

Green Innovation Centres for the Agriculture and Food sector – India

Sowing innovations for a green future in the Indian potato, tomato, and apple value chain

The context

Roughly half of India's population is engaged in the agriculture and food sector. As there is great potential for growth, the Indian government has set itself an ambitious goal: 'Doubling Farmers Income by 2022' and establishing 10.000 Farmer Producer Organisations by 2024. As a result, farmers will have better collective strength for improved access to quality inputs and sales markets. Working in line with these initiatives, the Green Innovation Centre India aims at increasing the yield and income of small holder farmers as well as the turnover of rural enterprises. By addressing common challenges such as inadequate inputs, price volatilities, storage constraints, and the occurrence of pests and diseases, the project disseminates innovative solutions along the value chains of potato, tomato, and apple. Within the activities, a special focus is set on women and youth.

Our approach

- 1. From idea to innovation:** Viable innovations are identified in a participatory and decentralised way, e.g. in Farmer Field Schools.
- 2. Understanding innovations:** Relevant actors of the value chains are trained to implement the innovations.
- 3. Up-scaling innovations:** Interest groups, such as Farmer Producer Organisations, actively roll out innovations. These organisations undertake the purchase of inputs, take up joint marketing activities, but also negotiate with the government for structural changes in the marketing of agricultural products for their fellow farmers.
- 4. From innovation to mainstream:** Innovations are widely adopted by the target groups.

The project focuses primarily on the two extension modules *Renewable Energy and Energy efficiency* and *Natural Resource management*. In addition, measures for sustainable soil and water management and agroecological activities are actively promoted.

Project name	Green Innovation Centres for the Agriculture and Food Sector – India
Commissioned by	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (BMZ)
Project regions	<ul style="list-style-type: none"> ➤ Shimla and Kullu, Himachal Pradesh ➤ Aurangabad, Ahmednagar, and Pune in Maharashtra ➤ Chitradurga, Chikmagalur, and Hassan in Karnataka ➤ Chittoor in Andhra Pradesh
Lead executing agency	Indian Ministry of Agriculture and Farmers' Welfare (MoAFW)
Duration	Nov 2014 – March 2025

The project goals

- Training of 139,000 farmers on good agricultural practices to increase productivity and income by 30 %.
- Identifying business potentials along the value chains to create employment opportunities and support agripreneurs.
- Establishing sustainable economic relationships between farmers and off-takers.
- Promotion of women entrepreneurship through targeted training approaches.





The achievements

- More than 110,000 people participated in training activities, of which 29% were women and 38% were young people.
- 1,662 additional jobs were created, of which 810 (49%) are for women and 840 (51%) for young people.
- Development of an Entrepreneurship Programme in Maharashtra and Andhra Pradesh for 350 women to be agri-entrepreneurs across the value chain of local crops.
- Training of 1,000 women and youth in apple processing and local enterprise structure development.
- 96% of the 72 supported companies could improve 3 out of the five key figures: Income, reduced production costs, number of customers, investments, and business relationships.
- Improved local potato seed production and storage by providing seed and cooling facilities, as well as advisory services.
- Establishment of an MoU with the Indian fruit distribution company AllFresh, that secures the sale of 2,000 tons of apples for the farmer producer organisations.



Balrasahib Sawant is proud of his latest project: a cold storage in which he can store over 5.000 tonnes of potatoes. The 57-year-old is a potato trader from Peth, in the North of Pune, Maharashtra. Balrasahib supplies farmers with seed potatoes and also offers storage capacities for harvested potatoes.

Cold storage and post-harvest handling are crucial for potato farmers: *'The availability of good quality seeds is one of the big issues for growing potato in this region. We need local cold storage facilities in which we can store potatoes from seed to harvest. This allows for better quality and better prices. The newly established cold storage with technical support of the Green Innovation Centre was the first step'*, says Balrasahib.

'We had no previous experience in nursery management but purchased two acres of land to start our nursery business', tells Kalavathi from Rasamamudram, Andhra Pradesh. *'High-quality tomato seedlings are of utmost importance. The better the seedling, the better the crop and yield. Therefore, we set up model nurseries for tomato crops. The Green Innovation Centre gave us valuable technical guidance and provided inputs and working capital. One highlight was an exposure visit to the Indian Institute of Horticultural Research to learn about best practices for nurseries. The turnover of our nursery has increased by over 55 per cent between 2017 and May 2018. We are now a successful family business and there is a huge demand from farmers all around for our high quality and healthy tomato seedlings.'*



Published by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Registered offices Bonn and Eschborn, Germany
Green Innovation Centres for the Agriculture and Food Sector – India
No. 38/43, 1st floor, 10th A Main Road, 5th Cross, 1st Block, Jayangar, Bengaluru – 560 011
Phone +91 70 4204 5625
greeninnovationcentreindia@giz.de
bit.ly/GIC-India
Gerrit Qualitz

Project Coordinator
Author
As at
Lisa Schönberger
October 2021

On behalf of Federal Ministry for Economic Cooperation and Development (BMZ)

Division Special Initiative ONE WORLD – No Hunger

Address
BMZ Bonn
Dahlmannstraße 4
53113 Bonn, Germany
T +49 (0)228 99 5350
F +49 (0)228 5353500
poststelle@bmz.bund.de
www.bmz.de

BMZ Berlin
Stresemannstraße 93
10963 Berlin, Germany
T +49 (0)30 18 5350
F +49 (0)30 18 5352501

GIZ is responsible for the content of this publication.