Results from the N2Africa baseline survey in East and Central Africa

The N2Africa baseline survey targeting 1200 households in Kenya, Rwanda and DR Congo has been completed and analysed. A comprehensive report on the results will soon be published on the N2Africa website. Here are already some results.

Farmers' choice of legumes
Common (bush) bean and climbing bean (in high altitude areas) were the most popular grain legumes in all three countries (Table 1). Common bean was often grown in combination with maize (Kenya) or cassava (DRC). Climbing bean was usually cultivated as a sole crop. The adoption of soybean and groundnut by farmers varied a lot between regions within the countries, depending on altitude, rainfall, and other agro-ecological and market conditions. Cowpea was only commonly grown in Kenya. Minor legume crops were bambara nut, green gram, garden pea and fodder legumes.

Table 1. Legumes GROWN by households in regions of DR Congo, Kenya and Rwanda (% of households growing the relevant legume).

| Legume type | DR Congo | | Kenya | | Rwanda | |
	North of Bukavu	South of Bukavu	Kanyamkago area	Kisumu area	Northern Province	Eastern & Southern Province
Common bean	86	79	92	88	32	93
Climbing bean	39	46	11	61	77	15
Soybean	26	6	16	24	4	37
Groundnut	23	5	47	34	0	43
Cowpea	1	1	43	62	0	0
Bambara nut	2	0	5	0	0	0
Garden pea	0	0	0	0	3	7
Green gram	0	0	0	10	0	0
Fodder legume	1	1	0	0	2	4

Use of inputs in legumes
Organic inputs were widely used On legume crops (Table 2). The organic inputs consisted of manure, compost, household waste and ashes. The vast majority of households had access to manure through the livestock they took care of. Cattle was the most important livestock type in Kenya and Rwanda, while small livestock species like goats, guinea pigs and chicken were more dominant in DRC. Only in Kenya, the use of mineral fertilizer, especially DAP, in legumes (often intercropped with maize) was common. None of the farmers in Rwanda and DRC and 1% of the farmers in Kenya applied inoculants RPIOR TO n2Africa starting activities. Given that soybean often gives a strong response to inoculant application in this region, the N2Africa project can contribute a lot to increasing yields by promoting the use of appropriate inoculants in soybean.

Table 2. Use of organic inputs and mineral fertilisers in legume crops (% of fields receiving the input).

| Legume type | DR Congo | | Kenya | | Rwanda | |
	Organic inputs	Mineral fertiliser	Organic inputs	Mineral fertiliser	Organic inputs	Mineral fertiliser
Common bean	92	0	23	51	72	2
Climbing bean	93	0	29	49	81	9
Soybean	84	0	22	46	78	5
Groundnut	74	0	7	33	41	1
Cowpea	100	0	15	49		

Sale of legume products
In all three countries, legume grains, especially beans, were a main component of the household nutrition. The products of the main grain legumes were also sold on local markets, but in most cases less than half the growers sold produce of the legumes they cultivated (Table 3). Thus, most of the legumes were cultivated for home consumption.

Table 3. Sale of legume products (% of growers involved in the sale of the relevant legume).

	DR Congo	Kenya	Rwanda
Common bean	22	34	40
Climbing bean	29	24	7
Soybean	43	32	38
Groundnut	56	47	31
Cowpea		33	

Baseline in other countries
The baseline data from Ghana and Malawi are currently being analysed. In Nigeria, Mozambique and Zimbabwe, the data have been collected and is currently being entered in electronic files. In many countries, the baseline survey data will be complemented by farm characterisations, providing detailed information on yields, areas, farm lay-out, resource flows and farmers' production orientation, allowing the N2Africa team to identify niches for N2Africa's legume technologies.

Linus Franke