

Ethiopia Legume Choice intervention activities current status highlights

Problems:

- Degraded soil, lack of improved seeds of any legume crops, highland legume disease, and knowledge of legume production are among the important constraining factors of legume intensification in the farming community.

Intervention packages:

- Cluster legume seed production with the following packages: Training, row planting, Bio-fertilizer, recommended rate of DAP, and recommended cultural practices.

A field trip have been conducted from 16th to 23rd of September, 2015 to Diga and Jeldu LC implementation sites. Partner institution researchers have been participated on the trip. The purpose of the trip is to conduct farmer's field exchange visit across the four implementation sites.

Lalisa-Dimtu implementation site:

- Improved varieties seeds of Haricot bean and Soybean were delivered for 30 farmers each together with bio-fertilizer. All farmers were supplied with seeds that is enough for ¼ ha of land.
- Training on seed production methods were given to the participating farmers
- A farmer's field day in which only participant farmers, development agents, and woreda agriculture bureau experts were took a part have been organized.
- It was very clear that farmers were differently implemented the intervention activities.
- Even though they were strictly informed to use recommended rate of chemical fertilizer in supplement to the delivered bio-fertilizer at planting, it was observed that most farmers were not applied it, or some other farmers were used full recommendation of chemical fertilizer or partial recommendation and/or with and without chemical fertilizer on the same plot.
- Few farmers were planted the seed by broadcasting
- Performance of the intervention activities were not uniform across farmers. This may be linked to the differences in application of production packages, difference in resource endowment, and/or differences in soil fertility status among farmers.
- Farmers were visited both fields with good and poor performance intervention activities and learned from each other
- Bird attack during the first 1 or 2 weeks after emergence of soybean were made soybean fields sparsely populated.

- *In most cases, late planted haricot bean fields were better performed compared to early planted once, therefore, it has been raised that Bako research center must consider to revise days to planting for haricot bean, and seeds of improved ground nut varieties must be seen to be introduced in the next season, because ground nut is well performing in the area.*
- Generally, apart from the environmental impact including the highly degraded soil and the rainfall distribution problem of the season, farmers were convinced that they were not applied what they had been trained and agreed to learn from their current mistakes for the future.

[Pictures from Lalisa-Dimtu](#)



- ✚ Above two photos: Sparsely populated soybean plants due to bird attack at seedling stage, but with very good tillers.
- ✚ Bottom right: a row planted haricot bean variety with and without application of chemical fertilizer on the same farmer field, and clearly demonstrating two distinct performances.
- ✚ Bottom left: a haricot bean field with relatively good performance.

Fromsa, Kolu-Galan and Chillanko implementation sites

- These three sites are mid-to-highland agro-ecology sites ranging from around 2100 to above 3000 meters above sea level, and are receiving good distribution of rain fall.
- A total of 20 farmers at Fromsa and 30 farmers each at Kolu-Galan and Chillanko were participated on faba bean and field pea improved variety seed production. Each farmers were delivered with improved faba bean and field pea seeds that is enough to plant ¼ ha of land.
- Bio-fertilizer (bacterial inoculum) has been given for each farmer to enhance effective atmospheric nitrogen fixation by the crops.
- Participation of woman farmers were high at Fromsa compared to other implementation sites.
- At Fromsa & Kolu-Galan, almost all farmers were planted the intervention activities in clustered form and applied the packages according to the recommendation, whereas at Chillanko, nearly half of them were used to plant by broadcasting.
- Regardless of the differences among farmers in the same sites, the current performance of the activities were generally very good at all the three sites.
- Farmer's field exchange visits were conducted at all sites and they were learned from each other.
- Reflections from both woreda office experts and farmers at both sites revealed that they are very happy to see such good performances of legume crops on their fields, and agreed to rotate with other crops in the coming years.

Pictures from Fromsa field sites





- ✚ Above left: a woman faba bean farmer explaining how she managed to do her faba bean field
- ✚ Above right: a well performing purple and white flowered field pea varieties planted side by side, and owned by woman farmer.
- ✚ Bottom right: a faba bean farmer explaining every steps he has applied cultivate this faba bean field.

[Pictures from Kolu-Galan and Chillanko](#)



- ✚ Above: good performed row planted faba bean variety in Kolu-Galan (left), and Chillanko (right)
- ✚ Bottom left: a field pea variety with very good performance at Kolu-Galan, and
- ✚ Bottom right: good performed field pea and faba bean varieties planted side by side by broad casting at Chillanko.

Plan

- ➡ Farmer's field day in which both participating and non-participating farmers, researchers, woreda experts, media communication peoples will participate, is expected to be conducted from mid-October to early November.
- ➡ Data from sample plants will be conducted at maturity.