AATCC Review

26 June 2024: Received
30 July 2024: Revised
04 September 2024: Accepted
06 October 2024: Available Online

https://aatcc.peerjournals.net/

Original Research Article

Open Access

Impact of shifts in cropping pattern on socioeconomic conditions of farmer

V. B. Pardhi[1], S. S. Khandave[2], S. S. Shinde[3]

[1]Department of Agriculture extension and communication, R.C.S.M. College of Agriculture , Kolhapur, Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra, India.

[2]Department of Agriculture extension and communication, College of Agriculture, Pune,Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra, India.

[3]Department of Agriculture extension and communication, Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra, India.

ABSTRACT

The present study's impact of shifts in cropping patterns on the socioeconomic conditions of farmers conducted in the Pune district of Maharashtra state. Both primary and secondary data were used for the study. 68.67 per-cent of farmers buy new livestock, 68.00 per-cent of farmers dig new wells/bores, and 62.00 per-cent of farmers improve their existing land. On the home front, 84.00 per-cent started using LPG gas, while 82.00 per-cent of respondents had access to drinking water, As improving living conditions, 80.00 per-cent started more spending on food and nutrition for the family, 8.67 per-cent of farmers purchased 'smart T. V.' and 85.53 per-cent farmers purchase 'android phones', as farmers changing living conditions, 70.67 per-cent repaid their old loans,48.67 per-cent had increased savings/deposits and 43.33 per-cent of invested their money in other enterprises. The research based on empirical data of crops and area under them during years 2012 -21 from 15 villages, Data collection and analysis is major challenge faced during research. By overcoming this problem this research helps to understand how socioeconomic characteristics of farmer help him to change its cropping pattern and help him to improve live-hood conditions.8u

Keywords: *As improving living conditions, 80.00 per-cent started more spending on food and nutrition for the family, 8.67 per-cent of farmers purchased 'smart T. V.' 70.67 per-cent*

INTRODUCTION

In India, agriculture and other agro-based sectors are having largest source of livelihoods. Nearly 70 per-cent of rural households depend on agriculture (FAO,2018). The proportion of area under various crops at a point as it changes over space and time is called a cropping pattern. The study of cropping patterns is very important because it provides evidence about the changes that are taking place in land use related to agriculture. The cropping pattern was studied on two bases 1) Shifts and 2) Deviations. The shift in cropping pattern means a change in the sequence of crops throughout time. Deviations in cropping patterns mean changes in the area allocated under different crops (Chavare,2020). Cropping pattern plays a deciding role in the socioeconomic conditions of farmers. Change in the cropping pattern and sequence from traditional cropping to commercializing cropping leads to improved socioeconomic conditions for the farmers. 88.99 % of the respondent's accessibility to inputs has increased, 91.51% of the respondents opined that vegetable production has increased, acquisition of assets 20.18 % of the respondents reported construction of a new house, 14.68 % of the respondents purchased vehicles and about 63.00 % and 74.54 % of the respondents opined that they provide education to their children and able to bear the family health expenses respectively due to increase in their income (K C Gummagolmath,2020).

*Corresponding Author: ***V. B. Pardhi***

DOI: https://doi.org/10.21276/AATCCReview.2024.12.03.388

Cropping pattern changes have also diversified dietary pattern (Sajithi,2017). An attempt was made to study.

1) To study the socioeconomic profile of the farmer
2) To assess the impact of shifts in cropping patterns on socioeconomic conditions of farmer

METHODOLOGY

For the present research paper Khed tehsil in the Pune district was selected for sampling procedure. Khed is an adjacent tehsil of Pune city and a major part of the tehsil comes under the Chakan and Moshi industrial area, due to industrialization, and urbanization, it is noticed that there is a predominant change in area, production, and productivity of various crops.10 respondents from 15 villages respondents selected purposively by proportional sampling technique. Data was collected and analysed with the help of statistical tools like mean, per-centage, and standard deviation.

RESULTS AND DISCUSSION

1. Socioeconomic profile of farmer

Data presented in Table 1 regarding the socioeconomic characteristics of respondents

Up to half 49.33 % were middle age category,34.66 % of farmers had primary education, 40.66% of farmers had 'Agriculture+dairy' as their occupation for live hood, and more than half 54.66 % of farmers had a medium level of experience from 20 to 26 years, 44.67 % respondents were small farmers had possessed land holding from 1 ha to 2 ha, 67.33 % respondents had to earn medium level income from 70,560 to 1, 45,441 Rs.

2. Impact of shifts in cropping pattern on socioeconomic conditions of farmer

Socioeconomic impact refers to the improvements in living conditions and standards of farmers due to changes in cropping patterns by farmers. For this, improvements are categorized as the improvements that occur on the home front, on material changes in the home, on health and spiritual changes, and economic changes.

Table 2 represents the impact on Socioeconomic impact on respondents due to changes in cropping patterns. On farm change, 68.67 per-cent of farmers buy new livestock which complementary to farming, while 68.00 per-cent of farmers dug new wells/bores for irrigation needs of farms, followed by 62.00 per-cent of farmers improving their existing land. On the home front, more than four-fifth of respondents (84.00 per-cent) started using LPG gas, while 82.00 per-cent of respondents had access to drinking water at homes followed by 72.00 per-cent of farmers had access to toilets, and less than one-half of respondents (42.67 per-cent) modified/constructed new homes.

As improving living conditions, the majority of respondents (80.00 per-cent) started more spending on food and nutrition for the family, while 67.33 per-cent of farmers spent more on clothing.48.00 per-cent of farmers agree with the notion of 'providing higher education to their Children' and less than two-fifths of respondents (36.00 per cent) agreed to 'more pilgrimage visits'.

In the economic sphere, as farmers change living conditions, slightly more than seventy per-cent of respondents (70.67 per-cent) repaid their old loans, followed by up to one-half of respondents (48.67 per-cent) had increased savings/deposits, and 43.33 per cent of invested their money in other enterprises.

CONCLUSION

1. Education, Work experience, and Annual income play an important role encouraging farmers to change cropping patterns.

2. As changing cropping pattern helps to mitigate risks, this helps increase in family income and directly improves

SCOPE OF STUDY

1. There are many factors which affect socio-economic condition of farmers. i e. society

2. There is further scope of study to understand their impact on socio-economical conditions of farmers.

3. This is further scope of study in different localities by applying same methodology with certain modifications.

CONFLICT OF INTEREST

There is no conflict of interest while undertaking research.

ACKNOWELDEMENT

I thankful to my m.sc. thesis guide Dr.S.S.Khnadave mam and all members of my m.sc. thesis research council, my seniors, juniors , farmers , mother-father and family who believe in me and helped me to complete my research work.

Table 1. Socioeconomic characteristics of the respondents

Sr.	Category	Frequency	Per-centage
1.Age			
1	Young (Up to 35 years)	14	9.33
2	Middle (36-55 years)	74	49.33
3	Old(56years and above)	62	41.33
2.Education			
1	Illiterate	21	14.00
2	Primary Education	52	34.66
3	Middle School	43	28.67
4	Secondary Education	34	22.67
3. Occupation			
	Agriculture	54	36.00
2	Agriculture + Dairy	61	40.66
3	Agriculture + Horticulture	16	10.67
4	Agriculture + Poultry	19	12.67
4. Work Experience			
1	Low	31	20.67
2	Medium	82	54.66
3	High	37	24.67
5. Size of land holding			
1	Marginal	10	06.67
2	Small	67	44.67
3	Semi-medium	47	31.33
4	Medium	26	17.33
6.Annual Income			
1	Low	29	19.33
2	Medium	101	67.33
3	High	20	12.66

Table 2. Socioeconomic impact on respondent due to change in cropping pattern *(n=150)*

Sr. No	Major aspects	Particulars	Before change incropping pattern(f)	per cent	After a change in cropping pattern(f)	per cent
1	Household	Modifications on existing home	33	22.00	64	42.67 **(+20.67)**
		Access to toilets	41	27.33	108	72.00 **(+44.67)**
		Drinking water in their homes	27	18.00	123	82.00 **(+64.00)**
		Started using LPG Gas	24	16.00	126	84.00 **(+58.00)**
2	Material possession	Purchase of jewels	36	24.00	98	65.33 **(+40.66)**
		Purchase of vehicles	67	44.67	66	44.00 **(-00.67)**
		Purchase of laptops and other advanced tools	28	18.67	122	81.33 **(+69.66)**
		Purchase of Smart T.V.	17	11.33	113	75.33 **(+64.00)**
		purchase of Android phones	22	14.67	128	85.33 **(+70.66)**
3	Health, Educational Spiritual aspects	provide higher education to children	51	34.00	72	48.00 **(+12.00)**
		Better health care	44	29.33	101	67.33 **(+38.00)**
		Spent more on food/clothing	30	40.00	120	80.00 **(+40.00)**
		Pilgrimage visits of family	29	19.33	54	36.00 **(+16.66)**
4	Farm asset	Purchase of new land	29	19.33	71	47.33 **(+28.00)**
		Existing land improvement	48	32.00	93	62.00 **(+30.00)**
		Dug new well/bore	48	32.00	102	68.00 **(+36.00)**
		Purchase of new farm implements	47	31.33	82	54.67 **(+23.34)**
		Purchase of new tractor	31	20.67	65	43.33 **(+20.66)**
		Purchase of livestock	47	31.33	103	68.67 **(+37.34)**
5	Economical aspects	Repair old loans	41	27.33	106	70.67 **(+43.34)**
		Increased savings/deposits	51	34.00	73	48.67 **(+14.67)**
		Invested money in other enterprises	34	22.67	65	43.33 **(+20.66)**

References

1. Mulani,S.M.,Ghadge, V.G.,Chavare, S.(2020). Cropping pattern analysis of Sangola district, tehsil 'Aksharwaghmal'–UGC approved. International research journal –ISSN 2229-4929

2. Gummagolmath K.C., Bhawar R.S., Ramya Lakshmi S.B. and Patra P(2020).Impact of Crop Diversification on Farmers Socio-economic Conditions of the Farmers: A Case of Himachal Pradesh.Res. Jr. of Agril. Sci. 11(1): 137-143

3. Food and Agriculture Organization of the United Nations (2018).The future of food and agriculture. Alternative pathways to 2050, FAO, FAO, Rome.

4. Rejuka,K. and singh ,R.(2015).An analysis of changing land use pattern and cropping pattern in a scenario of increasing food insecurity in kerala state*. National journal of economic affairs* 5(2):201-205.

5. Sanjithi S.A.(2017)Food for survival. Cropping with growing food insecurity: A daunting challenge. SDPI (Sustainable Development Policy Institute). Research & News, Bulletin. Vol. 17 (2).

6. Sanjeev,M.V. and Saroj, P.L.(2015). Social and Economic benefits of cashew cultivation in dakshinna Karnataka : An analysis of the impact , its determinants, constraints. *Indian journal of Agri. Sciences* 25(6): 247-252*.*

7. Singh, N.K. and Chouhan M. (2003).Impact of diversification of income, employment and credit needs of marginal farmers. *Indian Journal of Agri.Econ.* 13(7): 761-797.

8. Shakeel ,A.(2014).Changing Cropping Pattern from Conventional toMarket Oriented Value Added Crops in Eastern Uttar Pradesh, India: Variations and Causes. *National journal of economic affairs* 59(1):75-87

9. Sridharan B. and Radhakrishan S.A.(2009).Socioeconomic impact of cropping pattern in kerala state. *Indian Journal of Agri. Econ.* 33(3): 26-29

10. Thippeswamy,S.S.(2016).Cropping Pattern Influences on Farmers Suicide: A Case Study of Karnataka *International journal of scientific research* 5(7):444-448.

11. Vijayalakshmi, T.(2017). Land use and cropping pattern. *International journal of advanced research* 5(5):1710-1716