

## Factors Affecting Constituents of Agriculture A Case Study in Bilaspur District of Himachal Pradesh



### Environment

**KEYWORDS :** Constituents, Formidable, Holdings, Tenure, Plantation & Augmented.

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### ABSTRACT

*The main purpose of this study is to analyze the factors affecting constituents of agriculture and interrelationship between affecting factors constituents of agriculture in the study area. The physical and cultural constituents of agriculture development are most formidable. The climate, soil and topography are the most important physical constituents, which influence the agriculture development. The cultural constituents like land tenure system, fragmented of holdings and operational holdings found in the study area. Soil conservation need to highlight in the area with a large scale plantation, bench terraces, augmented fertility of soils etc. The cultural constituents like bad tenure system and fragmented of holdings should also be removed.*

### STUDY AREA & INTRODUCTION

Bilaspur district is selected as the region for present study. It is situated almost entirely within the Shiwalik range, the outer-most range of Himalaya. The area extend between 31°12' 30"N to 31° 35' 45"N latitude and 76° 23' 45" E to 76° 55' 40" E longitude in a triangular shape. The total area of the district is 1167square km. of which 1154 square km. is rural and remaining urban. In the north and north- west it is bounded by Hamirpur & Una district, in the north-east by Mandi district, in the south and south-east by Solan district and in the south- west by Ropar district of Punjab.

Administratively, the district has been divided into three tahsils Bilaspur, Ghumarwin and Jhandutta and one sub-tahsil Shri Naina Devi. There are three community development blocks Bilaspur Sadar, Ghumarwin and Jhandutta. The total population, according to the 2011 census is 382,056 in which 356,930 (93.42%) population is rural and remaining urban. Bilaspur district has 136 nyapanchayat and 1044 villages out of which 950 inhabited.

As agriculture is the mainstay of rural economy, it has to play a key role any development program and plans for rural area development. This sector contribute a large share to the income of people and plays a very crucial role in the economic development, providing capital not own its development but also generating surplus for development of non agriculture sectors. The economy of the study area is agrarian in nature, therefore the industrial sector should be expanded to diversity it. There should be an exchange between the two key sector i. e. agriculture and industry, the later supplying basic tools for increasing agricultural output as well as large expensive market for the same. The agriculture on the other hand supplies the raw materials for industrial production, and a variety of consumer goods to the agriculture people. The vital significance of agriculture and allied sector has been emphasized repeatedly by integrated rural development planers since these activities are predominant parts of the rural economy and fact provide a means of livelihood for the majority of the people.

About 80% population of the study area is associated with agriculture and allied activities. The most important means of eking out livelihood to the people is agriculture, since the other natural resources have not been exploited fully and properly. The major portion of population resides in the villages and their economic prosperity depends largely upon the growth and development of agriculture. As such the need of agricultural development in the district assumes greater importance. Before the proposal of agricultural development plan, it is necessary to study the affecting constituents of agriculture.

### OBJETCTIVES

- (1) To identify the different factors affecting constituents of agriculture in the study area.
- (2) To study the interrelationship between factors affecting constituents of agriculture in the study area.

### MATERIALS AND METHODS

The entire data used for the present study have been studied on the basis of secondary data, collected from the office of three tahsil and one sub -tahsil, The collected data analyzed both quantitative and qualitatively method. Data from secondary sources have been collected principally from various bulletins:

1. Bulletins of Agricultural Statistics of Himachal Pradesh (year wise from 1985-86 to 2001-02).
2. Socio-economic review and district statistical abstract of Bilaspur district (year wise from 1985-86 to 2001-02).
3. District census & hand book, Gazetteer agricultural epitomes, season and crops reports published by the department of agriculture.

### FACTORS AFFECTING CONSTITUENTS OF AGRICULTURE

The factors affecting constituents of agriculture like cultural and demographic aspect have been taken into account, during the present study.

#### 1. Cultural Factors

Among these factors, some are related to the social system of the study area. The social system sets its imprints on land holding and field system. In the oriental agrarian society like Bilaspur district, there are three important sociological impediments, viz. (a) Fragmentation of holdings (b) Land tenure system and (c) Size of operational holdings.

#### (a) Fragmentation of Holdings:

The fragmentation of holdings is one of the problems of agricultural is one of the problem of agricultural development. This practice of essential land procession has resulted in the worst of all the evils of agriculture. After the father dies, his land is distributed amongst the sons. This distribution of land does not entail a collection or consolidated one, but its nature is fragmented. This is due to the fact that land tracts vary in fertility. If there are five tracts which are to be distributed amongst the sons, all of them will get smaller part of each land tract, and in this way the inheritance of land goes on and with the fragmentation of land holdings become more and more acute. The important cause of the low productivity of land is to be found in the excessive sub-division and fragmentation of holdings in several parts of the district. The sub-division and fragmentation are further associated by factor like the rapid increase of population and to the law of inheritance and succession amongst the families. The sub-division and fragmentation have made cultivation more costly. The practice is very wasteful, in the sense that the farmer cannot concentrate all his attention and energies at one particular place. According to Turner (1931), the disadvantages are obvious, the nearer fields are apt to be over worked and the remote ones neglected. It involves waste of labour in moving, implements, cattle and water to distance, waste of land in providing boundaries and waste of time in going to and fro between the fields. It facilities damage by theft and cattle trespass, makes the use of labour saving difficult, and it restrains cultivators from attempting improvements. There is no possibility of

irrigation in such fragmented holdings. No preventive measures can be taken against the pests and locust menace.

### (b) Land Tenure System:

The term 'Land Tenure' is used to express legal and traditional relations between persons, groups and classes that regulates the right to the use of land, transfer there and enjoyment of the product and the duties that go with those rights. The secured land tenure is the heart of agricultural efficiency. Unless the actual cultivators of land have the incentive to raise the yield, the agricultural output cannot be raised and proper utilization of land can hardly be realized. Often the land owners' mortgage the piece of their fields to be money Landers at some cost and gives the right of tilling to the mortgagee till return his money. This is a bad system of tenure in which the soil fertility is reduced continuously. The mortgagee generally produces crops without supplying proper nutrition to soil. The second system of tenure is crop share system. The owners poor and without means, have no agriculture facilities like bullock and plough implements etc. give their land to the share croppers on share basis i.e. half or one third part of the produced crops. Since this is oral and the period fully depends on the owner's pleasure, therefore, the share croppers are not at all concerned towards putting any special efforts for increasing the output of such fields. The third system is owner cultivation which being the commonest, is strongly established in the area. The owners cultivate the land with the help of their family members.

### (c) Size of Operational Holdings:

The smallness of the holdings, occupied by cultivators, constitutes a limit to the possibility of improvement. There are different sizes of farms in the district, most of them being very small i. e. up to 0.5- 1.0 hectares.

There are 48,652 operational holdings in district with aggregate area of 59,619.98 hectares, according to the agriculture census 1995-96 (Table 1). The increase in the number of operational holdings is mainly due to the increase in population, resulting division of families and holdings.

**TABLE 1 NUMBER AND AREA OF OPERATIONAL HOLDINGS IN BILASPUR DISTRICT**

S.No.	Size of Holdings (Hectares)	Numbers	Area
1.	Below 0.02	-	-
2.	0.02-0.5	15,235	3846.40
3.	0.5-1.0	13,558	9353.47
4.	1.0-2.0	12,291	16943.71
5.	2.0-3.0	4,516	10010.44
6.	3.0-4.0	1,774	5516.21
7.	4.0-5.0	668	2864.98
8.	5.0-7.5	482	2826.56
9.	7.5-10.0	85	693.19
10.	10.0-20.0	40	442.11
11.	Above 20.0	3	72.91
Total		48,652	59619.98

Source: Agricultural Census of Himachal Pradesh 1995-96

Table 1 manifests that large number of cultivators cultivates land in units of less than 0.5 hectares (31.31% of the total holdings). The problem therefore is not so much of uneconomic cultivation as that of uneconomic cultivators. The table also displays that 84.44% of the holders' posses land smaller area less than 2 hectares. The fact of situation, however, is that most of these cultivators have no option but to keep on cultivating small piece of land. In spite of the disproportionate labour and cost that is required to operate a small farm, the land is definite source of employment and means of livelihood to the cultivator. As long as the income on land is in cereals that they daily consume, however, insufficient that income may be, the culti-

vators are not prepared to relinquish the same and carry out cultivation in the absence of any other secure employment. All the cultivators, therefore, search for one job or the other that would take out their income from land. At times, a cultivator earns more from his subsidiary occupation than from his land.

## 2. Demographic Factors

The efficient use of land depends as much upon the capacity of the man who uses it as upon the relationship between the land and individual i. e. man land ratio. The people till the land and grow the crops to fulfill their needs. Man is important in this context as an agent, the operator of the farm and other such units, who normally maximizes production. Pearson & Harper (1945) relate the man with soil as he gets nearly all of his food stuffs from the soil and less than one percent of what he eats being fish. Therefore the land is modified by man with increasing impact of science and technology.

### (a) Ratio of Non-Farm Workers to Farm Workers:

The term non-farm workers have been used for such a class of labour who provide services for the farm workers and hence can be considered as a part of the occupied royalties. According to 1991 and 2001 census, the person engaged in farming practices are 80.55% and 75.45% to the total workers, respectively. In rural area of the district, the ratio of non- farm in 2001 was recordable as 1:5 and 1:4, respectively.

### (b) Farm Workers:

In the Bilaspur district, a very large percentage of farmers are working on uneconomic holdings. The size of farm is so small that there is hardly sufficient work for the farmer and his family to keep engaged throughout the year. The bulk of the population is agricultural and agriculture here means ordinarily the growing, harvesting and disposal of two crops in the year.

## SUGGESTION AND RECOMMENDATION

Agriculture continues to play a significant role in the economic and social development of any region. It holds the key to national development, as the overwhelming majority 'classified as rural', is intimately associated with and is primary based on agriculture and allied activities. In this context different suggestions have been given.

The physical and cultural constituents of agriculture development are most formidable. The climate, soil and topography are the most important physical constituents, which influence the agriculture development. As such the importance of soil conservation need to highlighted in the area with a large scale plantation, bench terraces, augmented fertility of soils etc.

The cultural constituents like bad tenure system and fragmented of holdings should also be removed. The size of operational holdings is the other constituents which are becoming smaller and smaller due to 'inheritance division' by the law of succession. The only solution of fragmentation of holdings is the consolidation of holdings.

## CONCLUSION

80% population of the district is engaged in agriculture activities. There are three important sociological impediments, viz. (a) Fragmentation of holdings (b) Land tenure system and (c) Size of operational holdings. Land tenure system is also major problem in study area. There are 48,652 operational holdings in district with aggregate area of 59,619.98 hectares. Large number of cultivators cultivates land in units of less than 0.5 hectares. 84.44% of the holders' posses land smaller area less than 2 hectares. Person engaged in farming practices are 80.55% and 75.45% to the total workers. Therefore, the conclusion is that farming in the study area is neither a profession, nor a business nor an industry, but it is just way of life.

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