Rootstock multiplication technology developed by ICAR-CITH, Srinagar has transformed the life of Nursery Entrepreneur from Chamba, Himachal Pradesh.

Shri Pawan Kumar Gautum from Saloni, Chamba District of Himachal Pradesh has set himself as an example of a successful progressive nursery entrepreneur in the area by adopting the technology developed by the scientists of ICAR CITH Srinagar. He is a third-generation Nursery grower as his grandfather started the Nursery production of temperate fruit crops and also established apple orchards 35 years back. His father also followed in the footstep of his grandfather and continues to serve the farming community by the production of quality planting material over the Nursery area of $^{1}/_{2}$ Ha. Shri Pawan Kumar after leaving education in between, due to poor financial conditions began to help his father in Nursery raising and management. As the growers in the region have started shifting from low density to high-density orcharding systems, the demand for apple plants on traditional rootstocks has reduced and imported clonal rootstocks have surged up. The family which is mostly dependent on nursery raising also aspires to shift, but the poor financial base was the main bottleneck in transformation.

Pic : 2 Glimpses of greenhouse after adoption of technology

The grower started the raising of clonal rootstocks during the year 2015, on small scale inside a greenhouse area of 105 sq meters. The entrepreneur was able to produce only 1800 clonal rootstocks of apple per year, with this limited facility with a profit of around Rs 1.45 lacs per year. The evolved farmer adopted the technology "vertical expansion of nursery under protected conditions" during the year 2021 under the proper guidance and supervision of the institute, with the endurable input cost of Rs 35.0 thousand for the procurement of inputs and labour, etc. Initially, the entrepreneur faced a lot of problems during adoption like availability of inputs, and negligible support from the family members, but later with the support of family members was able to complete all operations well in time. The entrepreneur was successful in the production of an additional 7200 healthy with a well-developed root system suitable for grafting/ budding (> 8 mm caliper size) rootstocks in addition to his early production capacity of 1800 rootstocks which fetched him an additional revenue of Rs 4.30 lacs. Hence by the intervention of technology not only the income of the family has grown

four times but the dream of a transition from conventional to clonal rootstock has also been fulfilled.

The grower has become an early adopter and the brand ambassador of the technology in the region by training and, motivating other farmers for adoption of the technology. Keeping in view the interest shown by the other Nursery growers of the state, a group of twenty progressive Nursery growers along with the Shri Pawan Kumar were imparted five days of training on the topic "quality planting material production in temperate fruit crops" by the institute in December, 2021.The main purpose of the training was a detailed demonstration of technology for easy adoption and its promotion on large scale. This technology has not only ascertained to transform the lives of small nurserymen but is a step forward towards Aatma Nirbhar Bharat as the proven technology has the potential to reduce the dependence on the import of clonal rootstock from European and other countries.

Pic : 4 Training and practical demonstration of technology to Nursery Entrepreneurs at ICAR-CITH Srinagar