ABSTRACT

Different types of human activities are studied in human geography. In primary activities agriculture is main activity. It is major occupation of human from very beginning of cultivation. About 72 % of our country population lives in rural areas and 58 percent population are engaged in agriculture activities. In crop cultivation, villagers are involved in seed sowing, irrigation, harvesting and marketing of crops. In present study our emphasis is on studying the land use and cropping pattern in the village Surah Tehsil Jhajjar district Jhajjar Haryana. This present study is the answer to many questions relating to land use and cropping pattern of the village as we emphasis on land use pattern and cropping pattern in this study. The study will tell us what is the existing pattern of land use and cropping pattern in the village? With the help of this study we can know those various changes or factors which will help in improving land use and cropping pattern of the village. The study would give the answer to question such as – how cropping pattern has influenced socio economic condition of village, how farmer’s space, environment is affecting him in decision making process?

Keywords : Land use pattern, cropping pattern, percentage share, sown area

Introduction

Land use is multi disciplinary area and is a perquisite resources base for all activities of society. It describes the various ways in which human beings make use and manage the land and its resources. Land use pattern refer to the spatial distribution of human activities, in other words what kind of activities located where? Secondly we discussed cropping pattern, it refers to the type of crops raised and the proportion of area under various crops at a point of time.

STUDY AREA

Village Surah falls in Jhajjar district of Haryana. Its revenue no is 266. This village has an area of 1157 acre. Village Surah has plain topography and it is 220 mts above from mean sea level. According to 2011 census Surah village have a total population of 1700 people, out of which 927 are males and 773 are females which constitute 54.52% and 45.58% respectively of the total population. Sex ratio of this village is 873, while literacy rate is 79%. Whole village is fully dependent on agriculture. Out of total land i.e. 1157 acre villagers use 991.25 acre of land for agriculture purposes. Most dominating soil is alluvial in village. Every year people over cultivate there land but still the fertility of the soil is maintained because of using fertilizers after green revolution. Villagers grow many commodities in their fields whole year in two main seasons i.e. Rabi and kharif. Fields were also left vacant after both the cropping seasons to gain fertility.
OBJECTIVES
- To identify the existing pattern of land use over the space.
- To study about the existing cropping pattern of the village.
- To understand the factor affecting and controlling cropping pattern of the village.

Approach and Methodology
The present study of land use and cropping pattern is based on the village Surah (Teh and distt Jhajjar, Haryana). It involves basically secondary data. The secondary data concerning land use and cropping pattern have been collected from revenue record of the village. Such data are recorded in ‘lal kitab’ and it is available with the ‘Patwari’ of the village. The data collected from various sources was arranged, processed and then presented. The geographical approach has been followed in the present study. Firstly we study the land use pattern of the village. Secondly we study the cropping pattern of the village and also the factors which affect and control cropping pattern. So we are seeing variations in agricultural land use and cropping pattern at local level as well as agricultural system at micro level.

LAND USE PATTERN OF VILLAGE SURAH
The total land use area of the Surah village, according to the village revenue record is 1157 acre. The concern study is on the village Surah and its land use pattern. The total land of village is 1157 acre, out of which 991.25 acre were agricultural, 124 acre were gair majrua (settlements and panchayat land), and remaining 41.75 acre is waste land (Banjar) approximately, which covers approximately 85.7%, 10.7%, 3.6% respectively.

The classification of major land use is as follows:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>AREA (in acre)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural land use</td>
<td>991.25</td>
<td>85.7</td>
</tr>
<tr>
<td>Area under non agricultural use</td>
<td>124</td>
<td>10.7</td>
</tr>
</tbody>
</table>

Source: Data of village revenue records 2011

Barren Land category covers waste land of the village, which has no use. It covers an area of 41.75 acre of the total land approximately, which contribute 3.6% approximately.

Area under Non Agricultural Use category includes all land occupied by houses, roads, drain and other land to put uses other than agriculture. During recent years, there has been increase in the area put to non agricultural uses as expected, because as a results of increase in the developmental activities. It covers 10.7% of total land of village. Under this category various land uses are as follows:-

* Human Settlements covers 23.87%, Hospital 8.2%, Panchayat Ghar 31%, Stadium 4.96%, and Village Streets 26.57% of the total non agricultural land. For forest and permanent pastures there is negligible land in village Surah.

Table No. 1
Different Land Use of Village Surah

<table>
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CROPPING PATTERN OF VILLAGE SURAH

The number of crops and their relative strengths in land occupancy is known as cropping pattern. In this minor crops are eliminated and are not considered. Cropping pattern varies from region to region. The cultivators tend to grow those crops which provide them higher net output in the prevailing conditions. The cropping pattern in the village Surah is heavily biased in favor of food grains. Wheat and paddy constitute the predominant crops.

The whole Haryana like other parts of the country has two main crop seasons:-

1. Winter or The Rabi season
2. Summers or The Kharif season

The rabi season is an important crop season and coincides with the winter months. Sowing of rabi crop starts with the onset of the autumn in the month of October and it continues up to December. These crops are then harvested during early summer, mostly in the march-April. Moderate to low winter, primarily 12 to 15 cms of cyclonic rainfall is very beneficial. In the months of December and January, occasionally frost is injurious especially for fruit and vegetables. Wheat, gram, barley, mustard, various vegetable and fruits are important rabi crops. These crops were sown on 392 acre of land in village.

### Table No. 3 Area Under Rabi Crops 2011

<table>
<thead>
<tr>
<th>Crops</th>
<th>Wheat</th>
<th>Fodder</th>
<th>vegetables</th>
<th>Gram</th>
<th>Oil seeds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>79.3</td>
<td>1.2</td>
<td>1.4</td>
<td>3</td>
<td>17.8</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Data of village revenue records 2011

The kharif season coincides with the summer months. With the onset of monsoon sowing of kharif crops started. They grew during the rainy season. They are harvested during the late summer or early autumn season (September-October). Crops which required high temperature (around 30 degree Celsius) and about 50 cms average annual rainfall are raised during summer season. The crops of this season mostly depend upon monsoon rainfall. Rice, maize, jowar, bajra, groundnut, cotton, sugarcane, sesame, pulses are the major crops of the season. These crops cover 132 acre of land at the time of their sowing season.

### Table No. 4 Area Under Kharif Crops 2011

<table>
<thead>
<tr>
<th>Crops</th>
<th>Paddy</th>
<th>Fodder</th>
<th>Vegetables</th>
<th>Maize</th>
<th>Pulses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>55.4</td>
<td>33.7</td>
<td>4.3</td>
<td>1.4</td>
<td>5.0</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Data of village revenue records 2011

Besides, these there are two short intervening periods. These are called zaid-rabi (which follows the Rabi season) and zaid-kharif (which follows the kharif season). Some fodder crops, vegetables and fresh fruits are raised during these periods.

CONCLUSION

The area was mostly rain fed, situated at a distance of 8 kms south-east of the district headquarter at Jhajjar in Haryana. But the village has deep tube wells, owned by farmers. Thus farming has improved a lot due to availability of water from tube wells, by the use of improved fertilizer, hybrid seeds and mechanization of farming. The per acre yield of wheat, cotton, rice, pulses, fodder, & other varieties have increased 3 to 4 times. From this study one come to know that in village Surah 991.25 acre land is devoted to agriculture, 124 acre to non-agriculture (Gair Majrua), and 41.75 is waste land. There has only few classification of land use in Surah village. From this distribution it is understood that this village is fully agricultural based. Cropping pattern in the village Surah is heavily biased in favor of food grains. Wheat and paddy proved the largest grainer, as much as 79.3% or 55.4% of the total cropped area is under these crops in 2011 respectively. Beside these crops in village they also focused on food grains, pulses or vegetables. Thus, though the socio-economic position of the farmers has been improved but still more is required to be done to raise their standard of living and to meet with the day to day expenditure.