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Review Article

A Review of Sugar Cane Cultivation in **Chamarajanagar District**

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ABSTRACT

An outlook of sugarcane crops grown in the Chamarajanagar district has been given in the present study. The sugarcane is influenced by the spatial and the influence of environment in particular region for its growth. An unplanned cultivation has brought severe problems for the cultivation of sugar cane in the Chamarajanagar district. This study found that the yield and land use of sugarcane is low compared to other districts in Karnataka. This study has made an attempt to analyze the sugar cane cultivated areas within the Chamarajanaagr district. So for this the mere trend is to understand and analyze the problems and suggest creative measures for its cultivation. Agriculturists have a greater challenging role to play in the present context where cultivation technology is given utmost importance.

Key words: Deforestation, anthropogenic, topography,

INTRODUCTION

One of the most menacing problems in the developing countries has a profound effect upon the sugarcane has resulted into undergoing phenomenal charges in agriculture. In view of this process of acquiring information about such charges has become a basic requirement for agricultural planners. Accurate information on various aspects of agriculture systems and its day to date monitoring is needed at district state and national level.

The Problem: The Chamarajanagara District has witnessed remarkable growth in irrigation watershed development program, tourism pilgrim, deforestation and many other anthropogenic activities since its inception like many other districts. The sugar cane cultivation has different

problems such as wild life animals from forest, like of irrigation, transport, irregular water supply and sugar industries are away from the Chamarajangar district so these are the problems which is existing in the study area.

OBJECTIVES

- 1. To identify the sugarcane cultivation in study area.
- 2. To identify the distribution of sugarcane in the study area.

Study area: The Chamarajanagara district is situated in the southern most of part the Karnataka state and deccan plateau in the south the district with on area of 5101.00 sq kms between 11.30' and 13.55 cost longitude.

The Chamarajanagar district has undulating topography which is having hill ranges such as Biligirirangana Betta (B.R. Hills is Yelandur taluk and MM Hills in Kollegal taluk and Himavad Gopalaswamy betta in Gunldupet taluk, while it has gat veariety of resources, drainage system, temperature R.F, winds, socials, forest, wild animlas and animals husbandry etc.

REVIEW OF LITERATURE

In the early seventies geographies conducted several studies to understand the agricultural characteristics by home interview /field interview method. The effect of expending sugar cane farming on community in Masindi, Uganda by Wim Klvnne studied on newly cleared waded areas, land list in the waved land and glass land, grass land categories the increase in commercial subsistence farming. Another important study was conducted by Hordy in Australia has made a study on "Soil Sodicity and plant available water capacity maps used to plan sugar cane expansion and potential irrigation requirement in central queens land".

In recent years no systematic study has been made taking into consideration of Socio-Economic and environmental aspect of the people who are living in the villages. The spatial behavior of land use for sugar cane in determined by so many non-spatial factors like income, occupational structure, social status etc.,

METHODOLOGY OF SOURCE OF DATA

Any research were has to be done on a systematic way by collecting various data from different sources. The Sources of data for the research have been collected from different department pertaining to agriculture. The sources have been collected from various departments such as department of Agriculture, Statistics office, Watershed department program, land use board etc., The maps will be collected from the natural resource data management system, Chamarajanagar and survey of India, Bangalore. The resource method will be included for analysis the data. These data will be added to computer and thematic maps will be generated. This will be used for the analysis and suggestions. The Journals and the internet form the library will be used to know for the review and literature survey.

General land use of Chamarajanagar District: The district has total geographical area of 5101 Sq Kms out of which 27561 Sq Kms is under forest. The net sown area account for 1,72,35 hectares. The land not available for cultivation is of 45,900. The fallow land is of 21434 hectares and the cultivable land was 35128 hectare from the above data in general land use in the district exhibits about 62% percent of land used for cultivation.

Agriculture land use of Chamarajangara District: The Chamrajanagara District comprises of 4 taluks and has total geographical area of 5,69,901 hectares out of which 2,75,610 hectares (48.36%) of land covered under forest. The net sown area in the district accounts for 1,72,335 hectares (30.24%). The land not available for cultivation was of 43,994 hectares (7.72%). The follow land was about of 41,977 hectares (7.37%) and other cultivable land accounts about 35,985 hectares (6.31%). From the above data it reveals that the district has good percentage of land under cultivation. The forest land was more concentrated in Kollegal i.e., 1,93,259 hectares (69.08%) Yelandur 10,589 hectares (40.0%), Gundlupet 44, 589 hectares (31.90%) and Chamarajangara itself possess 26,903 hectares (21.85%). In General land use in this district exhibits that 62% of land is used for cultivation which is a good sign for development of agriculture in the district.

The forest land was 2,75,610 hectares (48.36%). The net sown area was 1,70,285 hectares (29.88%), the net decrease in net sown area use 2,050 hectares, the follow land is 743 hectares and same is used for different purposes apart from agriculture and other activities and due to low rainfall. The land not available for cultivation was of 45,760 hectares (8.03%). The net increase in this category is 1,7666 hectares and other cultivable land was 35,526 hectares (6.24%), the net decrease land is 459 hectares.

Land use/Cultivation of Sugarcane in Chamarajanagar district: The sugarcane in Chamarajanagr district is found in different parts where there is abundant rainfall and irrigation, because the sugarcane is a crop which needs water during the growth till the cutting of cane sugar. But Chamarajanagr is one of the driest districts in Karanataka with less of rainfall. Even the sugarcane is cultivated in the district with the help of irrigation and rainfall. By this we can see the data given below represents that the sugarcane is increasing year by year in all the taluks and the district. These analysis has been made on the taluk wise and finally of district.

Sugarcane	cultivation in	Chamarajanagar	district from	2004 to 2009
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Taluks	Total crops under Cultivation (area in hectares) 2004-05	Sugar cane Cultivation in the year 2004- 05(Area in Hectares)	Percentage of sugar cane	Total crops under Cultivation (area in hectares) 2006-07	Sugar cane Cultivation in the year 2006- 07(Area in Hectares	Percentage of sugar cane	Total crops under Cultivation (area in hectares) 2008-09	Sugar cane Cultivation in the year 2008- 09(Area in Hectares)	Percentage of sugar cane
Chamarajanagar	68108	3515	5.16	60713	4335	7.14	67315	5283	7.84
Gundlupet	66454	1092	1.64	61612	1225	1.98	66850	1499	2.24
Kollegal	66124	1711	2.58	64086	4198	6.55	82238	1492	1.80
Yelandur	13655	2640	19.33	15284	3076	20.12	14141	2657	18.78
Total	214341	8958	4.17	201695	12834	6.36	230544	10931	4.74

Source of data: District hand book, Chamarajanagar

The Chamarajanagar taluk indicates with the above table that 5.16 percent of the land is used in the 2004-05, while during the year 2006-07 the total area has increased to 7.14 percent. But during the last year (2008-09) it has increased to 7.84 percent this shows that there is an increasing trend in the cultivation of cane sugar. The data represents that that there is an increase in the percent of land use/cultivation.

The Gundlupet taluk is one of the important taluk in Chamarajanagar next to Chamarajanagr in the district. The above data shows that there is an increasing trend towards the cultivation of cane sugar in the taluk has been represented as 1.64 percent in the year 2004-05, 1.98 percent during 1.98 and 2.24 in the year 2008-09. The data reveals that only a small percent of sugar cane cultivation is increased due to availability low irrigational facilities.

The Kollegal taluk in Chamarajanagr district is one of the most important taluk having a vast geographical area in the state, but less of rainfall the developments and the irrigation is less compared to the other taluks in the district. The cultivation of sugarcane in the taluk is has been increased during 2.28 in the year 2004-05, while in the year 2007-08 it has increased to 6.55 percent of land use in the taluk due to rain fall and price of the cane sugar during that year. But in the year 2008-09 the taluk land use for cultivation has a decreasing trend due to lack of rainfall and marketing of cane sugar in the taluk.

The Yelandur taluk has a good irrigational facility through the Suvarnavathi water shed area. Even the taluk is partly covered by convergence of eastern and western ghats in the district. The Yelandur taluk receives more rainfall in the district compared to other three taluks in the district. The cultivation/land use of sugar cane is all dependent of rainfall and irrigation from Chickhole and Suvarnavathi. The taluk nearly cultivates about 19.33 percent of the total area under cultivation in 2004-05. While it has increased to 20.12 percent of the total cropped area in 2006-07, but there is a decreasing trend in sugar cane cultivation in 2008-09 and has decreased to 18.78 percent of the total cropped area.

By the consolidating the taluk wise data in to the district wise it is found that there is a mixed trend in the land use of sugar cane in the district. During the year 2004-05 the total land use for the cultivation of sugarcane is that of 4.17 percent, but it has increased to 6.36 percent in the year 2006-07 as per the data. There is a decreasing trend in the year 2008-09 in land use for the cultivation of cane sugar by 4.74 percent in the district.

CONCLUSION

Thus we can that the wide spread sugarcane cultivation has merely increased in the district; there is a need to scrutinize the effectiveness as a strategy for sustainable development. The general trend in the district is lack of interest in sugarcane cultivation leading to decrease in land under sugarcane. The Conversion of dry land from non-agriculture to wetland should not be done indiscriminately with the help of irrigation. Sustainable guidelines are to be evolved to ensure that lands with greater potential be first utilized for cultivating instead of converting the very productive sugar cane lands in Chamarajanagar district. With the increasing in agricultural land use and other developmental activities, it is almost impossible to prevent the conversion of farm lands to sugarcane cultivation purpose, but this should be carried out with suitable planning and management. Unless sugarcane cultivation is made more lucrative, this trend is bound to continue. The scientific community uses has to justify for the preservation of natural resources of the soil for the cultivation of sugar cane. Though the environmental management plans are prerequisite forms of sugarcane cultivation in Chamarajanagr district, steps should be taken to see that an environmental audit is done systematically to ensure strict adherence to environmental norms within acceptable standards for cultivation. The Chamarajanagar thrives on its natural environment, and if proper steps are not taken to manage both sugarcane cultivation and irrigation sustainable basis for the extension of land use for sugarcane.

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