# STRATEGY FOR LAND UTILIZATION PATTERN ACCORDING TO SOCIO-ECONOMIC CHARACTERISTICS BY THE RICE GROWING FARMERS OF RAIPUR DISTRICT

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# ABSTRACT

This study was carried out in Raipur district of Chhattisgarh in 3 blocks namely Abhanpur, Arang and Dharsiwa. Out of the total villages of Arang, Abhanpur and Dharsiwa blocks, four villages from each block were selected purposively. Thus the total 12 villages from three blocks were selected. And a total of 120 farmers were finally considered in the sample for the collection of primary data. It reveals that one third of the respondents were engaged in agriculture along with animal husbandry. About 15 per cent farmers with small land holding also earned by working in other's fields as labourer. In the study area, only 7.50 per cent respondents were engaged in service whereas, 5.84 per cent respondents were also doing some businesses for earning. The finding shows that the majority of respondents (67%) belonged to marginal and small size of land holdings (upto 5 acre). It concluded that half of the respondents reported their annual income between Rs. 20,001 to Rs. 35,000. Whereas, 40.83 per cent respondents reported their income between Rs.35001 to Rs. 50,000 per annum. It indicate that majority of the respondents (52.50%) were having two working members in their families, while, 29.17 per cent respondents were having only one working member in their families. It shows that maximum 97.50 per cent respondents were having local plough as main agricultural implements. While, 74.17 and 68.33 per cent respondents were having bullock pair and bullock cart, respectively as main farm power and main source of transportation. Whereas, 46.67, 32.50, 30.00 and 15.00 per cent respondents were also procured planker, sprayer, iron plough and tractor, respectively as important farm implements. The findings shows that the major part of annual income of most of the respondents were come from agriculture out of which 56 per cent respondents acquired more than 76 per cent income from agriculture. The role of agriculture in about 22 per cent respondents had between 26 to 50 per cent, majority of the respondents (54.17%) were acquired the credit from cooperative societies, 41.67 per cent respondents acquired the credit from relatives, mostly in kind and only about 37 per cent respondents acquired the credit from money lenders of the village and rest 13.33 per cent respondents took the credit from banks.

# INTRODUCTION

The total geographical area of Chhattisgarh is 1.35 lakh sq. km. occupied 4.14% area of the country. The total agricultural land of Chhattisgarh is about 58 lakh ha with less than 30% irrigated area. Whereas, the total area of agricultural land of Raipur district is 5.5 lakh ha with about 42% irrigated area. As the developmental goals of agriculture comprises complicated and complex issues like sustainability, food security, environmental safety, balanced eco-system, value addition and so on. All of these can not be worth true without proper utilization of ever shrinking, most valuable resource *viz* soil. Since, Chhattisgarh region is full of bio-diversity and high agriculture base The characteristics and quality of land to determine its suitability for agriculture and other allied activities are topography, texture, water retention, infiltration rate, physico-chemical properties etc. In Chhattisgarh, Bhata soils comprises 9.8 lakh ha, Matasi soils14 lakh ha, Dorsa soils 10.8 lakh ha and Kanhar soils occupied 11.2 lakh ha area. Similarly, in Raipur district Bhata, Matasi, Dorsa and Kanhar soils spreaded on the area of about 94, 195, 116 and 168 thousand ha, respectively. In the light of above the present study was carried out with the objectives- To study the socio-economic characteristics of the respondents

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# **RESEARCH METHODOLOGY**

There are 16 districts in Chhattisgarh state, spreaded in three agro-climatic zones viz. Chhattisgarh plains (11 districts), Northen hills (3 districts) and Baster plateau (2 districts). The present study was conducted in Raipur district of Chhattisgarh state. Out of the total 15 blocks of Raipur district, 3 blocks namely Abhanpur, Arang and Dharsiwa were purposively selected for this study because these blocks are having abondent variations in soil topography. Out of the total villages of these blocks, 4 villages from each of the block were selected randomly. Thus a total of 12 villages (4x3=12) were selected for this study. Out of the total farm families of each selected village, 10 farmers were selected randomly. Thus a total of 40 farmers were selected from each block. In this way a total of 120 farmers (12x10= 120) were finally considered in the sample for the collection of primary data. Respondents were interviewed through personal interview technique by using structured interview schedule. The data collected during the course of investigation were tabulated and analyzed with the help of suitable statistical method

### RESULTS AND DISCUSSION Occupation

The occupation of respondents is compiled in Table 1 It indicates that all the respondents were involved in agriculture. But may be due to increasing domestic requirements and low profitability of agriculture enterprise, the respondents were also practicing other occupations which are suitable and available in their reach. One third of the respondents were engaged in agriculture along with animal hus-

Table 1: Distribution of respondents according to their socio-economic characteristics(n = 120)

S.No	).	Frequency	Percent
Occi	upation *		
01	Farming	120	100.00
02	Farming +Animal Husbandry	40	33.33
03	Farming +Labour	19	15.83
04	Farming + Service	9	7.50
05	Farming + Business	7	5.84
Size	of land holding		
01	Marginal (Up to 2.5 acre)	34	28.33
02	Small (2.6 to 5 acre)	46	38.34
03	Medium (5.1 to 10 acre)	31	25.83
04	Large (above 10 acre)	9	7.50
Ann	ual income (Rs.)		
01	Up to 20,000	1	0.83
02	20,001 to 35,000	60	50.00
03	35,001 to 50,000	49	40.83
04	More than 50,001	10	8.34
No.	of Working Members		
01	One member	35	29.17
02	Two members	63	52.50
03	More than two members	22	18.33

\* percentage are based on multiple response.

bandry. About 15 per cent farmers with small land holding also earned by working in other's fields as labourer. In the study area, only 7.50 per cent respondents were engaged in service whereas, 5.84 per cent respondents were also doing some businesses for earning.

# Land holding

The finding shows that the majority of respondents (67%) belonged to marginal and small size of land holdings (upto 5 acre), whereas 25.83 and 7.5 per cent of them were occupied medium and large size of land holdings, respectively.

# **Annual income**

Regarding annual income, half of the respondents reported their annual income between Rs. 20,001 to Rs. 35,000. Whereas, 40.83 per cent respondents reported their income between Rs.35001 to Rs. 50,000 per annum. More than Rs. 50,001 were earned by the 8.34 per cent respondents. Only one respondent were found very poor and remaining respondents were acquired quite fair earnings for sustaining their livelihoods (Table1).

#### Working members

The results compiled in table 1 also indicate that majority of the respondents (52.50%) were having two working members in their families, while, 29.17 per cent respondents were having only one working member in their families. Only about, 18.33 per cent respondents had more than two working members in their families.

#### **Possession of agricultural items**

The table 2 depicts that maximum 97.50 per cent respondents were having local plough as main agricultural implements. While, 74.17 and 68.33 per cent respondents were having bullock pair and bullock cart, respectively as main farm power and main source of transportation. Whereas, 46.67, 32.50, 30.00 and 15.00 per cent respondents were also procured planker, sprayer, iron plough and tractor. respectively as important farm implements.

Table 2: Distribution of respondents according to the Possession of agriculture materials			(n=120)
S.No	o. Material possession	Frequency	Percent*
01	Bullock cart	76	68.33
02.	Bullock pair	89	74.17
03.	Tractor	18	15.00
04.	Planker	56	46.67
05.	Iron plough	36	30.00
06.	Sprayer	39	32.50
07.	Local plough	117	97.50

\* percentage are based on multiple response.

Table 3: Distribution o	of respondents accou	rding to contribu	tion of agricultur	e in annual inco	me(n = 120)
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S.No	. Contribution of Agriculture	Frequency	Percent
01	Below 25%	11	9.17
02.	26-50%	26	21.67
03.	51-75%	16	13.33
04.	76-100%	67	55.83

#### Contribution of agriculture in annual income

The data compiled in table 3 shows that the major part of annual income of most of the respondents were come from agriculture out of which 56 per cent respondents acquired more than 76 per cent income from agriculture. The role of agriculture in about 22 per cent respondents had between 26 to 50 per cent, whereas 13.33 and 9.17 per cent respon-

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dents earned between 51 to 75 per cent and below 25 per cent due to agriculture as annual income respectively.

#### Source wise acquisition of credit

The data compiled in table 4 indicated that majority of the respondents (54.17%) were acquired the credit from cooperative societies, 41.67 per cent respondents acquired the credit from relatives, mostly in kind and only about 37 per cent respondents acquired the credit from money lenders of the village

and rest 13.33 per cent respondents took the credit from banks. This credit have been mostly taken as purchase of seed, fertilizer etc. inputs or borrowing the implements. The availability index shows that the cooperative societies were the major source for acquiring the loan for maximum number of respondents while minimum availability (46.67) were found from relatives, whereas 79.54 and 56.25 per cent availability found from money lander and banks, respectively.

(n = 120)

Table 4. Distribution of respondents according to then create acquisition behaviour					
S.No.	Source of credit	Frequency	Percent	Availability Index	
01	Bank	16	13.33	56.25	
02.	Cooperative society	65	54.17	87.69	
03.	Money lender	44	36.67	79.54	
04.	Relatives	50	41.67	46.67	

Table 4: Distribution of respondents according to their credit acquisition behaviour

# CONCLUSION

According to socio-economical characteristics of respondents, it could be concluded that almost all the respondents were involved in agriculture but most of them were having small size of holding. Majority of the respondents reported their annual income under 35000 which was earned from 2 to 3 working members in most of the farmers families. Majority of the respondents were not using seed from other sources, they generally using their own seed for sowing in fields. Maximum respondents obtaining the fertilizers from cooperative societies, weedicides and insecticides were procured from retail shops, having bullock pair as a major source of farm power. Majority of the respondents had acquired the credit from cooperative societies in the form of inputs. It indicates that all the respondents were involved in agriculture. But may be due to increasing domestic requirements and low profitability of agriculture enterprise, the respondents were also practicing other occupations which are suitable and available in their reach. In this research the major conclusion is that the respondents were not used recommended practices as compared to eligible criteria according to various soil types. They adopt the all practices of rice crop in short terms and after the trial on small scale. They used various technology after some profitable discussion and suggestions.

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