Socio-economic profile and adoption of paddy cultivation practices by Siddhi tribal community farmers of North Karnataka

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ABSTRACT

The study was conducted in Yellapur Taluk involving 120 Sidhi farmers. The study revealed that majority of the Sidhi farmers were middle aged (72.50 %), illiterate (62.50 %), marginal holders (62.50 %) had large sized farmily (62.50 %) with medium level of income. Regarding the existing cultivation pattern, it was observed that majority (92.30 %) of the local paddy farmers applied only FYM. Chemical fertilizers and plant protection measures were not adopted by most of them.

Hanumanaikar, R.H., Nagaraja, M.S. and Chandranath, H.T. (2011). Socio-economic profile and adoption of paddy cultivation practices by Siddhi tribal community farmers of North Karnataka. *Agric. Update*, **6**(1): 47-50.

Key words : Socio-economic profile, Adoption, paddy, Siddhi tribal community farmers

Received: August, 2010; Accepted : October, 2010

INTRODUCTION

The gazetteer of Uttar Kannada district mentions that the Siddhis were brought to India mainly by Arabs, the Portuguese and the Dutch from Abyssinia (Ethiopia), Mozambique, Morocco and other countries of East Africa as slaves and domestic servants in the 14th century. The Siddhis are spread over the Western Coast in Gujarat, Maharashtra and Karnataka. They are mainly concentrated in Uttar Kannada district of Karnataka and Rajkot division of Gujarat. In Karnataka, the Siddhis inhabit mainly four Talukas of Uttar Kannada district, namely Haliyal, Yellapur, Mundgod and Ankola.

The primary economic occupation of the Siddhis is agriculture. The main crop grown is paddy but cotton and sugarcane are also grown occasionally along with paddy or instead of paddy. The settled agriculturists suffered on numerous fronts. A vast acreage was un irrigated and they grew only one crop which was rain fed. In smaller and unviable landholdings the produce was too small. The primitive state of tools and technology was another handicap in agricultural production. The use of chemical fertilizers, improved implements, seeds and technical know-how was at the minimum level. Therefore, the present study was taken up to ascertain the socio-economic profile and existing pattern of paddy cultivation followed by Siddhi farmers.

METHODOLOGY

The study was carried out in Yellapur Taluk of Uttar Kannada district, Selection of the district was based on the highest population of the Taluk and respondents was in consultation with the Siddhi Development Project Coordinator. Out of 72 settlements found in the Taluk, 13 were selected by random sampling procedure and the sample size constituted 120 paddy cultivating farmers. The data were collected using structured, pre-tested questionnaire by personal interview method.

The socio-economic characteristics of the respondents were studied and the variables selected for analysis were age, education, family type, family size, land holding, material possession, income and cosmopoliteness.

It can be noted that the Siddhi farmers growing improved paddy varieties were very few in number, because of which, the sample size of local variety growers became overloaded. Therefore, the individual practices adopted by the farmers growing local and improved varieties were discussed separately instead of comparing them with one another. Frequencies and percentages were used for analysis.

RESULTS AND DISCUSSION

The findings of the present study have been presented under following heads:

Socio-economic profile of Siddhis:

It is evident from Table 1 that majority of the Siddhis (72.5%) were middle aged, illiterate (62.5%) and were married (90.00%), had nuclear (82.5%) and large sized family (62.5%). The respondents were found to be possessing small land holdings (31.7%) and marginal land holdings (64.17%) and they possessed only six implements like wooden-plough (76.7%) and seed-drill (30.00%). Just over half of them (58.33%) had radio. Majority of them belonged to medium level of income (66.67%) and had a rather low cosmopoliteness as majority of them (60.00%) visited the nearby town just once in a seek. The inherent ignorance and shyness as also the location of settlements deep into the remote forests might have contributed for their poor socio-economic characteristics.

Adoption pattern of paddy cultivation practices for local varieties:

Perusal of data presented in Table 2 indicate that majority of the Siddhi farmers (82.24%) had grown the variety 'Akkalasali'. The seed rate used was 30 to 40 kg/ acre (63.55 %), majority of them had sown the fields during the first and second week of June (85.98%) and drill sowing was the common practice followed by 92. 52 per cent of paddy farmers. Majority (78.50%) of the respondents maintained a spacing of 8 inches between the rows while those who had transplanted their crop maintained a gap of 6 inches between the plants (87.50%). About 60 per cent of the respondents had applied 1-2 cart-loads of FYM per acre. Only 13.08 per cent of them applied chemical fertilizers while one farmer had followed plant protection measures. The average yield obtained from the local varieties was 6.58 quintals per acre.

It was obvious that with their primitive tools and technical know-how, the Siddhi farmers largely preferred sturdy and disease resistant-local varieties and the cheaper and readily available FYM was the only manure they could

Table 1: Distribution of respondents according to their socioeconomic profile (n =120)

Characteristics	No. of respondents	Percentage
Age		
Young (1 8 to 27 years)	15	12.50
Middle (28 to 52 years)	87	72.50
Old (53 years and above)	18	15.00
Education		
Illiterate	75	62.50
Primary (1 to 4th Std.)	31	25.83
Middle (5 to 7th Std.)	11	9.17
High school and above (8th Std., and above)	3	2.50
Marital status		
Unmarried	4	3.34
Married	108	90.00
Widowed/Separated	8	6.67
Family type		
Nuclear	99	82.50
Joint	21	17.50
Family Size		
Small (upto 4members)	45	37.50
Large (5andabove)	75	62.50
Occupation		
Farming	15	12.50
Farming and farm forest labour	96	80.00
Farming and others	9	7.50
Land holding		
Marginal (< 3.2 acres)	77	64.17
Small (3.2 - 7.2 acres)	38	31.67
Big (> 7.2 acres)	5	4.17
Material possession		
Agricultural implements		
Wooden plough (1 to 2 no.)	92	76.67
Seed-drill	36	30.00
Iron plough (1 to 2 no.)	6	5.00
Bullock-cart	6	5.00
Non-agricultural materials		
Radio	70	58.33
Bicycle	32	26.67
Live-stock possession		
Bullock (1 to 2 no.)	68	56.67
Cow (1 to 3 no.)	41	34.17
Buffaloes (1 to 3 no.)	14	11.67
Annual Income		
Low (less than Rs. 6,350)	18	15.00
Medium (Rs. 6,350 to Rs. 15,000)	80	66.67
High (More than Rs. 15,000)	22	18.33
Cosmopolite ness. (Visit to near by city)		
Twice a week	18	15.00
Once a week	72	60.00
Once a fortnight	19	15.83
Once in a month	9	7.2
Occasional	2	1.67

Table 2: Adoption of paddy cultivation pattern of Siddhi farmers for local and improved varieties (n=120)

Practices	Local varieties (n=107)		Improved varieties (n=13)	
	Number	%	Number	%
Variety grown				
Akkalasali	88	82.24	---	----
Doddiga	19	17.76	---	-----
Intan	---	---	7	53.85
Jaya	---	---	6	46.15
Seed rate				
30 to 40 kg/acre	68	63.55	10	76.92
40 to 50 kg/acre	37	34.58	3	23.08
50 to 60 kg/acre	2	1.87	---	---
Sowing time				
May 3rd to 4th week	15	14.02	1	7.69
June 1st to 2nd week	92	85.98	12	92.31
Type of sowing				
Drill sowing	99	92.52	4	30.77
Transplanting	8	7.48	9	69.23
Spacing				
Drill sown and transplanted crop				
8" between rows	84	78.50	11	84.62
8" between rows	23	21.50	3	23.08
Transplanted crop (n=8 and 9)				
6" between plants	7	87.50	8	88.89
6" between plants	1	12.50	1	11.11
Farm yard manure				
FYM applied				
Applied	65	60.75	12	92.31
Not applied	42	39.25	1	7.69
Quantity applied (n=65 and 12)				
1-2 cart loads/acre	42	62.62	6	50.00
3-4 cart loads/acre	19	29.23	5	41.67
5-6 cart load/acre	4	6.15	1	8.33
Time of application (n=65 and 12)				
15 days before sowing	25	38.46	3	25.00
1 month before sowing	40	61.54	9	75.00
Applied	14	13.08	7	53.85
Not applied	93	86.92	6	46.15
Type of fertilizer applied (n=14 and 7)				
Urea alone	7	50.00	1	14.28
Complex alone	2	14.29	3	42.86
Urea and DAP	4	28.57	-----	------
Urea and complex	1	7.14	3	42.86
Quantity applied (n= 14 and 7)				
Nitrogenous fertilizer				
20 to 30 kg/acre	12	85.71	7	100.00
30 to 40 kg/acre	2	14.29	-----	----
Phosphatic fertilizer (n= 7 and 6)				
20 to 30 kg/acre	7	100.00	6	100.00
30 to 40 kg/acre	----	----	----	-----
Potassic fertilizer (n=3 and 6)				
20 to 30 kg/acre	3	100.00	6	100.00
30 to 40 kg/acre	-----	---	-----	----
Intercultivation (n=107 and 13)				
Followed	104	97.20	13	100.00
Not followed	3	2.80	---	----
Number of inter cultivations(n=104 and 13)				
Two times	23	22.12	5	38.46
Three times	69	66.35	5	38.46
Four times	12	11.53	3	23.08
Interval (n= 104 and 13)				
At 15 days interval	87	83.65	11	84.62
At 25 days	17	16.35	2	15.38
Plant protection measures. Aware about pests and diseases				
Yes	76	71.03	12	92.31
No	31	28.97	1	7.69
Control measures (n=76 and 12)				
Followed	1	1.32	6	50.00
Not followed	75	98.68	6	50.00
Average yield obtained (q/acre)		6.58		9.88

Contd.....Table 2

Table 2.....Contd

afford to apply to their crop. Rest of the practices were followed on a routine basis which also depended to certain extent on how those practices were followed by the neighbouring farmers of other community.

Adoption pattern of paddy cultivation practices for improved varieties:

It was evident from Table 2 that 'Intan" was the variety grown by majority of the respondents (53.85%) while the rest used 'Jaya'. The recommended seed rate of 30 to 40 kg/acre was used by majority of them (76.92%). The first and second week of June, the recommended time for sowing was followed by a majority (92.31%). Unlike the local variety growers, majority of the improved variety growers (69.23%) had transplanted their crop. Majority of them maintained a spacing of 8 inches between rows and 6 inches between plants 84.62 and 88.89%, respectively. As many as 92.31 per cent of the Siddhi farmers applied FYM while just over half of them (53.85%) had even applied chemical fertilizers like urea, complex and DAP. All the respondents (100.00%) had inter cultivated the crop. Less than half of them (50.00%) took up plant protection measures and the average yield

obtained was 9.88 quintals per acre.

Some of the economically better-off farmers were able to grow the improved and recommended varieties. Apart from FYM, fair percentage of the respondents had applied chemical fertilizers which indicated their awareness of the importance of such fertilizers in growing fertilizer responsive improved varieties.

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