



**Legume Seed Acquired for
Dissemination in the Project
Impact Zones**

Milestone 4.3.1

Anne Turner

20 October 2011

N2Africa

**Putting nitrogen fixation to work
for smallholder farmers in Africa**



N2Africa is a project funded by The Bill & Melinda Gates Foundation by a grant to Plant Production Systems, Wageningen University who lead the project together with CIAT-TSBF, IITA and many partners in the Democratic Republic of Congo, Ghana, Kenya, Malawi, Mozambique, Nigeria, Rwanda and Zimbabwe.

Email: n2africa.office@wur.nl
Internet: www.N2Africa.org

Authors of this report and contact details

Name: Anne Turner Partner acronym: IITA
Address: IITA-Malawi, PO Box 30258, Lilongwe 3, Malawi
E-mail: a.turner@cgiar.org

If you want to cite a report that originally was meant for use within the project only, please make sure you are allowed to disseminate or cite this report. If so, please cite as follows:

Turner, A., 2011. Legume Seed Acquired for Dissemination in Project Impact Zones.
www.N2Africa.org, 8 pp.



Disclaimer:

This publication has been funded by the Bill & Melinda Gates Foundation through a grant to Wageningen University entitled "Putting nitrogen fixation to work for smallholder farmers in Africa". Its content does not represent the official position of Bill & Melinda Gates Foundation, Wageningen University or any of the other partner organisations within the project and is entirely the responsibility of the authors.

This information in this document is provided as it is and no guarantee or warranty is given that the information is fit for any particular purpose. The user thereof uses the information at their own sole risk and liability.



Table of contents

1	Improved legume seed mobilized for dissemination campaigns by month 18 of project operations in each country.....	4
1.1	KENYA.....	4
1.2	RWANDA.....	4
1.3	DRC	4
1.4	ZIMBABWE.....	5
1.5	MALAWI.....	5
1.6	MOZAMBIQUE	5
1.7	GHANA	5
1.8	NIGERIA	6
2	Challenges and Lessons Learned	6
	List of project reports	7



Milestone 4.3.1 By month 12 of year 1, sufficient (several tons) legume seed is acquired, e.g. through cooperation with TL-II and the private sector, for initial dissemination in the various impact zones.

Over the period of its first 18 months of operations, the project mobilized seed of improved legumes for use in N2Africa dissemination campaigns in all eight countries.

1 Improved legume seed mobilized for dissemination campaigns by month 18 of project operations in each country.

1.1 KENYA

Legume Crop	Amount of Seed (kg)	Varieties/Lines	Source(s)
Soybean	13,723	SB 19, Namsoy (SB 24)	Original seed (920 kg) from TL2, additional seed bulked by N2Africa co-operators. 8448 kg sold to Smart Logistics (K) Ltd. and resold to N2Africa progressing farmers.
Climbing Bean	461	Kenya Tamu	Original seed (58 kg) from TL2, additional seed bulked by N2Africa cooperators. Related variety from TL2 cv .Kenya Mavuno rejected by farmers because of greater pest susceptibility

1.2 RWANDA

Legume Crop	Amount of Seed (kg)	Varieties/Lines	Source(s)
Soybean	354	Peka 6, SB24	ISAR Rubona station
Bush bean	866	RWR1668, RWR2245	ISAR Ngoma station
Climbing bean	764	Gasilida	ISAR Rwerere station

1.3 DRC

Legume Crop	Amount of Seed (kg)	Varieties/Lines	Source(s)
Soybean	646	Peka 6, SB24	Initial 120 kg from CIALCA-Bukavu, the rest from seed multiplied by participating farmers
Bush bean	653	AFR708, CODMLB001	Initial 80 kg from CIALCA-Bukavu and INERA Mulungu, the rest from seed multiplied by participating farmers



1.4 ZIMBABWE

Legume Crop	Amount of Seed (kg)	Varieties/Lines	Source(s)
Soybean	1252	SC Saga, Serenade, Pan 891	Seed companies (SeedCo, Pannar, Progene)
Bush bean	1088	Cardinal, Speckled Ice, Pan 148, Pan 159	Seed companies
Groundnut	741	Natal Common	Seed companies
Cowpea	266	CBC1, CBC2, IT18	Seed companies

1.5 MALAWI

Legume Crop	Amount of Seed (kg)	Varieties/Lines	Source(s)
Soybean	1605	Makwacha, Nasoko, Ocepara-4	Seed companies, ASSMAG
Bush bean	601	Nalipira, Kholophere, Maluwa	ASSMAG
Groundnut	1036	Chalimbana, Nsinjiro, CG7	ICRISAT, ASSMAG
Cowpea	190	Sudan-1, IT81E-16	IITA

1.6 MOZAMBIQUE

Legume Crop	Amount of Seed (kg)	Varieties/Lines	Source(s)
Soybean	2040	TGx 1485-1D, TGx 1740-2F, TGx 1904-6F, TGx 1908-8F, TGx 1937-1F	TL-II, Platform Mozambique

1.7 GHANA

Legume Crop	Amount of Seed (kg)	Varieties/Lines	Source(s)
Soybean	8313	Jenguma, Quarshie, Anidaso	Savanna Seed Services Company and Ministry of Food and Agriculture's (MoFA) Seed Inspection Unit in Bolgatanga
Groundnut	1700	Chinese, Samnut 22 and Samnut 23	Savanna Seed Services Company
Cowpea	1544	Songotura, Apaagbala	Savanna Seed Services Company and M&B Seed Company, Ho (through Savanna Seed Services Company)



1.8 NIGERIA

Legume Crop	Amount of Seed (kg)	Varieties/Lines	Source(s)
Soybean	9110	TGX1835-10E, TGX1485, TGX1448, TGX1904-6F, TGX1945, TGX1951- 3F, TGX1935-F, TGX1955-3F	Seed Companies, TL-II, Jirkur Seed Cooperative
Groundnut	3440	SAMNUT21, SAMNUT22, SAMNUT23, RMP12, RMP19	Seed Companies, TL- II/BUK, Community seed cooperatives, BUK Agronomy Department, Seed Project
--Cowpea	3920	IT90K-277-2, 1T97K- 499-35, IT89D-391, 1T99K573-1-1, DANILA, IT93K-452-1, IT89KD-288, IT98K- 205-8	TL-II, Community Seed Cooperatives, Jirkur Seed Cooperative

2 Challenges and Lessons Learned

- I. During the first season of dissemination activities in all eight countries, seed procurement and dissemination was late due to a variety of factors (late signing of agreements with partners, logistical difficulties, etc.). In many cases this resulted in seed of the preferred varieties not being available by the time procurement took place. It also resulted in late planting, with adverse impacts on the dissemination trials. During the February 2011 N2Africa meeting in Harare, Zimbabwe, all countries agreed to make timely ordering and procurement of seed a top priority in the subsequent growing seasons.
- II. In some cases, seed was of poor quality (mixture of varieties, low germination rate) with consequent negative impact on trial results, including farmers' perception of N2Africa dissemination activities. The N2Africa team in west Kenya developed a simple and inexpensive seed germination test kit to assist farmers recognize seed viability before it is planted. This will be tested during the 2011-2012 short rainy season in Kenya and will hopefully alleviate the problem of poor seed germination rates there. Other measures may need to be developed to address both germination and mixture of varieties in the other seven countries.
- III. In several countries, participating farmers expressed their disappointment with the volumes of seed disseminated, stating that these were too small for them to multiply enough seed to expand production the following season.
- IV. The transition to Milestone 4.3.2 where at least half of the farming communities become self-sufficient in legume seed production largely depends upon their acceptance of the new crop varieties and the market opportunities unfolding around them. This goal becomes increasingly important where commercially-available grain legume seed is less available. For resource poor farmers in some countries (Rwanda, Malawi), additional efforts need to be made to set up seed-purchasing schemes which offer a remunerative price, otherwise these farmers are understandably prone to sell all their seed to the first trader who passes by their farm gate.



List of project reports

1. N2Africa Steering Committee Terms of Reference
2. Policy on advanced training grants
3. Rhizobia Strain Isolation and Characterisation Protocol
4. Detailed country-by-country access plan for P and other agro-minerals
5. Workshop Report: Training of Master Trainers on Legume and Inoculant Technologies (Kisumu Hotel, Kisumu, Kenya-24-28 May 2010)
6. Plans for interaction with the Tropical Legumes II project (TLII) and for seed increase on a country-by-country basis
7. Implementation Plan for collaboration between N2Africa and the Soil Health and Market Access Programs of the Alliance for a Green Revolution in Africa (AGRA) plan
8. General approaches and country specific dissemination plans
9. Selected soybeans, common beans, cowpeas and groundnuts varieties with proven high BNF potential and sufficient seed availability in target impact zones of N2Africa Project
10. Project launch and workshop report
11. Advancing technical skills in rhizobiology: training report
12. Characterisation of the impact zones and mandate areas in the N2Africa project
13. Production and use of Rhizobial inoculants in Africa
18. Adaptive research in N2Africa impact zones: Principles, guidelines and implemented research campaigns
19. Quality assurance (QA) protocols based on African capacities and international existing standards developed
20. Collection and maintenance of elite rhizobial strains
21. MSc and PhD status report
22. Production of seed for local distribution by farming communities engaged in the project
23. A report documenting the involvement of women in at least 50% of all farmer-related activities
24. Participatory development of indicators for monitoring and evaluating progress with project activities and their impact
25. Suitable multi-purpose forage and tree legumes for intensive smallholder meat and dairy industries in East and Central Africa N2Africa mandate areas
26. A revised manual for rhizobium methods and standard protocols available on the project website
27. Update on Inoculant production by cooperating laboratories
28. Legume Seed Acquired for Dissemination in the Project Impact Zones



Partners involved in the N2Africa project



Caritas Rwanda



Diobass



Eglise Presbiterienne Rwanda



Murdoch
UNIVERSITY
PERTH WESTERN AUSTRALIA



Resource Projects-Kenya



Université Catholique de Bukavu



University of Zimbabwe

