

Green Innovation Centres for the Agriculture and Food Sector - India



Development Partnership with the Private Sector: Apple Value Chain Interventions for Development (AVID)

Context

Although India's agricultural sector is poised to provide enough food for its population of almost 1.3 billion people, undernourishment and malnutrition are still prevalent in many parts of the country. The reasons: Seasonally grown products cannot be stored and processed in sufficient quantities. The storage and processing of agricultural commodities cannot keep pace with the growing production. The objective of the Green Innovation Centres is to enhance the income of small farm operations and to expand employment in rural areas, promote basic and further training, as well as strengthen local markets. In India the Green Innovation Centre mainly promotes tomato and potato based value chains in selected districts in Karnataka, Maharashtra and Andhra Pradesh.

In addition a partnership of innovation aims at supporting traditional smallholder apple growers in the northern Indian states of Jammu&Kashmir and Himachal Pradesh. Over the last decade a trend in decreasing apple yields has been observed in these two primary production areas due to environmental changes reducing soil fertility, recurring diseases and information gaps on modern planting methods as well as production practices. Together with Bayer, the Sher-e-Kashmir University of Agricultural Sciences and Technology, University of Horticulture and Forestry, Solan and the Kullu fruit growers association (KPM), Green Innovation Centre India aims to improve quality, productivity and market access in order to increase income of farmers.

Partnership for innovation with Bayer

The partnership endeavors to assist farmers in the pristine valleys of Himachal Pradesh and Kashmir to protect their crops against the outbreak of diseases such as the scab fungal disease in Jammu&Kashmir and Marssonina or Alternaria leaf fall in Himachal Pradesh in an efficient way. With the help of automated weather stations installed in the orchards, weather conditions conducive for the outbreak of crop infections will be identified and alerts sent to the university scientists for further validation and analysis. Across demonstration farms in Himachal Pradesh good agricultural practices in apple cultivation are showcased to improve the quality of their product which will enhance their income opportunities.

Objectives of the partnership:

In total 13590 apple growers will be reached due to interventions and training on good agricultural practices until the end of 2018.

Volume:

ca. 906.208 €

Bayer: ca. *530.278 € (59%)

BMZ: ca. *375.930 € (41%)

Project duration: 01.09.2015 - 31.12.2018

*Budgeted, actual allocation and utilisation may differ.



Task Sharing

The Green Innovation Centre supports the provision of expertise, through regular trainings and other capacity development measures to the local growers organised as part of farmer clinics in Shimla and the Kullu fruit growers association. Bayer Crop Science contributes by providing support in the area of field and plant knowledge, manpower support, materials and logistics. Given the emphasis on the economic and ecological sustainability of the initiative, pesticide usage is maintained at a minimum. To ensure the safe application of pesticides safety kits are distributed. Local growers are taught through these interactions to pay special attention to product quality, safety, labels and proof

of origin and product neutrality principles. Community organizations participate and contribute land, space, water as well as incremental technical manpower. Sharing of expertise by the partners will benefit all value chain participants. Producers and growers will continue to benefit at the end of the cooperation from the localized institutional development to sustain an effective production and marketing ecosystem, as well as the capacity enhancement of the local organizations involved in the program.

Training modules

- Plant protection
- Application Technology and Safety: Safe use of pesticides
- Nutrition Management including soil and leaf sample collection
- Canopy Management

Adherence to specific standards

In line with relevant international conventions and agreements and EU regulations, specific restrictions with regard to procurement and use of agrochemical products apply. Bayer Crop Science along with GIZ India will closely monitor and inhibit the use of banned and unregistered products (fertilizer, crop protection). In instances where EU guidelines are stringent as compared to those in India, the former will apply. Bayer commits to follow the FAO\WHO International Code of Conduct on Pesticide Management. Non-genetically modified organism: The partnership excludes interventions associated with access to genetic resources for food and agriculture. No hybrids: The utilization of hybrids is not part of the apple production system and is thus excluded from the project.

Why do we need partnerships for innovation?

The challenge of feeding a growing world population can only be dealt with, if all stakeholders in society, including the private sector, are engaged in a common effort. The amounts needed for investments in a future-proof and sustainable agricultural sector are simply too high to be covered by public funds alone. Therefore, the German Federal Ministry uses its funds to attract private money for investments, always provided such measures contribute to the developmental goal of fighting hunger with clear benefits for smallholder farmers.

The specific aim of the Green Innovation Centres is to mobilize the knowledge of all stakeholders in German society and those of partner countries for developmental purposes. To this end, not only German but also local and international enterprises are involved in the establishment and implementation of initiatives curated by these innovation centres. All stakeholders take part in country workshops that facilitate exchanges on key approaches and cooperation projects.