



Science For A Better Life

Improving yields and quality through close cooperation



food chain partnership



How it all started

Tomatoes are an important crop in India. They are grown on a total of 905,000 hectares, with an average production of 19.10 million tonnes (mt)(source: NHB*). Tomatoes are cultivated all over India – the main growing areas are in the states of Maharashtra, Andhra Pradesh, Karnataka, Punjab and Gujarat. Although most of the tomatoes are produced for domestic consumption and processing, some are exported to the Gulf States. The tomatoes required for processing need to be of good quality, reasonably firm, free of cracks, and bright red in color with high dry matter content.

The partnership between Bayer CropScience and Hindustan Unilever began in 2012 with the aim to support smallholder tomato farmers in improving their productivity and quality of fresh produce; and thereby improving net returns from farming through implementation of good agricultural practices guided by the Unilever Sustainable Agricultural Code. As a key supplier partner for Unilever and thus an essential link in this Food Chain Partnership project, Varun Agro, being a key supplier partner of Unilever and therewith an essential link in this Food Chain Partnership project described its beginnings as follows: “As a trusted supplier of Unilever, we are always concerned about quality of tomatoes we process so as to ensure good quality of final product. In view of a global co-operation Bayer Crop Science was looped in by Unilever to play a role of supporting technology partner for tomato cultivation in this project.”

*NHB is the National Horticultural Board, India

What we aimed to achieve

This Food Chain Partnership project was set up with the following objectives:

- Adoption of good agricultural practices
- Training of all participating contract farmers
- High-quality production of tomatoes as per the specifications
- Improvement in yields



Who is involved

Roughly 2200 contract farmers growing tomatoes for Varun Agro, participated in this Food Chain Partnership project.

Varun Agro Processing foods pvt Ltd. is a leading processor of tomato paste and fruit pulps as well as a company driven by the desire to improve the overall quality and continuous supply of the tomatoes and other agricultural products.

Unilever is one of the world's largest fast-moving consumer goods (FMCG) companies. Its subsidiary Hindustan Unilever Ltd. is one of the largest food processing companies in India and their brand "Kissan" for jams and ketchups is one of the well-known names in Indian kitchens.

Bayer CropScience India played a key role with its expertise in the safe use and handling of chemical crop protection products(CPP), customized CPP schedules, identification of pests and diseases, their management and training in good agricultural and cultivation practices.



The integrated crop solution

To start with, four Bayer Labhsutra (“Much More”) plots were maintained to demonstrate to the contact farmers the benefits and return on investment of the Bayer solution compared to local farming practices. Subsequently, the Bayer CropScience technical team developed a single crop protection program. This program involved treatments of the following pests and diseases with specific crop protection products: sucking pests with Confidor®; caterpillars with Decis® 100; *heliopsis* with Fame®; white fly and red mites with Oberon®; *Alternaria*/leaf blight with Nativo®; and *alternaria/phytophthora* with Antracol®.

In all, 85 training programs were run on proper agronomic practices, effective nutrient management and quality improvement through disease and pest management, the safe use and handling of crop protection products, and good agricultural practices. A total of 2200 farmers attended these trainings, which were jointly conducted by Bayer CropScience, Unilever and the Varun Agro team in several sessions.

Further, it was of high importance to make sure the farmers are familiar with the safe and ethical use of crop protection products in line with label instructions and integrated pest management (IPM). In this context the farmers were encouraged to use pheromone traps and yellow sticky traps for the control of borers and sucking pests like thrips. The field teams regularly monitored the farmers’ fields for the development of pests and diseases and provided guidance to the growers. All the management practices of the farmers were recorded in the “Passport”, a tool developed by Bayer CropScience for record management and traceability.



What we achieved

This Food Chain Partnership proved to be a win-win situation for all those involved.

Tomato farmers:

- 15-20% increase in yields in a year-on-year comparison
- Higher quality produce resulting in higher returns
- 10-15% reduction in crop protection costs

Varun Agro:

- Increase in tomatoes processed from 45,000 mt in 2012-13 to 70,000 mt in 2013-14

Unilever:

- Better quality of tomato paste
- Healthy and nutritious food for consumers

Bayer CropScience:

- Contribution to the sustainable production of tomatoes

The key factors on which this success was based were the regular meetings with the Varun Agro contract farmers, on-going follow-up checks on the limited and safe use of CPPs, sharing any problems that cropped up and the practical solutions provided to overcome those problems.

Next steps

This Food Chain Partnership is continuing and the total acreage rose by 80% from 2013 to 2014. Unilever and Bayer CropScience are also extending their co-operation to other crops like gherkins, spices and fruits like guava.



left:
Yogesh Mohite
AGM – Food Chain Alliances of
Bayer CropScience Ltd., India

right:
Dr. Vijay Sachdeva
Procurement Manager – Supplier Development
(South Asia and Africa) of Hindustan Unilever Ltd.

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Consumers are becoming increasingly conscious of the need for healthy nutrition. Food Chain Partnerships help to supply consumers with high-quality fresh produce, which forms the basis of a healthy diet. But such partnerships can only succeed if they involve every player in the food chain – from the farmer and processor to the exporter or importer and retailer. Bayer CropScience has the global experience and cutting-edge expertise to create a successful partnership at every level.



Bayer CropScience

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