

Africa RISING in the Ethiopian Highlands

Participatory variety selection and scaling: Cool-season food legumes

Seid Ahmed, Negussie Tadesse and Yetsedaw Aynewa

Background and Justification

- Wheat-based system was becoming unsustainable due to poor soil fertility, diseases and weeds
 - High yield gap
 - Low adoption rate
 - Low area coverage by improved cereal varieties
 - Weak seed production and delivery system
- Introduction of high yielding and disease resistant food legumes improves system sustainability, food, feed and incomes of farmers

Objectives

- To identify high yielding and farmer preferred varieties for future scaling out.
- To develop farmers on decentralized seed production and knowledge transfer system.
- To identify innovative cropping systems combining high land and minimum negative impact on the environment.
- To build the capacity of farmers and partners

Achievements

- Cultivars with wide adaption
 - Faba bean cv. Dosh
 - Lentil cv. Derash
- Cultivars with specific adaption
 - Field pea cultivar Burkitu
 - Lentil cv. Alemaya
- Farmers selected improved crop technologies led to narrowing grain and biomass yield gaps
- 4.3t of faba bean cv. Gebelcho was produced through community seed production (Table 1)
- Post harvest handling of food legumes and storage bags distributed
- Integrated management of the new faba bean disease in central and norther highlands

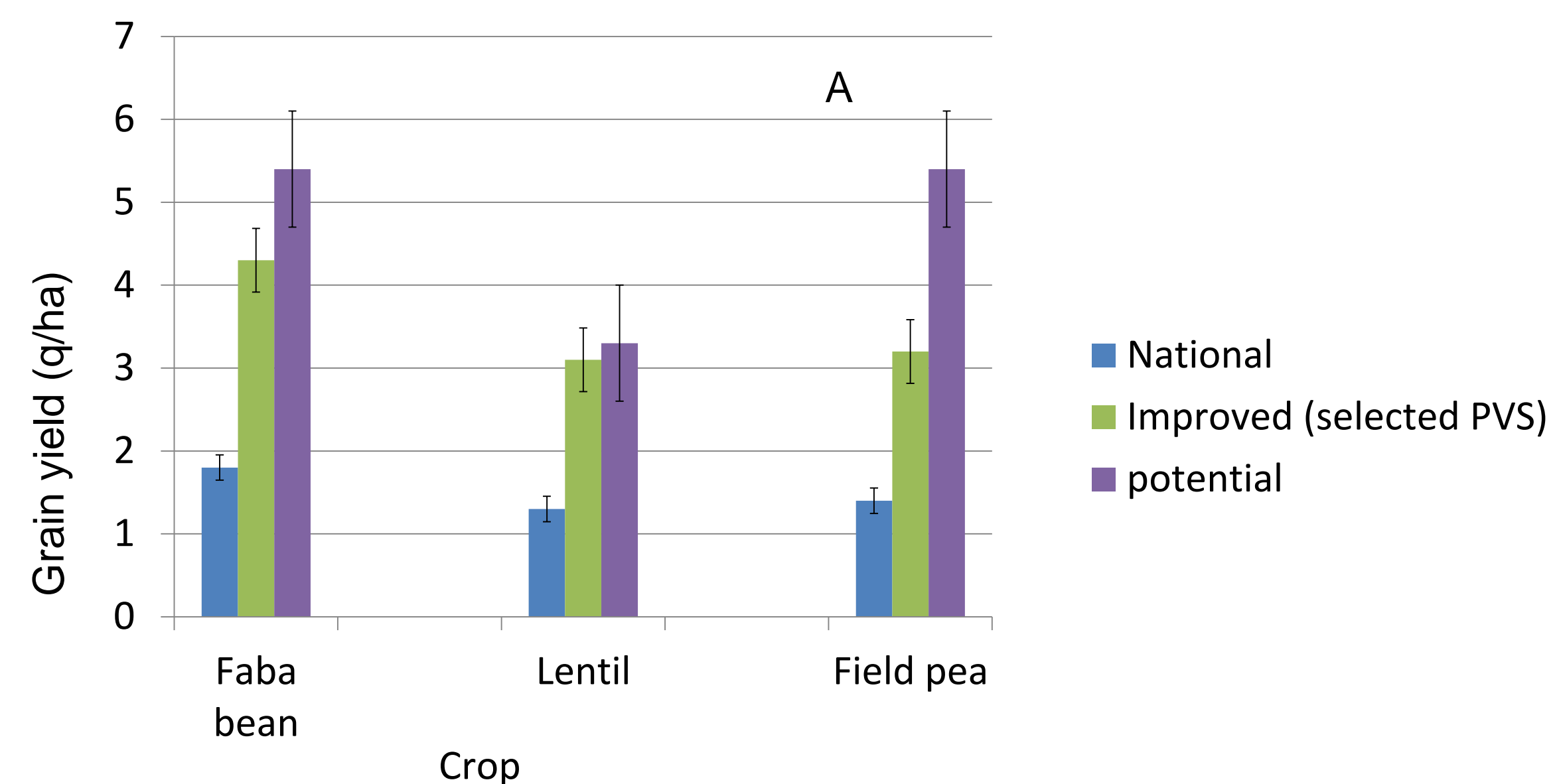
Scaling of farmers preferred technologies

- Faba bean cvs Dosh and Gebelcho
- Field pea Burkitu
- Lentil Derash

Capacity building

Field days were organized in each cropping season and many stakeholders participated

- Farmers
- NARS- SARC participants
- BOA - participants
- MW university participants
- CGIAR centers, ICRISAT, CIP, ICRAF, ILRI and ICARDA
- Training on postharvest management was given to farmers

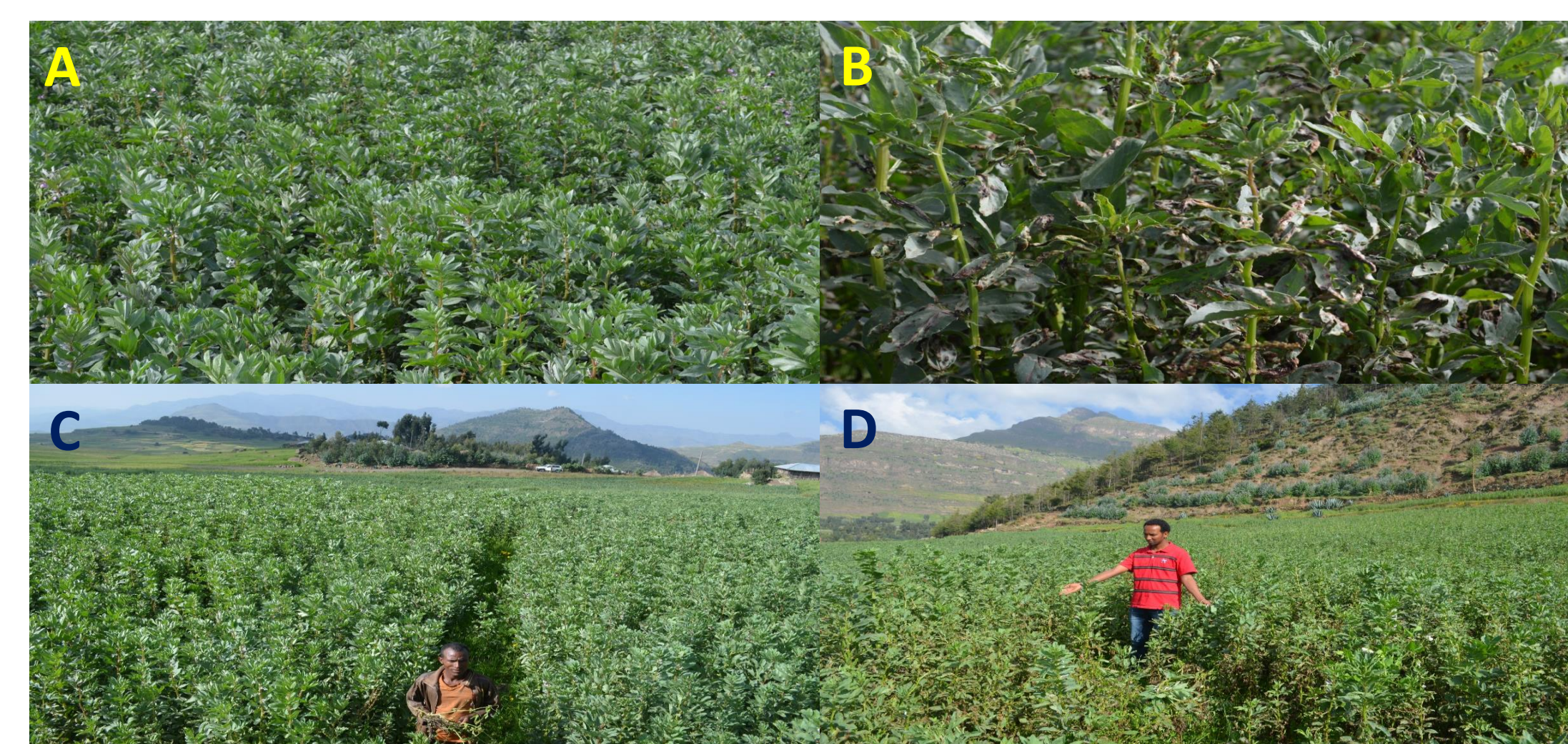


Future plans

- Identify more development partners for wider scaling and engaging them in planning through successive stakeholders meetings
- Use of Belg season for multiplication of farmers preferred varieties-
- Capacity building (training) on seed system, marketing and processing
- More work on PVS and faba bean foot rot management

Potential partners for phase II

- Government extension offices
- Local processors
- Seed Producers and Marketing Cooperatives Unions (Tegulet, Sinana, Endamehoni & Lemo)
- Seed enterprises
- NARS



Faba bean seed multiplication at Tsehibet Kebele

Scaling out to date

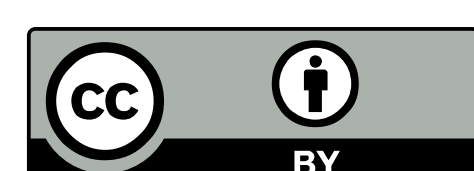
Table 1. Scaling of field pea, lentil and faba bean in Sinana, 2015/16 cropping season

SN	Crop/input	Variety	Quantity (q)	Farmers (N)	Area (ha)	Expected yield (q)
1	Field pea	Burkitu	4	12	3	45
2	Lentil	Derash	2	10	2.5	38
3	Faba bean	Gebelcho	9	18	4.5	90

Core partners



We thank farmers and local partners in Africa RISING sites for their support



This poster is copyrighted by the International Livestock Research Institute (ILRI). It is licensed for use under the Creative Commons Attribution 4.0 International Licence. November 2016

