N2Africa Annual Report 2015

Rwanda

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March 2016

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 Ethiopia, Tanzania and Uganda.

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S. Kantengwa, 2016. N2Africa Annual Report 2015 Rwanda, Report N2Africa project, www.N2Africa.org, 25 pp.

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Acronyms

RAB:	Rwanda Agriculture Board
COCOF:	Conseil Consultatif des Femmes
EPR:	Eglise presbyterienne au Rwanda
AGRIFOP:	Agribusiness Focused Partnership
CDI:	Clinton Development Initiative
DRD:	Developpement Rural Durable
IFDC:	International Fertilizer Development Center

Keywords

N2Africa Annual country report, Results framework 2015, biological nitrogen fixation, grain legumes, Rwanda

1 Progress narrative

The current report covers the period of January to December 2015, and narrates activities performed in Rwanda by N2Africa partners in the districts of Kayonza and Bugesera in Eastern province, Kamonyi in Southern province, Musanze, Gankenke and Burera in Northern province, and Ngororero in Western province.

Besides formal partners, some activities were conducted in collaboration with informal partners who work outside the impact zones of the project. This is the case of IFCD, CDI and AGRIFOP in testing new varieties and dissemination of inoculants through Agrodealers respectively. With these partners more districts were covered with legumes technologies promoted by N2Africa.

1.1 Project strategy, coordination and implementation and capacity strengthening

The strategy of N2Africa in Rwanda is to work with stakeholders involved in legume crops at different levels of value chain. More partnerships informally initiated with agro-dealership network backstopped by AGRIFOP to promote the use of fertilizer and inoculants on legume crops. In 2015, the accent was on agro-dealers who sold agriculture inputs, especially fertilizers and seeds, and how they could incorporate legumes inoculants on the list of inputs sold in their shops.

An informal partnership with a private company producing and exporting Macadamia nuts from Rwanda was established, to promote soyabean cultivation intercropped with Macadamia trees in Bugesera. The soyabean cultivation aimed at improving soil fertility for Macadamia production. Seasonal planning meetings were held to develop and review work plans, which fit in the project results framework. And three meetings were conducted this year with formal partners. Four MoUs were signed between IITA and four partners involved in N2Africa dissemination activities.

Table 1: Local capacity strengthening (not referred to in text).

Topic	Partner	Number of people trained		
		Total	Men	Women
Credit and Savings	EPR	23	0	23
Local processing of Soyabean	DRD	160	8	152
Nutrition using soyabean products for people living with HIV	COCOF	30	14	16
Gender equality in daily management of households	EPR	50	25	25
Grain storage	EPR	50	25	25
Management of pre – cooperative group		50	25	25
Farming technics for Soyabean crop for field staff of CDI	CDI/N2Africa	5	4	1
Post-harvest management of beans and allocation of production at the household level, considering gender	DRD	60	30	30
Marketing and business plan to the board of the 2 women associations and to identify 2 business opportunities	DRD	30	10	20

Cooperative formation and management, for agriculture value chain integration	CARITAS	40	20	20
Study tour to identify market opportunities for legumes produce	CARITAS	10	2	8
Total		**508**	**163**	**345**

Training conducted by COCOF on:

- Soyabean processing technologies for nutrition, markets,
- Postharvest handling on beans,
- Cooperatives management,
- Training of farmers on seed storage,
- Women training on gender equality in agriculture,
- Business plan and marketing and
- Cooperative management.

1.2 Delivery and dissemination, sustainable input supply, and market access

This activity was implemented mainly through demonstration plots and farmer field days organized around the demonstration plots, community seed production, and collective marketing of legume grains. Participating in agricultural shows and open-days organized at district level, contributed to awareness creation around N2Africa technologies.

Table 2: The number of demonstration plots and field days around demonstration plots, 2015 A&B seasons (not referred to in text).

Partner	Crop	# of demonstrations	Technology	Field days	Atten-dance	Men	Women
DRD	Climbing Bean	19	Staking methods coupled with use of fertilizer and inoculants	3	522	46	472
	Soyabean	3	New varieties of Soyabean	1	19	1	18
AGRIFOP	Bush Bean and Soyabean	58	Use of fertilizer and inoculants	48	497	235	262
CDI	Soyabean	27	Variety, density, brand of inoculants	No records	No records		
EPR	Climbing Bean and Bush Bean	11	Variety, use of fertilizer and inoculants	11	140		

Table 3: Seed production (not referred to in text).

Partner	Crop	Seed production (kg/year)
DRD	Climbing Bean	18,641
COCOF	Soyabean	10,000

Table 4: Collective marketing (not referred in text).

Partner	Crop	Collected yield (tons)
COCOF	Soyabean	119
	Bush Bean	34
UMUCYO cooperative	Bush Bean	190
Rwanda Nuts company	Soyabean	2

1.3 Empower women to increase benefits from legume production

Training of 23 members of IGISUBIZO cooperative in Kayonza by EPR partner on credit and saving, to build the capacity of women to run their business.

Labour saving tools for women running soyabean products, two electric blenders, which can extract 50 litre of milk per day were given to two women running small business on Soyabean products (one woman in Bugesera and one woman in Gakenke).

Women were trained in soyabean processing for better nutrition at household level.

A women group was trained in business development and market, and started a business to sell sorted beans at local market in Gakenke district.

1.4 Tailor and adapt legume technologies to close yield gaps and expand the area of legume production within the farm

Established variety trials on Soyabean in collaboration with RAB and several local partners.

New materials to release and varieties under dissemination were sent to IFDC to test in their area of operation during the second season of 2015. Results from three sites of Nyagatare district are summarized in Figure 1.

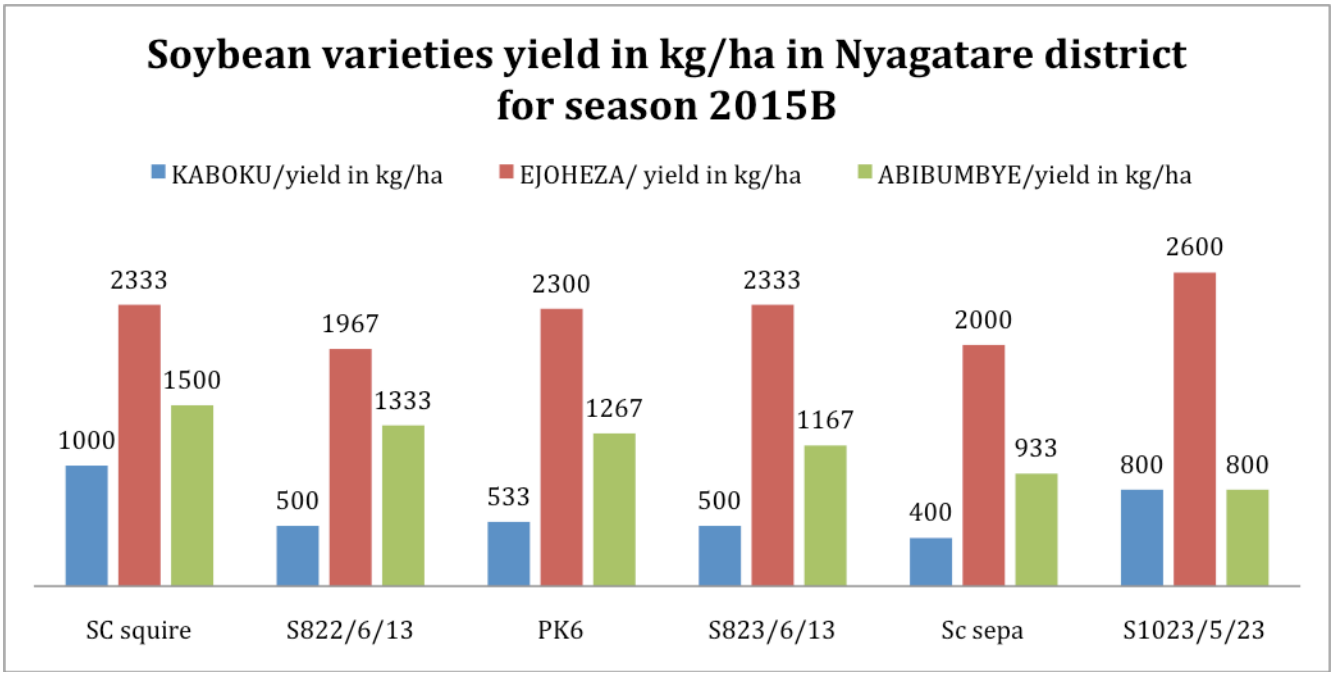

Figure 1: Soyabean varieties yield in kg/ha in Nyagatare district for season 2015B.

In 2015A season, the same materials were given to Rwanda Nuts Company, a private company promoting Macadamia tree in Rwanda. These soyabean materials were planted in Bugesera district.

Production of inoculants for Soyabean and Bean by RAB laboratory.

During this year, RAB laboratory produced 32,158 packages of inoculants for Soyabean and 2,006 packages of inoculants for common bean (80 grams/package).The same laboratory does also quality control on produced inoculants.

Table 5: Rhizobial populations and contaminants in Rwanda Agriculture Board Inoculant Plant (shelves and expired stock).

Brand Name	Host	Count (n)	Age (days)	Rhizobia (g^{-1})	CV	Contaminants (g^{-1})	CV
Rizobiyumu	Soyabean	16	62	6.9×10^{9}	33	1.7×10^{5}	86
Rizobiyumu	Beans	5	54	3.4×10^{9}	25	3.8×10^{5}	63
	Expired stock soyabean	7	+365	5.9×10^{6}	10	6.9×10^{7}	7

2 Results 2015 Rwanda

Table 6: Results framework

Activity per Objective	Milestone	Indicator	Milestone Target 2015	Achieved 2014	Achieved 2015	Achieved so far (2014&2015)	Reasons for Variance with Planned Target (if any)
Objective 1							
1.3. Engage research, development, private sector, and other relevant partners in each of the target countries	1.3. Partners along the legume input and output value chains cooperate actively towards achieving the overall N2Africa goals	# of partnerships developed and active	4 partners in dissemination 1 partner in research	0	4	4	No MOU with RAB for research activities, the collaboration is informal and rely on phase 1 official collaboration
	1.3.1. By Q2 of year 1, potential partners operating within priority legume value chains mapped	# partners within N2Africa legume value chains mapped					
	1.3.2. By Q3 of year 2, MoUs with priority partners in each of the target countries signed	# MoUs signed with priority legume partners	4	0	4	4	No variance

1.6. Organize seasonal/yearly project-wide and country-specific planning workshops	1.6 Scientists and other stakeholder groups are empowered to further the N2Africa research and development	# Scientist and stakeholder groups leading implementation of activities in N2AFrica yearly plans					
	1.6.2. By Q4 of each year, 1 or 2 seasonal, in-country implementation plans developed, evaluated, and revised through in-country-planning meetings	# Seasonal in-country plans developed	2	2	3	5	1 extra meeting was held to update annual plans and interact with the N2Africa M&E specialist
1.8. Develop and implement a non-degree-related capacity strengthening plan for relevant partners working within legume value chains	1.8.1. By Q4 of year 1, a non-degree-related capacity strengthening plan developed	Project-wide capacity strengthening plan	0				
	1.8.2. By Q4 of each year, at least 4 relevant and demand-driven training materials developed in cooperation with the African Soil Health Consortium (ASHC)	# training materials developed with ASHC		2	0	2	

	1.4. By Q4 of year 5, at least 320 partners trained in N2Africa technologies and approaches	# of persons trained (gender disaggregated data) in N2Africa technologies and approaches & # of N2Africa technologies (by type) in which the persons were trained. *(Note: Count the total number of persons trained from the collaborating partners for dissemination. Disaggregate data by gender)*	Local tools developed on how to plant in row, leaflet on how to extract milk from soyabean, Seed multiplication leaflet, Cooperative management, gender equality in HH resources management				
Objective 2							
2.1. Constitute and facilitate in-country/in-region N2Africa stakeholder platforms	2.1. Country-specific inoculant, seed, and fertilizer supply strategies guarantee the sustainable supply of high quality seeds and inoculants and legume-specific fertilizer	# and types of input supply strategies related to seed, fertilizers and inoculants. Performance of various strategies identified in relation to sustainable input supply	Joined 1 platform of Humid tropics in Kayonza. Joined the platform of agro dealers who supply agriculture inputs country wide (fertilizes, seeds) Joined joint action forums at district level, in total 6 platforms Also 1 local platforms initiated by COCOF				

			on legumes promotion				
	2.1.1. By Q2 of year 1, N2Africa stakeholder platforms operationalize	# N2Africa stakeholder platforms operational					
	2.1.2. By Q4 of years 1-4, stakeholders agree on specific roles and responsibilities across the various N2Africa objectives	# N2Africa stakeholders with agreed roles and responsibilities					
2.2. Facilitate N2Africa-led dissemination campaigns in the context of development-to-research learning cycles with specific attention to gender	2.2. Dissemination partners attain/surpass the anticipated number of households targeted and continue to engage in legume intensification post-project	# of target households (men/women) reached *(outcome level: these farmers continue to engage in legume intensification activities after participating in dissemination activities)*			858 with DRD in demo, seed multiplication, dissemination, local processing EPR worked with 288 farmers from whom 185 women and 103 men in climbing bean and Soyabean new varieties disseminated 730 with CARITAS women 491 and men 239		

	2.2.1. By Q1 of years 1-4, specific dissemination guidelines for legume intensification assembled	Document indicating specific dissemination guidelines for legume intensification					
	2.2.2. By Q4 of years 1-4, specific dissemination guidelines evaluated by a preset (see Returns-on-Investment calculations) number of male and female farmers	# of farmers (men/women) who evaluate the guidelines (Note: # of farmers (men/women) who have evaluated technologies and dissemination activities and methods (Disaggregated by type of dissemination activity))					
2.3. Create widespread awareness on N2Africa technologies and interventions	2.3. Local agro-dealers marketing fertilizer, seed, and inoculants are aligned with grass-root producer groups and input wholesalers and manufacturers	*Volume of seeds, fertilizers and inoculants used per targeted producer groups per land area, *Volume of seeds, fertilizers and inoculants sold by agro-dealers			18,641kg disseminated on cl bean 3 varieties with DRD 10tons of Soyabean seed produced by COCOF		
	2.3.1. By Q4 of years 1-4, at least 2 media events (e.g., radio, newspaper articles, field days, etc) per country implemented	# of media events implemented			3 field days on bean an d1 on soyabean 4 open days at district level 1 world food day by DRD 5 open days		

					COCOF 1 open day Bugesera CARITAS 1 national agri show with RAB		
2.4. Facilitate partner-led dissemination campaigns with specific attention to gender	2.4. A preset (see Returns-on-Investment calculations) number of households engaged in the collective marketing and value addition of legume grains and value-added products	# of individual households (men/women) engaged in collective marketing, value addition of legumes and value added products. Volume of produce sold through collective marketing, volume of value addition products and types of value added products			4 tons of soyabean and 6tons of bean collected as strategic stock to be sold in periods of scarcity and hunger 115 tons of soyabean grain produced by cooperatives and 28 tons of RWR 2245 Bush Bean		
	2.4.1. By Q4 of years 2-4, household targets (see Returns-on-Investment calculations), dissemination approaches, and content for partner-led dissemination activities agreed and implemented, with specific attention to gender	# of partner-led agreements/ partnerships with agreed target households, dissemination approaches & activities focusing on gender			13 cooperatives and 50 groups of farmers in total 4,281 members of which 2,911 women and 1,370 men who work with COCOF to bulk		

					Soyabean grain to feed the processing plant of COCOF		
	2.4.2. By Q4 of years 3-5, feedback on the performance of the dissemination models and the demonstrated content fed back to N2Africa	*Performance reports of dissemination models *Type of performance feedback fed back into N2Africa					
2.5. Facilitate private-public partnerships towards the sustainable supply of inoculants and fertilizer	2.5.1. By Q4 of years 1-4, inoculants available through public-private partnerships, through importation and/or local production, the latter facilitated by the inoculant production pilot plant	# of inoculant outlets in the target areas Volume of inoculants imported and /or produced with the identified outlets			2006 Packages of inoculants for bean and 32,158 packages of inoculants for soyabean produced by RAB		
	2.5.2. By Q4 of years 1-4, legume-specific fertilizer made available to smallholder farmers by fertilizer companies/retailers	# of fertilizer outlets in the smallholder target areas Volume of legume-specific fertilizer at the retail shops			1 agro dealer retailer per administrative sector selling agriculture inputs, At least 10tons of DAP per season sold		

2.6. Facilitate the establishment of private sector-led and/or community-based legume seed systems	2.6.1. By Q4 of years 1-4, sufficient legume foundation seed produced by private enterprises and/or government institutions	# of private enterprises & government institutions producing legume foundation seed in the target countries. Volume of legume foundation seed produced by private enterprises & government institutions in the target countries			1 private seed company and 1 government institution involved in foundation seed production; Seed co and RAB		
	2.6.2. By Q4 of years 1-4, sufficient quality legume seed available to farming communities	Volume of quality legume seed available to target farming communities in the target countries					
2.7. Engage agro-dealer and other last-mile delivery networks in supplying legume agro-inputs	2.7.1. By Q4 of years 1-2, a minimum number of agro-dealers and other delivery network partners trained in the storage, handling, and use of inoculants	# of agro dealers & other delivery network partners trained in storage, handling and use of inoculants		50 agro dealers trained	50 agro dealers trained	100	
	2.7.2. By Q4 of years 2-5, agro-dealer and other last-mile delivery networks engaged in the commercial supply to farmers of agro-inputs, including inoculants	# of agro dealers & other last mile delivery networks in full business of supplying agro-inputs to target farmers including inoculants			1,500 agro dealers selling agriculture inputs countrywide but inoculants are not yet part of inputs sold		

2.8. Establish agri-business clusters around legume marketing and value addition	2.8.1. By Q4 of years 1-4, opportunities for collective marketing and value addition for smallholder farmer associations identified	# of collective marketing and value addition opportunities identified for smallholder farmer associations			1 group of 43 farmers bulking Soyabean and Bean working with COCOF in Kamonyi 1 farmer cooperative in Bugesera bulked 94 tons of bush bean 1 private company established in Kigali is about to start processing common bean and packaging pre cooked bean		
Objective 3							
3.1. Sensitize partners, farmer associations, and farming households and mainstream approaches to address gender inequity in farming and decision-making	3.1. Female farmers increasingly lead N2Africa promotion and dissemination activities	# Female farmers leading N2Africa promotion and dissemination activities					
	3.1.1. By Q4 of years 1-4, all partners and households engaged in N2Africa activities that address gender inequity	# of Partner agreements with gender specific activities					
3.2. Assess business opportunities for	3.2.1. By Q4 of years 2-4, business opportunities for	# business opportunities identified			2 women cooperatives		

women in agro-input supply and legume marketing and value addition opportunities	women identified	with focus on women			from Gakenke trained in marketing and business plan to start bulking bean grain and sell at local market 3 women running a business on soyabean products		
	3.2.2. By Q4 of years 4-5, at least 2 businesses led by women established per country	# of businesses established and led by women & # of women involved in the businesses established					
3.6. Develop legume product-enriched food baskets for smallholder families	3.6.1 Food consumption and diversity scoped for at least 2 Core Countries	Food consumption and diversity patterns for women and children identified					
Objective 4							
4.8. Develop standard operating procedures for the production, quality control and application of rhizobium inoculants	4.8.1. By Q4 of year 2, standard operating procedures of quality control (storage), product registration and application of inoculants used by inoculant producers and retailers	# of inoculant producers and retailers (public private suppliers) using standard operating procedures			1 inoculants producer, RAB laboratory which combines production and quality control and selling		

					inoculants		

3 Lessons learned and decisions made

- There is a need to give farmers clear extension messages in the case of new technologies and follow up to see if the message sent is well understood and put in practice. Farmers were trained by the project partners in use of new improve varieties of legumes, with clear extension messages to test in their own field.

Illustration: a farmer harvested 90 pods from 1 plant of climbing beans; his neighbors were so amazed and asked seed of that variety. This happened in Ramba sector, Western province of Ngororero district where EPR introduced a new variety of Climbing bean RWV1129 promoted by N2Africa in Northern province in the districts of Burera, Gakenke and Musanze. There was a positive effect of seed inoculation coupled with the use of DAP fertilizer and organic manure.

- From open-days participated, demonstration plots, and training sessions on legumes cultivation, many people are still interested to interact with N2Africa technologies, especially the use of inoculants.
- Farmers' experience in farming should be considered when working with them, planting time. For example, farmers requested seed during dry period, and insisted to get them at that particular time those who planted at that time got better results. In a dry areas such as Bugesera, Eastern Province, farmers plant before the rains come back. The first rains find seed in the soil, and germination follows very quickly. The challenge is with the practice of legume seed inoculation, we cannot promote planting seed in dry soil. Instead farmers can receive seed and inoculants before the season start, to guarantee them in the availability of seed and other inputs before the season starts.
- Bringing on board other stakeholders in the legume value chain is encouraged. Beans used to be solely a food crop; they have become a cash crop *par excellence*.
- With the venue of new performing varieties of soyabean, this crop is slowly replacing bean in terms of area cultivated and home consumption. This was observed in Kamonyi District, on marginal soils where soyabean produces better than bean. Also the sales price of soyabean grain at local market was better as compared to bean. There is a guaranteed market for soyabean, with no price fluctuation.
- Many people are interested in the use of inoculants on legumes; therefore RAB wants to concentrate efforts in quality control to avoid disappointing clients.
- Farmers who experienced the use of inoculants on legume crops recognized the importance of that input used jointly with less fertilizer and organic manure.
- New varieties of legumes performing have gained space in farming systems. For example one variety of bush bean RWR2245 has become so popular in areas where dissemination packages were distributed in the period 2010-2012 of the project. The same is true with Gasilida variety of climbing bean introduced in the dissemination packages distributed to more than five thousand beneficiaries.

4 Challenges encountered in implementation

- Scarcity of quality seeds of soyabean is a big challenge to farmers, who want to expand soyabean cultivation. The new varieties released are owned by a private company, which has made it a complicated business, with high prices not affordable to farmers.
- Climbing bean varieties require a lot of stakes, which is a big challenge to poor households, leading to low yield due to the use of inappropriate staking materials such as maize straw
- Lack of new strains of rhizobia for inoculants production, and lab equipment, which are disfunctional, technical expertise of technicians in the inoculants lab needs improvement.
- Lack of labor saving tools along the legume value chain: planting equipment, threshers, amongst others, especially for soyabean.
- Lack of communication skills and expertise to better document project's achievements. No network among project partners to exchange information on regular basis.
- Availability and accessibility of inoculants by farmers at grass roots level.
- Climate change effects, crop failure due to drought occurred before crop maturity last season, and delay of rains at the beginning of the current season 2016A.
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5 Opportunities identified

- Willingness of farmers to increase their production (kg/ha).
- Favorable agricultural policy to promote agriculture technologies at large scale.
- A private factory processing common beans (pre-cooked bean packaging) has been built near Kigali city, which will be a good opportunity for bean producers and consumers at national and regional level.
- Markets available for legume commodities through farmers' cooperatives, and the existence of processing factories.
- Many stakeholders involved in legumes value chains.

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 soyabeans, 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
29. Advanced technical skills in rhizobiology: East and Central African, West African and South African Hub
30. Memoranda of Understanding are formalized with key partners along the legume value chains in the impact zones
31. Existing rhizobiology laboratories upgraded
32. N2Africa Baseline report
33. N2Africa Annual country reports 2011

34. Facilitating large-scale dissemination of Biological Nitrogen Fixation
35. Dissemination tools produced
36. Linking legume farmers to markets
37. The role of AGRA and other partners in the project defined and co-funding/financing options for scale-up of inoculum (banks, AGRA, industry) identified
38. Progress Towards Achieving the Vision of Success of N2Africa
39. Quantifying the impact of the N2Africa project on Biological Nitrogen Fixation
40. Training agro-dealers in accessing, managing and distributing information on inoculant use
41. Opportunities for N2Africa in Ethiopia
42. N2Africa Project Progress Report Month 30
43. Review & Planning meeting Zimbabwe
44. Howard G. Buffett Foundation – N2Africa June 2012 Interim Report
45. Number of Extension Events Organized per Season per Country
46. N2Africa narrative reports Month 30
47. Background information on agronomy, farming systems and ongoing projects on grain legumes in Uganda
48. Opportunities for N2Africa in Tanzania
49. Background information on agronomy, farming systems and ongoing projects on grain legumes in Ethiopia
50. Special Events on the Role of Legumes in Household Nutrition and Value-Added Processing
51. Value chain analyses of grain legumes in N2Africa: Kenya, Rwanda, eastern DRC, Ghana, Nigeria, Mozambique, Malawi and Zimbabwe
52. Background information on agronomy, farming systems and ongoing projects on grain legumes in Tanzania
53. Nutritional benefits of legume consumption at household level in rural sub-Saharan Africa: Literature study
54. N2Africa Project Progress Report Month 42
55. Market Analysis of Inoculant Production and Use
56. Identified soyabean, common bean, cowpea and groundnut varieties with high Biological Nitrogen Fixation potential identified in N2Africa impact zones
57. A N2Africa universal logo representing inoculant quality assurance
58. M&E Workstream report
59. Improving legume inoculants and developing strategic alliances for their advancement
60. Rhizobium collection, testing and the identification of candidate elite strains
61. Evaluation of the progress made towards achieving the Vision of Success in N2Africa
62. Policy recommendation related to inoculant regulation and cross border trade
63. Satellite sites and activities in the impact zones of the N2Africa project
64. Linking communities to legume processing initiatives
65. Special events on the role of legumes in household nutrition and value-added processing
66. Media Events in the N2Africa project

67. Launch N2Africa Phase II – Report Uganda
68. Review of conditioning factors and constraints to legume adoption and their management in Phase II of N2Africa
69. Report on the milestones in the Supplementary N2Africa grant
70. N2Africa Phase II Launch in Tanzania
71. N2Africa Phase II 6 months report
72. Involvement of women in at least 50% of all farmer related activities
73. N2Africa Final Report of the First Phase: 2009-2013
74. Managing factors that affect the adoption of grain legumes in Uganda in the N2Africa project
75. Managing factors that affect the adoption of grain legumes in Ethiopia in the N2Africa project
76. Managing factors that affect the adoption of grain legumes in Tanzania in the N2Africa project
77. N2Africa Action Areas in Ethiopia, Ghana, Nigeria, Tanzania and Uganda in 2014
78. N2Africa Annual report Phase II Year 1
79. N2Africa: Taking Stock and Moving Forward. Workshop report
80. N2Africa Kenya Country Report 2015
81. N2Africa Annual Report 2015
82. Value Chain Analysis of Grain Legumes in Borno State, Nigeria
83. Baseline report Borno State
84. N2Africa Annual Report 2015 DR Congo
85. N2Africa Annual Report 2015 Rwanda

Partners involved in the N2Africa project

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