International Journal of Agriculture Extension and Social Development

Study on socio-economic status of chilli growers in Varanasi district of Uttar Pradesh

Shailendra Pratap Srivastava and Dheerendra Kumar

Department of Agriculture Extension Education & Communication, Career Point University, Kota, Rajasthan, India

DOI: https://www.doi.org/10.33545/26180723.2025.v8.i5i.1953

Corresponding Author: Shailendra Pratap Srivastava

Abstract
Formulating schemes and policies for the economic benefit of chilli farmers, the prerequisite is to know the base line (socio-economic) data of chilli farmers of area under consideration. Considering this, the present study was conducted in the Varanasi district of Uttar Pradesh. A total number of 400 respondents were selected through random sampling. The structured schedule was developed keeping in view the objectives and variables under study. The respondents were contacted personally for data collection. The percentage, mean, standard deviation and correlation were used for calculation and drawing the inferences. Results reveals that majority of respondents were found in middle age category (50%), high school (34.50%), other backward caste (63.75%), nuclear families (57.5%), small size of family (23.75%), having marginal size of land holding (45.5%), annual income up to Rs. 50,000-1,00,000 (45.00%), level of Knowledge Fair (66.25%), Farm materials sprayer (57.50%), No any Social Participation (56.25%), electric tube well (52.5%), Small dairy (56.25%).

Keywords: Socio-economic status, mass media, farmers, random sampling, chilli

Introduction
India is the world's second largest vegetable producer next to China. The country had a diversified range of agro-climatic zones and seasons which allows for the cultivation of wide varieties of vegetables (Hanks, G., 2015) [4]. Vegetables are the rich sources of vitamins and minerals that contribute to the fight against malnutrition. They are the most affordable source of natural protective tools and also referred as functional foods Vegetable cultivation would be approximately 4-5 times more profitable than cereals and other field crops and also provides more job opportunities (Gopalakrishnan, T. R., 2007) [3].
Chilli is the green or dried ripe fruit of pungent form of capsicum annum L. In India chilli has become almost an essential article of diet of rich and poor (Jalgaonkar, K., Mahawar, M. K., Girijal, S., & Hp, G., 2024) [5]. The total output of chillies in the world is estimated at about 25 lakh tones. At present, India is largest producer of chillies in world about 8.5 lakh tones (Deepak, M. P. P., 2024) [1]. The world consumption of chilli is going up due to the increasing popularity of ethnic foods. The increased availability of oleoresins and spice oils of chilli has also enhanced its consumption in various food preparations (Procopio, F. R., *et al*. 2022) [6].
Among Indian states, Andhra Pradesh is the leading state having highest area, output and productivity of chilli (Velayutham, L. K., & Damodaran, K., 2015) [10]. Karnataka and Maharashtra ranked second and third in area and production of chilli respectively (Gadekar, V. C., 2019) [2]. Although the Punjab ranked 2nd in production of chillies, which is 1573 Kg per hectare, the area under chilli is very less which is only 4.7 thousand hectare (Sharma, L. K., &

Gupta, V., 2010) [7]. So there is a lot of scope increasing the chilli area. Moreover the yield of chilli in Punjab is 1573 Kg per hectare which is quite low when compared to package of practices yield (250- 300 qtls per hectare) (Singh, S., & Singh, T., 2013) [9]. The technological gap may be one of the reasons for the low yield. Keeping this in mind, the present investigation was undertaken to study the socio-economic characteristics of chilli growers, the knowledge of chilli growers regarding recommended chilli cultivation practices and the constraints faced by chilli growers and the ex-chilli growers who have discontinued the chilli cultivation. (Sharma, L. K., & Gupta, V., 2010) [7].

Methodology
A random survey was conducted in four major chilli growing block *viz*., Arajiline, Sevapuri, Badagaon and Harahua block of Varanasi Uttar Pradesh in which selected five village each block and 20 chilli growers from each village were randomly selected to constitute the total sample size of 400 respondents for survey of socio-economic and knowledge of chilli grower. A total of 20 villages covering 5 block in Varanasi districts were surveyed. Primary data and information on various aspects of agriculture and socioeconomic condition of selected farmers in Varanasi district have been obtained through a pre-tested questionnaire through survey method. General observation was conducted with the villagers, key persons of the villages, panchayat pradhans and NGO functionaries their helping hand for collection of data and information the total sample size of collection of data and information was 400 from Varanasi district. The baseline survey was conducted during the year 2023-24.

Results and Discussion

Land utilization pattern of Varanasi District has been provided in Table 1. The total area was 153500 ha in Varanasi District. The Net area sown and grass cropped area was 95748 ha and 134073 ha respectively of total area. The agricultural Rain fed area was 13542 ha of total area. The area under non-agricultural use and permanent pastures it was only 2932 ha and 24 ha respectively of total area. The area under Cultivable wasteland and Barren and uncultivable land was 256 ha and 2151 ha respectively of total area. Cropping intensity of Varanasi district has been 176 percent. According to that results study to Singh, A., et. al., 2023) [8].

Primary data
Age
The above Table 2 shows that majority of respondents (50.00 per cent) belong to the middle age group (35 to 50 years) followed by 42.50 per cent respondents with the age group (up to 35 years), whereas 7.5.00 per cent respondent belongs to the age group of old age group (above 50 years).
It is thus clear from the table that maximum respondents i.e. 50.00 per cent belong to the age group between (35 to 50 years). The old age groups of above 50 years are mostly family of head therefore, they work less but they supervise, guide and take decision for developmental activities.

Education
The Table 2 shows that majority (34.5 percent) of respondents have educational level up to high school followed by 18.5 percent respondents of middle school, 18.25 percent Secondary level, 15.0 percent graduate, 7.75 percent illiterate, however only 2.50 percent respondents were PG & Above.
Thus table concludes that 92.25 percent respondents were educated while only 7.75 percent were illiterate.

Caste
Caste is another important factor which pervades all fields of social action in the rural societies. Ones position in the caste hierarchy in a large measure, determines his behaviour in society.
Caste categories are divided into three i.e. General, Backward and Schedule caste. The table 2 indicates that maximum number of respondents belong to backward caste constituting 63.75 per cent, while 21.25 per cent and 13.25 per cent respondents belong to upper cast and schedule caste group respectively. EWS belongs 1.75 percent.
It is clear from the table that the majority of the respondents belong to backward caste and schedule tribe caste is zero per cent.

Land holding
Land is a major factor which helps in fixing the socio-economic status of an individual. The Table 2 shows that as regards land ownership, majority (45.5 percent) of respondents have marginal and Small size of land holding i.e. up to 2 ha followed by medium (39 percent) whereas, 15.5 percent respondents belong to large category of land holding.
It is clear from the table land holding is decreasing with the increasing number of farm families.

Family type
The table 2 shows that majority of respondent 57.5 percent have nuclear family structures, while remaining 42.5 percent respondent have joint family structure.
Thus study indicates that system of nuclear family in rural society appears to be also dominant over joint family.

Family size
The table 2 indicates that majority (58.75 percent) respondents belonged to middle family size, while 23.75 percent and 17.5 percent respondent belong to small and large family size respectively.
It is clear from table that majority of respondent belong to middle family size which indicates joint family concept in the rural society.

Live stock
It is clear from above Table 2 the majority (56.25 percent) of respondent have small dairy, while 22.5 percent respondent have middle dairy and 11.25 and 10 percent respondent have large dairy and have not any animal respectively.

Irrigation facility
As regards irrigation facility in the above Table 2 majority of the respondents 52.5 percent have electric tube well, 7.5, 37.5 percent have canal and diesel tube well, and 2.5 percent have a Govt. tube well used as a irrigation facility.

Material Possessions
The respondents are grouped on the basis of material they possess. The above table reveals that 97.5 percent respondent have TV, 95 percent have cycle, 91.25 percent have motor cycle, 82.5 have radio, 40 percent have refrigerator, 20 percent have sofa, 10 percent have washing machine and 6.25 per cent have car.

Farm machinery and equipment
As regards farm machinery and equipment in the Table 2 majority of the respondents (57.5%) have sprayer, 55 per cent have electric motor, 47.5 percent have bullock cart and land leveller, 45 percent have chaff cutter, 38.75 percent have tractors and trolley, 33.75 percent have thresher, 32.5 percent have diesel pumping set, 20 percent have cultivator, 15 percent have harrow and 10 percent have winnower. The maximum respondents possess as medium level of farm machinery and equipment for their need.

Social Participation
It clear from the above Table 2 the majority of respondent that 56.25 percent have no any social participation followed by 30 percent respondent member of one organization, while 7.5 and 6.25 percent respondent were member of more than one organization and office bearer respectively.

Income
Income of the respondents are categorized in to three groups i.e. up to 50,000, 50,001 to 1,00,000 and above 1,00,000. The table 2 shows that of the large no. respondents i.e. 45 percent belong to the income group of 50,001 to 1,00,000 per annum, while 35 percent respondent belong to Income group of above 1,00,000/- per annum followed by 20

percent respondent belong to the Income group of Rs up to 50,000/-per annum Income group.

It is also clear from the table that the majority of respondents belong to Rs. 50,001 to 1,00,000 per annum income group.

Socio- economic status

It was measured with the help of socio-economic status scale developed by as per schedule. Respondents were categorized in three categories *viz*. high, medium and low.

It is evident from the table 4.14 that majority (43.75 percent) of respondents belonged to medium socio-economic status followed by 41.25 percent belong to high socio-economic status, while 15 percent respondent possess low score category of socio-economic status.

Level of knowledge of the respondents

Knowledge of the respondent regarding various development issue i.e. rural development, agricultural development and development of women and child in rural areas. Six programmes of rural development, seven

programmes of agricultural development and six programmes of women and child development were taken in to account to know their knowledge level.

Table 2 indicates that majority (66.25 percent) had fair knowledge about rural development followed by 23.75 percent respondents have good knowledge, while 10 percent respondents had poor knowledge regarding various rural development programmes.

Table 1: Land utilization pattern of District Varanasi (2018-19)

S. No.	Particulars	Area (ha)
1	Total area	153500
2	Net area sown	95748
3	Gross cropped area	134073
4	Rainfed area	13542
5	Cropping intensity %	176%
6	Land under non-agricultural use	2932
7	Permanent pastures	0024
8	Cultivable wasteland	256
9	Land under Misc. tree crops and groves	2964
10	Barren and uncultivable land	2151

Table 2: Data of Socio-economic status

Variable	Responds	
	F	**%**
1. Age (in years)		
Young age (Up to 35)	170	40.50
Middle age (36 to 51)	200	50.00
Old age (Above 51 years)	30	7.50
2. Level of Education		
High School	31	7.75
Middle School	56	14.00
Secondary	73	18.25
Primary School	138	34.50
Illiterate	62	15.50
Graduation	30	7.50
PG and Above	10	2.50
3. Category		
General caste	85	21.25
Backward caste	255	63.75
Schedule caste	53	13.25
Schedule tribe	0	0
EWS	7	1.75
4. Land holding		
Marginal and Small (up to 2 ha)	182	45.5
Medium (2-4 ha)	156	39
Large (above 4 ha)	62	15.5
5. Type of family		
Joint	170	42.5
Nuclear	230	57.5
6. Size of family		
Small (up to 4 members)	95	23.75
Middle (5- 6 members)	235	58.75
Large (above 6 members)	70	17.5
7. House type		
Kachcha	8	2
Mix	27	6.75
Pukka House	365	91.25
8. Live stock		
Nil	40	10.00
Small dairy (below 4 animals)	225	56.25
Middle dairy (4 to 6 animals)	90	22.50
Large dairy (above 6 animals)	45	11.25

9. Irrigation Facility		
Govt. tube well	10	10
Canal	30	30
Electric tube well	210	210
Diesel tube well	150	150
10. Non-farm material		
Radio	330	82.50
T.V	390	97.50
Cycle	380	95.00
Motor cycle	365	91.25
Car	25	6.250
Refrigerator	160	40.00
Sofa	80	20.00
Washing machine	40	10.00
11. Farm material		
Bullock cart	40	10.00
Tractor	155	38.75
Trolley	155	38.75
Cultivator	80	20.00
Harrow	60	15.00
Land leveler	190	47.50
Thresher	135	33.75
Winnower	40	10.00
Chaff cutter	180	45.00
Sprayer	230	57.50
Pumping set (electric)	220	55.00
Pumping set (diesel)	130	32.50
12. Social Participation		
No any Social Participation	225	56.25
Member of one organization	120	30.00
Member of more than one organization	30	7.50
Office bearer	25	6.25
13. Annual income (in Rs.)		
Up to 50,000	60	15.00
50,001-1,00,000	175	43.75
Above 1,00,000	165	41.25
14. Categories		
Low (score up to 17)	60	15.00
Medium (18-34)	175	43.75
High (above 35)	165	41.25
15. Knowledge		
Poor (0-6)	40	10.00
Fair (7-12)	265	66.25
Good (13 and above)	95	23.75

F= frequency, % = percent

Conclusion
The socioeconomic standing of farmers is the main subject of the study. According to the study, the majority of farmers were middle-aged and literate, having completed both formal and informal schooling. The majority of farmers were from other backward castes. The majority of nuclear family structures were found to have less than five family members. The majority of responders were small-scale farmers. Farmers with incomes below Rs. 100,000 were discovered. Together with farm tools, electric motors and pump sets dominated farm power. Most people own a cell phone, internet, DTH, and television. There was one group in which most farmers participated. Family members were the informal source of information for most respondents, whereas Kissan Sahayak and Gram Pradhan were the formal sources.

References
1. Deepak MPP. Trends in arrivals and prices of dry chilli in APMC, Gadhinglaj of Kolhapur district [dissertation]. Rahuri: Mahatma Phule Krishi Vidyapeeth; 2024.
2. Gadekar VC. Economics of production of red chilli in Nanded district of Maharashtra state [dissertation]. Parbhani: Vasantrao Naik Marathwada Krishi Vidyapeeth; 2019.
3. Gopalakrishnan TR. Vegetable crops. New Delhi: New India Publishing; 2007. Report No.: 4.
4. Hanks G. A review of production statistics for the cut flower and foliage sector 2015. Kenilworth: The National Cut Flower Centre, AHDB Horticulture; 2015. Report No.: PO BOF 002a.

5. Jalgaonkar K, Mahawar MK, Girijal S, Hp G. Post-harvest profile, processing and value addition of dried red chillies (*Capsicum annum* L.). J Food Sci Technol. 2024;61(2):201-19.

6. Procopio FR, Ferraz MC, Paulino BN, do Amaral Sobral PJ, Hubinger MD. Spice oleoresins as value-added ingredient for food industry: Recent advances and perspectives. Trends Food Sci Technol. 2022;122:123-39.

7. Sharma LK, Gupta V. Knowledge and constraints in scientific cultivation of chilli among the farmers. Rajasthan J Ext Educ. 2010;17(18):60-4.

8. Singh A, Doharey RK, Singh AS, Singh A, Tripathi A, Singh A. The socio-economic traits of farmers of Varanasi district regarding cyber extension tools and services. Young. 2023;76:25-33.

9. Singh S, Singh T. Producer companies in India: A study of organization and performance. Kolkata: CMA Publication; 2013. Report No.: 246.

10. Velayutham LK, Damodaran K. An economic analysis of chillies production in Guntur district of Andhra Pradesh. Int J Res Econ Soc Sci. 2015;5(9):41-7.