



Cropping Pattern And Crop Ranking Of Dakshina Kannada District, Karnataka

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Abstract: - Agriculture, crop ranking play a vital role in agriculture development. In this study mainly the ranking of the crops has been analysed from the year 2000-01 and 2015-16 by using secondary data, different taluks of district is having different ranking in the different year. The production of crops is depends on the soil, temperature, rainfall, irrigation and agriculture technique, each taluk having different soil texture, availability of water resource. In this attempt have been made to analyse cropping pattern and crop ranking of the study region. Horticulture crops were dominated because of this study area having humid climate which is suitable for crops like areca nut, coconut, cashew nut and rubber etc.

Keywords: - Agriculture, Cropping Pattern, Crop Ranking. Horticulture

Introduction

The percentage of area under each crops was ascertained simply by ranking them for each taluks in order to have percentage of the total net sown area occupied by each crop. Ranking of crops gives an insight into the geographical reality of the cropping pattern. Moreover, ranking of crops helps in knowing the crops which compete with each other to gain more hectares under cultivation. After assessing the relative strength of different crops in geographical unit, the process of planning can be initiated more relationally for the optimum used of the available land for cultivation. A judicious use of land with adequate input in fact can help in raising the agricultural production even in the less fertile soil. Thus the study is useful in reducing the entire regional disparities in the agricultural income and economy. Unless the major crops of the district are studied in their ranking order and the areal strength of each crop is determined, an appropriate association of soil and soil enriching crops for situation cannot be ascertained.

Study Area

Dakshina Kannada district is located south western part of Karnataka state in India with a population of 20, 83,625 persons (census 2011). Geographically it lies between 13⁰ 50' and 14⁰ 30' north latitude, and 68⁰ .00' and 70⁰.10' east longitude. The district was bifurcated in 1859 from north Canara district. The total area of Dakshina Kannada district is 477381 sq. km. administratively the Dakshina Kannada district is divided seven tehsil namely Mangalore. Sullia, Puttur, Belthangadi, Moodbidri, Bantwal and Kadaba. The study is bounded from the north by Udupi and Chikkamagalore district, southern by Kasaragod (Kerala), Kodagu district eastern by Hassan district, and western by Arabian Sea.

Objectives

To assessment the ranking crops of Dakshina Kannada district.

To know the cropping pattern of the study region.

Sources of data collection

1. To study the various aspects of Agricultural geography of Dakshina Kannada district, the data for two periods i.e., 2000-01 and 2015-16 are taken from the following.;
2. Dakshina Kannada district at a glance 2000-01 and 2015-16 district statistical office, Mangalore (Dakshina Kannada district), Government of Karnataka, M. S. Building, Bangalore.
3. Taluk a wise plan statistics of Dakshina Kannada district, District Planning Unit, Zilla Panchayat Office, Dakshina Kannada District.
4. Gazetteer of Dakshina Kannada District, Govt. of Karnataka.

Limitations of the study:-There is a limitation in the agricultural and cropping pattern, some crops have been unable to describe such as minor commercial crops like fruits, vegetable, etc. because of less percentage of agricultural area and production.

Methodology

This method can be studied by descriptive and quantitative, ways to delineate the ranking of individual crops according to their areas as impotence in each components units. The crop with the larger percentage share of the net sown area forms the first ranking crop and the crop with the next largest share become the second ranking crop. Similarly calculation have been made up to 1 to 11 ranking crop and result patterns have been plotted in figure no. for the years 2000-01 and 2015-16.

Table:-Taluk wise ranking of Crops 2000-01

Sl.No.	Name of the taluk	1	2	3	4	5	6	7	8	9	10	11
1	Bantwal	P	CS	A	CO	FR	V	PU	SP	RU	PP	C
2	Belthangadi	CS	P	A	CO	RU	V	FR	SP	PU	C	PP
3	Mangalore	P	CS	CO	PU	FR	A	V	RU	SP	PP	C
4	Puttur	CS	A	P	CO	FR	V	RU	SP	C	PP	PU
5	Sullia	A	RU	CS	CO	C	FR	P	SP	PP	V	PU
		3	4	4	2	3	3	5	2	5	3	3

Table:-Taluk wise ranking of Crops 2015-16

Sl. No	Name of the taluk	1	2	3	4	5	6	7	8	9	10	11
1	Bantwal	P	CS	A	CO	FR	SP	PU	RU	PP	V	C
2	Belthangadi	CS	P	A	CO	RU	SP	FR	PP	PU	V	C
3	Mangalore	P	CS	CO	PU	A	FR	V	SP	RU	PP	C
4	Puttur	A	CS	CO	P	RU	FR	V	SP	C	PP	PU
5	Sullia	A	RU	CS	CO	FR	P	PU	SP	PP	C	V
		3	3	3	3	3	3	3	3	4	3	3

P-PADDY, CS-CASHEW NUT, A-ARECANUT, RU-RUBBER, CO-COCONUT, FR-FRUITS, V-VEGITABLE PU-PULSES C-COCOA SP-SPICES PP-PEPPER

Discussion

First Ranking Crops:-Paddy are the most dominant crop in the district in 2000-01. There were only three crops i.e., Paddy. Cashew nut and areca nut, which were compact as first ranking crops in the district. Paddy was cultivated as first ranking crop in Bantwal and Mangalore taluk and cashew nut was cultivated as first ranking crop in Belthangadi and Puttur Taluks. Areca nut is only in Sullia taluk. During 2015-16, Paddy, Cashew and Areca nut were Cultivated as first ranking crops in the district. Among these crops the Paddy was dominant in two taluks. Viz., Bantwal and Mangalore. Areca nut was cultivated as first ranking crops in Puttur Taluk have been changes

and all four taluk continued as first ranking crops. Also same as frown as dominant crop in 2015-16 where as it was dominated by Paddy, Cashew and areca nut, areca nut in Puttur taluk instead of cashew nut during 2015-16.

Second Ranking Crops:-Cashew nut, Paddy, Areca nut and Rubber were cultivated as second ranking crops in the district during 2000-01. Cashew was dominated crop even as second ranking crop of the district and was so grown in Bantwal and Mangalore taluks. The second important crop in the same rank was paddy. Which was grown in Belthangadi, Similarly Areca nut in Puttur Rubber in Sullia. During 2015-16, Cashew nut was cultivated in three taluks wiz Bantwal, Mangalore and Puttur, Rubber grown as second ranking crop in Sullia taluk. Similarly paddy in Belthangadi. A one and half decadal study periods shows that Cashew have been replaced by Areca nut in Puttur remaining four taluk have maintain same crops an second ranking is same taluks respectively.

Third Ranking Crops:-Four crops were grown in the district as third ranking crop wiz, areca nut in Bantwal and Belthangadi, coconut in Mangalore, paddy in Puttur, and cashew nut in Sullia in 2000-01. Whereas three crops were cultivated as the third ranking crops in 2015-16. Areca nut was cultivated as third ranking crop in Bantwal and Belthangadi, coconut in Mangalore and Puttur, in cashew nut in Sullia have been grown as third ranking crop in the district during 2015-16. A Fifteen year periods, shows that there were change in cultivation of crops i.e., paddy in Puttur taluk, there were no changes were found in other four taluks of the district in during 2015-16.

Four Ranking Crops:-Coconut was cultivated as fourth ranking crops in four taluk wiz, Bantwal, Belthangadi, Puttur and Sullia. Pulses in one taluk were cultivated as fourth ranking crop during 2000-01. Similarly in 2015-16, three crops were cultivated as fourth ranking crops in the district in different taluks. The three crops are coconut in three taluk, pulses under Paddy in single taluk. The change from 2000-01 to 2015-16 shows that, Paddy is replaced by coconut in Puttur taluk and other four taluk were maintained same crops as fourth crop ranking in between period of fifteen years.

Fifth Raking Crops:-There were three crops cultivated as fifth ranking crops in 2000-01 and 2015-16. Fruits, rubber, and cocoa were cultivated as fifth ranking crops in a different taluk each, Fruits cultivated as a dominant crop as fifth ranking in three taluk but fruits cultivated as a dominant crop as fifth ranking in three taluk during 2000-01. During 2015-16, Fruits, Rubber and Areca nut were the important crop grown in the district as fifth ranking crop. Fruits and Rubber are dominant crop which was cultivated as fifth ranking crop in two taluks each (each crops having two taluks) and Areca nut in a single taluk. A one and half decadal periods shows that areca nut, Rubber and Fruits have been replaced by Fruits and cocoa.

Six Ranking Crop:-Vegetable have been dominantly cultivated as sixth ranking. Crops in three taluks during 200-01. Two other crops are also grown as sixth ranking crops, wiz, Areca nut and fruits. During 2015-16 with replacing vegetable by spice in Bantwal, Belthangady and Areca nut by fruits in Mangalore, and vegetable by fruits in Mangalore, and vegetable by fruits in Puttur, and fruits have been replaced by paddy in Sullia.

Seventh Ranking Crops:-The five crops have been cultivated as seventh ranking crops in 2000-01, and three crops during 2015-16 in the district. Pulses fruits, vegetable, rubber and paddy have been grown as seventh ranking crops during 2000-01 whereas pulses, fruits and vegetable are the seventh crops in 2015-16. A fifteen years of study period (2000-01 to 2015-16) shows that two taluks have been replaced vegetable by rubber in Puttur and pulses by Paddy in Sullia taluk.

Eighth Ranking Crops:-In this rank only two crops were included during 2000-01, whereas, three crops in the year 2015-16. The minimum numbers of crops have been grown as eighth ranking crops have been grown as eighth ranking crops i. e., two crop. The spices played dominance with placing in four taluks as eight ranking crop in the district during 2000-01. Rubber also have been cultivated as eight as eighth ranking crop in one taluks. The changes from 2000-01 to 2015-16 shows that about three crops have been replaced during span of fifteen years, spice have been replaced by rubber in Bantwal. Spice is replaced by pepper in Belthangadi, Rubber is replaced by spice in Mangalore remaining two taluks have maintain same crop eight ranking.

Ninth Ranking Crops:-There were five crops in the year of 2000-01. And 4 crops during 2015-16 have been cultivated as ninth ranking, in the district, Rubber, Pulses, Spices, cocoa and pepper was cultivated as ninth ranking crop on five taluk. Five taluks has been grown as ninth ranking crop in a single taluk each during 2000-01. In the year 2015-16, pepper was cultivated as ninth ranking crops in two taluks similarly pulses, cocoa and rubber have

been cultivated as ninth ranking crops in Belthangadi, Mangalore, and Puttur respectively. The changes from 2000-01 to 2015-16 shows that pepper and rubber are replaced by spice and pepper in Bantwal and Mangalore taluks.

Tenth Ranking Crops:-Pepper in Bantwal, Mangalore and Puttur was grown as tenth ranking crop in the year 2000-01, but in the remaining taluks have been cultivated cocoa in Belthangadi and Vegetable in Sullia has tenth ranking crops in the district. In the year 2015-16, the vegetable and pepper have been grown as tenth ranking crops in two taluks each of the district. Cocoa as tenth ranking crops in the district. A one and half decadal study periods (2000-01 to 2015-16) shows pepper and cocoa have been replaced by vegetables as tenth ranking crop in the district. Three crops have been continued as tenth ranking crop during a span of fifteen years.

Eleventh Ranking Crops:-Cocoa and pulses was cultivated as eleventh ranking in two taluks each and pepper in a single taluk of district in 2000-01. Whereas cocoa, pulses and vegetable crops grown in) cocoa in three taluk in one taluk pulses and vegetable in a single taluk each have been cultivated as eleventh ranking crops in 2015-16. In the year 2015-16. Cocoa have been grown as eleventh ranking crops in three taluks of the district. Pulses, vegetables, in a single taluk each have been cultivated as eleventh ranking crops in 2015-16. The changes from 2000-01 shows that cocoa in Bantwal, pulses in Puttur have been other crops have been replaced during a fifteen year pepper was replaced by cocoa, pulses was replaced by vegetable and pepper was replaced by cocoa in Belthangadi in Sullia taluk.

Conclusion

In this study we can observe horticulture crops were dominated because of this study area having humid climate which is suitable for crops like areca nut, coconut, cashew nut and rubber etc. and also we can notice in this region farmers adopting new technologies for improving to develop of horticulture crops.

1. Paddy has been cultivated as first ranking crop in the 2 taluks which coastal plain land.
2. Cashew nut and areca nut are the first ranking crop in the elevated land to words Western Ghats region.
3. There are intermix of cashew nut, rubber and coconut as second and third ranking crops are all taluks of the districts.
4. Among the dry taluks other pulses and fruits are the third and fourth ranking crops.
5. There exist differences in the ranking of crops, between coastal plain and elevated land. The middle order rank like fifth and sixth possess few wet crops in dry taluks. This type of trend connate be notice in ninth tenth, and eleventh crops between wet and dry taluks.

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