N2Africa Podcaster no. 3



December 2010

Dear Everyone,

Almost a year ago many of us met for the first time in Nairobi for the Launching of Putting Nitrogen Fixation to Work for Smallholder Farmers in Africa (N2Africa). I am sending you this personal note because you have been part of the reason for some of the major accomplishments our team has achieved during this first year. We should all be very proud of what has been accomplished but also aware that the challenges ahead of us are great and the farmers we serve desperately need the technologies we can bring to them.

By early March our team was composed of our Steering Committee based around the globe, a Scientist in Malawi, and Nigeria and a few scientists and office staff based in Kenya. Today our team has grown to include at least 35 different organizations in our eight countries with well over 100 people working for the project.

We held a very practical, hands on Training of the Trainers Workshop in Kisumu, Kenya with two people from each country participating. The major crop production practices for soybean, common bean, groundnut and cowpea were discussed. Emphasis was placed on the technologies required to increase biological nitrogen fixation (BNF), and grain and fodder yields. During the workshop each of the participants prepared plans to train large numbers of lead farmers in their country and they have all successfully implemented their plans. When visiting project sites during the growing season I have met several of the Kisumu workshop participants and their excellent work ethic, enthusiasm and knowledge was a pleasure to witness. This core group of people will continue to train more lead farmers every year.

The first countries to go to the field were Kenya, Rwanda and DR Congo with planting in March. Except for some of our partners in Kenya this was the first time for most of us to introduce new production technologies to large numbers of farmers. The purchase, packaging and distribution of the seeds, fertilizer, inoculum, instructions and other important items to the lead farmers was a real challenge that our staff and partners successfully implemented. The results of both our researcher managed trials and farmer managed testing have shown that there is great potential for climbing beans in Kenya and major increases in soybean yield when P and inoculum are used. The vast majority of farmers are highly motivated to continue participating in the project and many more want to join.

Field activities started in Ghana and Nigeria in June with activities on soybean, cowpea and groundnut. I had visited these same areas in northern Ghana and northern Nigeria many times from 1983 – 2000 and was amazed in the changes that had occurred during the ten years I had been away. When I visited Ghana in 2000 soybean was very hard to find on farmers fields and now it has become a popular crop with an estimated production of 35,000 tons in 2009. In Nigeria Soybean production has continued to increase and is grown extensively in most of the N2africa sites. Another major change has been the adoption of spraying insecticides to control insect pests on cowpea. Grain legumes have already become important cash crops in Ghana and Nigeria and N2Africa will help these farmers to increase their yields and profits. Harvest was just a few weeks ago so we need to wait on the results but preliminary observation indicate that P and Inoculum increase soybean yields on most fields but on some very poor soils the addition of P and inoculum gave very little response. More research is required to solve this problem.

Our field activities are just starting in Malawi, Mozambique and Zimbabwe so there is not much to report except that our teams are in place and work has started.



We have made good progress on awarding scholarships for MSc students, and Training of Trainer courses in Rhizobiology have been held in Nairobi and Ibadan. Several countries have completed their baseline surveys and the data is being processed.

Last week I was in Bamako to participate in the African Association of Biological Nitrogen Fixation meeting with three other members of our team. This organization wants to become much more involved with having impact on African farmers and less of an academic society. The presentations made by our N2Africa team were well received and are helping this association identify how they can be more relevant to farmers. While we were in Bamako one of our team members said that most research and development projects are based on research leading to development activities but N2Africa is more a development project that leads to research activities.

I thank all of you for the strong support that you have given the project and me personally. Every member of N2Africa including all the farmers are important as we work together to help African farmers have a better life through the wonderful process of biological nitrogen fixation.

May you and your family have a healthy and happy holiday season and a productive and peaceful New Year.

Sincerely, Kenton

N2Africa moving to scale in 2011

I join Kenton in saying thanks to all of you - our partners, collaborators and wider community of N2Africa friends - for your support over the past year. We look forward to your continued commitment in 2011 as we start to scale up activities.

New Challenges

As the project progresses to reaching roughly 30,000 farmers in each country: we will encounter the numerous challenges of working at this extent, a new experience for us all. To meet it successfully and to stay on track, our partnerships must work optimally - we must communicate effectively - and we must plan well ahead.

A major focus of our *Annual Review and Planning Meeting* in Harare in February will be project planning, communication and co-ordination. N2Africa's success in 2011 depends on our renewed strength and commitment. Alongside our capacity to plan, co-ordinate and deliver successfully, all the inputs and activities called for by the project and its farmers. All support and delivery tasks will be required in amount, in timely fashion and well ahead of the growing seasons! We will continue to work on our communications strategy and planning with TASKSCAPE ASSOCIATES Ltd – with whom we filmed a number of educational films in East and Central Africa in May. These videos are available on the N2Media page of the project website – and provided to educational establishments on DVD, on request.

"The Market Paradox"

Some new challenges are already receiving our attention. A major conundrum is "the market paradox". Although there is a huge national market deficit for legumes such as soya bean in almost all countries where we work, farmers lack ready markets for their legume grain. This is essentially an institutional problem, typical of rural economies in which fledgling technologies need investment to help 'grow' the market before they and it can work fully independently. We know that substantial emphasis in N2Africa must be focused on making linkages to overcome the institutional barriers to allow legume markets to work.

Access to inoculants and other inputs



Challenges associated with output markets mean N2Africa will work to ensure ready access to high quality rhizobial inoculants and other inputs such as phosphorus fertilisers, in sufficient quantities for purchase by farmers. The lack of quality control regulations for rhizobial inoculants in Africa at present can lead to problems of cross-border trade in inoculants and sub-standard inoculants finding their way onto the market. These issues on inoculant quality will be addressed together with the African Association of Biological Nitrogen Fixation (AABNF) – see below.

Research Plans

Some of the emerging issues we have faced, such as the "non-responsive soils" we have encountered in several countries will demand extra attention. Detailed plans for significant and coordinated research like this are being prepared and will be presented and considered at the Annual review and Planning Meeting in February.

Training and Knowledge Transfer

The challenge is to facilitate knowledge transfer and provide a variety of training at all levels: and we recognise the urgent need for training and knowledge transfer on many levels – from farmers and extension, to laboratory technicians and scientists, to policy makers and government. The latest tools and techniques should be broadcast and used throughout the project and the latest technologies find their rightful place in farmers' fields. However, we recognise that our efforts are unlikely to be sufficient on their own: and we will continue to seek fresh opportunities to collaborate with organisations like AGRA to provide more training.

Please join me in continuing to be committed to harnessing and utilising the best expertise from around the world for the project. We can facilitate and achieve our goal with your help and put the very best nitrogen fixing legume technologies in the hands of the African farmers.

Ken Giller

Chair, N2Africa Steering Committee

The 15th African Association of Biological Nitrogen Fixation Conference to be held in Nairobi

Thanks to Prof Inamoud Yattara and his team for organising the 14th AABNF conference which was held from the 13-17th December 2010 in Bamako, Mali. The major constraints to implementation of nitrogen fixing technologies identified by N2Africa (indicated above) were highlighted in the final communiqué from the conference. Congratulations to Prof Nancy Karanja, coordinator of activities in Kenya for N2Africa, who will host the next AABNF meeting in Nairobi in 2012.



Call for news items for the N2Africa Podcaster

We plan to bring out N2Africa Podcaster on a trial basis each month in 2011: but that depends on you! Please send in your news items – by the end of third week each month - so we can include them in the next edition!

Ken Giller

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