Importance of beans in the region
Bean is an important crop for food/nutrition security, cash income and agro ecosystem improvement in Malawi, Mozambique and Tanzania. As a short-duration crop, it plays a major role in shortening farmers’ hunger periods and for providing quick cash. In the recent years, bean consumption has been on the rise. However, overall production and yield levels at the farm level have remained relatively low and some cases they have even decreased (see Table 1).

Table 1: Bean yields, overall production, and consumption in Malawi, Mozambique and Tanzania

<table>
<thead>
<tr>
<th>Country</th>
<th>Yields (kg/ha)</th>
<th>Production in 10^3 tonnes</th>
<th>Consumption (kg per capita)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1990</td>
<td>2005</td>
<td>% change</td>
</tr>
<tr>
<td>Malawi</td>
<td>566.7</td>
<td>381</td>
<td>-33</td>
</tr>
<tr>
<td>Mozambique</td>
<td>435</td>
<td>587</td>
<td>+35</td>
</tr>
<tr>
<td>Tanzania</td>
<td>610</td>
<td>763</td>
<td>+25</td>
</tr>
</tbody>
</table>

Challenge
To shift from isolated successful cases to wider utilization of improved crop varieties is hampered by inadequate exposure of farmers (small and large), consumers, traders, other rural service providers to potentially promising varieties and unavailability or inaccessibility of their seeds.

Objectives of the Project
- To identify/verify farmer preferred bean varieties in relation to diverse agro-ecological and socio-economic criteria
- To enhance skills and knowledge of partners on various aspects, such as Participatory Variety Selection (PVS) and decentralized seed systems (including markets)
- To develop impact-oriented bean seed production and delivery systems of preferred varieties serving a range of range of users

Activities
1. To enhance partners/farmers’ skills and knowledge in PVS approaches and methods to partners (40 partner organizations).
2. To establish bean PVS trials and demonstrations to exposure farmers and rural service providers to a range of promising genotypes and to receive their in-depth feedback.
3. To assess existing seed systems/seed diffusion channels and seed acquisition means available or accessible to farmers and use the most efficient ones to disseminate preferred varieties
4. To multiply foundation seeds of preferred varieties and avail to partners to be used as base for testing subsequent seed production options.
5. To compare and contrast the cost-effectiveness of seed production and supply options and their seed quality.
6. To enhance farmers/partners’ skills in pre and post-harvest bean management
7. Develop/Adapt and produce resource manuals on how to conduct PVS, on small-scale seed production, on pre- and post-harvest management of beans, and variety promotional materials to a large range of partners and stakeholders in three countries.

Expected output
1. Existing channels for seed production and delivery rigorously characterized taking into consideration farming heterogeneity (e.g. gender, wealth and production orientation)
2. Foundation seeds of the preferred bean varieties/lines availed in increased amounts for decentralized farmer – seed producers and large-scale seed producers.
3. More targeted options for seed production will be identified so as to link to varied intermediate and end-user production groups.
4. Adapted training manuals and variety promotional material availed on large-scale and in multiple (local) languages.
5. Increased access to preferred bean varieties by a broad range of farmers (rich, poor, men and women) in large numbers (300,000) in the target regions.
6. Project experiences (failures/success) in PVS and seed systems documented for wider use and replication.

Enhancing skills, knowledge and practice in both PVS and seed systems for project partners including farmers

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