

## Success Story

# CRS F2F Nepal

## Ginger farmers in Nepal are gaining new hope of prosperity

PROJECT LOCATION	Nepal
TIMEFRAME	2019-2023
COUNTRY PROJECT	Crops
HOST	Airawati Multipurpose Small Farmers' Cooperative

### PROGRAM STATISTICS

# 302

Number of assignments conducted

# 17,282

Number of people directly trained

# 145

Number of hosts supported



Farmer Mr. Chhanda Bahadur K.C. showing healthy ginger seed. Photo by Chhan Bhattachan/CRS.

In 2019, members of the Airawati Multipurpose Small Farmers' Cooperative feared they would never salvage their failing ginger crop that was under attack by multiple diseases. Thanks to the work of a Catholic Relief Services (CRS) Farmer-to-Farmer (F2F) volunteer, Airawati cooperative farmers went from desperation and the precipice of ruin to earning a collective income of \$9,000. In addition to the support the cooperative members received from F2F, they were able to acquire \$6,000 in funding from the local government to invest in new skills and technologies. Together, these actions resulted in a 25% increase in incomes and yield.

Located in Sarumarani Rural Municipality in central Nepal's Pyuthan district, the Airawati cooperative is a smallholder-led community-based organization that was established in 2001. The cooperative serves 1,221 members, 60% of whom are women and 85% farm less than 0.5 hectare of land. Recognized as one of the most successful cooperatives in the municipality, Airawati grows local agricultural products, such as ginger, turmeric, honey and beans. As in other parts of the country, a large number of working-age men are employed outside of the country, therefore, the majority of farmers are women. This means that improvements in the production and quality of ginger—and subsequent increases in incomes—directly benefit women farmers.

Nepal is the world's third-largest producer of ginger, after China and India, and produces around 300,000 tons of ginger annually. Ginger represents the country's most promising spice export. Noting this, the Government of Nepal has prioritized ginger in the hope of benefiting the many resource-poor small-scale farmers who produce it in remote locations often characterized by steep and unwieldy hillsides and inadequate access to irrigation.

As of 2007, ginger farmers in Sarumarani Municipality routinely lost up to 90% of their crops to disease. In the face of significant production problems, many gave up the crop and explored alternative livelihood options. Those who persisted sold their crop at very low prices on account of the poor quality and appearance of the ginger.

Just as the ginger farmers were facing bankruptcy, Airawati cooperative reached out to CRS for help. In September 2019, F2F volunteer Dr. Ahmad Reza Rafie, professor and extension specialist from Virginia State University, travelled to Pyuthan to assist Airawati's ginger farmers combat disease and save their livelihoods. Dr. Rafie began his assignment by listening to the farmers to understand their issues in their own words. Once he grasped the problems they faced, Dr. Rafie presented different solutions through classes and field demonstrations in two local communities. Farmers from Hagsapur and Sarumairani learned solutions to their problems from managing pests and diseases, to caring for seeds, and handling and storing ginger after harvest.

Through his classes, Dr. Rafie suggested ways to combat disease by installing adequate drainage systems, planting ginger in raised beds to avoid water stagnation, and practicing crop rotation. According to Dr. Rafie, "Initial field visits showed that ginger farmers in this part of Nepal do not plant ginger in raised beds, which, research shows, can reduce incidences of rhizome rot disease." This became a key component of the training.

At first, some farmers were skeptical. Mr. Chhanda Bahadur K.C., an experienced and prominent lead farmer, refused to participate in the training, arguing that he had already attended several trainings on the topic, all to no avail. Other farmers participated in Dr. Rafie's workshops and, after seeing encouraging results, committed to implement new practices. At that point, Airawati cooperative approached the local municipality for support in disseminating new technologies to other ginger farmers—preferring to share, rather than keeping livelihood-saving innovations to themselves.

Newly trained farmers mentored an additional 20 producers in their villages and gave them each 100 kilograms of disease-free seed from the cooperative's 2019 harvest. That year, 78 farmers produced and sold 70 metric tons of improved seed to the cooperative, enough to plant a fifty-hectare area. Ginger seed-producing farmers went on to earn \$60,000 from the 2021 growing season. Among these farmers was former skeptic, Mr. Chhanda Bahadur K.C., who harvested 1,000 kilograms of ginger from the 100 kilograms of seed he received the previous year. He told CRS, "I have new skills now and I can continue applying them in the future to secure income and employment for my family." He admits, "Although I didn't formally participate in the training, I kept a close eye on the demonstrations and witnessed the results they produced."

The F2F assignment has rewarded Nepal's ginger farmers with improved production, quality and revenue. Traders and processors from Pokhara, Butwal and Narayangadh have established new trading relationships with Airawati cooperative, and the organization has forged new linkages with the National Ginger Research Program, government extension agencies, and other donor-funded projects. The municipal office has a new policy of purchasing ginger seed directly from the cooperative and distributing them to farmers at subsidized rates.

Mr. Rebat Bahadur Khanal, a manager at the cooperative concluded, "The cooperative is back to where it was 15 years ago, collecting up to 75 tons of ginger annually from its farmers. We are gradually building back better and hoping to gain new prosperity by establishing a ginger seed resource center in the province."



CRS F2F volunteer Dr. Rafie demonstrates new methods of ginger cultivation and selection of disease-free seeds to farmers at Hangsakot village. Photo by CRS F2F Staff.