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Socioeconomic status of plain farmers in Haridwar District of Uttarakhand

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Abstract
Agriculture is a significant contributor to Uttarakhand's gross state domestic product. It is the main source of livelihood for over 70 percent of its population. However, the share of agriculture in Uttrakhand's gross state domestic product has declined from 29 percent in 2000 to 11 percent in 2022–23. Commercial agriculture is practiced in the plain areas of Uttrakhand. Among the 622 villages in the Haridwar district, two villages in the plain area, namely Budpur and Tikola Kalan from Narsan block, were randomly selected. The results of the study indicated that of the farmers, 94.17% were from the OBC category, 50% were in the age group of 35–60 years, 56.6% had high school and intermediate education level, 83.3% had a single occupation in agriculture, 63.33% had 1-2 ha land holding, 93.33% were in the medium and low-income groups, and 80% possessed the cemented type of houses. As far as training exposure is concerned, 71.67 percent had no training exposure.

Keywords: Agriculture, socioeconomic status, plain farmers, Haridwar, Uttarakhand

Introduction

Human resources are the most valuable resource for any country. But it is not the quantitative but the qualitative strength of the people that builds the country towards progress and prosperity. The development of human resources leads to socio-economic or political-cultural changes in any society (Dubey and Srivastava, 2007) [4]. The measurement of a person's or group's economic and social status relative to others in society is called socioeconomic status (SES). Socio-economic status plays an important role in terms of shared resources, livelihoods, household, food, nutritional security, etc. This leads to the psychological and behavioral components of the sample, which are knowledge, attitude, perception, acceptance, tendency to change, aspiration level, risk tolerance, financial motivation, etc. Several social and economic variables cumulatively define SES. The choice of SES variables largely depends on the purpose and topic of the study. Factors affecting social and economic development measure the family's position on others economically and socially (Gaur, 2013) [5]. Family socioeconomic status refers to where the family stands based on certain reported characteristics such as wealth, economic and social status, education, occupation, social participation, caste, power, and political influence (Tiwari *et al*., 2005) [10]. Based on the above definitions, socioeconomic status is a multidimensional construct measured by perceived factors. Thus, SES is seen as a complex pattern consisting of interrelated components that together produce a response.

Agriculture is an important sector of the Indian economy. More than half of India's population still depends on agriculture as their main source of income and an important source of raw materials for many industries. The agricultural sector has played a key role in rural and general poverty reduction, socio-economic development, and sustainable economic development through the gradual improvement of the rural economy. Agriculture is a major contributor to the state of Uttarakhand's gross domestic product (GSDP). It is the main source of livelihood for more than 70 percent of its population. The share of the agriculture sector in the GSDP of Uttarakhand declined from 29% in 2000 to 11% in 2022-23 (Uttarakhand Budget Analysis, 2023-24) [11]. In Uttarakhand, commercial agriculture is practiced in the plains, and farmers in the hills are mostly engaged in subsistence agriculture.

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Farmers work hard but their income is not enough to meet their needs. One of the main reasons for their low socio-economic status is low income. Low per capita income weakens control over available resources, which worsens their living conditions. The socio-economic status of a nation reveals its social and socio-economic conditions. The main cause of low SES is poverty. Satyanarayan *et al*. studied the SES of farmers. (2010) [8]. Babatunde *et al*. (2007) [1] reported that food security, farm size, household income, household size, and education level are some of the important situations of farmers. It describes the standard of living of a person or group. If someone has easy access to resources, their socioeconomic status is likely to be high. This study aims to understand and explain the socio-economic status of plain farmers in the Haridwar district of Uttarakhand.

Methods and Materials
The study area
The study was conducted in Haridwar district of Uttarakhand state in India during 2021-22. Uttarakhand is one of the hilly states, which constitutes the north-western Himalayan region of the country. The Uttarakhand has two divisions namely, Kumaon and Garhwal. There are 13 districts in Uttarakhand of which six districts are in the Kumaon division and seven districts are in the Garhwal division. Among these 13 districts. 10 districts are predominantly hilly. Haridwar district is located in the southwestern part of Uttarakhand state. It lies from 29°35' to 30°40' north latitude and 77°43' to 78°22' east longitude. Dehradun and Pauri are the districts in the northwest, Bijnor district of Uttar Pradesh in the southeast, the southern boundary with the Muzaffarnagar district of Uttar Pradesh, while the western part is bounded by the district Saharanpur. The geographical area of the district is 2360 km^2. Haridwar district has been divided into three tehsils *viz*. Roorkee, Bhagwanpur, and Laksar, and six development blocks namely Roorkee, Bhagwanpur, Laksar, khanpur, Bahadarabad, and Narsan, comprise 622 villages. District Haridwar comes under a hot sub-humid (dry) ecoregion with alluvium-derived soils.

The general Haridwar district can broadly be divided into physiographic units *viz*. the structural hills, the upper Piedmont plain, or the Bhabar and Tarai or the lower Piedmont plain. The complete northern and northeastern part of the district is covered by the structural hills called the Shivalik. The second unit lies just below the foothills of the Shivalik called Bhabar. Just below the Bhabar zone lies the Tarai or plains or the lower Piedmont plain.

The total geographical area of Haridwar is 2043 lac ha out of which, 1062 lakh ha land is under cultivation, which amounts to 67% of total land. Among land for agricultural use, 13% is rainfed and 87% area is under irrigation. The total forest area in the district is 0.84 lac ha. The land holding of the farmers with area <1.0 ha is three times more than those with areas of land holding > 2.0 ha, indicating that the marginal and submarginal are highest. The land of Haridwar district is highly fertile (CGBD, 2016) [2].

The most important crops in the district are sugarcane, wheat, and paddy. The crops grown among the cereals are rice, maize, sorghum, pearl millet in Kharif, wheat and barley in Rabi, and maize in Zaid. In oil seeds, the major crops are soybean, groundnut, til, and sunflower in Kharif, mustard in Rabi, and sunflower in Zaid. Among pulse crops are pigeon pea, urd, moong, and cowpea in Kharif; gram, pea, and lentil in Rabi; and urd/moong in Zaid season. The cropping intensity of the district is 150 percent.

Sampling plan
Among these six blocks, the Narsan block was randomly selected. Two villages namely Budpur and Tikola Kalan from Narsan block were chosen randomly. 120 farmers (60 farmers from each village) were randomly taken as samples.

Selection of variables
Twelve variables such as caste, age, education, occupation, land holding, livestock possession, farming experience, annual income, house type, family size, training exposure, and economic motivation were selected purposively. These variables constituted a farmer's socioeconomic status/profile to assess the SES of the plain region of the Haridwar district.

Tool and techniques of data collection
A pre-tested structured interview schedule was prepared. The data were collected with the help of the personal interview questionnaire survey method during the study period.

Statistical analysis
Simple statistical tools like frequency and percentage were used to analyze and interpret data.

Results and Discussion
It was found that the majority of the farmers (94.17%) were of the OBC category followed by 4.16% and 1.67% from SC and unreserved categories, respectively (table 1). This may be because the majority of the castes living in these villages belong to the OBC category. No ST category was found in the southwest plain region of Haridwar district. The age of the farmers in the area reveals that a high percentage of respondents belong to the 35-60 years age group (50%) (table 1). The lower percentage of the old age group (16.67%) was observed due to the claim that they usually may not be good at doing work in agriculture or handing over to their heirs.

The literacy level among the farmers in the areas depicted that a high percentage of respondents studied up to the high school (33.3%) and Intermediate (23.3%) level (Table 1). Only 14.17% of the respondents had been educated to graduation and above. The primary school and middle school level percentages were 16.67% and 12.5%, respectively. The low level of higher education may be due to the fact of early engagement of the children in the agriculture occupation or less income of the family to afford further education expenses. The majority of the Farmers (83.33%) had a single occupation of agriculture whereas others had subsidiary occupations like labor, shopkeeping, driving, and animal husbandry.

This study depicted that a maximum of 63.33% of the farmers were in the medium land holding category followed by 26.67% and 10.0% in the small and large farmers category, respectively. This is because in Haridwar district, per capita agriculture land holding is comparatively less (Mamgain, 2008) [6]. The majority of the farmers were found to have low livestock possession (76.67%) followed by 20.0% with medium and 3.33% with high livestock possession, respectively (Table 1). Das (2003) [3] reported

that many farmers had either small or medium livestock possession ranging between 4-7 dairy animals. Roy *et al.* (2013) [7] observed that a large percentage of respondents had medium (66.67%) livestock possession in the Almora district of Uttarakhand.

Table 1 showed that the maximum 56.67% of the farmers had medium farming experience (14-32 years) whereas 39.17% and 4.16% were in low and high farming experience categories, respectively. Singh and Ramchandra (20019) [9] also found that the medium experience of farmers of Prayagraj district of Uttar Pradesh. The data in Table 1 evident that the annual income of 48.33% of farmers was in the medium-income group followed by 45.0% in the small-income group and 6.67% in the high-income group. However, the per capita income of the Haridwar district is the highest (Rs 3,62,688) in Uttarakhand (UDES, 2021-22) [12], though in the farmer's community, maximum farmers belong to the low-income and medium-income groups.

The data in Table 1 indicated that a maximum (80.0%) of the farmers possessed cemented type of houses whereas, 20.0% of the total farmers had semi-cemented type of houses. No farmers had a katchaha type of house in the villages surveyed. The maximum number of farmers' families were in medium (56.67%) size followed by 37.5% of the families in small size. Probably reasons behind that are separation or partition of the joint families. Only a few (5.83%) of the families had more than 7 members.

Table 1 indicated that 71.67% of the farmers had no training exposure followed by 20.0% and 8.33% had one to two and three or more training exposure, respectively. It was also observed that the information of the farmers regarding economic motivation that 51.16% of the farmers had low economic motivation, whereas 42.5% of the farmers had medium followed by 5.83% of the farmers had low economic motivation.

Table 1: Socioeconomic status of farmers of district Haridwar

S. No.	Variable	Category	Frequency	Percentage
1.	Caste	Unreserved	2.00	1.67
		OBC	113.00	94.17
		SC	5.00	4.16
		ST	0	0.00
		Total	120.00	100.00
2.	Age	Young (up to 34 years)	40	33.33
		Middle (35-60 years)	60	50.00
		Old (> 60 years)	20	16.67
		Total	120	100
3.	Education	Primary	20	16.67
		Middle	15	12.50
		High school	40	33.33
		Intermediate	28	23.33
		Graduate and above	17	14.17
		Total	120	100.00
4.	Occupation	Agriculture	100	83.33
		Agriculture & others	20	16.67
		Total	120	100.00
5.	Landholding	Marginal farmers (<1 ha)	32	26.67
		Small Farmers (1-2 ha)	76	63.33
		Large farmers (> 2 ha)	12	10.00
		Total	120	100.00
6.	Livestock possession	Low (<4)	92	76.67
		Medium (4 to 8)	24	20.00
		High (>8)	4	3.33
		Total	120	100.00
7.	Farming experience	Low (up to 14 years)	47	39.17
		Medium (14-32 years)	68	56.67
		High (>32 years)	5	4.16
		Total	120	100.00
8.	Annual income	Lower income (< 60000)	54	45.00
		Middle income (60001-160000)	58	48.33
		Higher-income (> 160000)	8	6.67
		Total	120	100.00
9.	House type	Kutchcha	0	0.00
		Semi cemented	24	20.00
		Cemented	96	80.00
		Total	120	100.00
10.	Family size	Small (up to 4 members)	45	37.50
		Medium (5-7 members)	68	56.67
		Large (> 7 members)	7	5.83
		Total	120	100.00
11.	Training exposure	No training	86	71.67
		one to two	24	20.00
		Three or more	10	8.33
		Total	120	100.00
12.	Economic motivation	Low	62	51.67
		medium	51	42.50
		High	7	5.83
		Total	120	100.00

Conclusions

In conclusion, the present study was carried out in the plain cultivated area of Haridwar district. All the farmers of the area under study are literate but their level of education is low. Most of the farmers in this study are marginal and small landholders whose main occupation is agriculture. Most of them belong to low or medium-income groups. The socioeconomic status of the farmers of the areas is low or marginally medium.

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