<table>
<thead>
<tr>
<th><strong>Locations</strong></th>
<th>Australia, Pakistan</th>
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<tbody>
<tr>
<td><strong>Dates</strong></td>
<td>16/02/2018 - 31/12/2022</td>
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<tr>
<td><strong>Summary</strong></td>
<td>Small scale vegetable farmers in Pakistan encounter a number of issues that compromise their sustainable livelihoods; particularly for women and youth. Through the project, an alliance of selected organizations is aiming to improve the livelihoods of rural communities in Sindh and Punjab through strengthening selected horticultural value chains and promoting sustainable production and marketing opportunities.</td>
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The problem

Over 60% of Pakistan’s population of around 208 million live in rural areas where poverty in all its forms is high (nearly 55%) compared to urban areas (less than 10%). The vast majority of the country’s rural poor depend on subsistence agriculture, either as farmers, or as farm labourers and service providers. The vast majority of these farmers operate family smallholdings – comprising less than five acres of land – and for many of these, vegetables are a major, but highly variable, source of household income. Women and the young who are attempting to make their living through vegetable farming and trade are especially affected.

A needs assessment was conducted in Sindh and Punjab where three major vegetables (onion, potato, tomato) are grown. It showed that supplying consistently good quantity vegetables to the market remains challenging. Structural constraints such as poor storage, handling, transportation and processing, are big issues. We found that these, coupled with production constraints (such as seed quality, price of inputs, pests and diseases, an absence of best practices for harvest, postharvest and marketing management) and economic constraints (such as the mechanism to access capital, credit, tenancy or land) means that consumers are not being supplied with enough good quality vegetables. As a result, these constraints lead to inefficient target value chains while minimizing profitability.

Overarching socio-cultural factors such as the lack of knowledge to address these constraints (including inadequate extension services) and restricted opportunities for women and youth, also act as barriers to working collaboratively within some communities.
To address these constraints, a holistic and multidisciplinary approach has been
developed that will look at the entire value chain to help improve the livelihoods
of the target communities in Sindh and Punjab. This will be achieved by
strengthening horticultural value chains and by promoting sustainable production
and market opportunities.

Specifically, the project objectives are to:

- Identify opportunities for increasing community engagement and
developing rural entrepreneurship
- Establish sustainable production and marketing opportunities for small
scale vegetable farmers and traders
- Test and develop technical innovations for selected vegetables value
chains
- Expand improvements in vegetable value chains, sustain and maximize
any community benefits

The project team is comprised of subject specialists and experts from all areas
of the value chains (social science, production, postharvest handling, value-
added product development, marketing and capacity building) and a
comprehensive work plan is being developed on a yearly basis whereby the
experts test and make recommendations to farmers on techniques and
technologies. Participatory action research will be applied to study the issues
and barriers in the target vegetable value chains through the lens of customers’
preferences.

Our value chain, family-style approach to this project will not only benefit the
community households working directly with us, but also the stakeholders
involved in these and other commodity value chains. Partnerships with public
and commercial institutions throughout testing and the application of value chain
interventions are vital to sustain any future impacts.

Various engagement strategies will be adopted to build the capacity of
smallholder farmers of tomato, potato and onion value chains to ensure best
practices of production, postharvest and marketing are followed to improve the
quality and yield of their produce which will, in turn, attract better prices from the
markets and, ultimately, improve their livelihoods.
Results so far

Focused on social science, this horticulture value chain project is taking place at six target sites in two provinces of Pakistan. Nine subcontracts with in-country and international partners who help to implement the project have been successfully established.

The outcomes of the project in 2020-21 demonstrated that the value chain approach can deliver community-wide benefits to smallholder farmers, both male and female, and their families. The interventions introduced by the project and adopted by farmers have resulted in a significant increase in crop yield and have improved production by 18%, 23%, and 20% for tomato, onion and potato, respectively, as well as quality. Meanwhile, the consignments of tomato, onion and potato also proved that interventions can bring a significant increase in growth profit of 133%, 318% and 121% for tomato, onion and potato, respectively.

The value chain approach, facilitated by participatory action training and supported by an integrated multi-disciplinary team, not only improved the efficiency of the value chain through improving quality and reducing wastage, but also strengthened the value chain through improving relationships between farmers and customers.

Women's engagement in value chain activities has been significantly improved. Through value chain analysis, the project team has identified activities for the involvement of women in creating market value along the chain. These involve tomato nursery production, potato seed sorting and treatment and onion stop irrigation (20 days before harvesting), curing for two weeks, proper cutting, sorting and grading and marketing best practices. Through the adoption of the ‘whole family’ approach, the number of females participating in nursery production, potato seed sorting and treatment and onion postharvest activities has increased significantly. Onion farmers were willing to pay women labourers 20% more for onion cutting, sorting and grading. The success of this approach was also demonstrated by the increase in the participation of females in training activities and field days.

During 2020-21, the project implemented five field days and 17 trainings. As a result, 501 farmers, including women, men and youth, were reached. 27 men and 12 female researchers, development professionals, extensions, social mobilizers from 15 stakeholders and institutions were engaged in the project activities.

Future plan

For the 2021-22 season, project planning for tomato, potato and onion value chains will continue. The evaluation of the interventions of tomato, potato and onion value chains have also started.

Donors

Australian Centre for International Agricultural Research (ACIAR)

Partners

Department of Agriculture Extension Sindh, Pakistan, Department of Agriculture Extension Punjab, Pakistan, Agriculture Research Sindh, Pakistan, National Agricultural Research Centre, Pakistan, Sindh Agriculture University, Tandojam, Pakistan, University of Agriculture Faisalabad, Pakistan, Women Agriculture Development Organization, Pakistan, Engro Foundation, Pakistan, The University of Queensland, Australia

CABI Project Manager

Muhammad Asif
https://www.cabi.org/what-we-do/cabi-projects/