In 2015, amongst fields of tomatoes, cucurbits, and other vegetables, the IPM Innovation Lab conducted a training in Nepal. It was not long before the team made the distressing discovery that almost 100 percent of the crops were virus-infected, and a further assessment revealed that many of the viruses were seed-borne. The IPM Innovation Lab recommended to the group of farmers, agri-business owners, and extension agents in attendance that they immediately change their seed source to avoid potential economic and food security losses.

Samir Regmi, a business owner participating in the training, listened.

Regmi opened Laxmi Agrovet Center in Nepal in 2012—selling agricultural and veterinary supplies, his Integrated Pest Management (IPM) products brought in minimal earnings. Proving difficult to maintain the slow-selling supplies, Regmi partnered with the IPM Innovation Lab to develop a supply chain of IPM products. He also began attending trainings, like the one in 2015, to ensure that his supplies addressed farmer’s most pressing crop needs.

Now, not only is Regmi successfully selling virus-free seeds of tomato, chili, and other crops per the IPM Innovation Lab’s recommendation, he is a wholesale provider of IPM products and his business is booming.

“The IPM Innovation Lab has always supported me in my business promotion,” Regmi said. “Currently, my business is one of the renowned agrovets [agricultural supply store] in this region, especially for the supply of bio-pesticides, insect traps, lures, irrigation technologies, and now for disease-resistant seeds. This is all because of the IPM Innovation Lab’s support. My transactions have tremendously increased in recent years.”
In 2018, Regmi earned over ten times the average yearly income in Nepal from selling IPM products alone. Recently, he moved his business into a bigger facility to support the growing demand for his products, which annually reach more than 3,500 households.

Regmi mobilizes IPM products through community business facilitators (CBFs), or local entrepreneurial farmers with IPM training who promote his products to interested buyers. He also coordinates with local governmental bodies and is an agricultural program advisor for a municipality in Surkhet.

As reliance on synthetic pesticides builds around the world, and human and environmental life bear the effects, IPM products aim to provide inexpensive, comparable alternatives to crop protection.

Naidu A. Rayapati, professor in plant pathology at Washington State University, co-lead the 2015 training in Nepal with IPM Innovation Lab Associate Director Amer Fayad. Strengthening seed supply systems, he said, is critical to maintaining enduring vegetable crops.

“Training courses and field workshops conducted by the IPM Innovation Lab not only help subsistence farmers learn about new pests and diseases,” Rayapati said, “but they help agri-business owners become aware of serious crop issues, like viruses spreading through compromised seed, and can then improve their business prospects by providing that clean seed to farmers.”

Agri-business owners, he added, can also offer best practice guidelines to farmers, especially for promoting clean seeds as a key IPM component for raising healthy crops for increased family income and food security.

The IPM Innovation Lab has an extensive history of implementing programs based on immediate farmer needs, such as the numerous awareness workshops the team provided on the tomato pest *Tuta absoluta* upon its arrival. Further, virus and disease diagnostic training has long been a central program objective in strengthening the scientific capacity of farmers, extension personnel, and others involved in agricultural development. The proof resides along the shelves of Samir Regmi’s business in Nepal, and others like it, but most importantly, in the surrounding fields now strengthened and bearing a healthy, bountiful harvest.