

# India: Green Chili, Tomato

## INTRODUCTION

India is known around the world for its green chili, most of which is grown on smallholder farms and then sold to local, national and even global markets. But despite the global distribution of this chili, the smallholders who produce it face several barriers to earning a sufficient income.

The third largest producer of tomatoes in the world, India produces 10.4% of the world's produce. Better Life Farming identified the areas of Ranchi & Hazaribag in Jharkhand, a state in eastern India, as areas where tomato farmers face several limitations in increasing yield and income.

The efficient use of available resources, such as water, fertilizer, and energy, will empower farmers to produce higher quality crops, generate higher incomes, and make farming attractive for future generations so that rural communities can thrive.

## Challenges

- Farmers are vulnerable to many challenges, including adverse climate impacts, pests and crop diseases, poor infrastructure, rural migration, fluctuating commodity prices and regulatory barriers
- Most farmers in developing areas only realize a fraction of their potential yield
- In some areas of India, such as Uttar Pradesh and Jharkhand, farmers don't always employ modern agronomic practices, including GAP-like nursery raising and mulching
- These smallholders don't have the ability or resources to invest in new technologies
- Some of these farmers also have challenges gaining access to finance
- Currently smallholder farmers in Uttar Pradesh see an annual profit of about 872 euros per year, living near the poverty line.

## PROJECTS

### Green Chili, Uttar Pradesh

- Better Life Farming launched the Green Chili project in Uttar Pradesh in June 2016
- We have introduced many standard agricultural practices to smallholder farmers in India to increase the production of green chilies. Crop nursery, mulching, and staking were introduced with the expectation that crop volume and size would increase
- Better Life Farming works with local distributors and retailers who provide direct training and inputs to the farmers
- Multiple micro finance institutes are available to assist in the project ensuring financing is accessible for project study participants. Local partner DeHaat provides farmers with advanced technology to facilitate best practices and offers training sessions for farmers

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- Smallholders receive classroom and on-farm training:
  - Classroom training runs from the start of the season until flowering stage
  - On-farm training runs from the beginning to the end of the harvest, demonstrating the strength of the whole program
- A field officer is available to the farmers for individual consultations
- Following the training, the distributor receives input material and pays input providers. Farmers then receive input packages and pay the retailer/distributor.
- YARA is involved as an input provider for the project
- DeHaat sends automatic messages with daily information on price for farmers to sell produce to an off-taker through mobile collection centers. Yields are picked up at the farm gate and farmers receive money in their bank accounts.

### Successes

- Better Life Farming's pilot began by working with 20 green chili farmers across 20 villages in Uttar Pradesh and the project has grown to 1,600 farmers over 1,050 acres in 2018
- During the project smallholders' yield rose 103 percent
- Open market price revenues rose more than 176 percent for the smallholder participants, compared to the average smallholder in the region
- Profit for the smallholders in the project was nearly triple the average profit for farmers in the region

### Tomato, Jharkhand

- The project was launched in Jharkhand in June 2017
- In Jharkhand, many smallholders reach less than 20 percent of their potential productivity
- YARA is involved in the project as an input provider and training expert, sharing its fertilizer know-how
- Local company, BigBasket, has started to collaborate with Better Life Farming as an offtaker
- In 2018, the agri-entrepreneur concept, where farmers become entrepreneurs and open a shop to sell goods, was rolled-out

### Successes

- In Jharkhand, 37 farmers reported a 100 percent yield increase on 7.5 hectares in 2017
- In 2018, the tomato project increased to include 510 farmers, covering 500 hectares of farmland
- Smallholder farmer, Umakant Singh says: "I think our life will be better in the coming three years . . . [they] tell me about new techniques to help us increase production and I get better rates in new markets."