



A SPATIO-TEMPORAL STUDY ON PATTERN OF LAND USE UNDER CULTIVATION AND IRRIGATION IN MYSURU DISTRICT

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ABSTRACT

Agriculture is the most predominant occupation in India. It plays an important role because it supplies food and the people, raw materials to the industries and various items of export trader but also it constitute an integral part of our cultural and tradition and the general fabric of life in the country. The present paper relates to the trend of cultivable land utilization in Mysuru district. It mainly focus on total land area, cultivable land area and irrigation land utilization from the different sources. Totally Mysuru district has consist of 71.9 percent of cultivable land utilization in the year of 2000-01 and it having 74.13 percent of cultivable land utilized during the year 2013-14. Compare to these 14 years the district cultivable land utilization has been increasing but when compare to taluka wise percentage it's varies from one taluk to another. From 2000-01 to 2013-14 the position of irrigated land area under cultivation is also varies one taluk to another. Percentage of T Narasipura taluk is slightly increasing and H D Kote taluk percentage is slightly decreasing. But compare to other taluks Hunsur, Mysuru, Periyapatna taluk percentage is increasing and K R Nagar and Najangud taluks share of irrigated land is decreasing.

KEYWORDS: Cultivable Land, Occupation, Utilization.

INTRODUCTION

In India agriculture occupies a prominent place, it constituent of man's primary occupation and reforms the first vital link of human interaction with environment. The beginning of agriculture marked a significant landmark in the annuals of human civilization, as it revolutionized the entire human existence by triggering off a chain of development i.e., social, economic, political, scientific, technological etc., even today its contribution to the growth and development of human society and economy is an important, as it used to be in the early years of human history. It can be fairly assessed from the fact that in spite of being heavily encroached upon by growing technological and industrial development over the year, it still employs about 50 percent of the total labour force of the world. Land is an unquestionably a priceless property. It is important to every individual and every nation, but its importance to those who depend on its direct use, multiplies with the increasing intensity of the use. India is heavily agricultural and the majorities of its population derives its livelihood, by cultivating the land. Therefore we cannot afford to wish away the problems and requirements related to the land use in the country. Presently the country needs sufficient quantities of food grains to feed its tuning millions, various raw materials to build up sound industrial base, several items of export to improve foreign exchange position and creation of adequate job opportunities for the large majority of unemployed youth. The present paper aims to analyzing the pattern cultivable land utilization and focus on the utilization of irrigated land



area from different sources in Mysuru district.

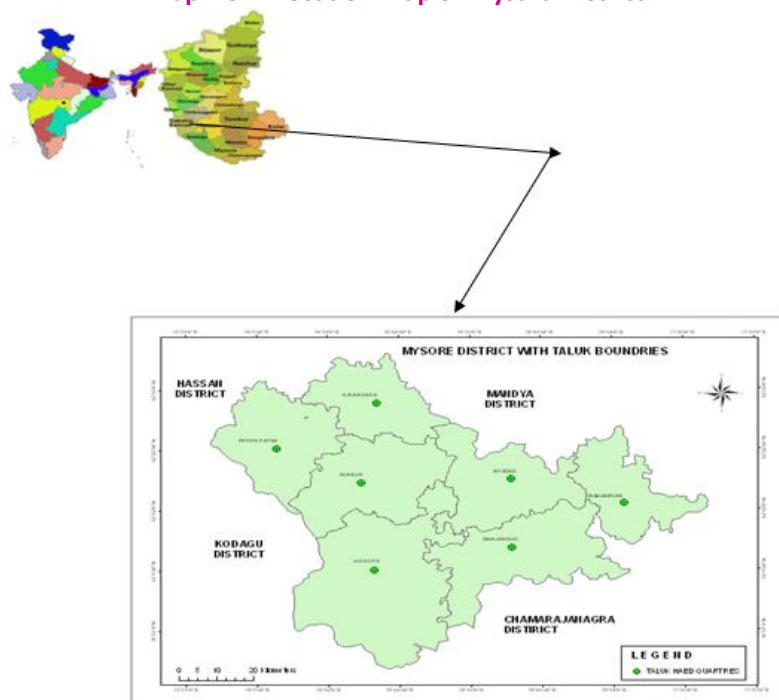
OBJECTIVE:

The present paper has attempted to find out the pattern of cultivable land and irrigated land utilization in the study region.

STUDY AREA:

Mysuru district is one of the southern district in the state of Karnataka. It is situated in the southern part of the state. The district is an important historical and tourist center of the country. It lying between 11° 30' north latitude to 12°50' north latitude and 75°45' East longitude to 77°45' East longitude. It is bounded on the north by Hassan, Mandya districts to the north-east, Kodagu district to the south-east. It covers an area of 6269sq.Km. This constitutes about 3.5 percent of the total area of the state.

Map.No.1: Location Map of Mysuru District



DATABASE AND METHODOLOGY:

Data and sources regarding utilization of cultivable land and irrigated land from different sources were obtained from Mysuru district statistical office and District at Glance and e-sources. The relevant information and data were organized and classified using relevant statistical techniques at the development of taluk level to find out the special pattern.

LAND USE UNDER CULTIVATION:

Agriculture constitutes the back bone of Indian economy as it is the sources of livelihood of 70 percent of the country's population. Land able to be used for farming is known as cultivable land. It's a traditionally called arable land and permanent cropland together. All cultivable land area utilization is depending upon their soil condition, climate condition, and better use approach to use new technologies and better use of irrigation facilities and their market potential. The trend of land utilization is varies from

one decade to another and one place to another. This level 1 % of land utilization is completely depend upon human involvement is agricultural activities. In the present paper Mysuru district, taluk cultivable area and irrigated area number will calculated in the form of percentage and it finally out the decadal variation between the year of 2000 to 2014. These collected data were processed in tabular form and for deriving specific conclusion. Table no 1 shows to the taluk wise cultivable land use and their decadal variation from 2000-01 and 2013-14.

Cultivable land area utilization is calculated as below:

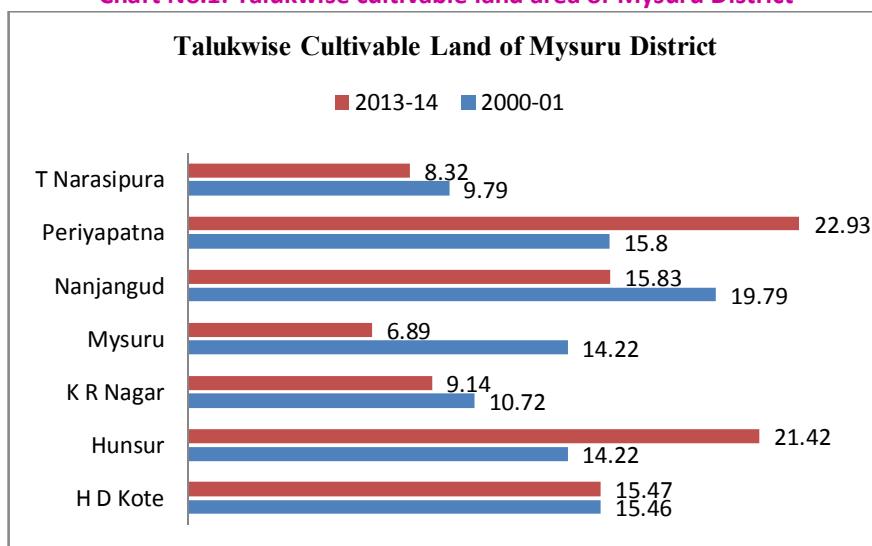
$$\text{Cultivable land} = \frac{\text{Total geographical area}}{\text{Total cultivable area}} * 100$$

Table no.1: Taluk-wise cultivable land area of Mysuru District

Sl.No	Taluk name	Cultivable land utilization (%)		Decadal variation from 2000-01 to 2013-14
		Year		
		2000-01	2013-14	
1	H D Kote	15.46	15.47	0.37
2	Hunsur	14.22	21.42	7.66
3	K R Nagar	10.72	9.14	-1.24
4	Mysuru	14.22	6.89	-6.84
5	Nanjangud	19.79	15.83	-3.32
6	Periyapatna	15.80	22.93	7.64
7	T Narasipura	9.79	8.32	-1.16

Source: District Hand Book 2000-01 and 2013-14

Chart No.1: Talukwise cultivable land area of Mysuru District



Mysuru district has consisted of taluks namely H D Kote, Hunsur, K R Nagar, Mysuru, Nanjangud, Periyapatna and T Narasipura. During the year 2000-01 Nanjangud taluk has highest percentage cultivable land area and T Narasipura taluk having lowest percentage i.e., 19.79% and 9.79% respectively and other remaining taluks are having medium share of land utilization. During the year of 2013-14 the highest and

lowest percentage will shift to the taluks of periyapatna (22.93%) Mysuru taluk (6.89%) remaining taluk is having 1 % of cultivable land utilization.

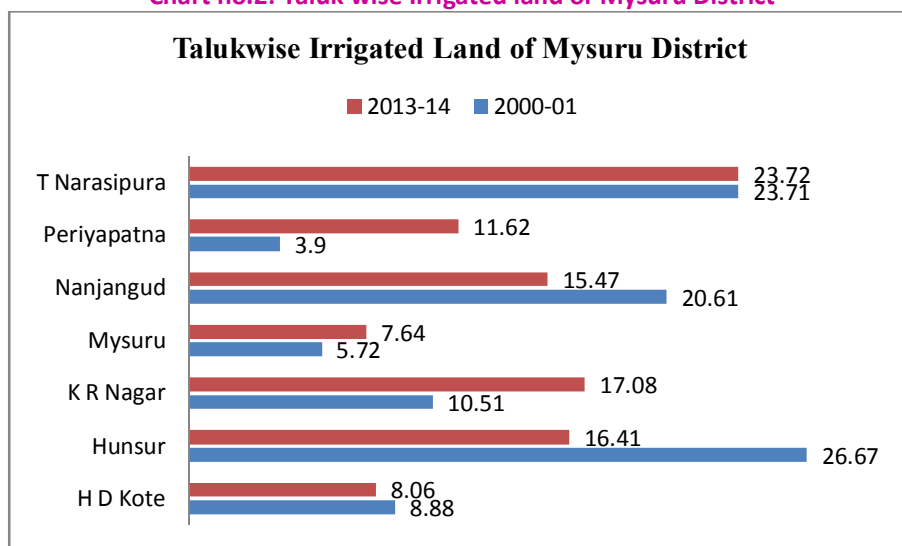
From the year 2000-01 to 2013-14 Periyapatna taluk area utilization is increasing. But the year remaining taluks in decreasing manner. Compare to all taluks H D Kote has constant level, Hunsur, Periyapatna is increasing and remaining taluks share of percentage is decreasing viz., K R Nagar, Mysuru, Nanjangud, T Narasipura. When we see the district cultivable land utilization will decrease because of –it may be cultivable land will be converted into commercial land or more number of farmers are shifting occupation from agriculture to sector and some rural areas are converted into the urban centres. So all these factors are influencing the utilization of cultivable land.

Land Use under Irrigation:

Irrigation is one form or another has been in vogue from time immemorial. Agriculture is precarious where rainfall ranges between 30cm to 50cm, farming without irrigation is very limited if the rainfall decrease to less than 30cm, agriculture becomes impossible without irrigation. Irrigation becomes indispensable for efficient utilization of existing land and for increasing food resources and the evapotranspiration land is irrigated by a variety of ways, such as land and rising subsoil water. Sources of irrigation will depend upon various factors such as, surface configuration, rock structure, water table, quality and quantity of ground water and extent of water potential attachment area and soil profile of the land. These factors vary considerably from place to place in a given region. In the present paper is analyzing the pattern of irrigated land utilization from different sources under cultivation in Mysuru district. Mysuru district has irrigation facility from all the four major sources via., Krishnarajanagara, Kabini, Harangi and Hemavathi located in Cauvery basin. Talukwise percentage of irrigated land utilization under cultivation as shown in the table no.2

Table No.2: Taluk wise Irrigated land area of Mysuru District

Sl.No	Taluk Name	Irrigated land area under cultivation (%)	
		Year	
		2000-01	2013-14
1	H D Kote	8.88	8.06
2	Hunsur	26.67	16.41
3	K R Nagar	10.51	17.08
4	Mysuru	5.72	7.64
5	Nanjangud	20.61	15.47
6	Periyapatna	3.90	11.62
7	T Narasipura	23.71	23.72

Chart no.2: Taluk wise Irrigated land of Mysuru District

During the year of 2000-01 Hunsur taluk having highest percentage of irrigated land area from the entire source and Periyapatna taluk has registered lowest percentage i.e., 26.67% and 3.90% respectively. Other taluk has medium share of irrigated land. In the year 2013-14 T Narasipura taluk has record highest percentage (23.72%) and Mysuru taluk having lowest percentage (7.64%) remaining taluks are having medium level of irrigated land area under cultivation viz., H D Kote, K R Nagar, Hunsur, NANjangud and periyapatna.

Compare to the all the taluks between the year from 2000-01 to 2013-14 the position of irrigated land area under cultivation is varies one taluk to another. Percentage of T Narasipura taluk is slightly increasing and H D Kote taluk percentage is slightly decreasing. But compare to other taluks Hunsur, Mysuru, Periyapatna taluk percentage is increasing and K R Nagar and Najangud taluks share of irrigated land is decreasing.

CONCLUSION:

The way and extent to which land is utilized set the pace of countries economic development. Hence the proper utilization of land according to the use and capability should be the prime concern of its people. An integrated development of water and land resources of a nation is of fundamental importance for the development of its agricultural economy. Finally the department of agriculture is implementing various crop development schemes in the district for development the irrigation area and cultivable land area viz., 1)developmental works in seed farms 2)Micro Irrigation 3) Maintenance of Raith Samparka Kendra's .

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