

A Study of Cropping pattern followed by tribal farmers of Panchmahals district in Gujarat

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INTRODUCTION

In India, considerable changes have been brought about in traditional agriculture during recent years through various programmes involving use of modern inputs and new technology. However, the progress is not yet to the desired level of satisfaction because whatever progress that has been achieved so far, differs from one region to another. There are certain region showing backwardness in agriculture. This is particularly observed in tribal areas of the country. Tribal agriculture is tradition bound and has undergone very few changes during the plan periods. Even today large number of tribal families have subsistence agriculture.

Panchmahals district, where this investigation was carried out, is one of the underdeveloped, economically backward tribal district of Gujarat State with a sizeable tribal population of 34 per cent in the state. Agriculture, by and large, is the only source of lively-hood for them. Their land is comparatively poor in quality and practically without irrigation facility.

Various researchers like Burman *et al.* (1970), Pawar (1972), Krishna Swamy and Patel (1973) and Patel and Krishna Swamy (1979) have reported that the

cropping pattern in most of the tribal villages were by and large, toward food grain oriented, basically cereal oriented.

Keeping this in view, the study was undertaken with the following objectives:

1. To study the cropping pattern followed by the tribal farmers.
2. To know the relative share of different crops in the cropping pattern followed by the tribal farmers.

METHODOLOGY

The present study was conducted in tribal areas of Panchmahals district of the Gujarat State. Out of five talukas of the tribal sub plan project, two talukas viz. Santrampur and Devgadbaria were selected purposively. The Villages in each selected taluka were classified into three groups viz. high, medium and low communication facilities according to scale developed by Murthy and Singh (1974) and two villages from each group were selected randomly. In all, 12 villages were selected from two talukas. From each village, 15 tribal farmers were selected randomly which constituted total sample of 180 tribal farmers. The data were collected by personal interview technique.

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RESULTS AND DISCUSSION

1. Cropping Pattern Followed by the Tribal Farmers :

The information regarding cropping pattern followed by a sample tribal farmers is presented in table 1.

Table 1 : Distribution of the farmers according to cropping pattern followed by them. (N=180)

Sr. No.	Cropping Pattern	Number	Percent
1.	Single crop	180	100.00
2.	Double crop	125	69.44
3.	Triple crop	13	7.22

It can be observed from table 1, that all the tribal farmers followed single cropping pattern. While 69.44 per cent of them followed double cropping pattern. Only 7.22 per cent of them had followed triple crop in their cropping pattern.

Further, an effort has been made in this study to know the cropping intensity of the sample tribal farmers. The cropping

intensity refers to the percentage of proportion of the total annual cropped area to the size of land holding possessed by the tribal farmers and was calculated with the help of following formula:

$$\text{Cropping Intensity} = \frac{\text{Total cropped area}}{\text{Total area cultivated}} \times 100$$

The information regarding cropping intensity is presented in table 2

Table 2 : Distribution of the tribal farmers according to their cropping intensity (N=180)

Sr. No.	Categories	Number	Percent
1.	Upto 125 cropping intensity	115	63.88
2.	From 126 to 150 cropping intensity	37	20.56
3.	151 and above cropping intensity	28	15.56

Mean=128.58

As evident from Table 2, majority of the Tribal farmers (63.88 per cent) had cropping intensity upto 125, followed by 20.56 per cent of them had cropping intensity from 126 to 150. Only 15.56 per cent of them had cropping intensity of 151 and above.

The data in table 1 and 2 reveal that majority of the tribal farmers (63.88 per cent) had cropping intensity upto 125 with almost all tribal farmers had single cropping pattern. The probable reasons for this situation might be that the poor economic conditions of the tribal farmers, small

land holding, lack of irrigation facility, unawareness regarding new improved practice of crops, etc.

2. Relative share of different crops in the cropping pattern followed by the tribal farmers:

The relative share of different crops in farmers has been studied and the comparison between the data i.e. 1978-79 and similar data of the year 1970-71 has been made. The data are presented in table 3.

Patel and Krishna Swamy (1974) had studied relative share of different crops in

the cropping pattern of the tribal and non tribal farmers during the year 1970-71 in the Panchmahals Dist. The same data in

respect of tribal farmers have been used to make comparison with the present data i.e. 1978-79.

Table 3 : Relative share of different crops in the cropping pattern of the tribal farmers.

Sr. No.	Name of crop	Percentage of area during 1970-71	Percentage of area during 1978-79
1.	Maize	32.4	39.2
2.	Paddy	12.4	28.2
3.	Wheat	10.4	9.4
4.	Other millets	7.0	2.8
	Total cereals	62.2	79.6
5.	Pulses	28.0	10.3
	Total Food grains	90.2	89.9
6.	Groundnut	6.7	3.0
7.	Cotton	1.4	3.1
8.	Other crops	1.7	4.0
	Total	100.00	100.00

It is evident from the table 3 that the relative share of total food grains in the cropping pattern of tribal farmers was 90.2 percent in 1970-71 and 89.9 percent in 1978-79. The relative share of total cash crop and other crops was equal during the year 1970-71 and 1978-79. Thus, it could be inferred that the cropping pattern of the tribal farmers was predominantly food grains oriented and especially cereals oriented. Also it is clear from the data that there is no change in cropping pattern during the year 1970-71 and 1978-79. Hence, it can be inferred that there is no change over time in the cropping pattern of the tribal farmers. The probable reasons of this might be poor economic

condition, smaller surplus inputs of their own, borrowing of all financial requirements from credit agencies, etc. Also they invest less on farming aspects, lack of resources as well as low educational level had affected their cropping pattern.

CONCLUSIONS

The study revealed that all the tribal farmers (100 percent) followed single cropping pattern only i.e. only khariff season. Majority of them (63.88 percent) had cropping intensity upto 125. The cropping pattern of tribal farmers was predominantly food grains oriented and there is no change over time in their cropping pattern.

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