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# CROP COMBINATION PATTERN IN HAVERI DISTRICT OF KARNATAKA

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## Abstract

**Abstract :** The present paper attempt to highlight the crop combination pattern of Haveri district with the help of weaver's method. The study region situated in western part of Karnataka state and also it is coming under Semi-Malnadu region that why this land suitable for crop cultivation. The agricultural pattern in the study region is suitable for climatic conditions, soil fertility as well as social-economic factors. Two crop combinations are found in southern part, Northern part has 3 to 5 crop combinations and high crop combination found in Hanagal and Ranebennur taluks. The unequal distributional pattern of crop combination is mainly because of soil fertility and water availability of Haveri district.

**Keywords:** Crop Combination; crop ranking; Agriculture; Crop Cultivation; Haveri

## INTRODUCTION

The analysis of crop combination regions is important aspects of agricultural geography; it provides more information about agricultural regionalization. In Karnataka State crops are normally grown in combinations and are rarely they occupy isolation from other crops in a particular area at a particular time. In India generally a set of crops are grown so as to suit the environmental frame. Different types of crop grown avoid the risk of crop damages; varieties of crop create high cropping intensity zones. Combinations of crops produce different types of crop. The study of crop combination is also very useful for the area development planning particularly for the rural areas. In recent period this crop combination concept gain more attention and become an important fact among geographers and

agricultural planners.

## STUDY AREA

Haveri district encompasses an area 4823 sq.km lying between the latitudinal parallels of 14° 19' North to 15° 19' North and the longitudes of 75° 01' East to 75° 50' East. Haveri district one of the newly formed district in Karnataka. It was carved out of the undivided Dharwad district on 24<sup>th</sup> August 1997. Erstwhile Dharwad district was divided into three districts; Dharwad, Haveri and Gadag. Now Haveri district is surrounded by Dharwad district in the North, Uttara Kannada district in the west and Davanagere district in the South, Ballari district is towards East of Haveri district. Haveri district is located in northern semi rain fed and semi-malnadu zone.

Haveri district consists of 7 taluks namely Byadagi, Hangal, Haveri, Hirekerur, Ranebennur, Savanur and Shiggaon. For administration convenience two revenue sub-divisions have been formed in this district. While Haveri, Byadagi, Hirekerur and Ranebennurtaluks are the part of Haveri sub-division, the remaining Savanur, Shiggaon and Hangal are the part of Savanur sub-divisions. The district has 698 inhabited of which 7 uninhabited villages, 19 hoblies. This district also known as the Gateway of the Northern Districts of Karnataka. It is famous for its Cardamom garlands. Jawar, cotton, rice, chillies, gram, groundnut, sunflower, sugarcane and oilseeds are the major crops of the district.

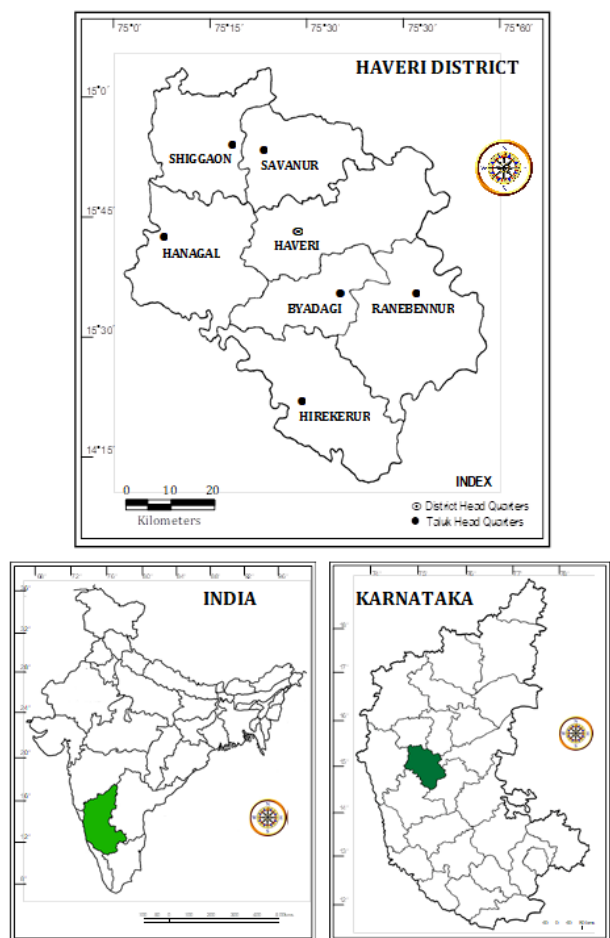


Fig. 1. Location Map of Study Area

## OBJECTIVES

- To know the agricultural aspects of Haveri district.
- To understand the cropping pattern of Haveri district.
- To identify the crop combination regions of the district.

## DATABASE AND METHODOLOGY

The present research has been done by using secondary data of District Statistical Handbook of Haveri district (2016-17) which is collected from department of economics and Statistics, Haveri district. In this study taluks has considered as the smallest unit of analysis. The crop combination pattern has been calculated by using the J.C. Weaver method which is expressed as,  $d = \frac{\sum d^2}{N}$

Where **d** means difference between standard value and actual value and **N** means number of crop in a given combination.

## RANKING OF CROPS

To understand the cropping pattern of the study region a comparison of relative position of a real strength of various crops is ascertained by ranking them for each taluk according to the percentage of each crop to the total cropped area. The first, second and third ranking crops thus obtained for each taluk is mapped with resulting pattern

### First Ranking Crop

In the study region the data indicates that the Maize is the leading and most dominant crop. This aspect is sustained by the fact that Maize rank first in the six out of seven taluks of the district. The Byadagitaluk has the maximum area under Maize amounting to 61.53% of the total cropped area followed by Hirekerur (60.71), Haveri (51.32), Ranebennur (48.640, Hangal (39.29), Shiggaon (32.31).

### Second Ranking Crop

The second ranking crops show a much varied distributional pattern both in term of area and number of crops involved. Cotton is the important second crop in Haveri district. It is covered 4 taluks like Byadagi (22.03), Hirekerur (20.15), Haveri (20.15) and Shiggaon (19.68). Paddy covered 2 Taluks they are Hangal (30.32) and Ranebennur (12.17) and Maize covered Savanurtaluk (29.26).

### Third Ranking Crops

Jawar is the important third rank crop. It covers three taluks like Haveri (12.19), Byadagi (6.06) and Hirekerur (3.88). Ranebennur (10.46) and Hangal (8.68) covered by cotton. Savanur (21.72) Covered by Groundnut and Shiggaon (16.20) covered by Paddy.

## CROP COMBINATION REGIONS

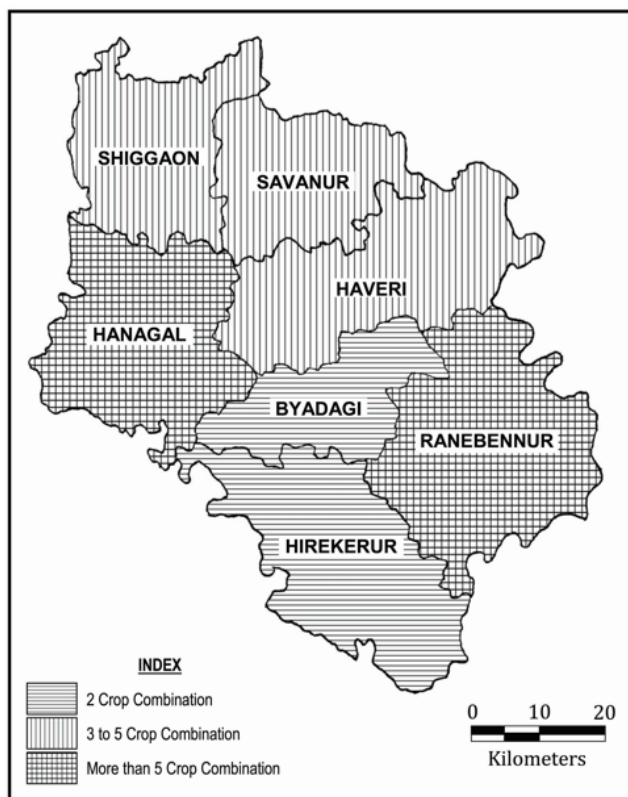
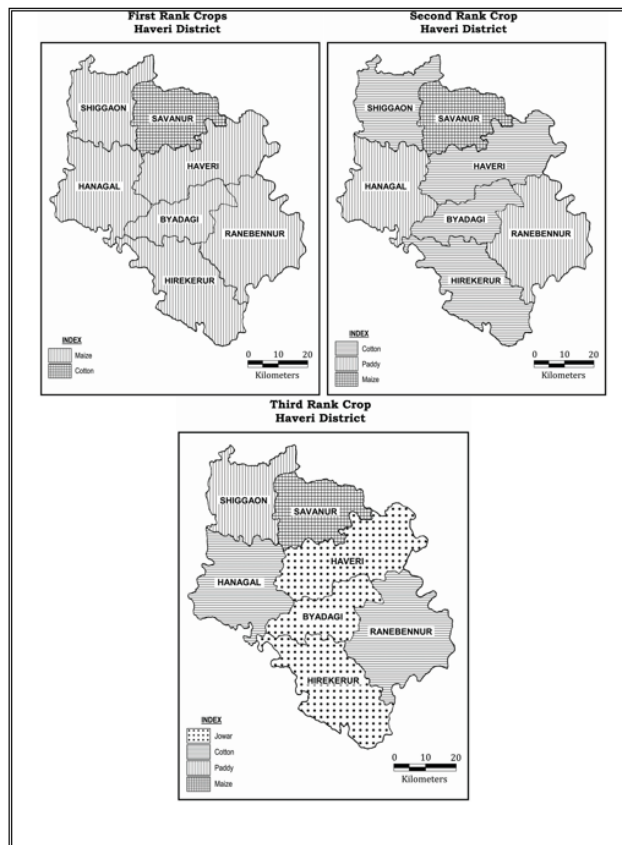
Mono crop regions are not found in any taluks of the Haveri district. Byadagi and Hirekerur taluks are coming under two crop combinations. Three crop combinations

**Table 1. Crop Combination**

Sl. No.	Name of Taluk	No. of Crops	Crop Combination
1	Byadagi	2	M, C
2	Hangal	19	M, P, C, Sg, Fr, Sy, j, Gn, Gg, V, Sn, Cw, Hg, Bl, To, T, Aw, Bg, Mn
3	Haveri	3	M, C, J
4	Hirekerur	2	M, C
5	Raneben- nur	23	M, P, C, V, J, T, Sg, GnBg, Sn., Fr, Sy, Gg, Cw, Aw, Ss, Mn, To, R, W, Hg, Cs, Ng
6	Savanur	3	C, M, Gn
7	Shiggaon	5	M, C, P, Gn, Sy

**Source:** Derived after the calculation of crop combination by J.C. Weaver's method.

**Note:** M=Maize, C=Cotton, J=Jawar, V=Vegetables, Sg=Sugarcane, P=Paddy, Fr=Fruit, Sy=Soya been, GN=Ground Nut, Sn=Sunflower, Hg=Horse Gram, Gg=Green Gram, Cw=Cowpea, Bg=Bengal Gram, Aw=Aware, T=Tur, Ng=Niger seed, To=Tale oil, R=Ragi, OMn=Other Minor Millets, W=Wheat, Bl=Black Gram, Cs=Caster, Ss=Sesamum, L=Linseed.


**Fig. 3. Crop Combination in Haveri District (2016-17)**

**Fig. 2. Top Three Ranking Crops (2016-17)**

are made by Maize, Cotton and Jawar in Haveritaluk and Cotton, Maize and Groundnut in Savanurtaluk. Maize, cotton paddy, Groundnut and Soybean these five crop combinations identified in Shiggaontaluk. Haveri taluk has 19 crops combination and highest crop combination found in Ranebennur has 23 crop combinations.

## CONCLUSION

In this article J.C.Weavers crop combination method has been used. The North part of Haveri district Byadagi and Hiekerur taluks are come under two crop combination and Shiggaon, Savanur and Haveri taluks are identified three crop combinations in Southern part of Haveri district. Remaining Hangal and Ranebennur are more number of crop combination found. The available soil fertility and water availability to support the more number of crops cultivation in Haveri district and also combining the crops to avoid the risk to crop damages. The irrigation system is main reason for unequal distribution of crop combination pattern in study region. <sup>(1-7)</sup>

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