

## **Role of Protected Cultivation of Flowers in Improving the Socio-Economic Status of Farmers in Seraj Valley of Himachal Pradesh**

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### **SUMMARY**

Floriculture is a rapidly expanding, profit-generating sector of the agricultural industry that is expanding at a moderate rate globally and has the potential to be a lucrative agricultural enterprise, particularly for developing nations. India is the world's second-largest flower producer after China. Due to urbanization and increasing levels of disposable income, the demand for floriculture products has increased significantly. Himachal is quickly becoming known as the "flower state" due to its favorable agro-climatic conditions for the continuous cultivation of a variety of flowers under covers. The total area under protected cultivation in the state has been estimated around 100 ha. The protective cultivation of flowers will not only safeguard the farmers from unpredictable weather but also provides ample alternatives for a better livelihood for the educated unemployed youth of the state.

### **INTRODUCTION**

Flowers played a vital role in almost every aspect of human existence from the dawn of time, including birth, marriage, worship, decoration, and death. Flowers are intrinsically linked to human existence. Flowers represent feelings such as beauty, purity, love and passion. Floriculture is the blooming industry in Asian countries including India with the greatest potential for generating decent self-employment and good remuneration for small and marginal farmers. The steadily rising demand for cut and potted flowers is prompting it to gradually become one of the most important commercial enterprises in Indian agriculture. It offers a wide range of opportunities and has become to be integral to modern life. The floriculture sector has transformed into a commercial venture endeavor with significant market value and great potential. It is one of the horticultural industries with the fastest growth rates, having the potential for providing enhanced profits to the farmers, besides providing employment opportunities to the unemployed youth.

### **Status of Floriculture**

As per National Horticulture Board, about 322 thousand hectares of area was under cultivation of floriculture in 2020-2021. The total Production of flowers is estimated to be 2980 million tonnes with the production of 2152 thousand tonnes of loose flowers and 828 thousand tonnes of cut flowers. Floriculture is now commercially cultivated in several states of the country with the highest area in states such as Kerala (16.5%), followed by Tamil Nadu (13.3%) and Karnataka (11.4%), Madhya Pradesh (11.1%) and Uttar Pradesh (7%) have gone ahead to other producing states. Flower cultivation is also practiced in some other states like Andhra Pradesh, West Bengal, Mizoram, Gujarat, Orissa, Jharkhand, Haryana, Assam and Chhattisgarh. India's total export value of floriculture business was Rs. 771.51Crores or 103.47 USD Million for 23,597.17MT of floriculture products in 2021-2022. The major importing countries of Indian flowers were USA, Netherland, Germany, UK and U Arab Emirates (APEDA, 2021).

### **Protected cultivation of Flowers in Seraj valley of Himachal Pradesh**

Protected cultivation is defined as a cropping technique where a plant's growth and development are influenced by a controlled microclimate. As agriculture has developed, many protected cultivation techniques have been widely adopted in modern agriculture. Himachal Pradesh is mainly mountainous situated in the Himalayan zone in the North-Western region of India and known as the "flower state" due to its favorable agro-climatic conditions for the continuous cultivation of a variety of flowers under covers. Government is also paying attention by providing incentives to the farmers so that they can adopt floriculture to enhance their economy. The total area under protected cultivation in the state has been estimated around 100 ha. Protected cultivation has evolved into a brand-new agribusiness for farmers with the support of the state and federal governments. The state government's protected farming schemes, such as the Horticultural Technology Mission and Pandit Deen Dayal Kisan Bagwan Samridhi Yojna, have led to the construction of a significant number of polyhouses.

Seraj valley is located in Mandi district of Himachal Pradesh. The valley is located in a temperate region that offers ideal growing conditions for apples and several floral species. Weather remains engrossing in summer, normally varies from 15°C to 30°C and but wintertime temperature is relatively frigid and dip below freezing, resulting in significant snowfall. The majority of farmers in this region falls into the marginal category and engaged in protected cultivation. Here, agriculture is the main source of income for the majority of the population. There has been significant improvement in the literacy rate in the area along with average level of quality of education. Farmers are engaged in the floriculture commerce to sustain their economy and it is their means of livelihood. Due to the mountainous terrain, small landholdings, and favorable climatic conditions, people cultivate protected flowers. It will not only safeguard the farmers from unpredictable weather but also provides ample alternatives for a better livelihood for the educated unemployed youth of the state. In Seraj valley after 2017 with collaboration with horticultural department different flower species are grown under protected cultivation. It is also known as green house valley due to the numerous green/polyhouses that have been constructed in the valley. The major commercial flowers grown under protected cultivation in the valley are Carnation, Liliun, Limonium, Eustoma and Gypsophila. Out of all the flowers, carnations have the most protected cultivation area. The B: C ratio for carnation was 2.63 which mean protected cultivation of carnation is profitable cash crop (Pooja, 2022). Likewise, the other flower species also proved to be economically beneficial which thereby improving the socioeconomic status of Seraj farmers.

## CONCLUSION

Floriculture is a rapidly expanding, profit-generating sector of the agricultural industry that is expanding at a moderate rate globally and has the potential to be a lucrative agricultural enterprise, particularly for developing nations. Due to its favorable agro-climatic conditions for the year-round production of a variety of flowers under covers, Himachal is quickly becoming known as the flower state. Protected cultivation technique reduces biotic and abiotic stresses by providing complete controlled condition. The increasing flowers demand compels to think for protected cultivation. The government should promote the ploy house technology and frame suitable policies to priorities this technology particularly for flowers. Besides, time to time training and extension programmes should be organized for flower growers by state horticulture department.

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