



An Assessment on Commercial Crops of Himachal Pradesh, India

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Abstract: *Himachal Pradesh is a place of rich biodiversity which have a great diversity of different crops available. Some of these crops have high economic value. In Himachal Pradesh, the agricultural sector directly provides a living for about 85% of the state's population. Himachal Pradesh is frequently referred to as the "Apple State of India" since apples are said to be the primary cash crop in the region. In addition to apples, several other economic crops are farmed throughout the state, including wheat, barley, rice, corn, seed potatoes, and tea. A significant portion of the land is devoted to the cultivation of fruits, and the state exports its apples to markets around the country and the world. It is extremely advantageous to the state. Agriculture and crop cultivation in mountainous regions have always been challenging endeavours. Only grains were produced in Himachal Pradesh and many other steep regions, and productivity has never been high. Following the arrival of economically significant crops in Himachal Pradesh's fields, the state's economy and production have grown, benefiting a sizable population with substantial financial gains from the crops.*

Keywords: *Commercial crops, Cash crops, Crops Diversity, Crop Production*

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1. Introduction

A sizable portion of the land is dedicated to the cultivation of fruits. The primary horticultural crops produced at commercial plants in Himachal Pradesh are fruits and vegetables. Despite making up only roughly 7.39% of the state's total cropped land, these high-value crops make up a sizable portion of the agricultural sector's overall revenue.

During 1995-96 about 28 per cent of State income has been contributed by agricultural sector alone [1]. [2] During 1996 vegetables and fruits production in the mid hill zone of Himachal Pradesh 1000-1500 MSL was acknowledged as good cash crops. Earlier the seeds of temperate vegetables were imported from European countries but since 1965-66 the production of vegetable seeds has been introduced in the region itself. Shimla area became famous for disease free seed potatoes . Kangra district became popular for the production of sub- tropical fruits like citrus, mango and litchi [3]. The agricultural sector cannot ignore the influences that would be put out on small and marginal farmers who rationalise over 78 per cent of the farmers in India [4]. In the recent years high value commercial crops such as fruits and

vegetables in some potential regions have become popular and are expected to improve the economy of the region in general and farmers in particular [5]. Over the decades the contribution of the agriculture and allied sectors in gross state domestic product has declined from 57.9 per cent in 1950-51 to 55.5 per cent in 1967-68, 26.5 per cent 1990-91 and to 8.4 per cent in 2018-19 as it shifted to industrial and services [6]. Since the early 1970s, this sector has made considerable progress, as is evident from an increase in foodgrain production from 9.45 lakh tonnes in 1972-73 to lakh tonnes in 15.81 lakh metric tonnes 2017-18 and 16.92 lakh metric tonnes in 2018-19 [7]. The process of diversification towards fruits and vegetables started in the late fifties and sixties in the districts of Shimla, Kullu, Solan, and Lahaul & Spiti which extended in late seventies and eighties to other parts and gained momentum in the nineties when the process spread even to low and mid-hill districts [8].

The crop diversification towards high-value cash crop-based commercial agriculture promotes the productive use of abundant small and marginal lands 54 % in these regions. It also helps in maintaining and improving the

ecology and environment by promoting soil conservation and improving soil fertility [9]. Further, the diversification of agriculture with high-value off-season vegetable crops has made a noticeable impact on the standard of living and quality of life of rural people [10].

1.1 Importance and future aspects of commercially important crops in Himachal Pradesh

Commercial crops are very important for the state because they make up about 9.4% of everything that the state produces. In Himachal Pradesh, 90% of the people rely on farming to make a living. The amount of money farmers make depends on how much people want to buy their crops and how easy it

is for them to sell them in stores [11]. The production of many other crop plants is being promoted in the state for the future such as olives, figs, pistachios, hops and saffron. Saffron farming has recently begun in the Kinnaur, Chamba, Mandi, Kullu and Kangra districts of the state. For the very first time Himachal Pradesh is introducing saffron (kesar) cultivation at the commercial level. India has a comparative advantage in the international trade [12].

Cereals dominated the cropping pattern and except for cash crops like potato and vegetables, marketable surplus was almost negligible. Shortage of farm implements was found to lead to underutilization of labour. The study suggested that for the improvement



of farming systems, technical knowhow should be extended to the farmers particularly on the aspects like land improvements, soil conservation and management of the cropping pattern [13].

Fig 2.1 Map of Himachal Pradesh (source google).



The micro level experiences further show that crop diversification towards high value crops is economically beneficial and also reduces stress on natural resource base which is so crucial for sustainability of hill agriculture[14]. The factors affecting crop diversification and found that diversification potential was high on Indian farms because it stabilizes the farm on higher level of efficiency under the conditions of risk and uncertainty. It was proved empirically that initial thrust on diversification promoting policies finally leads to betterment in economic conditions of farmers [15]. The crop diversification is recommended as an effective strategy in raising incomes, generating employment opportunities and alleviating poverty [16]. Diversification of agriculture in favor of more competitive and high value commodities is reckoned as an important strategy to augment farm income, stabilize income flows, generate employment, increase efficiency of resource [17].

2. Methods & Methodology

2.1. Study Area

Himachal Pradesh is situated at northern part of India. Himachal Pradesh is arranged at 30° 22' and 33° 12' N and between 75° 47' and 79°

04' E which is having an altitude ranging from 350 to 7000 meter above MSL and is covering a geographical area of 5.57 million hectare. It shares borders with Jammu and Kashmir, Ladakh in the northern part, Punjab from south-west and , Haryana from the south part, with Uttarakhand at the south-east and its Sirmour district sharing small borders with Uttar Pradesh as well. It also shares borders with Tibet on the east. Himachal Pradesh is situated in the Himalayan region near the Himalayan range. It is hardly 350 km from the national capital Delhi. Many rivers flow through Himachal Pradesh such as Ganga, Ravi, Satluj, Chenab and Yamuna. According to the 2011 census the total population of Himachal Pradesh was 6,864,602 in which total population of males were 3,481,873 and female population being 3,382,729. The area of Bathri and Goli situated at Chamba district of Himachal Pradesh were chosen for data collection at field with GPS location.

2.2 Objectives Of The Study

The objectives of the study were to study about the commercially important crops found in Himachal Pradesh and also to understand the impact of urbanization, pollution and industrial development on commercially important plants.

2.3. Methodology

During this study, primary data was collected from the farm leads and farmers and traders located at markets including different crops which are grown in the state, cropping pattern, yield, commercial importance of crop, its price and value at local market and its export value in domestic and international markets.

The secondary data was collected from studying the literature review of various researchers and from state government information depository.



Fig.2.3.1 Interview of local vendor



Fig. 2.3.3 Potatoes kept for selling at local market.

3. Result and discussion

The crops of commercial importance in Himachal Pradesh are grown in different parts of the state. The major commercial crops include wheat, apple, rice, potato, barley, tea.

The agriculture is main source of income for the people of Himachal Pradesh. A great number of people are involved in the production of commercially important crops.

These crops are a very important part of the economy of Himachal Pradesh. After tourism, the commercial crop production benefits a lot



Fig. 2.3.2 Potatoes kept for selling at local market.

to the GSDP. There is a massive growth seen in the agriculture sector of the state. For better production of the crops the change in cropping

pattern can be seen. It is done for increasing productivity of the crops.



Fig.3.1: (a) Wheat (*Triticum aestivum*), (b) Rice (*Oryza sativa*)



Fig.3.2 (a) Maize (*Zea mays*), (b) Potato (*Solanum tuberosum*)

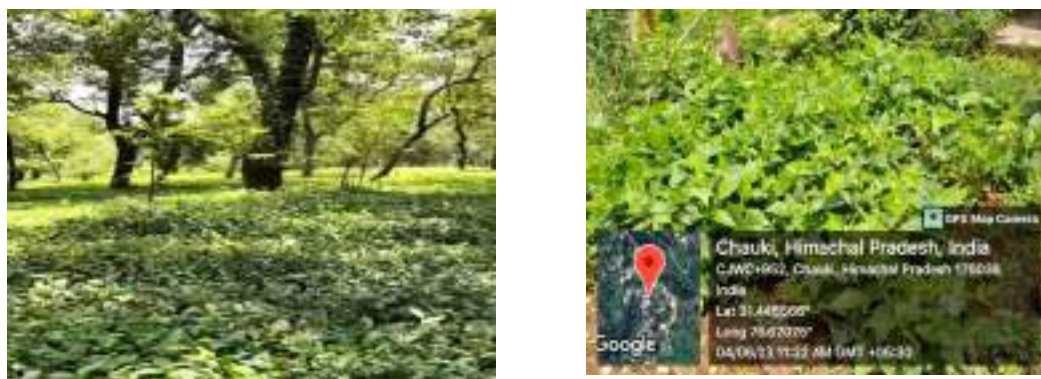


Fig.3.3 (a) Tea (*Camellia sinensis*), (b) French bean (*Phaseolus vulgaris*)



Fig.3.4 (a) Barley (*Hordeum vulgare*), (b) Okra (*Abelmoschus esculentus*)

Different Commercially important crops found in the state Himachal Pradesh are:

3.1 Impact of urbanization on commercially important crops

Urbanization leads to a continuous loss of crop land, both directly under the form of land take, and indirectly through the use of agricultural land for non-productive rural activities like recreation, horse keeping or hobby farming. These urbanization processes put pressure on farmers, making farming activities harder through reduced agricultural land, negative externalities and the competition for land. This results in increasing the share of non-producer; declining agricultural land and increasing food prices; and putting pressure on the livelihoods of rural as well as urban poor. The land for agriculture

is decreasing due to need of people for better living the land which was used for agriculture is now used for living. Which leads to more area under urbanization and lesser area for agriculture leading to loss in land and decreased yield of crops.

3.2 Impact of pollution and industrial development on commercially important crops

Agricultural crops can be injured when exposed to high concentrations of various air pollutants. Injury ranges from visible markings on the foliage, to reduced growth and yield, to premature death of the plant. The development and severity of the injury depends not only on the concentration of the particular pollutant, but also on a number of

other factors. These include the length of exposure to the pollutant, the plant species and its stage of development as well as the environmental factors conducive to a build-up of the pollutant and to the preconditioning of the plant, which make it either susceptible or resistant to injury. Due to pollution the stomata of the leaves of crops present got shrunk and it leads to the decrease in yield of the crops.

3.3 Various preservation and conservation methods for commercially important crops

To process and preserve fresh produce successfully, the spoilage agents must be destroyed without ruining the nutritional value or palatability of the produce itself. Unfortunately, fruits, vegetables and root crops are the only natural source of the essential vitamin C in our food. This vitamin is easily destroyed, especially where processing makes use of heat. In order to retain the maximum amount of vitamin C in processed food, it:

- should be used when freshly harvested;
- must not be subjected to long soaking or washing;

- must be processed immediately after preparation;
- should not be treated in copper, iron or chipped pars.
- The best methods for small-scale processing are: drying, chemical preservation and heat Processing.

4. Conclusion

In Himachal Pradesh, apple farming is the main source of commercial agricultural. Some very valuable plants that could be referred to as cash crops are also grown. The share of net state production that comes from commercial farming is about 9.4%. The state exports apples not just to the home market but also to other countries. In the Himalayas, a variety of exotic plants, including olives, saffron, figs, and hops, are being introduced in an effort to improve trade prospects and the availability of cash crops. Farmers in HP will have more opportunities in the future. Crop land continues to be lost as a result of urbanization. Commercially significant crops are negatively impacted by pollution and industrial growth. Crops can be presented and preserved using a variety of techniques, such as heat processing, chemical presentation, and drying. Commercial crops are cultivated in hillsides



despite numerous challenges. The state's economy greatly depends on these crops. Increased public awareness of the advantages of commercial cropping will be beneficial for

the state's commercial agricultural industry going forward. There will be more space set up for income crops.

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