



N2Africa Podcaster no. 12

January and February 2012

Introduction

The world never stands still! This Podcaster contains a number of important news items, as well as some updates on M&E, inoculant production and guidelines for co-authorship of publications.

I would like to take this opportunity to thank Dr Kenton Dashiell for all of his hard work to get N2Africa off to a flying start over the past two years, as he moves on to take up a new role at IITA. Kenton will remain with N2Africa as he joins the Steering Committee of N2Africa. Dr Bernard Vanlauwe is also moving to head up Natural Resource Management at IITA, although he will remain based in Nairobi and will continue to be involved in N2Africa in an advisory role and as a member of the Steering Committee.

I also welcome Dr Deborah Bossio to the N2Africa Steering Committee. Deborah just started as Director of TSBF-CIAT based in Nairobi. We wish her all success in her new role.

The Bill & Melinda Gates Foundation has commissioned an external review of N2Africa by Dr John Lynam, who is well

known within research and development circles in Africa. This review will take place in the coming months and we will update you on its findings in due course. We welcome having someone of John's calibre to put our work under the spotlight and to critically evaluate our approaches and progress.

The Steering Committee is currently reviewing the organisation of N2Africa and I have asked Alastair Simmons, who has been advising the N2Africa leadership over the past year, to step in to ensure continuity while we search for a replacement for Kenton.

Change always brings some uncertainties, but also opportunities and we need to move ahead. We look forward to your continuing support as N2Africa steps up its activities for the final year and a half of what we hope will be only the first phase in our drive to put nitrogen fixation to work for smallholder farmers in Africa.

Ken Giller

Kenton Dashiell is moving on

Dear Friends and Colleagues,

Probably most of you already know that I have resigned from CIAT and will be joining IITA as their Deputy Director General for Partnerships. When I joined TSBF two years ago to lead the N2Africa Project I thought that I would probably hold this position for 10 or 15 years if the project continued. I even told people that this was my dream job. My relatively short time with TSBF and N2Africa has been both rewarding and challenging. In my new position I will still be involved with N2Africa and I look forward to helping this project continue to grow and impact the lives of farm families all over Africa.

When I learned that IITA was looking for someone to lead their activities in working with partners and capacity building I was very excited about this opportunity and decided to

apply. The best and probably only way for us to have a real positive impact and see our research results being used to improve standards of living, nutrition and etc. is to work with a diverse group of partners.

Most of you know I worked at IITA from 1983 to 2001 and I am looking forward to returning to where I started and developed my agriculture research for development career.

Many thanks to all of you that I have worked with at TSBF and N2Africa. We have accomplished a lot in a short time because we all have a shared vision and work together as a team.

I plan to move to Ibadan sometime between March 7-15.

Best regards, Ken

An update on M&E within N2Africa

We are approaching exciting times as we are getting the first full set of results from all the M&E tools employed in N2Africa from Ghana and Nigeria. Not long after, East-Central Africa will harvest and provide data, while the Southern Africa region will harvest their legume crops in April/May. Although some information may come available during the season, most of it is collated after the season has ended.

We work from the idea that N2Africa is a development to research project in which dissemination and development are the core of the project, M&E provides the learning and the research within the project analyses and feeds back into the D&D (see Figure 1). In a way, M&E connects D&D and research.

We have defined 39 indicators that are being monitored in the implementation of the N2Africa project. These indi-

cators cover the wide range of project research and development activities and may be categorized as follows:

1. Global synthetic indicators (e.g. income);
2. Indicators on supply-side (e.g. number of farmers receiving inputs from N2Africa through partners, number of training events);
3. Indicators on use of components (e.g. number of farmers using improved varieties);
4. Indicators on the results of the use of the components (e.g. number of farmers increasing acreage planted to legumes);
5. Supply channel indicators (e.g. number of channels which supply inoculants to farmers);
6. Policy (e.g. identification of changes in policies toward access of smallholder farmers to legume seed and inoculants);
7. Impact indicators at scientific level (e.g. number of improved rhizobial strains identified);
8. Indicators related to agronomy trials (e.g. number of recommendations developed for D&D);
9. Indicators on impact at capacity building (e.g. number of extension staff trained);
10. Other impact (e.g. media events).

Some of the indicators have uniform data collection tools, other information may be gathered by calling upon a few key people (e.g. country coordinators are well aware of the capacity building of students within the project and are supplying that information which will then be updated twice a year). Although quite a few of these indicators are numerical, the tools to collect the information ensure that we are also collecting more qualitative information and all tools are gender sensitive. For example, while we count the number of field days organized in a country, we are also collecting information on the participants such as their age (or age group), gender, subjects dealt with on the field day, the costs and what lessons can be learned from that particular field day.

Apart from the data collection that can be considered to be quite 'routine', staff from N2Africa and partners in Ghana and Nigeria have for the first time implemented the Field Book for Technology Evaluation as well as the Use Survey for Progressing N2Africa Farmers. The Field Book has been adjusted from what has been used within the CIALCA project in countries like RD Congo and Rwanda. The Field Book allows us to collect a lot more information from a sample of at least 300 farmers in each country, this covers the diversity of environments in which farmers work much better than the agronomy trials which can only be implemented in a limited number of sites. In this way, these farmers' fields become part of agronomic research and we are creating much stronger linkages between research and D&D.

The Use Survey follows up on farmers who have been

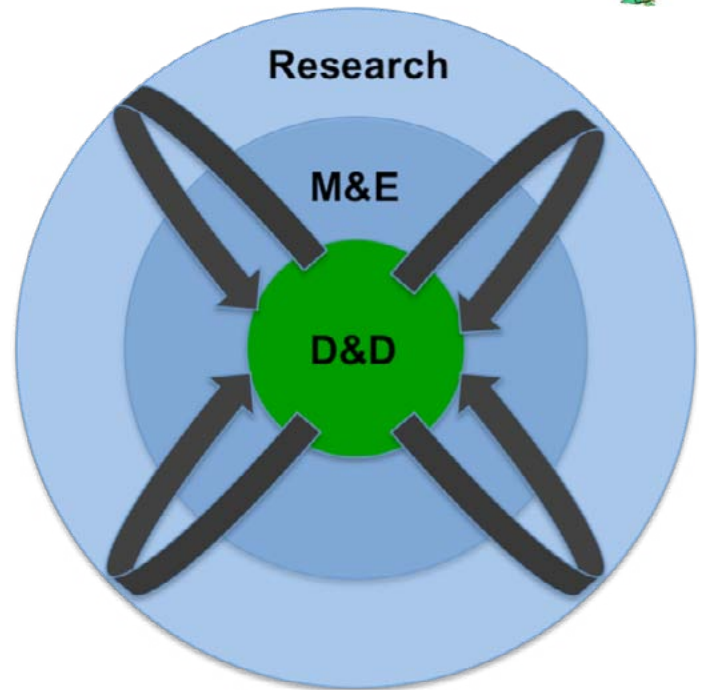


Figure 1

previously involved in activities within the N2Africa project to see whether these farmers continue with the newly introduced techniques, new varieties, etc. A farm household is only considered an 'adopter' if, for three seasons, it uses at least two of the N2Africa components, one of which is directly tied to agronomic management. Components could include new variety, additional legume, fertilizer, inoculants, improved agronomic practices. So while it is too early to begin to count adopters, the use survey allows us to begin to track the use of the technologies by farmers. The data from the Field Book and Use Survey from Ghana is at present being analysed in Wageningen by Linus Franke, who is assisted by Marcel Lubbers. There has been a delay in the preparation of data from Nigeria, due to the challenging circumstances. The staff in Nigeria is however working very hard to make the data available.

The data from the Field Book from Ghana showed widespread responses of groundnut and cowpea to P fertilisers. The addition of P fertiliser and inoculants to soybean led to a large average yield increase (28%) but the variability in responses between farmers was large and the reasons behind this need to be further analysed when soil and rain data from the sites become available. The data also stressed the importance of planting time. Planting soybean or groundnut after mid-July gave considerably lower yields than planting in early July. On-time distribution of inputs to farmers by the D&D team is thus absolutely essential to achieve good yields in on-farm trials, and this needs further attention in the coming season.

Apart from data collection, it has become clear that the entry of data collected at country level requires quite some



organisation as well. We do however see quick improvements and at first glance the quality of the data from Ghana is good. Now it is up to us to quickly organise and analyse the data and provide meaningful feedback to the country teams to ensure the learning. In addition, we will assess the feedback on the implementation of the M&E tools: was it too much or doable, which were the main bottlenecks, how can we make it even easier, etc. We would like to encourage all people working with

N2Africa to think of new ways of monitoring and evaluating our progress. We have a robust system in place, but this should act as a basis and is not the end in itself. The more different and innovative ways we can think of to evaluate and improve our learning and impact the better. More news to follow soon!

Judith de Wolf & Linus Franke

Establishment of rhizobial inoculant production factories in Africa

The possibilities for establishment of rhizobial inoculant production in Africa were discussed in detail at the N2Africa Steering Committee held in Kano and I include a short report on our discussions below. As evidence mounts for substantial responses to inoculation with soyabean in different countries, our attention turns towards sustainability of supply. A key question is: *Why is sustainability of supply always equated with local production?*

When we evaluate the various options for supply we need to consider a number of issues:

1. *Quality* has to be the first consideration. This is normally tested as the number of viable rhizobium cells against the number of contaminants in the inoculant.
2. The economics of inoculant use are paramount. Cost-benefit ratios are often very favourable for farmers, which gives producers some flexibility with the price, but of course we want to ensure that farmers are offered a quality product at a reasonable price.
3. Shelf-life is particularly important in our target countries if inoculants are to be sold by local stockists.
4. We need to work hard on ease of supply. Local production could have advantages over importation in terms of guaranteeing local supply. This depends on the ease of import into different countries.

Experiences with inoculant production in Africa

There have been a number of initiatives to establish local inoculant production in the past. In the 1980s and 1990s initiatives led by NifTAL, FAO and the MIRCENs led to establishment of small scale inoculant production in many countries throughout Africa but few developed production at a large scale.

Three facilities that have continued to produce rhizobial inoculants over a long period for a market are found in Kenya, Zambia and Zimbabwe (see Milestone Report 3.4.1, on the website as [report 13](#), by Abdullahi Bala et al.)

- a) The inoculant production facility at MEA was formed as a “spin-off” through grant from the British Council from the Nairobi MIRCEN at the University of Nairobi. MEA are producing and distributing inoculants and are keen to grow their market. N2Africa and our sister project SIMLESA have been working with MEA to improve the quality of their inoculants and Dr Anabel Marifisi from

Australia provided training and advice.

- b) The government department of the Soil Productivity Research Laboratory at Grasslands Research Station in Marondera, Zimbabwe has produced inoculants since 1967. These are produced on a semi-commercial basis and funds are cycled back into the inoculant production. Much of the inoculant produced was sold to large-scale farmers, but assistance from N2Africa is helping to increase the number of small-scale farmers using inoculants. In COMPRO tests the Zimbabwean inoculants were selected as one of the best products in both glasshouse and field evaluations, when tested against a range of commercial imported inoculants.
- c) In Zambia inoculant production was established with support from NifTAL at the agricultural research station at Mt Makulu. When this ceased, the Balmoral Veterinary Services, a government institute who produce animal vaccines, has produced inoculants to meet the demands (largely) of the commercial farmers in Zambia.
- d) In South Africa, a private company, Soygro, produces a wide range of biological products, including rhizobial inoculants.

Thus different models have led to sustained production over a long period of time. Both have some degree of commercialization, either a semi-commercial government operation, or a combination of government/private sector involvement. If we explore why relatively few of the initiatives to establish inoculant production continued to the present, the three cases in southern Africa perhaps cast light on the reasons behind this trend. In all three countries - South Africa, Zambia and Zimbabwe – the major market for inoculants has been the large-scale, commercial farming sector. From a base of a guaranteed market the companies have been able to increase supply to the smallholder sector.

Quality control of inoculants

The N2Africa Steering Committee has charged the project to establish effective inoculant quality control (QC) systems in all of the countries where we work. This is going ahead and systems are in place in several of the countries already. Where we have been unsuccessful in establishing QC, this has largely been due to the lack of human, technical capacity which demonstrates the importance of our ongoing train-

ing programme. Initial results show variable quality in the inoculants produced by some suppliers, which is a cause of concern that is being actively addressed. We need still to establish if the variable quality has been at source or at other stages through the supply chain in storage, transport and delivery.

Inoculation with soyabeans

N2Africa is forging ahead with inoculation on soyabeans. In East Africa these have been supplied by MEA and Resag-bio, Spain. In Zimbabwe we have used the locally produced SPRL inoculants. In West Africa we have imported inoculants from Legumefix, UK. In all regions we have seen strong responses to inoculation, though the results have been variable across seasons and locations in East and Central Africa and southern Africa. The problem is that in these cases we do not know if the problem has been due to variability in batch quality of the inoculants, or due to the presence of effective background rhizobial populations. A question remains: *If we had consistent highest quality inoculants would we be observing even larger and more consistent yield increases from inoculants?*

Inoculation with Phaseolus beans, cowpea, groundnut etc.

Trials to date with inoculation on *Phaseolus* in Kenya have generally demonstrated no response to inoculation. In a few cases, marginal increases in yield have been observed with inoculation. This is in line with a large body of research conducted in the 1980s and 1990s that demonstrated similar results. At present we cannot be sure whether the lack of responses to inoculation are due to either: a) inoculants delivering insufficient rhizobia; b) the inoculant strain not being the best possible; c) that beans do not need to be inoculated as the indigenous rhizobia populations are sufficiently effective.

Our current strategy is to suspend dissemination work on inoculation in beans until we have been able to conduct field campaigns with the best quality inoculants and have sufficient evidence that inoculation is a sensible strategy with beans. We are actively pursuing this topic through research in the next cropping season in East Africa.

With regard to inoculation for cowpea and groundnut, there are sporadic reports of inoculation responses with cowpea, and less evidence of inoculation responses with groundnut. This is a further area urgently needing research. Again we will only start to promote inoculants with these crops once further research has been done and when we can ensure the highest quality of inoculants (both strains and formulations).

Current proposals to establish inoculant production facilities

When is it justified to establish inoculant facilities in a

country? N2Africa is striving to ensure that QC facilities are established all countries, and a good microbiologist can produce small quantities of inoculant for research with such facilities. We are supporting an initiative to establish inoculant production facilities in Nigeria where soyabean is produced by millions of smallholder farmers, and where we are confident of a large and growing market. A first stage in this initiative is to develop a business plan and this is underway together with a private sector partner.

N2Africa does not consider that it would be a sensible move at present to establish inoculant production in all of the countries where we work. There are a number of reasons for this, including:

- i) The current market volume is too small to make an inoculant production plant a viable economic enterprise.
- ii) The skills base in terms of both scientist and technicians trained in rhizobiology for inoculant production and quality control is too weak.
- iii) Initial research is needed to test, select and refine carriers and develop appropriate formulations.
- iv) In both West and southern Africa there is only one season a year. This means that if inoculants have a shelf-life of only six months, the factory would need to pay staff for half of the year to maintain their expertise, while not being productive, unless they can use the facilities to make other products.

There is danger in moving ahead with establishing new inoculation production facilities in different countries before we have demonstrated sufficiently large demand from farmers to warrant it. The last thing we want is for new companies to market inferior quality inoculants. If we promote inferior products that do not work consistently then we will rapidly lose the confidence of the farmers, and may compromise inoculant use in the long-term.

The N2Africa proposed strategy

Given the above discussion we suggest it is sensible to import high quality inoculants, and focus on ensuring an effective supply chain for inoculants in the areas where N2Africa is working until we know that there is sufficient demand to warrant establishment of local production.

We will continue to support all countries to establish robust quality control procedures as we have been doing already. N2Africa will also support MEA and the SPRL inoculant production facility in Zimbabwe to improve and guarantee that consistent quality inoculants are delivered to farmers.

This strategy was endorsed by the N2Africa Steering Committee. We would be pleased to hear your thoughts and advice on this important issue.

Ken Giller

Time for innovation and change

I had the privilege of spending some time visiting delivery and dissemination (D&D) as well as research trials on agronomy and rhizobiology in Zimbabwe in February. The season started with difficulty in southern Africa, with a 'false start' to the season and then a three week dry period that led to failed early plantings of many crops and late planting periods for others. Nevertheless, there was a lot to see in the fields, and legumes suffer less from the late start to the season as they are mainly planted after the maize crop is established.

It was a real pleasure seeing the enthusiasm of N2Africa staff – I was in the field with N2Africa staff – Talkmore Mombayarara (Agronomist), Isaac Chabata (Farm Liaison Officer), Judith de Wolf (M&E Specialist & Country Coordinator) – as well as with some of our important partners such as the Community Technology Development Trust (Patrick Kasasa), Agritex, and Prof Barbara Maasdorp from Crop Science, University of Zimbabwe who is leading the forages work for N2Africa in Zimbabwe. Some of you may remember that Barbara won the prize last year for naming the Podcaster! In many ways it was a trip down memory lane for me as I taught many of the NGO and N2Africa staff about legumes and nitrogen fixation together with Barbara when I was Prof of Soil Science in Zimbabwe. I also had a chance to visit Mazvita Murwira and other staff at SPRL who are in charge of rhizobiology research and oversee the inoculant production factory.

We saw some excellent trials and farmer-led demonstrations (see photos), and discussed what was going well, and what the problems were with farmers. The over-riding concern of farmers was access to inputs – such as certified seed, fertilizers, inoculants and credit facilities – as well as lack of ready markets for their produce. During the rich discussions in the field it became apparent that we need to be more reflexive in our thinking and more flexible regarding approaches in N2Africa.



Patrick Kasasa of the Community Technology Development Trust discussing a sugar beans demonstration on the field visit

N2Africa started up with a fairly 'top-down' approach of training and demonstrations with lead farmers and then expansion to satellite farmers. The aim was also to drive a 'value chain' approach for the different crops, linking farmers to markets. This model can work well in some places with some crops, and is delivering successes in many countries, in particular with soyabean.

When we probed further about markets, not surprisingly we got different stories about the different crops, but stories that were consistent between the various farmer groups we visited. Indeed a value chain approach seems appropriate for soyabean with the main problem being one of consolidation of the grain harvest into loads for transport to markets – a market coordination issue.

For groundnut the challenges are similar in terms of consolidation of produce. But as opposed to soyabean which is only consumed in small quantities at household level, people know what to do with groundnuts. They consume them a lot and process them into peanut butter for sale at local level.

The situation was again different with sugar bean, as common bean or *Phaseolus vulgaris* is called in Zimbabwe. Some farmers were growing large fields of sugar bean targeted for a local market of missionary schools. Others complained of problems of keeping seed from one season to the next – not because of post-harvest pests – but because the beans are so popular they get eaten!! So there is generally little surplus, and that surplus can readily be sold through local markets. The other major issue for farmers growing beans is the poor performance in the coarse granite sands that are the predominant soils in most of the smallholder (communal) farming areas. Sugar beans only grow well in the 'infields' – the fields close to the homestead that receive regular dressings with cattle manure. But these fields are where the main 'food-self-sufficiency' crop of maize is grown. The farmers have the perfect solution – simply planting sugar beans as an intercrop without reducing the density of maize planting. The sugar beans generally grow well under maize and tend to produce more grain than when grown as sole crops.

What struck me particularly was the issue of markets for cowpea. Essentially, cowpea is grown by most farmers for their own consumption (both the grain and the leaves) and it is liked but not the most popular legume. In contrast with sugar beans, cowpea grows well on the coarse sandy outfields in Zimbabwe, if a little phosphorus can be applied. The varieties being offered by N2Africa are very popular with farmers and there is considerable demand for them locally. But apart from trade in seed of cowpea by some companies very little cowpea is sold on open markets, neither locally nor through the central grain markets in



In the foreground you can see the response in soyabean using the SPRL inoculants produced in a D&D trial in Zimbabwe - behind the farmers Catherine Masenda and Annie Musakare is the uninoculated plot (Nhayungwa village, Goto, Hwedza)

Harare. So cowpea is an important food-security legume for poor and wealthier farmers alike, and one where simply introducing the new varieties and ensuring their dissemination through local women's groups can have an important impact at household level.

Greta van den Brand joined the N2Africa team in Wageningen

Greta van den Brand has joined the N2Africa team at Wageningen University in January. She works primarily on the extension of the N2Africa project to Sierra Leone, Liberia and North Kivu in DR Congo through the extension of the project as part of the Howard G. Buffett Foundation.

Besides, she contributes to on-going research activities in the other N2Africa countries. Greta completed an MSc. in sustainable development, with a focus on land-use and environment related topics. Her past research, carried out as a master thesis within the framework of N2Africa, focused on possibilities for smallholder farmers in Malawi to increase production of grain-legumes.

Greta van den Brand

N2Africa – Guidelines for Co-authorship of Publications

N2Africa is producing many types of publications in the form of training materials, milestone reports, other internal reports and, of course, articles for publication in peer-reviewed journals. We have developed some guidelines for authorship particularly with journal articles and book chapters in mind, but may be useful when thinking of other types of publications. Our aim is to ensure that credit is duly given to those who have contributed to particular pieces

of work. Please regard these guidelines as opportunities rather than restrictions. If somebody is to be a coauthor of your paper, then it is appropriate to expect and ask for substantial help in preparing it. The full document, which was discussed and endorsed by the N2Africa Steering Committee, can be accessed [here](#).

So where does this leave us? I think not with a problem but with an opportunity! We need simply to use differentiated models for the various legumes – a value chain approach for soyabean, a 'mixed model' for different varieties of groundnut, and different 'local niche' models for sugar bean and cowpea.

For me this is another example in a long line of experiences that demonstrate the importance of spending quality time discussing with farmers. Many seem to think that all of the good ideas come from farmers – and that may often be true – but in my mind it is the *interaction* between farmers, development agents and research that leads to innovation. Time to get your thinking hats on and to reflect on how best N2Africa can adapt to *your* local situations as I know many of you are doing already.

Thanks from me to all of those who gave up their valuable time to spend with me in the field.

And a plea to all you who read the N2Africa Podcaster – please share some of the rich experiences you have with us so that we can learn from each other to develop and test more diversified approaches to achieving our goals!

Ken Giller



Linus Franke and Greta van den Brand at the cold Wageningen University campus

Ken Giller

TLII Report: Tropical Grain Legumes in Africa and South Asia

The Tropical Legumes II project, funded by the Bill & Melinda Gates Foundation, has recently published a research report on six major tropical legumes (chickpea, common bean, cowpea, groundnut, pigeonpea and soya-bean). The report *Tropical Grain Legumes in Africa and South Asia: Knowledge and Opportunities* brings together information on all six legumes. It contains an analysis of the impact of investments in agricultural research and development on productivity, a review of past trends in productivity and trade as well as projections through 2020, and constraints and opportunities for improving production. Main data sources are FAOSTAT, national statistics and ICRISAT, IFPRI, IITA and CIAT databases.

Some highlights of the report for Sub-Saharan Africa (SSA) are:

- Grain legumes are grown by more than 100 million households in SSA and production is dominated by smallholders.
- SSA represents 16% of the global area grown with the tropical legumes, but productivity is low with a contribution of only 6% to global production.

- Increase in legume production over the past decades is mainly the result of an expansion of the area rather than improved productivity through technological changes.
- Export earnings from legumes in SSA contribute only 0.4% of the global US\$ 21.8 billion in export.
- Demand for the six legumes in SSA is expected to increase annually by about 3% until 2020, while production increase is projected to be around 7% for chickpea, common bean and pigeonpea and 2.5% for cowpea, groundnut and soyabean.

Important constraints for yield gains include a lack of access to improved varieties, inputs and crop and pest management practices; poor input and output market access; price volatility; unfavourable landholding systems and land fragmentation as well as inefficient/ineffective extension services. Recent interest in legumes research and development has led to a number of initiatives in Africa, including N2Africa, that all aim to remove some of these constraints and improve productivity.

The full report can be downloaded [here](#).

Esther Ronner

Barriers to seed trade between COMESA countries lifted

THE Common Market for Eastern and Southern Africa (COMESA) through its specialised agency, the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA) has completed the process of harmonizing seed trade rules and regulations for the region. The agreement will ensure smooth flow of seed from one country to another.

ACTESA acting chief executive officer Chungu Mwila said through a speech read for him by COMESA Agro Input Regional Programme (COMRAP) seed expert John Mukaka at a meeting in Addis Ababa, Ethiopia, recently that his organisation had met the mandate that it was given by the COMESA member states.

The finalisation of the rules and regulations will result in removing trade barriers to free-flow of seed among member states.

“We want to ensure free movement of seed from one country to another through a harmonised policy so that obstacles to seed trade across our borders are removed with a view that the regional markets in Eastern and Southern Africa will become more attractive,” Dr Mwila said.

Dr. Mwila noted that the harmonisation of seed trade will also enhance farmers’ access to seed through simplified customs procedures and quick seed varietal release procedures in the COMESA region.

The finalisation of the seed regulations and policies comes after a series of meetings whose objectives were to harmonise seed certification systems in the COMESA region in terms of seed classes, regional label colours, content and issuing procedures.

The objectives also included streamlining the roles and responsibilities of national seed authorities and regional offices and seed certification standards for field inspection and laboratory services for 12 crops which include beans, maize, rice, groundnuts cotton, wheat, cassava, potatoes, sunflower, sorghum, soya beans and millet.

The COMESA region faces a number of challenges in terms of seed availability and utilisation. One of the reasons cited for this situation is lack of a well developed seed industry as well as differences in terms of seed rules and regulations which make it difficult for seed to be moved from a surplus area to a deficit one.

The seed industry in eastern and southern Africa is said to be weak. As a result, it constrains small-scale farmers from having quality seed and engaging in good agricultural practices needed to increase crop production.

Some of the factors that inhibit seed development in the region include low agricultural productivity.

For example, maize production among most COMESA



member states is about 1.39 tons per hectare compared to 4.47 tons per hectare in some developed economies. ACTESA envisages that with good quality seed and other improved agricultural practices, the member states would be able to achieve their food requirements.

Apart from availability of quality seed, the COMESA region also lacks other inputs such as fertilizers, which if available, are too expensive for most of the small-scale farmers.

Other factors that lead to low access to quality standard seed include insect pests and diseases, and lack of a harmonised and rationalised seed trade within the region that can enable the farmer's access to seed from countries that have a surplus.

In some cases, seed has not been available due to natural disasters such as floods, drought, hail storm and inadequate parent materials to enable research institutions and seed companies multiply the seed to meet the needs of smallholder farmers within their countries and abroad.

The specific areas covered in the certification scheme include seed certification rules and standards, seed classes, field and laboratory parameters, colour labels, label contents, responsibilities of various authorities and a glossary of terms.

The seed certification scheme is the first among other sub-agreements to be concluded within the seed regulations and harmonisation component of COMRAP.

International conference Integrated Soil Fertility Management in Africa: From Microbes to Markets (ISFM Africa)

CIAT - TSBF and partners will be organizing an international conference in October 22-27, 2012 in Nairobi, Kenya on the Theme: Integrated Soil Fertility Management in Africa: From Microbes to Markets (ISFM Africa). This meeting is also the biennial meeting of the African Association of Biological Nitrogen Fixation (AABNF).

Meanwhile, the COMRAP programme, which was sponsored by the European Union came to a close on December 31 last year.

The two year programme mainly focused on seed harmonisation, agro-dealer training as well as finance and weather indexing.

The programme has created a base for the ministries of Agriculture in the eight countries where the project worked to among other things link farmers to improved markets as well as seed that will increase farmer productivity.

The programme has also led to farmers' organisations such as farmers unions to work with insurance companies in security of crops which in most cases the insurance sector is unable to ensure because they consider the agricultural sector risky.

The harmonisation of the seed programme among COMESA member states and the coming to an end of COMRAP marks a milestone in the implementation of ACTESA programmes by members states.

The impact of this programme, though not vivid due to a short-life span will however go a long way in helping improve farmer productivity among member states. The only challenge however, is the sustainability of these programmes among respective member countries.

Chris Kakunta ([Zambia Daily Mail](#))

More details are provided in the [first announcement](#).

The website is: www.isfmafrica2012.org. An official email address will be soon available on the website of CIAT-TSBF.

The Podcaster is published eight times per year – we look forward to receiving news and contributions – particularly from partners. Please send in contributions well in time. Contact address for this newsletter is: N2Africa.office@wur.nl

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