



Relationship between Socio-economic Status and Knowledge about Millets Farming Practices in Prayagraj and Bhadohi District of Uttar Pradesh

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Abstract

The current study was conducted mainly with objective to determine the Relationship between Socio-economic status and knowledge about millets farming practices in Prayagraj and Bhadohi districts of Eastern Uttar Pradesh. The study was done in three blocks: Manda and Uruwa in Prayagraj, and Deegh in Bhadohi district. Four villages were selected from each block which involved a total of 120 millets growers. Data gathering was carried out through personalized interviews and aided by a well-developed questionnaire. We used the coefficient of correlation 'r' to analyze the interaction between millets growers and their knowledge practices. The study concluded that the majority of respondents were in the middle age group (58.34%), high school and intermediate level education (43.33%), and 51.67% population belonged to other backward class, and 68.34% were belonging to the farming experiences. found the relationship between socio-economic characteristics with level of knowledge of millets grower's caste, farming experience, mass media exposer and extension contact were positively and significant. Its need to Government should provide more information about millets to the farmer through fairs, training and campaigning, etc.

Keywords: Millets, Knowledge, Farming, Practices.

Introduction

Indian millets are a category of nutritionally dense, drought-tolerant grains that are predominantly grown in the arid and semi-arid regions of India. These millets are also known as “coarse cereals” or “cereals of the poor” (APEDA 2023). Current area and production scenario of millets are 12.45 M.h yielding 15.53 M.t at 1247 kg/ha (ASSOCHAM 2022). Sorghum (*Sorghum bicolor*) after rice, wheat, maize, and barley, It is the world's sixth most significant grain crop in terms of production and acreage. It is a drought-

tolerant crop that may be produced in a variety of environments including semi-arid areas. Each flower cluster contains between 800 and 3000 kernels (Sathish 2018). Pear millets (*Pennisetum glaucum L.*) It's a drought-resistant crop grown in semi-arid regions of Africa, Asia, and the Americas (Sathish 2018). The crop is well suited to difficult environmental circumstances, with rainfall less than 250 mm and temperatures of 300 °C or higher. (National Research Council 1996). They are also gluten-free and have a low glycemic index, which makes them suitable for

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persons with celiac disease or diabetes. (Seetharama *et al.* 2005). They offer protein, fatty acids, minerals, vitamins, dietary fiber, and polyphenols. (Amadou *et al.* 2013). Millets are C4 plants with enhanced photosynthetic efficiency, short duration, increased dry matter production capacity, and a high degree of resistance to heat and drought (Yadav *et al.* 2013). Millets have a higher potential to absorb atmospheric CO₂ as biomass per unit of water consumed, making those crops with low carbon and water footprints. Millets have a shorter life cycle (10–12 weeks) than other important crops (20–24 weeks), which aids in stress mitigation (NAAS 2022). Millet as climate resilient crop Photo-insensitive "does not require a specific photoperiod for flowering" and resistant to climate change. Millets may grow in poor soil with little or no additional inputs. Millets consume less water and can grow under drought and non-irrigated environments, even in very low rainfall regimes (Upadhyay 2022).

Research Methodology

The study was done in Prayagraj and SantRavidas Nagar (Bhadohi) district, which located in eastern Uttar Pradesh. Prayagraj and Bhadohi district is the most important districts of the state, for major millets grower (Sorghum and Pear millet) which is located in eastern part of Uttar Pradesh. Prayagraj and Bhadohi district is the

major wheat, rice, and millets crop growing district of Uttar Pradesh. The districts have been selected purposively as Prayagraj and Bhadohi for large number of farmer involved in major millet (Sorghum and Pear millet) cultivation. The investigation was done three in blocks: Manda and Uruwa in Prayagraj, and Deegh in SantRavidas Nagar. There are 90,84 and 96 villages in Manda, Uruwa and Deegh blocks respectively out of that 12 villages were select randomly. Ten respondents were selected from each village thus a total of 120 respondents were chosen at random for the investigation. Data gathering was carried out through personalized interviews and aided by a well-developed questionnaire. The coefficient of correlation 'r' was used to understand the interplay between millets growers' knowledge practices.

Results and Discussion

This chapter discusses the presentation of analysis and interpretation of data in order to make meaningful conclusions using proper statistical tests. The outcomes of the various areas under examination are addressed in light of previous research findings, and rationales are supplied when needed. In general, this chapter presents the study's findings in the following sections.

The results of the current inquiry, as well as pertinent debate, have been presented under the following headings:

Table 1: Socio-economic characteristics of the millets growers

Parameter	Classification	Frequency (f)	Percentage (%)
Age	Young (up to 30 years)	28	23.33
	Middle (31 to 57 year)	70	58.34
	Old (above 58 year)	22	18.33
Education	Illiterate	2	1.67
	Primary	15	12.50
	High school and Intermediate	52	43.33
	Graduate and above	51	42.50
Occupation	Agriculture	58	48.33
	Agriculture + Labor	37	30.84
	Agriculture + Business	25	20.83
Annual Income	Low (up to 1 lakh)	30	25.00
	Medium (1.01 to 2 lakh)	81	67.50
	High (above 2.01 lakh)	9	7.50
Caste	General	32	26.67
	OBC	62	51.67
	SC	26	21.66
Farming experience	Low (up to 16 year)	18	15.00
	Medium (17 to 37 year)	82	68.34
	High (above 38 year)	20	16.66
Farming size	Small (up to 8 member)	27	22.5
	Medium (9 to 14 member)	74	61.67
	High (above 15 member)	19	15.83
Land holding	Marginal farmer (less than 1 ha.)	16	13.33
	Small farmer (1 to 2 ha.)	95	79.16
	Big farmer (more than 2 ha.)	9	7.50
Mass media exposer	Low (up to 10)	24	20.00
	Medium (11 to 12)	47	39.17
	High (above 13)	49	40.83
Extension contact	Low (up to 3)	23	19.17
	Medium (4 to 7)	70	58.33
	High (above 8)	27	22.5

The data of table 1 reveal that majority of millets growers 58.34 per cent belonged to middle age group, while 43.33 per cent of them High school and Intermediate of education, while 48.33 of the farmer were included in agriculture, where 67.5 per cent were belonged to medium annual income (1.01 to 2 lakh), while 51.67 per cent farmer belonged OBC category, while farmer 68.34 percent had a moderate level of farming experience, Meanwhile, 61.67 percent farmer belonged to medium size of family and 79.16 per cent were had small land holding of farmer. It was found that 40.83 per cent farmer were had high mass media exposer and most of the farmer 58.33 per cent had medium level extension contact. Similar finding was also reported by Dhruw *et al.* (2012) and Ramachandra (2018).

Table 2: knowledge level of respondent for recommended millets farming practices

Sr. No.	Category	Respondent (N=120)	
		Frequency	Percentage
1	Low (up to 12)	21	17.50
2	Medium (13 to 14)	59	49.16
3	High (above 15)	40	33.37
	Total	120	100.00

According to Table 2. The majority of responders (49.16%) had a medium Level of Knowledge about recommended millet farming practices, while the remaining (17.5%) and (33.37%) had a low and high level of knowledge about millets grower recommended farming practices. It can be concluded that the majority of millets growers possessed a medium level of knowledge. They could be due to the fact that the majority of millets growers had a medium level of education (high school and intermediate), medium mass media contact, medium extension contact, medium social participation, and medium millet cultivation experience. Deshmukh *et al.* (2014) reported similar findings when researching farmers' knowledge of Improved farming practices in the Kharif Jowar Nanded district. Patil *et al.* (2019) conducted research on minor millet knowledge among growers and non-growers in the Dharwad district of Karnataka. In comparison to Prayagraj, Bhadohi had the highest level of farmer knowledge of millet cultivation.

Table 3: Relationship between personal and socio-economic characteristics of millets growers with knowledge

Sr. No.	Variables	Correlation coefficient (r)
1.	Age	0.012
2.	Education	0.0354
3.	Occupation	0.0775
4.	Annual income	0.0891
5.	Caste	0.2015*
6.	Farming experience	0.2856**
7.	Family size	0.0682
8.	Land holding	0.0463
9.	Mass media exposer	0.2182*
10.	Extension contact	0.267**

It was observed from Table 3 that correlation coefficient (r) showed that the independent variables like caste, farming experience, mass media exposer and extension contact were favorably and significantly associated to the level of knowledge of enhanced cultivation methods of millets, whereas age, education, occupation, yearly income, family size, and land holding had no significant relationship with knowledge of improved cultivation practices of millets. Similar findings also reported by Deshmukh *et al.* (2014).

Conclusion

In recent years, millets farming area reduces. Because millets mostly grow in dry land farming areas but I noticed that when the farmers there got better irrigation facilities, they started switching to other crops. Most of the millets growers had found to a medium level of knowledge about the recommended farming practices in medium age group farmer. It was found the relationship between socio-economic characteristics with level of knowledge of millets grower's caste, farming experience, mass media exposer and extension contact were positively and significant. Therefore, we need to provide more information about millets to the farmer fairs, training and campaigning.

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