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SOCIO-ECONOMIC PROFILE OF FARMERS PRACTICING LAND RECLAMATION PRACTICES AND CROPPING PATTERN IN MALAPRABHA COMMAND AREA

[1]Ashok Doddamani, [2]Angadi, J.G., [3]Govinda Gowda V., [4]Jagadajyoti Binkadakatti, S. & [5]Biradar, B.N.
[1,3]Department of Agricultural Extension, UAS, GKVK, Bangalore, India
[2,4,5]Department of Agricultural Extension, UAS, Dharwad, India.

ABSTRACT
The present investigation was under taken in Belgaum and Gadag districts of Malaprabha Command Area of Karnataka where highest area is under problematic soils, viz. Saline and waterlogged. In each selected village 15 farmers were selected by simple random sampling. Thus, 135 farmers formed the sample for the study. The findings indicated that nearly half the number of respondents (45.93%) belonged to middle age followed by 33.33 and 20.74 per cent who belonged to young age and old age categories respectively with regard to level of education 33.33 per cent of the respondents were educated up to primary level and 30.37 per cent of them were illiterate. It is revealed that, more number of the respondents (45.19%) were semi-medium farmers and medium farmers (28.89%). It was also found that television was possessed by 80.00 per cent of respondents, out of which 48.14 per cent viewed the programs regularly. It is evident from the study that 3.70 per cent, 11 per cent and 13.33 per cent of farmers contacted Agricultural Assistant once in a week, once in a fortnight and once in a month, respectively. The results pertaining to training indicated that, only 8.15 and 1.4 per cent of the respondents received training on irrigation management and land development activities only once and twice respectively.

KEYWORDS: Malaprabha Command Area, land reclamation, saline soil.

INTRODUCTION

A highly disturbing situation is created in the command areas in view of the increasing areas that are going out of cultivation due to intense degradation. Soil degradation due to excessive use of water has been recognized as one of the significant factors in recent times. It is often claimed that soil degradation caused due to over irrigation is further accelerated by intensive use of fertilizers to increase agricultural production. A considerable attention in increased production was promoted by favorable environment that encouraged inappropriate land use and injudicious input use, especially excessive irrigation, trade policies, output price policies and input subsidies all have contributed to the degradation of agricultural land (Datta and Jong, 2002b). The possible adverse effects of irrigation have been by and large unnoticed.

The phenomenon of water logging and salinization are leading to crop substitution, decline in crop production and eventually farm income. At micro level these processes lead to downward shift in farm production that reflect lower productivity of resources and increase in the cost of production. In some of the major irrigation projects, production and profitability of crops have been adversely affected (Joshi *et al.*, 1994). A study in Ukai-Kakrapar command area showed that productivity and profitability of crops like sugarcane and rice declined with increase in the level of soil degradation. A study in Tungabhadra Project command (Chinnappa, 2002) reported that soil degradation reduced the crop productivity and net returns of paddy and increased the unit cost of production. Further, a considerable size of land was abandoned from production due to soil degradation. The corresponding effects at macro-level are decline in total production, labour migration, increase in incidence of diseases, regional disparities, ecological imbalance and erosion of bio-diversity which in turn escalates the public investment and adding to the social cost. With this back drop, the present investigation was under taken in Belgaum and Gadag districts of Malaprabha Command Area of Karnataka to study the *Profile of Farmers Practicing Land Reclamation Practices and different cropping patterns in the Command Area.*

METHODOLOGY

Malaprabha Dam stores 37.73 TMC ft. of water (Gross storage) to irrigate 2,20,028 Ha. in the Districts of Belgaum, Bagalkot, Gadag and Dharwad. The affected area in Malaprabha project was identified as 8999.52 Ha of which, 1149.59 Ha is saline and 7849.93 Ha is water logged. Based on this data, the present investigation was under taken in Belgaum and Gadag districts of Malaprabha Command Area of Karnataka where highest area is under problematic soils, viz. Saline and waterlogged. Three taluks namely Naragund, Ramdurg and Saundatti were purposively selected based on highest area under problematic soils. The same procedure was adopted for selection of three villages from each taluka. In each selected village 15 farmers were selected by simple random sampling. Thus, 135 farmers formed the sample for the study. Keeping in view the objectives and the variables selected for the study, a structured interview schedule was developed. The interview scheduled was pre-tested in non-sample area for its practicality and relevancy. Based on the discussions with soil science experts, the interview schedule was modified wherever necessary and finalized. Using the final schedule, the respondents were interviewed individually and required data were collected.

The ex-post-facto research design has been adopted in the present study. Socio-economic and personal characters selected for the study were age, education, land holding, mass media participation, and extension contact. Frequencies, percentages, mean and standard deviation were used to interpret the socio-economic characters and personal characters.

RESULTS AND DISCUSSION

Age: The findings in the Table 1 indicated that nearly half the number of respondents (45.93%) belonged to middle age followed by 33.33 and 20.74 per cent who belonged to young age and old age categories, respectively. Usually farmers of middle age are more experienced and have more work efficiency than the younger and older ones. Further, individuals of 36 to 50 years of age group have more responsibility towards family members. The present finding is in line with the findings of Bhagyalaxmi *et al.* (2003).

Education

Information in Table 1 revealed that 33.33 per cent of the respondents were educated up to primary level and 30.37 per cent of them were illiterate. While, 17.04 per cent of them were educated up to middle school and 13.33 per cent of the respondents studied up to high school level. Remaining 3.71 per cent of them were educated up to PUC level. Only few were graduates.This situation might have arised due to non-realization of importance of education in one's life, illiteracy of parents and financial constraints. The finding gets support from the findings of Raghunandan (2004).

Land holding

The results in Table 1 revealed that, more number of the respondents (45.19%) were semi-medium farmers followed by medium farmers (28.89%), small farmers (14.80%), marginal farmers (5.93%) and big farmers (5.19%).The fragmentation of ancestors land from generation to generation might have led to more number of medium, semi medium and small land holdings. The above results got support from the studies conducted by Ningareddy (2005).

TABLE 1. Personal characteristics of the farmers *Practicing Land Reclamation Practices in Malaprabha Command Area*

Sl. No.	Characteristics	Frequency	Percentage
1	Age		
	Young(<35)	45	33.33
	Middle(35-50)	62	45.93
	Old(>50)	28	20.74
2	Education		
	Illiterate	41	30.37
	Primary	45	33.33
	Middle school	23	17.04
	High school	18	13.33
	PUC/Diploma	5	3.71
	Degree and above	3	2.22
3	Land holding		
	Marginal farmers(<2.5 acres)	8	5.93
	Small farmers(2.5-5acres)	20	14.80
	Semi medium farmers(5.01-10acres)	61	45.19
	Medium farmers(10.01-25acres)	39	28.89
	Big farmers(>25acres)	7	5.19

Mass media exposure

Data pertaining to mass media exposure by the respondents are depicted in Table 2. Television was the most popular mass media which was possessed by 80.00 per cent of respondents, out of which 48.14 per cent viewed the programs regularly, while, 36.21 per cent of them were occasional viewers. Remaining 15.55 per cent of them never viewed television. Radio was possessed by 53.33 per cent of the respondents, out of which 34.81 per cent were listening the radio programs regularly, while 18.52 per cent of them were occasional listeners. Remaining 46.67 per cent of them never listened radio. Further, the table showed the exposure of respondents to the print media. Some (22.96%) of the respondents subscribed the newspapers. Among them, 28.14 per cent were regular readers followed by occasional readers of newspapers who were 31.85 per cent. Remaining 40.00 per cent of the respondents were non-subscribers of the newspaper.

Among different mass media, television was the most popular one which was possessed by 80.00 per cent of the respondents. Nearly50 per cent of them viewed the programs regularly, because television is a powerful medium which mobilizes the information very quickly and effectively. Print media was subscribed by few respondents (22.96%). This might be due to low literacy rate. The findings of the present study agree with the findings of Moulasab (2004).

Extension contact:

It was evident from the data (Table 3) that 3.70 per cent, 11 per cent and 13.33 per cent of farmers contacted Agricultural Assistant once in a week, once in a fortnight and once in a month, respectively. This might be due to less awareness about extension activities, poor education

and also poor organizational participation. The results indicated that, 42.96, 33.85 and 31.85 per cent of farmers contacted Agricultural Assistant, Assistant Agricultural Officer and Command Area Development Authority Staff whenever problem arised, respectively. These extension functionaries were the grass root level workers at the village, so they meet the farmers frequently, which directly help them to get information on relevant innovations and technologies. This intern helps to increase their knowledge level. The results also indicated that the Assistant Director of Agriculture (ADA) and Agriculture Officer of Bank (AOB) were also the extension personnel contacted by 33.33 per cent and 34.04 per cent of farmers to seek solution to their problems. This might be due to the fact that, the ADA and AOB provide the subsidies and credit facilities to the farmers for land development. The findings are in accordance with the findings of Angadi (1999) and Sridhar (2002).

TABLE 2. Distribution of respondents according to their mass media exposure

n=135

Sl. No.	Media category	Own/Subscribe		Regular		Occasional		Never	
		F	P	F	P	F	P	F	P
1	Television	108	80.00	65	48.14	49	36.29	21	15.55
2	Radio	72	53.33	47	34.81	25	18.52	63	46.67
3	Newspaper	31	22.96	38	28.14	43	31.85	54	40.00

F- Frequency
P- Percentage

TABLE 3. Distribution of respondents according to their extension contact

n=135

Sl.No	Extension staff	Once in a week		Once in fortnight		Once in a month		Whenever problems arise		Never	
		F	P	F	P	F	P	F	P	F	P
1	Asst. Director of Agriculture					2	1.48	45	33.33	88	65.19
2	Assistant Agricultural Officer	2	1.48	9	6.67	27	20.00	45	33.33	52	38.52
3	Agricultural Assistant	5	3.70	15	11.11	18	13.33	58	42.96	39	28.89
4	UAS Specialist			1	0.74	2	1.48	1	0.74	131	97.04
5	CADA staff	6	4.44	11	8.15	28	20.74	43	31.85	47	34.81
6	Officials of Private Input Agency					3	2.22	1	0.74	131	97.04
7	Agril. Officers of bank			8	5.93	24	17.78	46	34.07	57	42.22

F- Frequency
P- Percentage

TABLE 4. Distribution of respondents according to their cropping pattern

n=135

Sl. No	Season	Frequency	Percentage
	Kharif		
1	Sun flower	44	32.59
2	Sugarcane	47	34.81
3	Cotton	20	14.81
4	Onion	14	10.37
5	Maize	75	55.56
6	Jower	28	20.74
	Rabi		
1	Bengal gram	64	47.41
2	Jower	29	21.48
3	Wheat	68	50.37
4	Sun flower	35	25.93
5	Sugarcane	47	34.81
6	Maize	24	17.78
	Summer		
1	Ground nut	28	20.74
2	Onion	17	12.59
3	Sun flower	23	17.04

Cropping Pattern

The findings (Table 4.) showed wide variation in cropping pattern followed by the respondents. Majority of the respondents (55.56%) were cultivating maize crop in kharif season followed by sugarcane (34.81%), sunflower (32.59%), jowar (20.74%), cotton (14.81%) and onion (10.37%). The reason might be that, irrigation water is easily available and government of Karnataka has fixed the supporting price to maize, as a result majority have

preferred this crop. Now-a-days availability of labour is less and also wages are high. Further, sugarcane is a commercial crop grown with ease. Hence, farmers might have switched over to these crops due to the suitability of crop to that area and irrigation is easily available. In *rabi* season majority of the respondents (50.37%) were cultivating wheat, as it is an important staple food crop of Karnataka. Wheat is resistant to saline and waterlogged soils and it can be cultivated only in irrigated area. While, 47.41 and34.81 per cent of the respondents were cultivating bengalgram and sunflower, respectively. The possible reasons might be the suitability for the season and good price for their produce. It was noticed that, sunflower and jowar are cultivated in both *kharif* and *rabi* seasons. Cotton is grown in black soils. Cotton is also resistant to saline and waterlogged soils. In summer season, 20.74 per cent of the respondents were growing groundnut, the reason was its suitability to summer season and availability of irrigation. Further, it is one of the important oilseed crops in the region of Gadag, Belgaum, Dharwad and Bagalkot districts. Only 12.9 per cent of the respondents were cultivating onion as a vegetable crop.

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