### STRENGTHENING VEGETABLE VALUE CHAINS IN PAKISTAN

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<tr>
<th>Locations</th>
<th>Australia, Pakistan</th>
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<td>Dates</td>
<td>16/02/2018 - 31/12/2022</td>
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**Summary**

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 aimed to improve the livelihoods of rural communities in Sindh and Punjab by strengthening selected horticultural value chains and promoting sustainable production and marketing opportunities.

**The problem**

The production and marketing of vegetables is an important component of rural industry in Pakistan and provides opportunities for improving the economic well-being and nutritional status of those living in poverty. Up to nine million tonnes of vegetables are grown annually on around 630,000 ha, with Punjab and Sindh accounting for 70% and 13% of production, respectively.
The vast majority of farmers, women and young included, 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.

The target beneficiary groups of this project were the rural poor, particularly women and youth, who are disadvantaged and are unable to participate effectively in existing vegetable value chains, owing to constraints.

These constraints include a lack of standardized production technologies, the absence of postharvest handling infrastructure and protocols, a lack of awareness of marketing options, obstacles to financial support, technical and business knowledge and various social and cultural barriers within some communities.

The aim of this project was to strengthen the value chains of three target vegetable crops in Pakistan (onions, potatoes and tomatoes) using a community-based approach. By building the capacity of participants in these value chains, including farming families, traders, and intermediaries, the project sought to improve household incomes and livelihoods of resource-poor communities in a sustainable way. The partnerships established in the project will enable project outcomes to be scaled out after its conclusion.

The project was structured around four principal objectives with a focus on smallholder women, men and youth and associated communities in Sindh and Punjab:

1. Identify opportunities for increasing community engagement and developing rural entrepreneurism
2. Establish sustainable production and marketing opportunities for small-scale vegetable farmers and traders
3. Test and develop technical innovations for selected vegetable value chains
4. Scale-out improvements in vegetable value chains, sustain and maximize any community benefits

Throughout the project, a value chain theory combined with participatory and ‘whole family’ approaches was applied to local rural vegetable communities.

The value chain approach focused on creating consumer value by introducing interventions to improve value chain responsiveness, productivity and efficiency. The participatory approach ensured chain members, particularly farmers, understood the rationales behind the interventions proposed and were actively involved in making decisions. The whole family approach, with the farmer ‘leadership approach’, was applied for gender and youth inclusion whereby information to all family members, irrespective of their role, was shared.

A multi-disciplinary facilitation team (research officers, women social mobilizers and partners) played a vital role to deliver all three approaches at project sites.

Various engagement strategies were adopted to build the capacity of smallholder farmers of the key crops to ensure best practices of production, postharvest and marketing with the aim to improve quality and yields, attract better market prices and ultimately improve livelihoods.

The outcomes of the project demonstrated that both the value chain and ‘whole family’ approaches are effective and that gender mainstreaming is possible in a sensitive socio-cultural environment.

The interventions introduced by the project and adopted by farmers have resulted in significant increases in yields and gross profits and improved quality
across each key crop: onions, tomatoes and potatoes. As a result of these improvements, the income of smallholder farmers and their families has been improved. Nursery and value-addition enterprises also experienced increased household incomes. Average increases in profitability over traditional practices totaled 136% for onions, 140% for potatoes and 60% for tomatoes.

Other project highlights include:

- Participatory farmers (women, men and youth) now understand, create and deliver customer value
- Farmers are in a better position to negotiate with buyers and can deliver the quality required
- Farmers take a market-led approach rather than production-led
- Farmers are transferring their skills and knowledge to other village farmers
- Provincial Agri Extension (Punjab and Sindh) has been trained and hope to scale out project approaches
- 37 extension officers (29 male, 8 female) participated in project activities, developing their capacity on the value chain approach
- The shelf life and marketability of onions have improved
- A low-cost, local media for healthy tomato seedlings has been developed
- A potato seed treatment to reduce scab disease has enhanced opportunities for premium buyers
- Participatory farmer training sessions across three crops and value addition have been conducted
- Weekly and monthly meetings with the ACIAR team developed the capacity of the Pakistani team
- Teams from the University of Agriculture Faisalabad Horticulture and Marketing have submitted projects on the value chain approach for different crops to the Punjab Agricultural Research Board
- Sindh Agriculture University has developed the capacity of postgraduate research students.

Women's engagement in value chain activities has been significantly improved. Through the project, female participation in nursery enterprise, value addition, kitchen gardening, bulb cutting and grading and sorting has resulted in an increased interest from other females in the villages. Female farmers were also given a leadership role during 'best practice' training while youth were involved in record keeping.

The status of female farmers within their families and the community for crop production and market-related decisions has improved and daily wages and job opportunities for trained women labourers increased due to their adoption of best practice interventions.

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**Donors**

Australian Centre for International Agricultural Research (ACIAR)

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**Partners**

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

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