Tigray Region and North Wollo Zone (in Amhara Region) are among the most drought-prone areas of Ethiopia, and a proportion of households in these areas depend on food and cash assistance for their survival. Wild edible cactus grows abundantly in these parts of the country, and can be used to address human and livestock needs. However, the development and utilization of this crop was limited by inadequate management, and communities’ lack of awareness of how cactus dishes could be prepared. Unlike cactus, the presence of fruit trees was very rare in both areas, even though they had great potential to produce various fruits. The project aimed to address problems that constrained the development of fruit and the use of cactus in these areas, in order to improve food security, boost incomes and generate employment.

WHAT DID THE PROJECT DO?
Fruit production and productivity were greatly enhanced in the two regions, as a result of the project interventions. These included the strengthening of existing fruit nurseries within 24 woredas (districts), through the provision of infrastructure and material support; as well as the establishment of new nurseries. The capacities of technical staff and local human resources improved significantly through the many training courses and study tours that were organized. In addition, six reservoirs were constructed in selected sites, in order to avoid water shortages. A considerable amount of technical assistance and training was also provided for cactus production and management, with excellent results. The sustainability of the project interventions was demonstrated by the results achieved, particularly the fruit component, as the beneficiaries have continued to graft, grow and sell the fruit that was introduced during the project.

IMPACT
Enhanced tropical, subtropical and temperate fruit production, together with the promotion and management of the cactus pear contributed to improving the nutritional status and livelihoods of farming communities across 24 woredas (districts) in Tigray and North Wollo. Significant numbers of farmers are now earning a considerable income from selling the fruit they grow in their nurseries and backyards.

KEY FACTS

<table>
<thead>
<tr>
<th>Contribution</th>
<th>USD 3 275 000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>July 2007 – December 2016</td>
</tr>
<tr>
<td>Resource Partners</td>
<td>Government of Italy</td>
</tr>
<tr>
<td>Partners</td>
<td>Ministry of Agriculture and Natural Resources, Addis Ababa; Tigray National Regional State Bureau of Agriculture; North Wollo Zonal Department of Agriculture; University of Mekelle</td>
</tr>
<tr>
<td>Beneficiaries</td>
<td>Fruit growers, vulnerable households, consumers, private commercial sector, national research and development institutions, Tigray Bureau of Agriculture and Rural Development officers and technicians</td>
</tr>
</tbody>
</table>
ACTIVITIES

- 20 fruit nurseries in the two regions strengthened, and six nurseries newly established.
- Wide range of fruit-trees introduced to the nurseries from locations within the country and abroad.
- Papaya seed, guava seedlings and banana suckers distributed to 2,000 farmers.
- 180 private fruit-tree nurseries set up (65 in Tigray, and 115 in Amhara).
- Five cactus collection blocks established, where 42 cultivars of the cactus were classified.
- 447 households trained on cactus management and silage preparation from cactus, together with conservation practices.
- Training sessions on the preparation of different types of food from young cactus cladodes and fruits organized for 12,763 trainees.
- Seven Training of Trainers held for regional, zonal and woreda Tigray Bureau of Agriculture and Rural Development experts, who then provided training on fruit management techniques to approximately 30,000 farmers across the participating woredas.
- Study tours and learning visits conducted, including visits to Mexico and Italy.
- 180 farmers supported through specialized training in nursery management, and the provision of required inputs for the establishment of private fruit nurseries.

Project Code
FAO: GCP/ETH/073/ITA

Project Title
Strengthening of fruit and cactus pear production in Tigray and North Wollo

Contacts
FAO Office in Ethiopia
FAO-ET@fao.org

Alison Hodder (Lead Technical Officer)
Alison.Hodder@fao.org