

AGRICULTURAL INNOVATIONS IN INDIA



SITUATION

In general there is enough food in India to ensure the nutrition of the approximately 1.3 billion people. Yet, malnutrition and undernourishment is widespread in many parts of the country. India is the largest producer of many vegetables, but the agricultural productivity is low for reasons like fragmented land holdings, inadequate adoption of good agricultural practices and a low level of mechanisation. Inputs are not applied appropriately and farming practices are partly inefficient. Other problems are caused for example due to plant diseases. Harvest loss through leaf blight is an issue especially in potato cultivation. Along the tomato value chain a substantial part of the production is lost before it reaches the final customer. Even though the Indian agriculture sector has the potential for change, the domestic potato demand and productivity is increasing continuously and production areas in Karnataka and Maharashtra play a crucial role for the South Indian market. With change in lifestyle the demand for value added or processed products of tomato and potato is continuing with high growth. This is where the Green Innovation Centre India takes action and works together with potato and tomato farmers as well as with businesses along the different value chains.

ACTIVITIES IN INDIA

- Dissemination of agri-innovations and sustainable agriculture: training of farm enterprises in Good Agricultural Practice, integrated pest management, nutrient management and mechanisation
- Farmer field schools on innovation farms and plots for Participatory Technology Development: the field becomes the classroom and the farmers have the possibility to turn their theoretical knowledge into practice.

- Implementation of trainings for businesses along the value chains like tomato nurseries and cold storage managers
- Green Colleges, agricultural schools in rural areas, offer accredited training courses based on experiences in the field development
- Strengthening farmers' self-organisation: registration and development of farmer organisations like Farmers Producer Companies
- Linking farmers to support programmes of the Indian Government
- Encouragement of women by providing them with special training courses and advisory services

WHAT IS INNOVATIVE?

ICT for Agriculture - digital networking via smart farming app

Mechanisation - increasing yields, saving manpower

Seedlings with potential: new varieties are tested on demonstration plots

Rural areas need powerful voices: farmers are coming together as formal groups or companies

Efficient farming practices: drip-irrigation for saving water and increasing harvest; adapted plant protection

OUR GOALS BY 2022

Increase in incomes: of 75,000 small-scale farming enterprises

Employment growth: through minimum 1,000 new jobs

Increase in productivity: by 30 per cent

Education and training programs: for 90,000 people (including women and youth)



Region

Four selected districts in Karnataka, Maharashtra and Andhra Pradesh; additionally Green Colleges in Jharkhand, West Bengal and Odisha, Public Private Partnership is piloted in Himachal Pradesh and Kashmir

We promote

Potato and tomato based value chains

Budget

EUR 18.35 Million

Project Duration

11/2014 - 03/2022

Lead Implementing Agency

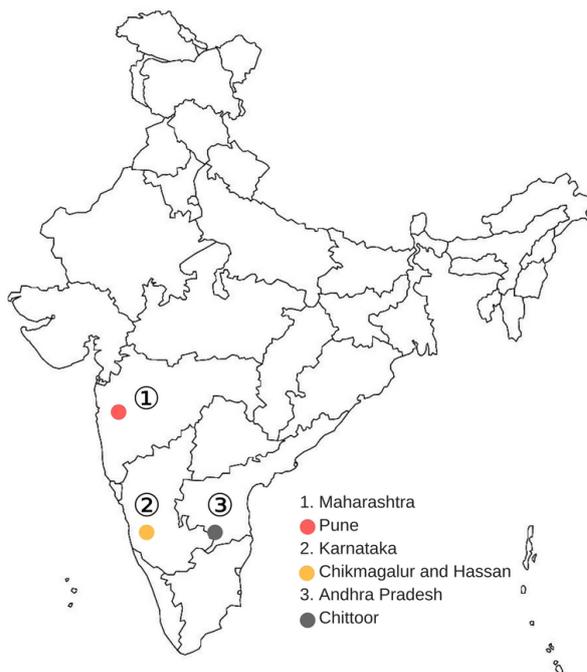
AFC-Consulting, Welthungerhilfe (WHH), Andhra Pradesh Mahila Abhivruddhi Society (APMAS), World Vegetable Centre, International Potato Centre, Deutscher Genossenschafts und Reiffeisenverband (DGRV), local universities and research institutes, local and international private companies (e.g. Grimme, Lemken, Bayer)

Lead Executing Agency

Indian Ministry of Agriculture and Farmers Welfare; National Centre for Cold Chain Development

Target group

Small-scale farming enterprises, employees in the upstream and downstream enterprises (particularly women and youth)



HOW WE WORK IN PRACTICE

Hosahalli's first group of farmers

Chiddananda Gangappa has vowed together with farmers from Hosahalli, to set up a farmer group which will implement best practices imbibed from the Green Innovation Centre project in the future. Hosahalli is all about tomatoes they are the most important vegetable in the Kadur area. However, various diseases have endangered future cultivation significantly. "Over the last decade and a half, I have had a total crop loss on account of various diseases," says Chiddananda. Every year he invests significantly in plant protection products, but is dissatisfied with the results. He particularly cites the lack of reliable advisory as an impediment to deal with recurring disease infestations. Farmers share this opinion and are emphasising on the importance of reliable production related advisory, "Until now, I did not realise the importance of breeding practices for tomato seedlings and their role in the spread of viral illness. I really look forward to work with the team from the Green Innovation Centre India" says one of the largest farmers in the village.

The potato trader of Pargoan

Balasaheb Sawant is very proud of his latest project: a cold storage in which he can store approximately 5,000 tonnes



of potatoes. The 57-year-old is a potato trader from Peth, a region located in the north of Pune. Balasaheb supplies farmers with seed potatoes and also buys out their harvest. "He is a reliable partner who delivers good quality produce and if we don't pay him immediately, he offsets the seed potatoes with the harvest", says one of the farmers standing in the yard. The main problem for him and the others is that the seed potatoes do not always arrive in time when rain starts in June. Especially at that time every single day counts, the potatoes have to be planted as quickly as possible so that they may use all the water to grow it. "The availability of good quality seeds is one of the big issue for growing potato in this region. "We need local cold storage facilities in which we can store the seed potatoes from seed to harvest", says Balasaheb Sawant. The new cold storage will change everything. There will be no more losses as the transportation will be carried out in February when it gets cooler. This is a way of helping the small-scale farmers who grow potatoes to get back on their feet. Sawant planned the new cold storage facility together with an expert who has been mediated by Green Innovation Centre.

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