

Temporal Change in Cropping Pattern in Haryana

Manisha*

Ph.D. (Research Scholar) Geography Department, Maharshi Dayanand University, Rohtak

Abstract – Study of cropping pattern has played an important role to find out the agricultural transformation of an area. In the present research work an attempt has been made to analyse the change in cropping pattern in Haryana. For the present study data of 1991-92 and 2011-12 have been used. The changes have been examined in term of change in percentage share of individual crops in total cropped area. The analysis of cropping pattern in the study area has been done for major crops separately. The cropping pattern of the study area reveals that the cereal crops covered the large extent of agricultural land. The proportion of area under cereal crops increased from 57.87 percent in 1991-92 to 68.19 per cent in 2011-12. On the other hand the proportion of other cereals likes maize, barley, jowar and bajra in total cropped area has decreased. It is observed that the area under pulses and sugarcane has decreased but area under cotton increased.

Key Words: Cropping pattern, Temporal change, Cereal crops, Haryana.

-----X-----

INTRODUCTION

Cropping pattern means the proportion of area under various crops at a point of time. It is changes over space or time (Hussain 2004). In a country like India where food grain crops covered the larger proportion of gross cropped area. The cropping pattern of an area has influenced by some factors like geo climatic, sociocultural, economic, historical and political factors. Due to these factors cropping pattern differ from one area to another area. Moreover the size of land holdings, ownership of land and size of fields also decide the cropping pattern of an area. Due to the technological changes in the form of biochemical and irrigation technologies, agriculture has undergone significant changes. As a result the yield level of most crops and especially in cereals has shown upward shift.

In the present research work an attempt has been made to analyse the temporal change in cropping pattern in Haryana during the period 1991-92 and 2011-12. In Haryana significant changes have taken place in the cropping pattern. In different agro climatic zones of Haryana also there are variations in cropping pattern. That is why the study of the extent of changes in cropping patterns in Haryana has been done.

OBJECTIVES OF THE STUDY

The present study is undertaken with the following objectives –

1. To examine the temporal change in cropping pattern in the Haryana.
2. To analyse the change in area under major crops in the Haryana.
3. Find out the reasons responsible for changes in cropping pattern.

DATABASE AND METHODOLOGY

Database

The present research work is based on secondary data. The secondary data has been collected from Statistical abstract of Haryana, Government of Haryana.

Methodology

In this paper percentage method has been used and the changes have been examined in term of change in percentage share of individual crops in total cropped area during 1991-92 and 2011-12. The analysis of cropping pattern in the study area has been done for major crops (rice, wheat, bajra, jowar, barley, maize, gram, sugarcane, cotton, rapeseed & mustard and fruits & vegetables) separately and some minor crops (bajra, jowar, maize, barley, mash, moong, massar, ground nut, sesamum and linseed), for which separate analysis could not be done included in the category of residual crops.

Temporal change in cropping pattern in Haryana

In the state there are changes in cropping pattern spatially and temporally. These changes have been examined as percentage share of individual crops in total cropped area. The time period at which the analysis has been done is 1991-92 and 2011-12. In the table 1.1 the analysis has done of major crops separately but some minor crops, for which separate analysis could not be done included in the category of residual crops.

The cropping pattern of the study area reveals that the cereal crops covered the large extent of agricultural land. The proportion of area under cereal crops increased from 57.87 percent in 1991-92 to 68.19 per cent in 2011-12. That happened because of fulfilling the need of food of growing population of the state. The figure 1.1 shows that the cropped area under rice in kharif season increased from 11.56 percent in 1991-92 to 19.01 percent in 2011-12. In the same way, the share of wheat in rabi season increased from 31.12 percent in 1991-92 to 38.89 percent in 2011-12. On the other hand the proportion of other cereals likes maize, barley, jowar and bajra in total cropped area has decreased.

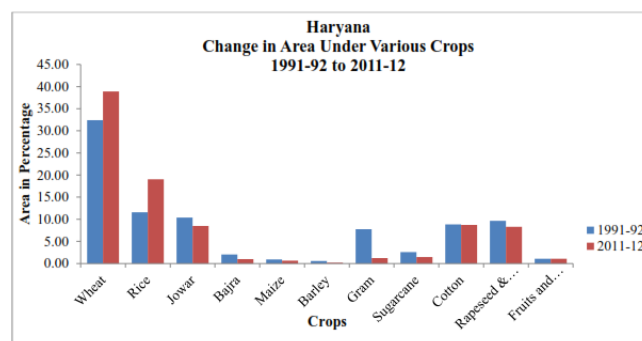
It was observed that the area under pulses has decreased from 9.18 percent in 1991-92 to 1.93 percent in 2011-12. In pulses the proportion of area under gram in rabi season has declined from 7.75 percent to 1.23 percent during the period. Due to the increase in the irrigation facilities in the state the area under pulses decreased because it became favourable for the cultivation of wheat and rice. The area under sugarcane decreased from 2.58 percent in 1991-92 to 1.43 percent in 2011-12, inspite of the fact that the state government has increased minimum support price of sugarcane. On the other hand, the area under cotton decreased from 8.82 percent in 1991-92 to 8.71 percent in 2011-12. The share of area under residual crops increased from 10.21 to 11.28 percent during study period.

Table 1.1: Haryana: Change in area under different crops, 1991-92 to 2011-12

| Crops | 1991-92 | | 2011-12 | | Percentage change |
|----------------------------|----------------|--------------|----------------|---------------|-------------------|
| | Area (000hec.) | Percent Area | Area (000hec.) | Percent Area | |
| Wheat | 1873.07 | 31.10 | 2510.73 | 38.89 | 6.48 |
| Rice | 668.53 | 11.56 | 1227.90 | 19.02 | 7.45 |
| Bajra | 600.53 | 10.39 | 548.83 | 8.50 | -1.89 |
| Jowar | 116.70 | 2.02 | 63.57 | 0.98 | -1.03 |
| Barley | 53.17 | 0.92 | 42.07 | 0.65 | -0.27 |
| Maize | 31.73 | 0.55 | 10.17 | 0.16 | -0.39 |
| Other Cereals | 1.17 | 0.02 | 0.17 | 0.00 | -0.02 |
| Total cereals | 3345.10 | 57.87 | 4403.03 | 68.19 | 10.33 |
| Gram | 447.97 | 7.75 | 79.13 | 1.23 | -6.52 |
| Other Pulses | 82.90 | 1.43 | 45.50 | 0.70 | -0.73 |
| Total Pulses | 530.87 | 9.18 | 124.63 | 1.93 | -7.25 |
| Sugarcane | 149.37 | 2.58 | 93.40 | 1.45 | -1.14 |
| Cotton | 509.70 | 8.82 | 562.57 | 8.71 | -0.10 |
| Rapeseed and Mustard | 558.00 | 9.65 | 534.63 | 8.28 | -1.37 |
| Other oilseed | 35.07 | 0.61 | 10.17 | 0.16 | -0.45 |
| Total Oil seeds | 593.07 | 10.26 | 544.80 | 8.44 | -1.82 |
| Fruits and Vegetable | 61.10 | 1.08 | 69.09 | 1.07 | -0.01 |
| Total (above crops) | 5190.50 | 89.79 | 5728.47 | 88.72 | -1.07 |
| (Residual crops) | 590.17 | 10.21 | 728.20 | 11.28 | 1.07 |
| Total cropped area | 5780.67 | 100 | 6456.67 | 100.00 | 0.00 |

Source: Statistical Abstract of Haryana 1990-92 to 2010-12

Haryana: Change in area under various crops (1991-92 to 2011-12)



Source: Statistical Abstract of Haryana 1990-92, 2010-12.

Fig. 1.1

CONCLUSION

There are variations in the cropping pattern in the state. The cereal crops covered the large extent of agricultural land. The proportion of cereal crops increased from 57.87 percent in 1991-92 to 68.19 percent in 2011-12. In cereals wheat and rice are the dominant crops in overall cropping pattern. On the other hand it is observed that the area under pulses, oilseeds and sugarcane has declined during the period.

REFERENCES

- Ghosh, B. K. (2011), "Determinants of the Changes in Cropping Pattern in India: 1970-71 to 2006-07", *Economic and Political Weekly* 34(2), pp. 109-120.
- Hussain, M. (2004). *Systematic Agriculture Geography*, Rawat Publication, Jaipur and New Delhi.

- Shafi, M (2006). *Agricultural Geography*. Dorling Kindersley, India.
- Statistical Abstract of Haryana (1990), Department of Economic and Statistical Analysis, Haryana.
- — (1991), Department of Economic and Statistical Analysis, Haryana.
- — (1992), Department of Economic and Statistical Analysis, Haryana.
- — (2010), Department of Economic and Statistical Analysis, Haryana.
- — (2011), Department of Economic and Statistical Analysis, Haryana.
- — (2012), Department of Economic and Statistical Analysis, Haryana.
- Goyal. K. A., (2013), 'Agricultural Production Trends and Cropping Pattern in Uttar Pradesh: An Overview', *International Journal of Agricultural Innovation and Research* 2(2).

Corresponding Author

Manisha*

Ph.D. (Research Scholar) Geography Department,
Maharshi Dayanand University, Rohtak

manisha313131@gmail.com