



Science For A Better Life



Environment-friendly,
safe, and sustainable
Basmati Rice production

food chain partnership



How it all started

India is the largest producer and exporter of Basmati rice. India exports 3.21 million metric tons of Basmati rice to Middle Eastern countries, Europe, as well as US and Canada. Although over the last few years, exports have been steadily growing, crop protection product residues in Basmati rice are becoming a more important issue and creating a challenge for Basmati exporters and the industry as a whole.

LT Foods, one of the largest Basmati exporters, is a household name in India through its “Daawat®” brand. Moreover, its US brand “Royal” stands for the high standards of quality and purity in international markets. LT Foods joined hands with Bayer CropScience in a Food Chain Partnership project for environment-friendly, safe, and sustainable Basmati rice production.



Who is involved

LT Foods Ltd. is a leading Indian Basmati processor and exporter. The company is mainly known for its high standards in hygiene, quality, and healthy food products. LT Foods has a strong global network in more than 50 countries across the globe. Daawat®, Royal, Devaaya, Heritage, and Chef's Secretz, the company's leading brands, are very popular household names in both the domestic and international Basmati rice markets. Exports are sold to major markets such as the US, the UK, Germany, France, Spain, the Middle East, South Africa, Mauritius, and Australia. Daawat Foods Ltd. and KUSHA, INC. are the subsidiaries of LT Foods Ltd.

Some **1,800 growers** cultivating rice on 2,000 ha in the states of Haryana, Madhya Pradesh, and the Punjab were involved in the project as a test model. However, Bayer's joint training

and supervision activities involved many more farmers and an even larger cropping area. As Basmati rice procurement is done through the open mandi system, no contract farming was involved in this project.

Bayer CropScience is India's leading crop protection company with more than 100 years of experience in the Indian market. Through its innovative Food Chain Partnership model, Bayer CropScience provides not only innovative products but also comprehensive crop solutions to Basmati growers, helping them in the quality production of Basmati rice. The company focus is on training these farmers in disease and pest management and the safe use of crop protection products.



What we aimed to achieve

- Supporting the growers in producing safe, high-quality Basmati rice and helping them achieve higher earnings by passing on technical training and monitoring fields
- Creating awareness about the use of safe and effective plant protection measures and thereby reducing the risks of residues
- Reviving the image of Indian Basmati rice in international markets as a safe and healthy product

The confidence-building solution

A lack of awareness of the crop protection product residue issue at a grower level was a key challenge for the project. The other challenge was to reach the large number of growers located over a very wide area of India. LT Foods decided to involve their associates (commission agents in marketing yards) to select the progressive farmers for the project.

Bayer CropScience developed a crop protection schedule that kept in mind the export requirements. Crop production products such as Topstar®, Fame®, Nativo®, and Glamore® were included in the schedule to combat the Stem borer, blast/sheath blight, brown plant hoppers, and weeds. A plant protection (PP) kit was developed and made available to the farmers. The aim in promoting the PP kit was to ensure that the growers are applying legally compliant products for use in the export markets. At the same time, the PP kit was designed to provide a complete crop protection solution to the Basmati growers.

As creating awareness at a grower level was the main objective, the specific inputs were developed jointly by Bayer CropScience and LT Foods. Each month, the field activities to be carried out in that particular month were highlighted through information charts.

Program monitoring and training courses for the rice growers were also an integral part of this Food Chain Partnership project. The field activities and training were monitored and supervised by senior agricultural professionals representing Bayer CropScience and LT Foods. Training courses were given to the farmers on agronomic practices, nutrient management, GAP principles, and quality improvement. The overall program took into account the principles of good agricultural practices through integrated pest management (IPM), technologies to prevent crop pests and diseases, as well as the safe use and handling of crop protection products.

It was ensured that all the growers' spraying practices were recorded in a Passport. This Bayer CropScience tool was developed to record field details and forms the basis of traceability. Finally, at harvesting, LT Foods' experts advised and trained the farmers on the right time and method of harvesting, threshing, cleaning, and packing Basmati rice.



What we achieved

A true spirit of partnership was exhibited by all the key stakeholders. Bayer CropScience delivered added value through its innovative product portfolio, sustainable agricultural expertise, and global Food Chain Partnership concept. The integrated approach made improvements in the quality of the Basmati rice possible.

Growers:

- Generally increased awareness of crop protection product usage thanks to information and support from respective experts
- Increase in yield of 8–10% and in overall returns of 10–12%

LT Foods:

- Sustainable production and procurement of Basmati rice
- Exports of safe and healthy Basmati from India
- Stronger relationships with the growers

Bayer CropScience:

- Increased confidence on the part of the growers in Bayer CropScience as a solution provider
- Contribution to the sustainable production of Indian Basmati rice

Next steps

In view of the success achieved over last two years, Bayer CropScience and LT Foods have decided to expand their co-operation to new geographies and new crops. The project that started in 2010 at one location in Madhya Pradesh covering 400 ha expanded to other states covering 2,000 ha in 2012, and will increase to 5,000 ha by 2015.



left:

**Amit Sharma, Associate General Manager –
Food Chain Alliances of Bayer CropScience
Ltd. India**

right:

**Vijay Malik, Associate Director of
LT Foods Ltd. India**

cover:

**Surinder Kumar Arora, Joint Managing
Director of LT Foods Ltd. India**

food chain partnership



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

For more information contact:

**Food Chain Partnership Team India
Bayer CropScience Limited
Kolshet Road, Thane – 400607
Maharashtra
India**

**Phone: +91 22 2531 1036
Mobile: +91 98 2049 1734
Fax: +91 22 2545 5237
Email: amit.sharma@bayer.com
Internet: www.bayercropscience.com**

**Bayer CropScience AG
Food Chain Management
Alfred-Nobel-Str. 50
40789 Monheim
Germany**

**Phone: +49 2173 38 5834
Fax: +49 2173 38 3383
Email: foodchainpartnership@bayer.com
Internet: www.foodchainpartnership.com**



© 2013 by Bayer CropScience
FCP-13-1568

**LT Foods Ltd.
Plot No. 119, Sector – 44
Institutional Area
Gurgaon, Haryana – 122002
India**

**Phone: +91 124 305 5100
Fax: +91 124 305 5199**

**Daawat Foods Ltd.
Plot No. 7, Satlapur Growth Centre
Phase – 2, Mandideep 462046
India**

Phone: +91 755 302 5900

**KUSHA, INC.
1211 McGaw Avenue Irvine
CA 92614
USA**

Phone: +1 949 930 1400