



## Socio-economic Profile of the Krishna CADA farmers

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**ABSTRACT:-** The UKP command area is coming under backward area of Karnataka two dams are built in north Karnataka. The UKP covers Hyderabad Karnataka area districts Gulbarga, Yadgiri.Raichur. This district people's main occupation is agriculture. The majority of peoples are engaged in agricultural activities. In farming community small and marginal, medium and large farmers .The compare to the un-irrigated farmers irrigated farmers income and expenditure are more. The farmers are growing two seasonal and bio seasonal crops in the area.

### I. INTRODUCTION

A huge investment has been made by the union of India and Govt. of Karnataka in construction of major and medium irrigation projects and multipurpose projects since independence. Due to those, the country has become self sufficient in food and fiber and the achievement in this sector is commendable. However it is necessary to check whether the reference have been achieved as per planning and whether the projects have been successful with this background, it has been decided by the Govt. of India and Govt. of Karnataka to take up post evaluation studies to assess the reasons for the short fall in achievement compared to the expectations and remedial measures required to be taken up for better planning of future projects.

In the present study, estimations on degraded land in UKP command area by various organizations and individual researchers is compiled to get an over view of the extent of degraded land in UKP command area. However, the data on ground water table pertaining to the observation wells in UKP command were also obtained from the Department of Mines and Geology, Government of Karnataka for the period from 1981 to 2006 for 26 years period to assess the extent of waterlogged area and its growth over a period. The results of analysis of water table data for the observation wells located in NLBC and SBC commands covering total irrigated area of 1,47,530 hectares and the extent of waterlogged area before and after irrigation in different seasons is presented area followed by Puttaswamy (1999) puts about 28,164 ha (16.67%) of the notified area in UKP area as degraded due to salinity, alkalinity and waterlogging. The distribution among degraded classes of soils showed that, 67.74 per cent area was estimated to be alkaline, 20.02 per cent as saline 12.24 per cent as waterlogged.

Agriculture in the country has been providing employment either directly and indirectly to 65 per cent of the population. On the other hand, the process of employment generation is shrinking in the irrigated commands as more and more land is becoming waterlogged and salt-affected thus rendering the farmers jobless The overall labour employment declined in *kharif* (ranged between 24.37% and 25.51%) and *rabi/summer* (ranged between 17.37% and 22.71%) paddy production in waterlogged and severe saline soils when compared to normal soils. However, decline in labour used in both the seasons was only marginal in case of moderately saline soils. Thus, it can be inferred that problem of soil degradation has created on-farm unemployment for farmers and agricultural labourers in the area which might under worst production conditions resulted in out-migration of farm families to other areas in search of employment.

### II. REVIEW OF LITERATURE

S.Chander (1997) reported that Impact of irrigated agriculture on society gives detailed studies of the gross income, cost estimates and net income per ha. of irrigated area indicate that the irrigated areas would result in an increase in net income of about Rs. 3000 to Rs. 4000 per ha. at 1982-83 prices. A study of the Rajasthan canal project, phase, carried out by the national council of applied economic research indicated that gross receipts per man day in irrigated areas have increased by more than 100% in all economic activities.

Irrigated farming also results in increase in permanent employment which is of the order of 30 to 50 man-days per ha. Or about 60 to 100 million man-days per year at the present growth rate. Studies also indicate that the man power used per ha. Of cropped area is about three times higher in irrigated agriculture as compared to unirrigated agriculture. The obvious reason is the elimination of risk in crop cultivation due to availability of irrigation facilities resulting in higher yields and consequently more returns of agriculture.

Hugar *et al.* ( 2001), the extent of area under degraded soils was assessed using survey by Delphi method and found that about 28,590 ha (12.15%) of the notified area as degraded comprising about 20,543 ha (71.85%) as waterlogged, followed by 7,066 ha (24.72%) as saline and about 981 ha (3.43%) alkaline. Similarly, Command Area Development Authority CADA, UKP reported that, 40,439 ha (Anon., 2002) of land was degraded accounting 15.66 per cent of the notified area. In an another estimate, CADA, UKP (Anon., 2004) assessed that, about 38,257 ha (which accounted about 10.56%) of the notified area as degraded of which waterlogged area constituted largest proportion followed by saline and alkaline soils. The data of water table depth for pre and post-monsoon seasons were used for classifying (Anon., 2005) affected areas as critical and non-critical with respect to water logging. The results showed that, an area of about 48,105 hectares during pre-monsoon was categorized as critical area with water table between 1-2m bgl while, the critical area during post-monsoon was to the extent of 1,26,065 hectares. The estimated growth rates of degraded lands in UKP command were very high (49.34%) problem spread was confined to smaller areas (15.36 %).

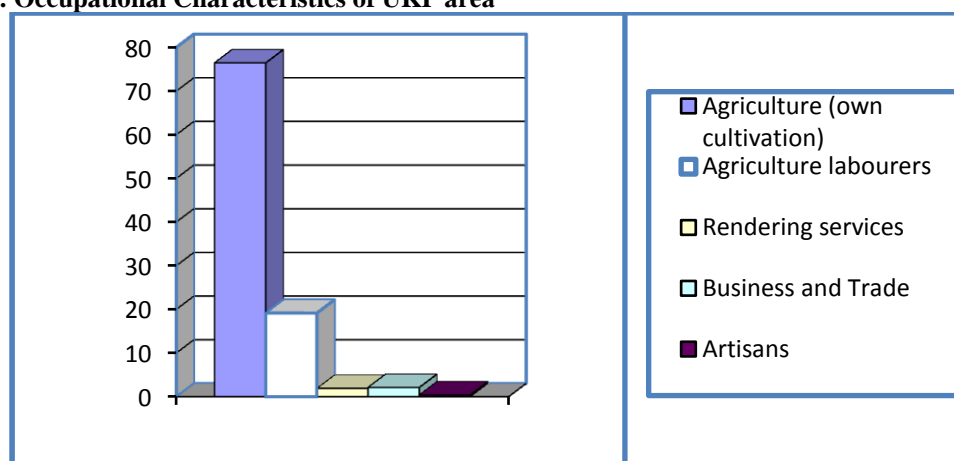
Datta and Jong (1997) in their study also observed similar displacement of labour in agriculture. It was also evident that, women-folk were forced to work both at home and off farm as agricultural and non-agricultural labourers. They shared equal burden of work in unknown living environment as non-agricultural labourers mainly in the construction sites along with their men counterparts. It was also revealed by the farmers that the work in the construction sites involved constant moves from one site to another with uncertainties of employment. In addition, the displacement of families to unknown places away from their natives has psychological dimensions. The farmers had to leave their villages by abandoning the only productive land resource they owned and inherited from forefathers which was once productive to support the entire family. Land degradation due to water logging and salinity threaten the sustainability of irrigated agriculture and the very subsistence of farm families with marginal and small holdings who constituted the major proportion in the rural households. Scherr and Yadav 1998 due to water logging. On the contrary, they reported that there was high role of male members as labourers on non-farm activities.

**Table-4.3: Occupational Characteristics of UKP area**

Particulars	Percent
Agriculture (own cultivation)	76.45
Agriculture labourers	19.15
Rendering services	1.9
Business and Trade	2.1
Artisans	0.4
Population (No.)	695040
Literacy (%)	43.67

Source: HKDB report 2011

**Chart-4.1: Occupational Characteristics of UKP area**



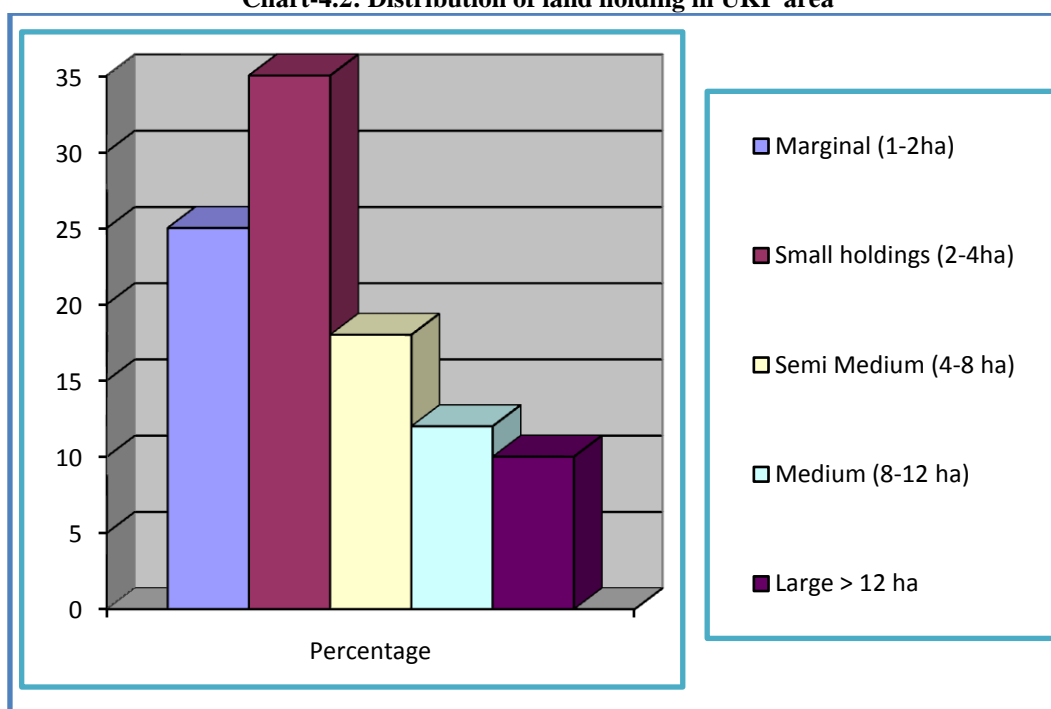
The above table and chart deals with the occupational characteristics of the Upper Krishna Project. The 76.45 percent peoples are engaged in agriculture (own cultivation). The 19.15 percent peoples are working as agricultural labourers and 1.9 percent peoples are rendering services and 2.1 percent peoples are Business and Trade, and remaining 0.4 Artisans. The UKP peoples literacy rate is 43.67 percent.

**Table-4.4: Distribution of land holding in UKP area**

Number	Percentage
Marginal (1-2ha)	25
Small holdings (2-4ha)	35
Semi Medium (4-8 ha)	18
Medium (8-12 ha)	12
Large > 12 ha	10
<b>Total</b>	<b>100.00</b>

Source: HKDB report 2011

**Chart-4.2: Distribution of land holding in UKP area**

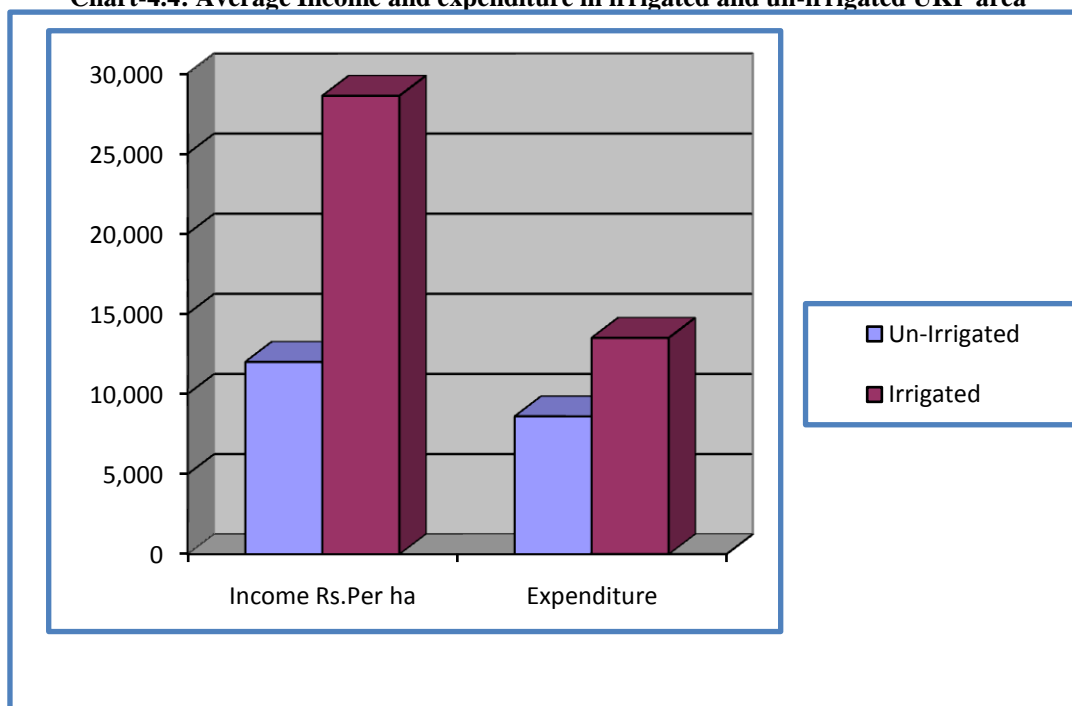


The above table and charts deals with the distribution of land holding in UKP Area. The 25 percent marginal farmers the size of the land holding is 1-2 acre. The 35 percent farmers are small land holding i.e. 2-4 acre. The 18 percent farmers are semi-medium land holding 4- 8 acre. The 12 percent farmers are medium farmers land holding 8-12acre. The 10 percent farmers are large farmers their land is above 12 acre.

**Table-4.6: Average Income and expenditure in irrigated and un-irrigated UKP area**

Holdings	Income Rs.Per ha	Expenditure
Un-Irrigated	12,000	8,600
Irrigated	28,600	13,500

**Chart-4.4: Average Income and expenditure in irrigated and un-irrigated UKP area**

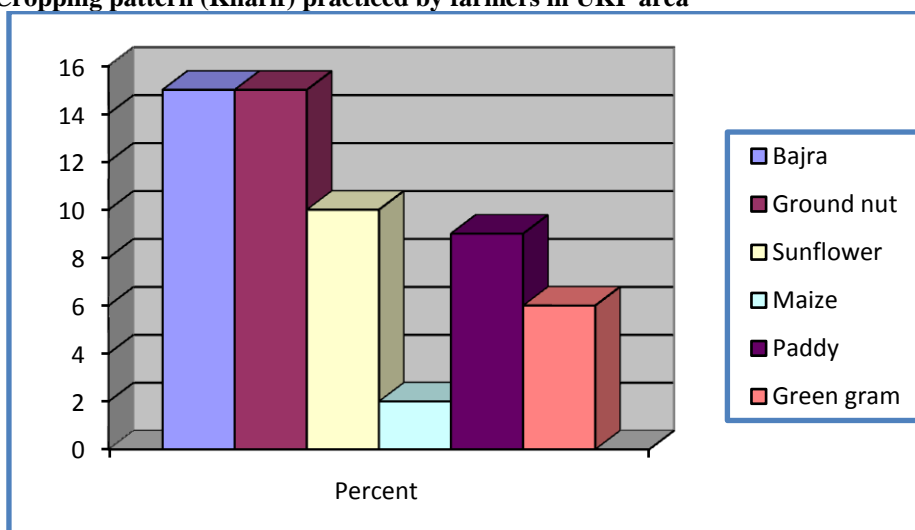


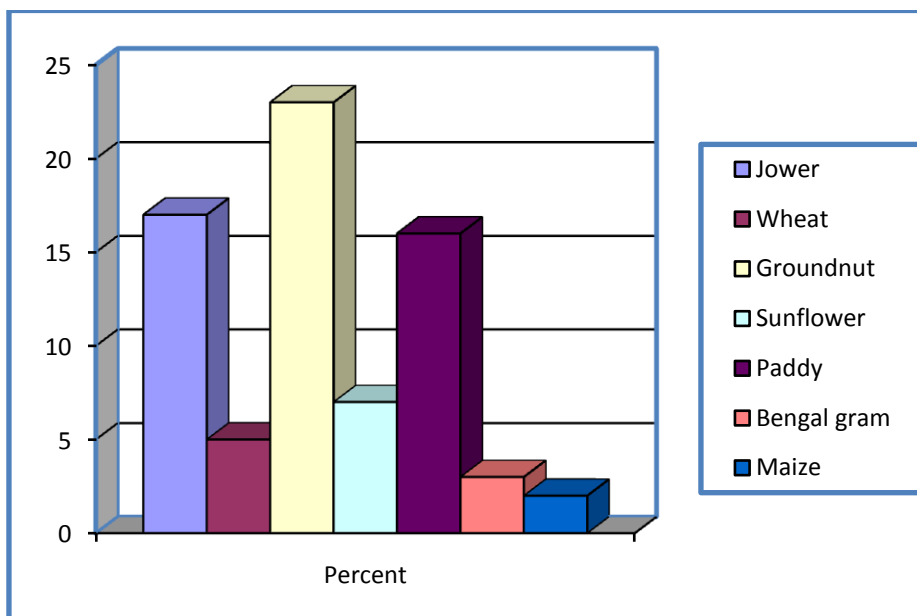
This table and chart is deals with the average income and expenditure in irrigated and un-irrigated UKP area .The Rs 12000 per ha income in un-irrigated area. Other side Rs 28600 per ha income in irrigated area. The data shows that irrigated area farmers are getting more income and their expenditure also more.

**Table-4.7: Cropping pattern practiced by farmers in UKP area**

Kharif Crop	Percent	Rabi Season	Percent
Bajra	15	Jowar	17
Ground nut	15	Wheat	5
Sunflower	10	Groundnut	23
Maize	2	Sunflower	7
Paddy	9	Paddy	16
Green gram	6	Bengal gram	3
		Maize	2

**Chart-4.5: Cropping pattern (Kharif) practiced by farmers in UKP area**



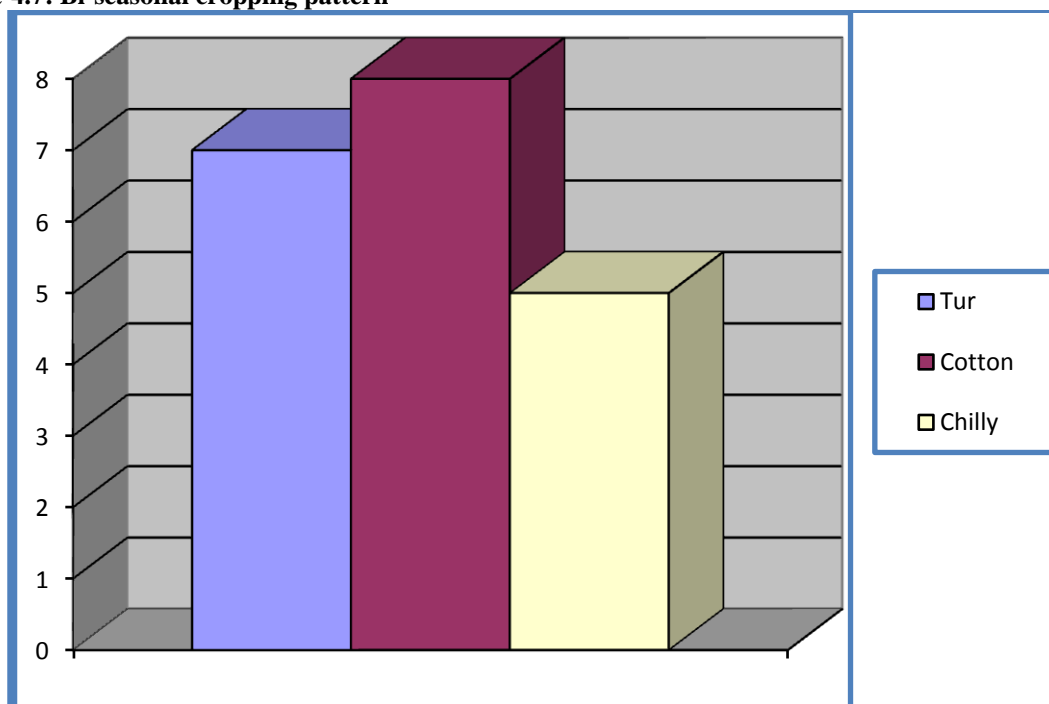


The Cropping pattern practiced by the farmers in UKP area. The 57 percent crops in Kharif season Bajra, Ground nut, Sunflower, Maize, Paddy, Green gram, The 73 percent crops in Rabi season jowar, wheat, Ground nut, sunflower, paddy, Bengalgram, Maize

**Table-4.8: Bi-seasonal cropping pattern**

Bi-seasonal crop	Percent
Tur/Redgram	7
Cotton	8
Chilly	5
Sub Total	82

**Chart-4.7: Bi-seasonal cropping pattern**

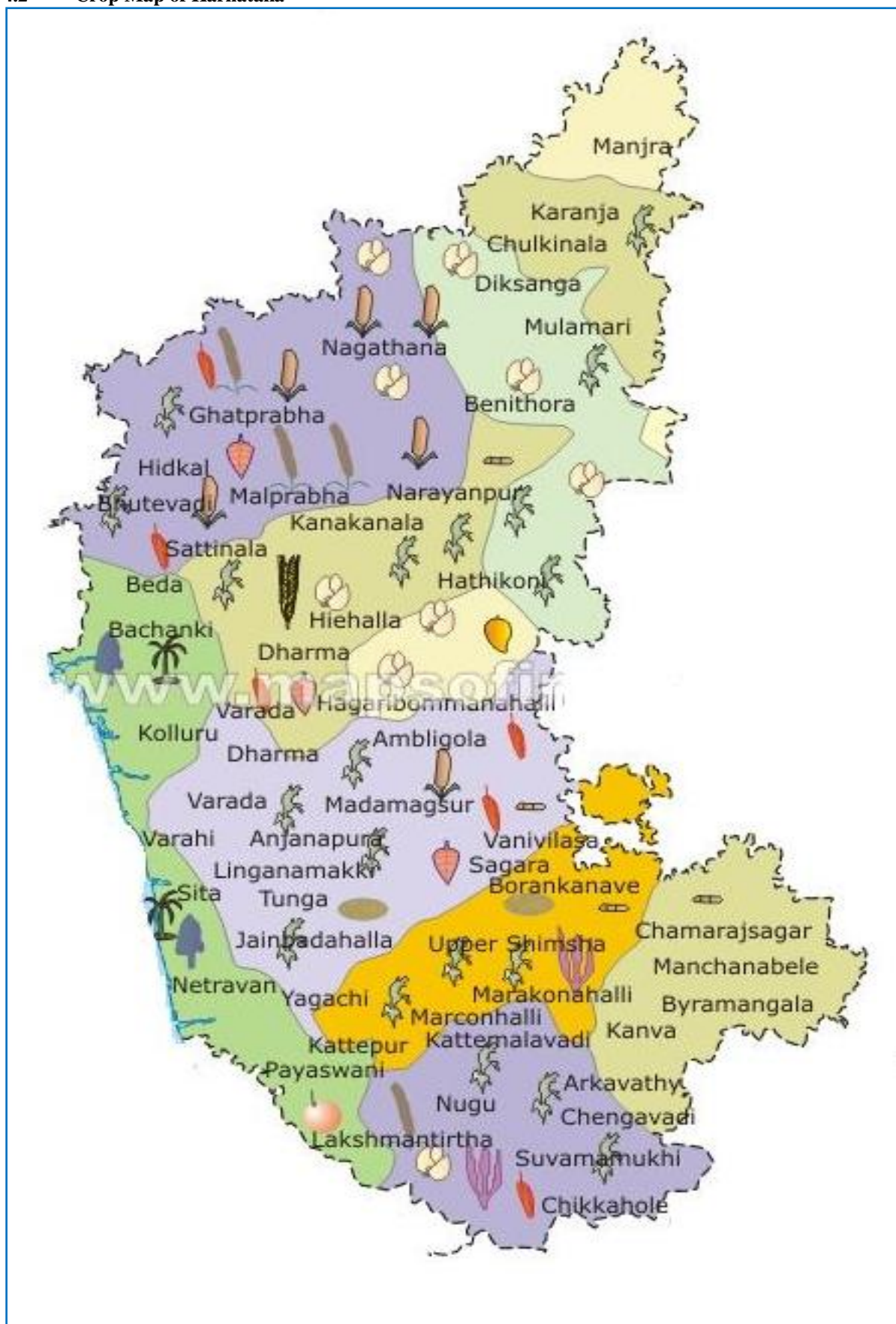


The above table and chart shows that the 82 percent farmers are growing Bio-seasonal crops like Tur/redgram, cotton and chilly in Upper Krishna project command area. The 18 percent farmers growing other crops.

4.1 Karnataka District Map

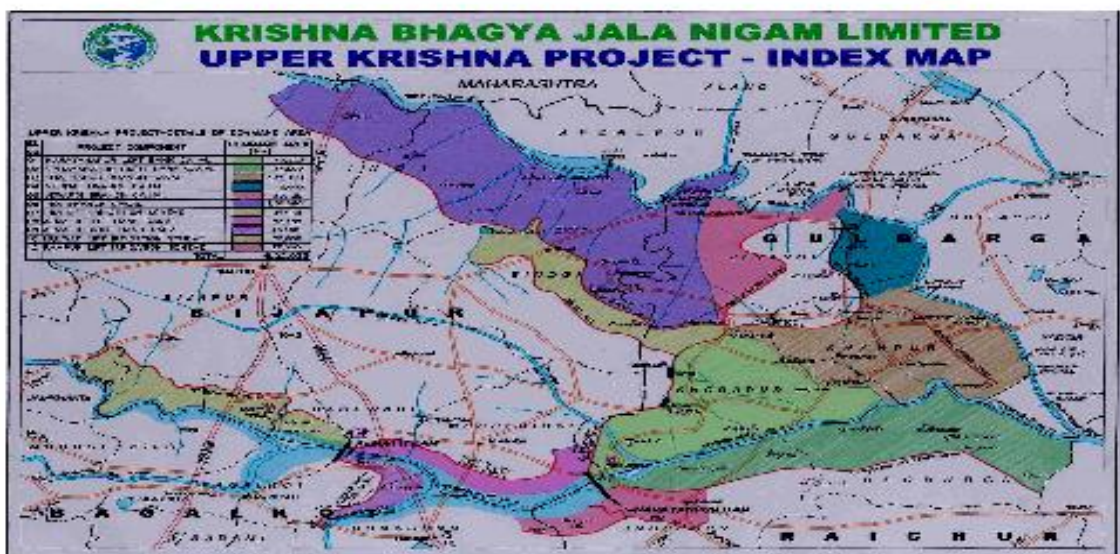


4.2 Crop Map of Karnataka



4 UKP INDEX MAP

**ABOUT UPPER KRISHNA PROJECT**



- Upper Krishna Project under Krishna basin is a prestigious mega multipurpose of Karnataka.
- The project is a boon to the drought prone area of North Karnataka.
- Project envisages utilizations of 173 TMC of water under Scheme 'A' of Krishna basin.
- Project contemplates providing Irrigation to 6.22 Lakh ha. Of command area in Gulbarga, Bijapur, Raichur and Bagalkot Districts.
- Project components of UKP under Scheme 'A' are as under:

Dams	Flow Canals	Lift Irrigation Schemes
Almatti Dam Narayanpur Dam	Narayanpur Left Bank Canal Narayanpur Right Bank Canal Shahapur Branch Canal Jewargi Branch Canal Mudbal Branch Canal Indi Branch Canal	Almatti Left Bank Canal Almatti Right Bank Canal Mulwad Lift Canal Rampur Lift Canal Indi Lift Canal

**III. FINDINGS**

The occupational characteristics of the Upper Krishna Project. The 76.45 percent peoples are engaged in agriculture (own cultivation).The 19.15 percent peoples are working as agricultural labourers and 1.9 percent peoples are rendering services and 2.1 percent peoples are Business and Trade, and remaining 0.4 Artisans. The UKP peoples literacy rate is 43.67 percent.

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#### **IV. CONCLUSION**

The UKP command area main occupation is agriculture. The majority of peoples are engaged in agricultural activities. In farming community small and marginal, medium and large farmers .The compare to the un-irrigated farmers irrigated farmers income and expenditure are more. The farmers are growing two seasonal and bio seasonal crops in the area.

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