

N2Africa Podcaster no. 52

May and June 2018

Introduction

In May, the N2Africa team met in Rwanda for our Annual Planning Meeting together with the N2Africa Advisory Board and local partners. This is the last year of N2Africa Phase II and the meeting was a chance to reflect on progress so far and to plan for the future. In particular we finalised planning for an impact study which is now in full swing across the N2Africa core countries (Ethiopia, Ghana, Nigeria, Tanzania and Uganda) and on which we will report in due course. You can read more detailed reports on the workshop in this Podcaster.

Christian Witt, our Senior Programme Officer at the Bill & Melinda Gates Foundation commented that N2Africa is 'not-just-another-project', but has developed its own brand through which it has built a compelling case for the importance of legumes and their multiple roles in smallholder farming systems in Africa. A strength of N2Africa he recognised were having all issues tackled under one roof, from academic research to business applications.

Due to some delays in the start-up of the project and in exchange rate fluctuations we are discussing a 'no cost

extension' which means that N2Africa should remain active until June 2019 although we cannot maintain all staff positions. Apart from the impact evaluations and writing up results, the main focus for the remaining year is to consolidate work done to date, particularly ensuring delivery of rhizobial inoculants and other inputs to farmers and cementing the many public-private partnerships that have been established. This in addition of course to conducting the impact study and writing up results for publication. A key resolution made was to keep alive the N2Africa network across the eleven countries and a number of proposals are currently being developed for specific pieces of work to ensure this.

This is the time of year that many are off on annual leave – myself included! For those going on leave please take time to escape the constant flow of work and email and come back refreshed. For others this is a very busy period for implementation of the impact study and we wish you all the very best with this important work.

Ken Giller

Impressions of the N2Africa Annual Planning Meeting and field trip in Rwanda 15-18 May 2018

The former Country Coordinator for Rwanda, Speciose Kantengwa took the lead in organizing our last full team meeting in Rwanda, a country that differs from others within N2Africa by climate and geography. Country coordinators of both Tier 1 and Core Countries, Business Development Officers, members of the Scientific Advisory Committee, our donor representative, Research coordinators, Leadership team and support gathered, together with representatives from the NGO's and institutions from Rwanda that took over working with the Knowledge after the end of Phase I.

The meeting started by looking back on the last year. Short presentations were made by the Core countries and poster presentations by the Tier 1 countries. The remaining time was focused on issues that need attention towards the end of the project. These were diffusion of knowledge, partnerships, technologies, agronomy and data, rhizobiology, M&E and planning beyond the project, for which 1.5 days were scheduled.



Samuel Adjei-Nsiah, presenting progress in Ghana



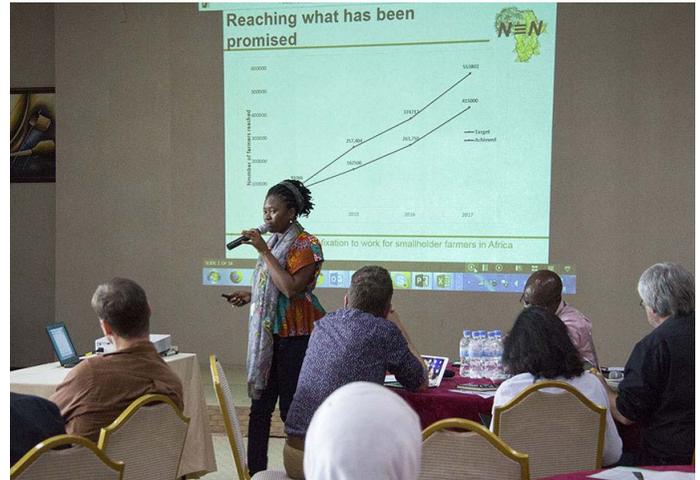
Discussing the Mozambique poster



Practicing with maps and partner data



Vivid discussions: Silvia Silvestri (CABI/GALA), Step Aston (One Acre Fund) and Christian Witt (BMGF)



Theresa Ampadu-Boakye presenting what we can learn from M&E to date

Day three we made a field trip to Musanze, which was reached over sometimes slippery roads though a mountainous area. Due to heavy rains we could not visit all locations that were planned, but the two we could visit, Gahunga and Muka action sites, gave great insights into the projects impacts.



At the Gahunga action site Ms. Gasilida showed their varieties (Photo credits Eva Thuijsman)



Showing the N2Africa team around (Photo credits Ken Giller)



Really great height can be achieved



Also at the Muka action site we received a warm welcome



Speciose Kantengwa translated

In the afternoon a seminar was planned in Musanze for which two speakers were invited, a former MSc student from N2Africa presenting work from his thesis and a former research assistant with N2Africa now working with RAB. Further Ken presented a video partly recorded in the Musanze region 10 years ago. Due to exams only few visitors from the university could attend.



Alfred Tabaro presenting his MSc thesis work



Aimable Nsengiyumva presented on N2Africa and its influence on rhizobiology industry



Ken Giller in 2010 filmed on the location visited today

The last day was for feedback and recommendations and working on plans for the remainder of time for N2Africa and beyond.

All in all we can say it was a meeting in very good spirit, with a strong eye for leaving a good N2Africa legacy behind. We closed happy on what has been achieved, with a focus on what still to do and of course a bit sad the end is coming close while there is still so much possible to anchor even deeper.

Charlotte Schilt, Wageningen University & Research

A flavour of the N2Africa Annual Planning Meeting in Rwanda

N2Africa is approaching the end of Phase II for the core countries while the Tier 1 countries phased out at the end of 2017. The N2Africa Annual Planning Meeting held in the Grand Legacy Hotel in Kigali (15-18 May) focused on exploring opportunities for Core and Tier 1 countries to continue their catalytic roles in providing technical backup to other projects and to stimulate diffusion of N2Africa technologies. Discussions were centred around the question “how can N2Africa reach 80% of the farmers who would benefit from N2Africa technologies?”.

Participants of the meeting were members of the N2Africa Advisory Committee (NAC), Country Coordinators, project staff, Business Development Officers of the Core Countries, a delegation from the Rwanda Agriculture Board (RAB), and representatives of EMBRAPA, One Acre Fund, Farm Radio International, CARITAS and COCOF.

Before tackling that challenge of continuing to reach new farmers, key achievements and learnings in terms of agronomy, rhizobiology, partnerships and M&E were presented by country coordinators and staff of the Core and Tier 1 countries. An overview of these accomplishments and an account of reached targets can be found in the Annual Report of 2017 and was summarized in [Podcaster 51](#). Some of the most distinct developments during Phase II include a large focus on building strong partnerships, the take-off of inoculant production, distribution and use (especially Nodumax in West Africa), and reaching numbers of farmers well beyond the set targets through a wide variety of means.



Lively discussions during the Annual Planning Meeting in Kigali

The presentations and following plenary discussions helped to identify key strategic partners (new and existing) who could take on multiple roles of N2Africa and to develop locally-tailored approaches along the best-bet to best-fit continuum. Maps showing legume distribution and population densities were used to identify areas where there could be potential markets for N2Africa technologies and the Bass-model for diffusion was introduced for modelling diffusion of these technologies. Feedback was given to the prototype of an online tool which could serve as a means of making N2Africa's findings transparent and accessible.

The third full day of the meeting was a field trip to the Gahunga and Muko action sites in Northern Rwanda, where we visited the impressive climbing bean fields of farmer cooperatives. A more detailed report of the field trip can be found in a separate section in this Podcaster. The visit was followed by a seminar at La Palme hotel in Musanze. The seminar included presentations from two rhizobiologists

who did their MSc research with N2Africa, and a presentation on the history of climbing beans in Rwanda.

On the last day, special attention was given to finalizing plans for the impact assessment study, to planning how to make best use of the remaining 2018 budget and to determining topics for R&D that have not been addressed yet and could be readily proposed when an opportunity for funding arises in the future.

Closing the meeting, there was a strong sense of accomplishment as a team and a clear intention to keep in touch after phasing out. N2Africa will soon take on a different role than it had in the last ten years and when we maintain this network we can be sure of more fruitful collaborations in the future!

Eva Thuijsman, Wageningen University & Research

Field trip: climbing beans in Rwanda

In the morning of May 17th buses took all participants of the Annual Planning Meeting through a hilly landscape to two sites in Northern Rwanda that were first approached by N2Africa back in 2010.

Gahunga action site

The first visit was to a farmers' organisation called Turwanyinzale ('fight hunger') in the Gahunga action site (cell: Rwaswa, village Mutara) where we were warmly received with song and dance. Jacques Hakizimana Rwibasira (coordinator of the Department of Rural Development (DRD)) introduced the group which consisted of 19 females and 19 males, managing 60 hectares of land in a rotation of beans (first season) and maize (second season).



Ms Gasilida and Mr Hakizimana Rwibasira showing varieties of climbing beans

They try out various varieties of climbing beans including the following:

- Gasilida: an iron-enriched variety (Fe 92 ppm) named after one of the female farmers present;
- RWV3317: its local name Mpanguhe means 'give me and I will give you';
- RWV3006: Fe 92 ppm, locally known as Inshuti Nziza, meaning 'good friend';
- CAB2: Fe 95 ppm;
- RWV1129: Fe 81 ppm;
- MAC44: Fe 78 ppm.

Ms. Gasilida explained that climbing beans perform better than other crops in this region. The group of farmers started out years ago with local varieties and they approached DRD when they learned that DRD was experimenting with improved varieties. With these new varieties the bean yield increased from one bag of 100 kilograms to three bags and a half!

Upon receiving training from N2Africa in 2010, the farmers began to further cooperate among themselves and they started to produce climbing beans on a large scale on an area of 30 hectares. All farmers marked the boundaries of their own land, but they agreed to consolidate neighbouring plots and grow the same varieties with similar agronomic practices.

Whereas previously all of the bean produce was consumed by themselves, they were now bulking a large part of it for sale. The revenues from bean sales were used to buy pigs (600,000 Rfr each) and to build a pig shed (6,000,000 Rfr) and a storage shed for sweet potatoes or other crops.

The farmers do not feed the pigs with bean revenues but purchase pig feed from the bean revenues.

Ms. Gasilida stressed the importance of beans in their daily lives: beans are part of every meal. Taste is a critical variety characteristic. If the taste is not good, the farmers will not grow that variety. Bio-fortification with iron meant a lot to this group of farmers and it has greatly reduced the number of malnourished children.

Climbing beans have been promoted in Rwanda since the 1980s. Before that time, bushy varieties were grown which were often affected by root rot. Climbing beans were less susceptible. The Rwanda Agricultural Research Institute (ISAR) promoted climbing beans on a national level and mainly in the North. Ultimately, development projects were active in every district, providing new varieties to replace the initial five climbing bean varieties that were grown, most originating from Latin America. The Umubano variety grew very popular until the grains were considered too small (especially in acidic soils). The currently grown varieties are very much based on the varieties introduced in the 1990s.

With the growing popularity of climbing beans, farmers also gained interest in agroforestry for producing stakes.



The plants are taller even than Christian Witt!

At present, scarcity of strong, long stakes is still sometimes limiting climbing bean production, especially in Rwandan valleys.

The inputs that are usually applied by the farmers to climbing beans are DAP, manure and makoseb (dithone to improve resilience in case of heavy rains, and cypermethrin against pests). The local soil type is volcanic and it does not respond to inoculant application.

The introduction was followed by a walk through the climbing bean fields with impressive, vigorous plants!

Muko action site

The second field visit was to a group of seed multipliers in Muko (cell: Mburabuturo, village Musenyi) who also received us singing and dancing. This cooperative of 21 women and 1 man grew iron-enriched climbing beans (RWV3317 and MAC44) in rotation with maize, on a consolidated area of



Tripod staking of climbing beans



A warm welcome by this farmer cooperative



21 hectares. The plants were a lot smaller than at the previous site, because they were planted later (March 27th).

Tripod staking was the common practice for staking. String staking was not adopted because it requires more people to build the construction and because the heavy posts are difficult to obtain. The string staking method is only applied when stakes are not available.

The common staking material was napier, which was grown a lot at this site. It was also used as livestock feed. Manure was the only fertilizer input used.

Reflections from our Rwandan colleagues

Introduction

The last annual meeting of the Phase II of N2Africa project was held in Rwanda, in the period of 15 to 18 May, 2018 at Grand Legacy hotel in Kigali. The focus of this review and planning meeting was to reflect on achievements made and the future role for N2Africa based on what we have learned and to explore opportunities and barriers for reaching millions of smallholder farmers in Africa.

For the Rwanda team, it was a privilege to be selected to host this important event in the history of the project. It was an occasion for some of our colleagues from N2Africa family to visit the country of thousands hills, and the home of climbing beans in Central Africa region.

In Rwanda, N2Africa activities started as early as February 2010 with research activities in parallel with on-farm testing of the technology “need to inoculate soyabean” with few hundred farmers. At the end of the 8 years of the project, this technology has become the legacy of N2Africa, and reached thousands of farmers not only on soyabean but also on climbing bean varieties.

From Phase I, N2Africa had five direct partners who were very committed for the sustainability of project interventions: 1 partner in charge of research, and 4 in charge of technology dissemination and delivery. In the second phase of the project, more indirect partners joined in scaling up and out N2Africa technologies country wide. We purposely invited partners who were onboard from Phase I, for them to share experience on how they continued disseminating N2Africa technologies with a minimum intervention of the project, and also interact with other members of the N2Africa family and learn from them.

Feedback from some partners:

More on climbing beans

Plans for visiting another action site were cancelled because it turned out to be too difficult to reach, but that site starred in a video shown by Ken later that day: <https://player.vimeo.com/video/15048183>. The video was shot in 2010 and shows Ken, Bernard Vanlauwe and Freddy Bajjukya explaining the characteristics of climbing beans and their history in Rwanda.

Eva Thuijsman, Wageningen University & Research

“We thank N2Africa project leaders at all levels, to choose Rwanda to host the workshop and especially Rwanda N2Africa former coordinator, Mme Kantengwa Speciose to select DRD for field visit.

1. Lessons learned:

- *Sharing information on appropriate legume*
- *Information tool on crop (in preparation)*
- *Thinking that N2Africa will become a pan African information sharing platform*

2. DRD suggestions for sustaining N2Africa technologies in Rwanda:

- *Advocacy for DRD about the staking alternative methods (agro forestry extension for Calliandra and Vernonia species, produce sisal locally for staking with strings*
- *Harmonize inoculant supply (RAB- Agro dealer- Farmer)*
- *Women labor saving tools”*

By Hakizimana Rwisebura Jacques / Developpement Rural Durable (DRD)

“I really liked the setup of the meeting. It was a participatory approach where all participants expressed their point of view. The meeting was so well organized.

In the field visit, everyone has seen the existence of N2Africa in Rwanda, through the interaction with local partners, sustainability and scalability of interventions. Nevertheless, there are still points which were discussed in the national exit strategy which were not addressed on the way forward for the sustainability of N2Africa technologies in Rwanda (e.g. soyabean seed system, and labour saving tools).”

By Cyrille Nzigiyiye / COCOF



“My name is Annuarite Uwera, a bean breeder at Rwanda Agriculture and Animal Resources Development Board (RAB). Being part of the N2Africa Project Annual Planning Meeting 2018, was a privilege for me as it was my first time to meet and mingle with N2Africa members from different countries.

Personally, I was inspired by rhizobiology and the Scaling topics. I believe that the adoption of N2Africa technologies will be among the factors which contribute to the increase of legumes production and farmers income generations as well. Annuarite, RAB.

Many thanks for inviting me to this meeting. Cheers!”

“Let the organizers of the workshop know that I was happy to see this meeting organized in Rwanda, and Rwanda was selected because of a purpose: we did so well under N2Africa project, and they knew it. I liked recommendations taken on the way forward after N2Africa life time especially the integration of private sector along the value chain of legumes inoculant production and distribution for sustainability and quality control of the product. Thank you”.

By Felix Byamungu / Caritas Rwanda

Speciose Kantengwa, former Country Coordinator of N2Africa-Rwanda and organizing host for this meeting

Related newsletters

- [CABI News: Multi-media campaign helps improve food security in Tanzania](#);
- [Tropical Grasslands Newsletter no. 7 on “Forages for the Future”](#);
- [FAO News: FAO and ICA sign new partnership in lead up to the UN Decade of Family Farming, Cooperatives can bolster inclusive growth in Africa and New programme to boost soil productivity and reduce soil degradation in Africa](#);
- [IITA News: Back to the future: Africa’s agriculture offers its youth perspectives](#);
- [Soybean Innovation Lab newsletters: March and June 2018](#);
- [ICRISAT news: From grass to great: Tropical Legumes project transforms agricultural extension in Northern Nigeria](#);
- [Africa Soil Health Consortium newsletter no.2: Sharing soil health approaches, June 2017](#).

Reports and other output uploaded on the N2Africa website

[N2Africa Review of policies relating to legume intensification in N2Africa countries.](#)

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