

Himachal: The Role Model of a Horticulture State

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It is rightly said that "the glory of gardening, hands in the dirt, head in the sun, heart with nature, to nurture a garden is to feed not just on the body, but the soul." Well, the word 'Himachal Pradesh' comes from the Sanskrit word 'Hima' which means 'Snow' and also the literal meaning of the State's name is in the lap of Himalayas. Himachal Pradesh is characterized by sub-tropical, tropical, temperate and arid climatic conditions suitable for cultivation of variety of temperate as well as sub-tropical fruits, off season vegetables and cut flowers. Himachal Pradesh is the only state where 89.96 per cent population lives in rural areas. Therefore, agriculture and horticulture are the most important activities which provide direct employment to about 62 per cent.

What is horticulture? Why is it important? Ever wondered why Himachal Pradesh has added glories with respect to the cultivation of various fruits and vegetables? Horticulture is the science and art of producing edible fruits, vegetables, flowers, herbs and ornamental plants. Horticulture sector has played a key role in the growth of agriculture in India during the past three decades and is the major source of livelihood in the hilly areas of Himachal Pradesh. The state has long been regarded as a horticultural state due to magnificent achievements in the production of fruits, mainly apple, various temperate fruits such as peach, pear, plum, apricot and the subtropical fruit crops such as mango, citrus, litchi, etc. In addition to fruit production, the state has earned its niche in the commercial vegetable cultivation in the past three decades. These include crops such as peas, tomato, cabbage, cauliflower, capsicum, beans and garlic. However, realizing the importance of off-season vegetable growing, even the farmers in low-mid hill locations have started growing vegetables in recent times. Horticulture sector in Himachal Pradesh has exhibited magnificent growth in the past. Its share in the gross value added in agriculture increased considerably. The production of fruits has registered a stupendous growth which is a



welcome development as it helps widen 'the fruit basket of the state.' The state of Himachal Pradesh (HP) is characterized by a significant number of opportunities in highvalue commodities. These include, most importantly, diversity in agro-climatic conditions, possibilities to produce for 'off-season' markets, relative high education of producers, and a location relatively close to terminal consumer markets. The state's agriculture is dominated by high value horticulture commodities, which account for about 44 percent of the cropped area and contribute about 48 percent of agricultural gross state domestic product (GSDP). Horticulture in HP has been responsible for many of the positive outcomes in employment, wages, and in turn, poverty reduction.

The development of horticulture in Himachal Pradesh is envisaged with the assistance of World Bank funded Himachal Pradesh Horticulture Development Project (HPHDP). The Project Development Objective (PDO) is "to support small farmers and agro-entrepreneurs to increase the productivity, quality, and market access of selected horticulture commodities in Himachal Pradesh".

The Director of Horticulture directly controls the horticulture development activities in the South Zone of the State which comprises of the Bilaspur, Kinnaur, Mandi, Shimla, Sirmaur and Solan districts. Project Director (Mushrooms) at Chambaghat, Solan and the Joint Director of Horticulture (Hqrs) Shimla look after the Mushroom Development and Fruit Processing activities, respectively under the control of the Director of Horticulture. The Additional Director of Horticulture posted at Dharamshala, District Kangra, supervises the horticulture development activities in the North Zone of the State which comprises of the Chamba, Hamirpur, Kangra, Kullu, Lahaul&Spiti and Una districts, under the overall control of the Director of Horticulture. Deputy Directors of Horticulture have been posted in the each district to implement and co-ordinate all the horticulture activities in their respective districts. They are assisted by District Horticulture Officer in extension and input supply and Subject Matter Specialists in the field of orchards and nurseries, plant protection, floriculture and marketing, depending upon the scope of activities in the concerned district. Not only directorates but also we have our state horticulture university, Dr YS Parmar University of horticulture and Forestry, Nauni, Solan, HP which has added more fame in being a role model, in terms of releasing new varieties, developing nutritional food products, introducing



various post harvest techniques, creating awareness to local farmers and various other research methods.

Well, as we know, 'An apple a day keeps the doctor away', so Himachal Pradesh alone contributes around 30% to the country's total apple produce. According to State Project Implementing Unit, total of 1,33,056 farmers are practicing natural farming in the state, either partially or fully, including 12,000 apple orchardists. Talking about Himachal Pradesh as a role model, here's an example of apple grower Shakuntala Sharma, from upper Shimla, has reasons to smile. The apples she produced under natural conditions without the use of chemicals and fertilizers have fetched a record price of over Rs 100 per kg. Further she manifested, "The moment a buyer in the local market saw the label of natural apples on my boxes, he instantly said he would purchase the entire stock at this price. By adapting to natural farming, I saved Rs 50,000-60,000 on the total cost of cultivation." Well, the nonchemical low-cost climate-resilient SPNF technique is being promoted for agriculture and horticulture crops in the state as a part of Prakritik Kheti Khushhal Kisan Yojana, launched by the state government in 2018. While the farmers are happy with the results of natural farming in terms of zero dependence on external markets, production, farm health and reduced expenditure. Many of them have started making efforts to build their own linkages for marketing of their produce and it has added more stars in the field of horticulture in Himachal Pradesh which can be considered as a role model for various reasons.

Not only fresh fruits and vegetables are exported but also various post harvest management steps are taken into consideration. Did you ever wonder from where did the story of packaged juice began in India? Well, the idea of fruit juice and nutritional drink is amazing right? It was first, and a new introduction to the Indian palate, HPMC was the first any-time juice for the Indian masses. The sight of bubbling juice fountain in a transparent container is still vivid in the minds of many consumers. Even the introduction of fruit juices and drinks in aseptic tetrapacks was an initiative from HPMC. HPMC has graduated to include a wide range of high quality fruit juices, drinks, pulps, concentrates, squashes, fruit wines, ciders, jams, pickles and mineral water to its portfolio. HPMC has had the good fortune of sourcing its fruits directly from India's fruit bowl, Himachal Pradesh, which is a major advantage. The fertile land and the excellent climatic conditions, along with modern fruit processing, have helped HPMC become the pioneer in India's fruit juice market. From



direct consumers to institutional buyers and international market, HPMC has found acceptability on account of its high standards of quality.

As per the latest estimates, by Central Institute of Post Harvest Engineering and Technology (CIPHET), Ludhiana, the wastage of fresh horticultural produce is upto 18 per cent due to poor postharvest management practices. Hardly 2 per cent of perishable horticultural produce is processed to value added products. Hence, there is huge scope for processing of fruits and vegetables. There is market glut during harvesting season and farmers are forced to sell their produce at throw away prices. Therefore, food processing industries can help farmers to get sure income for their produce and also avoid market glut. This wastage can be easily prevented by adopting various methods of preservations so that we can consume the horticulture produce later during the off-seasons. There are various methods of preservation of food including thermal processing, fermentation, pickling, dehydration, freezing etc. the post harvest facilities such as packing and grading houses and cold storage facilities, total packing and grading (combined) houses capacity in the state stood at 25,000 metric tones. Not only the processing can be a boon but also, in addition to this, the state has grading houses with capacity of 6,000 metric tones, which is another crucial infrastructure support for the production of fruits and vegetables is the existence of cold storage facilities. The state has at present cold storage capacity of 16,250 tones of which fifty per cent lies outside the state in distant places such as Delhi, Chennai and Mumbai. As regards the fruit processing facilities, the state has 82 processing units with a capacity of 83,160 tonnes of which nearly 64.0 per cent is in the Cooperative/ Joint/ Private Sector.

There's a famous saying that, "Flowers always make people better, happier and more helpful. They are sunshine, food and medicine for the soul." Yes, I'm talking about this branch of horticulture referred as floriculture. In 2018, State government made a Rs. 150 crore five-year ambitions plan to boost floriculture in a big way in the State. Various incentives will be provided to the progressive farmers to encourage them to adopt this lucrative cash crop venture under the newly launched, Himachal Pushp Kranti Yojna, to encourage Floriculture in the State. The main objective of the scheme is to encourage farmers to adopt commercial cultivation of flowers and ornamental crops under protected environmental with a view to make Himachal as a pioneer State in floriculture in near future. The department of Horticulture has already established six floriculture nurseries to encourage



commercial floriculture in the State. These are Navbahar and Chharabra in Shimla district, Parwanoo in Solan district, Bajaura in Kullu district and Dharamshala and Bhatoon in Kangra district. The two model floriculture center—one at Chail in district Solan and one at Palampur in district Kangra with Tissue Culture Laboratories for quality floriculture planting material have also established for the benefit of the farmers.

So as you can see, there are thousands of reasons which make Himachal Pradesh a role model in Horticulture field. To conclude, evidences show that the availability of required physical infrastructure is of great importance for the growth in horticulture. Horticultural commodities, especially fruits and vegetables, are highly perishable, among several constraints related to productions, processing and trade, the awfully inadequate supply chain infrastructure is perhaps the biggest impediment in boosting the performance of Indian horticulture, more so in hilly states. Efforts have been made to boost horticultural exports in general and fruits and vegetable exports in particular. While summing up, I'd like to say that the soul of Himachali people are always in the mountains, their orchards and different ways of creating their livelihood which we refer to as 'krishi' or 'baagwaani.'