



## CASE STUDY

(CONDUCTED IN THE THIRD YEAR, RATES/AFACI, NEPAL)

### **Case study III: A case study of the farmer, Shiva Prasad Timilsina, a permanent resident of Belkotgadhi-2, Nuwakot.**

Shiva Prasad Timilsina, a resident of Belkotgadhi, Nuwakot, started his agribusiness journey through poultry production. However, he faced substantial losses during the COVID-19 pandemic. Mr. Timilsina switched himself towards commercial vegetable farming. With new hope, he started tomato cultivation in 2022 in two tunnels with total area of 160 square meters. Unfortunately, in 2024, the tomato field was severely affected by pests, leaving him uncertain about the cause and on the brink of destroying the crop. Like most of the farmers, initially he relied on the pesticides suggested by the agrovet but was of no help. Realizing the need for expert consultation, Shiva reached out to the agriculture extension officers in Belkotgadhi municipality. This municipality had been part of a pilot project under the RATES/AFACI initiative in Nepal where capacity building training for the extension worker was conducted. Moreover, booklets on improved tomato farming and leaflets on management of Tuta on tomato were also distributed. Also, the extension workers of the Belkotgadhi are provided with the expert consultation service of the disciplinary specialists associated with the RATES/AFACI, Nepal. The RATES/AFACI project implemented by National Agricultural Policy Research Centre (NAPREC), Nepal Agricultural Research Council (NARC) envisioned R& D model of agriculture extension which adopts participatory approach where researcher, extension worker and farmers work together in the process of agricultural technology generation, evaluation and dissemination along with input and pest management. Mr. Binod Poudel, a frontline extension worker in Belkotgadhi, played a crucial role in the recovery of Shiva's tomato field. Binod, who had received the training on 'improved farming practices on tomato' and leaflet on Tuta management, timely identified a Tuta outbreak in Shiva's tomato fields and provided specific control measures to mitigate the issue as taught in the training and mentioned in the leaflet. Under Binod's guidance, Shiva applied the pesticide Spinosad, purchasing it for nearly \$15 and using a dosage of 2 ml per 3 liters of water. The timely intervention came when the tomato plants were just at the flowering stage (1 to 1.5 feet tall). Shiva applied the pesticide five times, successfully reviving his crop. Despite the infestation, Shiva managed to produce 52 crates of tomatoes (1 crate = 25 kg). Out of these, 2 crates were consumed at home, while the remaining 50 crates were sold in the market. The sales spanned from May to August, with an average selling price of \$10 per crate, resulting in total earnings of \$500. This case accentuates the importance of robust linkages between farmers, extension workers, and researchers. The coordinated efforts of these stakeholders were pivotal in addressing the extension gap, enhancing farm productivity, and income. Thus, the extension workers, researchers and farmers need to be interlinked with each other to solve the problems associated with the agricultural production. Shiva's experience highlights that timely technical support and effective pest management strategies can significantly increase agricultural production and farm income. Shiva Prasad Timilsina's journey from loss to

recovery exemplifies the critical role of R&D model of agricultural extension in agricultural resilience and importance of capacity building training and expert consultation as well.

***Glimpse of the field visit to the tomato field of Mr. Timilsina by the agriculture extension worker (Mr. Binod Poudel) with Tuta management practices prescribed by NARC***



NPSN: 053/080/61

### व्यवसायिक गोलभेडा खेती

नेपाल सरकार  
सोपाल कृषि अनुसन्धान परिषद्  
राष्ट्रिय कृषि बीमि अनुसन्धान केन्द्र  
सुमसटार, ललितपुर  
२०६०

NPSN: 040/051/32

### MANUAL OF PARTICIPATORY R&D MODEL OF AGRICULTURAL EXTENSION

National Agricultural Policy Research Center (NAPREC)  
Nepal Agricultural Research Council (NARC)  
November 2024



**Annex:** Glimpse of the capacity building training conducted by AFACI/RATES, NAPREC for the extension workers and the farmers and interaction meeting between NARC scientists, extension workers and Mayor of Belkotgadhi, Nuwakot

