspect of integrated seed sector development.
- Building on prior success stories, SeedNL can stimulate collaboration between different types of actors with complementary expertise to launch new agrobiodiversity initiatives: scientists for research tools, artists for storytelling and companies for technology, knowledge, and funding.



Quality seeds for all farmers

Join the SeedNL community



Spoken word by Esmay Usmany

*In distant lands where hopes take root,
Farmers toil with nature's flute,
A mission's ember, burning bright,
To end the hunger, seek the light.
Exploring boundaries, bold and free,
In fields where growth and knowledge meet,
Sowing dreams in every hand,
To bridge the gaps in every land.*

*We gather 'round, our progress shared,
In seeds, we find a world repaired,
In search of quality, let's unite,
Guided by the seeds' guiding light.*

*Fourfold goals, like seasons turn,
Sharing wisdom, for knowledge to burn,
Innovative bonds, cradled in our laps
A vision grand, on the world wide map.
Technological frontiers, a vision anew,
In the world of potatoes and veggies, they grew,
From variety to production galore,
Sustainability and digitalization, let's explore.*

*We gather 'round, our progress shared,
In seeds, we find a world repaired,
In search of quality, let's unite,
Guided by the seeds' guiding light.*

*Geographic frontiers,
where development begins,
They are the seeds of our wins.
Inclusion's our goal, with stories unfold*

*We gather 'round, our progress shared,
In seeds, we find a world repaired,
In search of quality, let's unite,
Guided by the seeds' guiding light.*



Thank you for joining us!
Please follow us on LinkedIn and
reach out to the SeedNL team
with questions and ideas related
to seed sector development.

[Website](#) | [LinkedIn](#)
Reach out via info@seednl.nl



*Photos from SeedNL Annual event
were made by Floor van Koert.*