

# Post Independent India

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## Cropping Pattern and Farmer's Income

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#### Abstract:

The paper based on study of the changes in cropping pattern and their impact of farmers income. The research helps in understanding the cropping pattern of Kannad Tahsil. The area under the maize crop has increased relatively largely in the last decade. In 2017-18, the area under maize crop in Kannad Tahsil was found to be 33.76 per cent of the total area under cultivation. For most of the year in last decade. farmers in Kannad Tahsil suffer financial losses as the maize crop is not sold at the minimum support price. While maize, cotton and ginger crops are being produced on a large scale. The lack of a processing industry has not led to increase in agricultural and farmers income. A change in cropping pattern has a great potential in improving crop yield, reducing the cost of cultivation and increase the net income realized by the farmers.

Keywords: Cropping pattern, farmers income Introduction:

India is an agriculture country and most of the people in India depend on agriculture sector for livelihood and employment. Agriculture has been the backbone of the Indian economy. Agricultural sector provides raw material to the industrial sector. Industry will provide finished Exporting agricultural goods to agriculture. finished goods will be favorable to the foreign exchange of the country. India is the second largest country in the world in terms of population. Most people in India also seem to be dependent on the farming. The development of the agricultural sector appears to be a major issue in India. In 2020-21, agriculture accounted for 19.9 per cent of GDP. Compared to other countries, the income of farmers in India seems to be very low. The Government constituted an Interministerial Committee in April, 2016 to examine issues relating to "Doubling of Farmers Income" (DFI) and recommend strategies to achieve the same. The Committee submitted its Report to the Government in September, 2018 containing the strategy for doubling of farmers' income by the year 2022

In this research, cropping pattern and farmers income has been studied in kannad tehsil. The period from 2010-11 to 2019-20 has been selected for the research. Kannad Tehsil has a population more than 3,41,019 in which 3, 00,260 (88%) rural population and 40,759 (12 %) urban population. There are 211 villages in kannad. The average rainfall is 749.2 mm. Kannad tahsil has one agriculture produce market committee work in Kannad and there are five yards of these agriculture produce market committee work at Chincholi-Limbaji, Pishor, Chapaner, Deogaon-Rangari and Nagad. Most of the people are dependent on agriculture sector. The total area of Kannad tahsil is 1,55,547 hectares. 1,12,691 hectares land useful for cultivation of crop. In year 2012-13 cotton crop cultivated area was 55,600 hectares, and it was 55% to total area. In the same year fruit crops cultivated area is 4283 hectare and it was 4.26% to total area. Sugarcane crop cultivated area was 1970 hectare and it was 2% to total area. Total spices crop cultivated area is 406 hectares. In the same year sugarcane production was 80,770 metric tons, cotton production was 16,124 metric tons, total pulses production was 2,598 metric tons and total oilseeds production was 756 metric tons. Availability of man-made water resources, irrigation, fertilizers, intensive cultivation. knowledge of soil composition or testing and high yielding plants varieties impacts on cropping pattern and farmers income.

#### Review of literature:

There are many researchers, who have carried out work in respect of cropping pattern and income. 'Changes in cropping pattern in Rajasthan 1957 to 2017, is done by Anisha Modi and P. Gopinath. 'Cropping pattern change in Kerala 1956-57 to 2016-17, is done by Deepak Johnson, Prema Borkar and E.R. Patil studied on the research topic "A study on changes in the cropping pattern in Chandrapur district" The study was based on time series data for a period of 11 years beginning from 1998-99 to 2008-09 "Impact of crop diversification on farmers socioeconomic condition of the farmers. A case of Himachal Pradesh" entitled research studied by

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K.C. Gummagolmath, R.S. Bhawar, S.B. Ramya Lakshmi and Priyanka Patra published in February 2020. S.B. Ingole carried out research on "changing cropping pattern in selected tahsils of Amaravati district - Micro level analysis"2003-04 to 2015-16 in 2019, Patterns and determinants of agricultural growth in Maharashtra carried out a research by S.S.Kalamkar published in 2011. Ranad C.G. (1980) researched on analyzed effect of cropping pattern. Elumalai Kannan and Sujata Sundaram analyzed of trends in India's agricultural growth. Crop diversification: an important way-out for doubling farmers income is done by Rubina Khanam, D. Bhaduri, and A.K. Nayak published in february 2018. Importance of research topic:

It is observed that the changing cropping pattern has changed the lifestyle of many farmers due to growth in their income. The changing cropping pattern and crop income creates sustainable development in rural area and brings changes in fundamental facilities of farmers. All the developed countries are under the threat of many problems of agriculture sector. The agricultural development can help to sustain economic development. Many crops like Cotton, Sugarcane, Groundnut, and Spices Crops like Turmeric, Ginger, Garlic, and Fruit Crops like Mango, Banana, Oranges, and Lemon can be exported in other countries. This way the foreign exchange can be done for the better economic condition of our country. Agricultural development is important and major issue of country. The Kannad tahsil farmers have adopted new cropping pattern and techniques in the agricultural sector as result the production of crop is increased. It has changed the financial conditions of many farmers in Kannad tahsil. Planned cropping pattern increases the income in the agricultural sector.

Objectives: The main aim of the research work is to analyze changing cropping pattern and its impact on farmers income in Kannad tahsil. The important objectives are:

- 1. To search and compare cropping pattern in Kannad Tahsil.
- 2. To study changing cropping pattern and farmers income.
- 3. To study changing cropping pattern and expenditure of farmers.
- 4. To study changing cropping pattern and agricultural employment.

#### Hypotheses:

- 1) Farmer's income is increasing due to Changing cropping pattern.
- Farmer's expenditure is increasing due to Changing cropping pattern

3) Employment in agriculture has increased due to changing cropping patterns.

Research Methodology: Both, primary data and secondary data were used for the study. The comprehensive and detail study of primary data through the direct field survey of selected 100sample of farmers. Quantitative data has been collected from the farmers interview collected from secondary data had been government office, report and reference books Discussion: India's population is increasing steadily. The food needs of the people are met through the agriculture sector. Although there has been a change in the cropping pattern in Kannad tahsil the extent of cultivation of food grains appears to be significant. More than half of the total cultivation area of kannad tehsil came under cereal crops due to increase in cultivation area of maize crop during study period in the tehsil. A decrease in the area of cotton crop was observed because of increase in production cost of cotton as compared to steady and flat market price of the cotton. The increase in the area under ginger crop appears to have led to an increase in the total area under spice crop.

Table: 1 Changes in cropping pattern in kannad tahsil

Changes in cropping pattern in kannad tahsil						
Years/crops	2010-11 Percentage to total area under cultivation	2019-20 Percentage to total area under cultivation				
Cereal crop	37.93	41.80				
Pulses crop	10.93	08.65				
Food crop	48.87	50.45				
Sugarcane	01.54	01.15				
Spices crop	02.03	04.52				
Fruit crop	00.31	03.64				
Vegetable crop	04.02	03.44				
Cotton	42.28	35.42				
Oil seed crop	00.60	01.33				
Maize crop	20.50	28.00				

**Source:** District Socio-Economic Review Dist. Aurangabad

The study period of above table show changes in percentage to total area under cultivation in kannad tahsil. Change in cropping area under Pulses, Sugarcane, Vegetable and

cotton decreased during study period in kannad tahsil. The area under Cereal crop. Food crop. Spices crop. Fruit crop and oil seed crop increased over a period of time in kannad tahsil.

Table: 2
Impact of changing cropping pattern on farmers income, expenditure and agricultural employment (2010-11 to 2019-20)

Sr. No.	Factors	Number of farmers	% of farmers
1	Changing cropping pattern led to increase in crop yield. The number of farmers who answered yes to this question.	92	92
2	Changing cropping pattern led to increase in income of farmers. The number of farmers who answered yes to this question	64	64
3	Changing cropping pattern led to increase in expenditure of farmers. The number of farmers who answered yes to this question	96	96
4	Changing cropping pattern led to increase in employment in agriculture. The number of farmers who answered yes to this question	82	82
5	Changing cropping pattern increases the use of modern technology. The number of farmers who answered yes to this question	88	88

Source: Interview Questionnaire

Crop production and farmers' income. The table number 2 revealed that the changing cropping pattern increased crop yields up to 92 % and income up to 64% of sample farmers. It was

found that the changing cropping pattern increased the yield of crops but not the income of farmers as it should be. There are many reasons why incomes are not increasing while increasing crop production. The main reason seems to be farmers did not get expected market price for crops.

Expenditure of farmers. Changing cropping pattern led to an increase in expenditure of farmers is 96% of sampled farmers. Changing cropping pattern led to an increase in the cost of modern seeds, fertilizers, irrigation materials and labour. Farmers assumed that modern farming cost increase than traditional farming.

Employment in agriculture: 82 percent of farmers reported an increase in farm employment due to changing cropping pattern. The increase in area under cash crops such as vegetables, spices and cotton are important to increase in employment.

#### Conclusion:

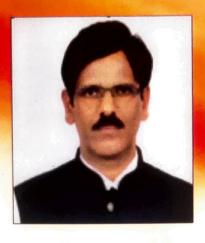
From 2010-11 to 2020-21, the minimum support price (MSP) of 15 major crops increased by 131 per cent. During the same period, the price of chemical fertilizers has increased by 132 per cent. The cost of farm labour has also increased during the period. The national rural employment guarantee scheme's per-day wage rate has increased by 82 per cent in the same period. From 2013-14 to 2022-23, the minimum support price (MSP) of sugarcane crop has increased by 45 per cent. The increase in expenditure seems to be significant compared to the minimum support price.

Sugarcane farmers in Kannad Tahsil suffer financial losses as they are getting lower prices than sugarcane farmers in other parts of Maharashtra. From 2005-06 to 2022-23, the recovery rate increased four times to determine the MSP and FRP of sugarcane crop, which increased the recovery rate from 8.50 to 10.25. Though the FRP appears to have increased, it was found that farmers are suffering financial losses due to the increase in recovery rates.

In the year 2022-23 it was found that 94 percent of the farmers had planted maize crop, 92 percent of the farmers had planted cotton crop, 4 percent of the farmers had planted sugarcane crop, 8 percent of the farmers had planted ginger crop and 16 percent of the farmers had planted vegetable crop. For most of the year in last decade, farmers in Kannad Tahsil suffer financial losses as the maize crop was not sold at the minimum support price.

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