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Socio-economic Status of CROPSAP Scheme of Cotton Growers

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ABSTRACT: In the present study the socio-economic characteristics of beneficiary and non-beneficiary cotton growers have been assessed. It may prove beneficial to know socio-economic characteristics of the CROPSAP scheme of cotton cultivators as well as their knowledge about CROPSAP scheme of cotton. The increasing yield of fibre is a big challenge around the globe especially for the researchers. This was based mainly on primary data which was collected through personal interview method with the help of pre-tested schedules. An investigation was conducted in the Jalna district of Maharashtra purposively on the basis of 2nd highest area under cotton crop. Multistage sampling technique was used for selection of district, tehsils and villages. Total sample size was 160 where 80 was beneficiary and 80 non-beneficiary cotton growers. Data were analyzed with the help of Descriptive statistics, was used to calculate the socioeconomic level of cotton growers using mean, frequency, and percentage. Beneficiary cotton growers more educated than non-beneficiary cotton growers. Both beneficiary and non-beneficiary cotton growers was middle age group (41.25 per cent) and (43.75 per cent) respectively. Both the growers has agriculture was the main occupation. The benefit of CROPSAP scheme for farmer is reduces the extra application of insecticides and pesticides hence saving the cost and increasing the status of farmers. The benefit of this scheme is that the problems are sorted according to their severity from the respondents' perspective.

Keywords: Beneficiary, Non-beneficiary, Jalna, CROPSAP.

INTRODUCTION

Cotton, the 'White gold' occupies an enviable place amongst commercial crops of our country. Cotton plays a dominant role in agriculture as well as in industrial economy. It is one of the prime sources of natural fibers. It gives support to prestigious textile industry and produces employment to millions of people (Dalvi *et al.,* 2013). India is unique to grow all the four cultivated spp. (*Gossypium hirsutum, G. barbadense, G. arborium* and *G. herbaceum*) and intra as well as inter specific hybrids under diverse agroecological conditions (Lad *et al.,* 2022). Cotton is the principal commercial crop in India, influencing the country's economy as it provides remunerative income and employment to most of the people. India ranked first in the world for cotton acreage with 120.69 lakh hectares (36 per cent of the global area of 333 lakh hectares) under cultivation. India grows 33 per cent of its cotton under irrigated and 67 per cent of it on rainfed land. India has a yield of 510 kg/ha, placing it 38th in terms of productivity. During the cotton season 2021–2022, India is expected to produce 362.18 lakh bales (6.16 million metric tons), or 23 per cent of the 1555 lakh bales (26.44 million metric tons) of cotton produced worldwide. This puts India in first place. Cotton is productive at 336 kg/ha for seed cotton production (National average: 568 kg/ha). The CROPSAP scheme is helpful to increase the income level of cotton growers (Prachi *et al*., 2023).

The study may prove beneficial to the policy makers and stakeholders in decision making and agricultural development (Ambhure *et al.,* 2023).

The main reason for choosing this crop is that during the 2008-09 period, the region faced a severe pest outbreak of *Spodoptera litura* L. (*Fabricius*) and *Helicoverpa armigera* L. (*Hubner*), as well as other leaf-eating caterpillars in the cotton- soybean based cropping system. This outbreak affected leading to significant losses. To prevent future outbreaks and to address the various factors responsible for the pest's onset and spread, there was a pressing need to establish a robust pest monitoring and advisory mechanism, which farmers can implement the CROPSAP scheme to generate cash income to feed themselves.

METHODOLOGY

Multistage sampling design was employed to select the sample farmers. In the first stage, Jalna district was selected purposively from marathwada region on the basis of 2nd highest area under cotton crop. The district contributes area about 2957.59 ha, 8350.84 tonnes prodution, 480 kg/ha productivity. In the second stage, five tehsils - Bhokardan, Jafrabad, Jalna, Badnapur, and Ambad - were chosen from each district. In third stage, 4 villages was selected from each tehsils. In the fourth stage, four cotton growers—four beneficiaries and four non-beneficiaries were chosen from village. There were 80 cotton growers who were beneficiaries and 80 who were not, making up a total sample size of 160 from 20 communities (Kiresur and Inchangi 2011). Using a pretested questionnaire, data were collected through personal interviews. The data were related to various socio-economic characters such as farmer's details, family members, age, education, and occupation, size of holdings, inventory resources, income and expenditure of the selected farmers, cropping pattern have been collected. Descriptive statistics, was used to calculate the socioeconomic level of cotton growers using mean, frequency, and percentage.

RESULTS AND DISCUSSIONS

Selected personal, socio-economic and psychological characteristics of the beneficiary and non-beneficiary cotton growers.

Age. Age of the respondents at the time of investigation was recorded and they were classified in to three groups. From the Table 1, it can be concluded that majority of the beneficiary and non-beneficiary Cotton growers were in middle age group. Hence, a higher proportion of respondents can be inferred have been found to fall among the total respondents in the middle age group. This result similar with (Kumar *et al.,* 2019; Kumar, 2015; Bandgar *et al*. (2002); Chauhan (2003); Kumar (1996).

Education. Formal education of an individual influences his attitude as well as enhances comprehensive ability and skill. These in turn lead to increasing problem solving ability of individual. The data presented in Table 1. The highest number of beneficiary cotton growers were educated up to high school level (33.75 Per cent) and non-beneficiary cotton growers were educated upto primary level (31.25 per cent). With this consideration the beneficiary cotton growers was studied more than the non-beneficiary cotton growers Gamanagatti and Dodamani (2016); (Kumar, 2015).

Size of family. Size of family refers to the number of persons present in their family. The beneficiary and non-beneficiary cotton growers were classified according to their size of family in following three groups. The data presented in Table 1 make, it clear that majority (51.25 per cent) of the beneficiary cotton growers were found with five to seven members, and majority (43.75 per cent) of the non-beneficiary cotton growers were found with eight and above members.

Occupation. The data presented in Table 1 reveal that majority of the beneficiary cotton growers (86.25 per cent) had only farming as their main occupation, while (05 per cent) of them had business as their occupation and (8.75 per cent) of had service as their occupation. In case of non-beneficiary cotton growers (85 per cent) had only farming as their main occupation, while (3.75 per cent) of them had business as their main occupation and (11.25 per cent) of had service as their main occupation. None of the beneficiary and non-beneficiary cotton growers had farming + business + service as occupation. It is inferred that majority of beneficiary and non-beneficiary cotton growers were doing farming as their main occupation (Gamanagatti and Dodamani 2016; Kumar, 2015).

Table 1: Socio-economic status beneficiary and non-beneficiary cotton growers.

	Particulars	Beneficiary	Non-Beneficiary
A	**Age**		
I	Young (< 35 years)	19 (23.75)	15 (18.75)
II	Middle (>36 to<50 Years)	33 (41.25)	35 (43.75)
III	Old (> 50 years)	28 (35)	30 (37.5)
	Total	80 (100)	80 (100)
B	**Education**		
I	Illiterate	11 (13.75)	28 (35)
II	Primary	22 (27.5)	25 (31.25)
III	High School	27 (33.75)	15 (18.75)
IV	Above High School	20 (25)	12 (15)
	Total	80 (100)	80 (100)
C	**Family Size (members)**		
I	Members (1 to 4)	21 (26.25)	15 (18.75)
II	Members (5 to 7)	41 (51.25)	30 (37.5)
III	Members (8 and above)	18 (22.5)	35 (43.75)
	Total	80 (100)	80 (100)
D	**Occupational Level**		
I	Agriculture	69 (86.25)	68 (85)
II	Business	4 (5)	3 (3.75)
III	Service	7 (8.75)	9 (11.25)
	Total	80 (100)	80 (100)

(Figures in parentheses indicate the percentage to the respective cotton growers)

The probable reason might be that they had large land holding and continuing parent's occupation

Cropping pattern of beneficiary and non-beneficiary cotton growers. Cropping pattern of beneficiary and non-beneficiary cotton farm were computed and are presented in Table 2. In case of beneficiary cotton growers gross cropped area was 2.27 hectares. In which share of cotton crop was 48.49 percent. After cotton crop, the area under *Kharif* crop Soybean was higher (9.05 per cent), followed by tur (7.55 per cent) and udid (4.01 per cent). Gram accounted for a larger percentage of the *Rabi* crop area (9.76 per cent), followed by *Rabi* jowar (7.07 per cent) and wheat (4.44 per cent). Maize accounted for a higher percentage (4 per cent) of the summer crop area, followed by oranges (1.53 per cent). Sugarcane under annual crops made up 3.78 per cent of the area.

Gross cropped area for non-beneficiary cotton growers was 2.82 hectares. The area covered by cotton was 43.53 per cent. In *kharif* season after cotton, soybeans covered area (6.99 per cent) is followed by Tur (6.85 per cent) and Udid (4.77 per cent). In *Rabi* crops the area under Gram (14.38 per cent) was higher than that under jowar (11.68 per cent) and wheat (5.79 per cent). Area under maize was (3.53 per cent) and Orange (0.44 per cent), Area of sugarcane under annual crops (1.99 per cent). Further revealed that the cropping intensity of beneficiary growers and non-beneficiary growers were 134.41 per cent and 154.90 per cent respectively.

Table 2: Cropping pattern of beneficiary and non-beneficiary cotton growers.

	Crops	Beneficiary	Non-Beneficiary
A	***Kharif***		
1	cotton	1.10 (48.49)	1.23 (43.53)
2	Soybean	0.20 (9.05)	0.19 (6.99)
3	Tur	0.17 (7.55)	0.19 (6.85)
4	Udid	0.09 (4.01)	0.13 (4.77)
	Total	1.58 (112.37)	1.75 (62.16)
B	***Rabi***		
1	Gram	0.22 (9.76)	0.40 (14.38)
2	*Rabi* jowar	0.16 (7.077)	0.33 (11.68)
3	wheat	0.10 (4.44)	0.16 (5.79)
	Total	0.48 (21.28)	0.9 (31.85)
C	***Summer***		
1	Maize	0.09 (4.00)	0.1 (3.53)
2	Orange	0.03 (1.53)	0.01 (0.44)
	Total	0.12 (5.54)	0.11 (3.98)
D	***Annual***		
1	Sugarcane	0.08 (3.78)	0.05 (1.99)
	Total	0.08 (3.78)	0.05 (1.99)
	Gross Cropped area	2.27 (100)	2.82 (100)
	Cropping Intensity	134.4189	154.900

(Figures in parentheses indicate the percentage to the respective cotton growers)

The study inferred that the dominance of *Kharif* crops over *Rabi* and summer crops due to dependency on monsoon rains. In cropping pattern of cotton growers average land holding was being utilized in *Kharif* season followed by *Rabi* and summer season. The close examination of cropping pattern indicated that more than 85.00 percent area was allocated for the cultivation of cereals, pulses and oil seeds. This is because of the dietary habit of the people of the region.

CONCLUSIONS

The research identified the socioeconomic characteristics of the beneficiary and non-beneficiary cotton growers. Having analyzed the findings based on the information collected, it is important, to most of beneficiary and non-beneficiary cotton growers was middle age group (41.25 per cent) and (43.75 per cent) respectively. Most of the beneficiary cotton growers educated upto high school level (33.75 per cent) and non-beneficiary cotton growers Illiterate. Hence value addition more in beneficiary cotton growers than non-beneficiary cotton growers and implement the CROPSAP scheme more quickly. Five to seven members (51.25) are present in beneficiary cotton growers and eight and above members (43.75 per cent) are present in non-beneficiary cotton growers. The main occupation of beneficiary and non-beneficiary cotton growers was agriculture. Gross cropped area of beneficiary cotton growers was 2.27 ha and non-beneficiary cotton growers was 2.82 ha cropping intencity of beneficiary cotton growers was (134.41) and non-beneficiary cotton growers was (154.90).

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