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To study the socio-economic profile of the KVKs beneficiaries

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Abstract
This research paper investigates the socio-economic profile of the KVKs beneficiaries. A sample of 210 farmer was surveyed, and the data was analyzed to identify socio-economic profile of the KVKs beneficiaries. The study reveals that The socioeconomic traits of KVK beneficiaries were evaluated under the first goal. Age, education, marital status, caste, type of family, size of family, size of land holding, occupation, material possession, housing pattern, social participation, annual income, extension contact, scientific orientation, economic motivation, and risk orientation Various socio-economic factors were found to be significantly associated with the farmers' perception.

Keywords: Training, beneficiaries, profile, social

Introduction
The Government of India through Indian Council for Agricultural Research (ICAR) has established a wide network of Krishi Vigyan Kendra's (KVKs) in all the rural districts of the country. These KVKs under the aegis of the National Agricultural Research and Education System are the real carriers of front-line technologies and they impart knowledge and critical input support to the farmers. Training is a crucial and continuous requirement for agricultural development. Training requires a context, and methodologies and approaches alter with different stages of development, business objectives, and clients. According to Lynton and training consists of carefully planned opportunities for participants to pick up the relevant knowledge and abilities. By increasing farm productivity, income, and employment through the use of agricultural innovation developed at the research station, KVK trainings are assisting in improving the poor socio-economic conditions of farmers, farm women, and rural youths in rural India.

Material and methods
Study was conduction in Chitrakoot and Banda districts of Uttar Pradesh. Each of the selected districts has one Krishi Vigyan Kendra (KVK) functioning for the transfer of agricultural technology among the farming community of respective district. This study aims assessing the socio-economic profile of the KVKs beneficiaries. Hence, the farmers received training during last five years from any of the selected KVKs forms the sampling frame. For sample selection, a list of beneficiaries was collected from each KVK. Then, 105 farmers from each KVK were selected through simple random sampling, making total sample size as 210. Semi-structured interview questions were used to gather the study's data, which were then categorized, tabulated, and evaluated in order to come to relevant conclusions. The study's goals were taken into consideration while creating the interview schedule. The data were analyzed using statistical techniques such frequency, percentage, mean score, mean weighted score, and rank.

Results and Discussion
The socioeconomic traits of KVK beneficiaries were evaluated under the first goal. Age, education, marital status, caste, type of family, size of family, size of land holding, occupation, material possession, housing pattern, social participation, annual income, extension contact, scientific orientation, economic motivation, and risk orientation are some of the variables used to present the findings and discussion related to this objective. The table 1 indicates that majority of the KVK beneficiary farmers (58.10%) fall in middle age group, 27.62 per cent belonged to young age group while 14.29 per cent beneficiaries were in old age group.

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Table 1: Distribution of KVK beneficiaries according to their age n=210

Sl. No.	Category (age in years)	Frequency	Percent
1.	Young (Up to 32)	58	27.62
2.	Middle Age (32 to 56)	122	58.10
3.	Old Age (Above 56)	30	14.29
	Total	210	100

Mean: 44.45; SD: 12.01

The average age of farmers was 45 years which was near to average age of Indian farmers as reported by Agriculture Census Division, 2016. Studies reported the similar findings. The findings show that the young farmers are registered with the KVKs in more number than the old age farmers. It also shows that the focus of KVK activities is on rural youth who are more interested in learning some new technologies as well as acquiring new skills. Reverse migration of rural youth after COVID 19 pandemic may be the other reason of involvement of youth in vocational trainings conducted by the KVKs. Opposite to it, opined that rural–urban migration had led farmers to gradually abandon agricultural cultivation, especially among young rural laborers.

2. Education
The KVK beneficiaries were classified into six categories on the basis of their educational attainment.

Table 2: Distribution of KVK beneficiaries according to their level of education n=210

S. No.	Category	Frequency	Percent
1.	Illiterate	28	13.3
2.	Primary School	33	15.7
3.	Up to Middle School	52	24.8
4.	Up to High School	28	13.3
5.	Up to Intermediate	35	16.7
6.	Graduation and Above	34	16.2
	Total	210	100

The table 2 reveals that the majority of the KVK beneficiaries (24.80%) attained middle school level, followed by intermediate level (16.7%), graduation and above (16.2%), primary school (15.70%) and high school (13.3%). Among all the respondents, 13.3 per cent were found illiterate. The above trend might be due to the fact that the respondents were aware about the importance of education for their economic as well as the overall development.

3. Marital Status
The marital status refers to the state of being married or not married. The status was measured with nominal scale of measurement. Table 4.1.3 shows the findings.

Table 3: Distribution of KVK beneficiaries according to their marital status n=210

S. No.	Category	Frequency	Percent
1.	Married	162	77.14
2.	Unmarried	48	22.86
	Total	210	100

It is clear from the table 3 that 77 per cent of the KVK beneficiaries were married and 33 per cent of them were unmarried.

4 Caste

Table 4: Distribution of KVK beneficiaries according to their caste category n=210

S. No.	Category	Frequency	Percent
1.	General	78	37.14
2.	OBC	92	43.81
3.	SC	26	12.38
4.	ST	14	6.67
	Total	210	100

The table 4 depicts that majority of KVK beneficiaries (43.81%) belonged to OBC caste category, followed by General (37.14%) and SC (12.38%). Only 6.67 per cent of KVK beneficiaries were found in ST category. Possible reasons might be the majority of population belongs to other backward class. This finding is in line with findings of Singh (2018) [6], Mishra & Ghadei (2015) and Ojha *et al.* (2021).

5. Type of Family

Table 5: Distribution of KVK beneficiaries according to the type of family n=210

Sl. No.	Category	Frequency	Percent
1.	Nuclear	143	68.10
2.	Joint	67	31.90
	Total	210	100

The table 5 reveals that majority of KVK beneficiaries (68.10%) were having joint families and 31.90 per cent were belonged to nuclear families.

6. Family Size

Table 6: Distribution of KVK beneficiaries according to the size of family n=210

Sl. No.	Category	Frequency	Percent
1.	Small (Up to 5 Members)	80	38.10
2.	Large (More than 5 members)	130	61.90
	Total	210	100

The Table 6 shows that majority of KVK beneficiaries (61.90%) had large family size, having more than 5 members, while 38.10 per cent KVK beneficiaries belonged to small family size.

7. Size of land holding

Table 7: Distribution of KVK beneficiaries according to size of land holding n=210

Sl. No.	Category	Frequency	Percent
1.	Marginal (below 1 ha.)	44	20.95
2.	Small (1.0 to 2.0 ha.)	58	27.62
3.	Semi-Medium (2.0 to 3.0 ha.)	41	19.52
4.	Medium (4.0 ha to 10.0 ha)	43	20.48
5.	Large (more than 10.0 ha.)	24	11.43
	Total	210	100

Table 7 clearly indicates that 27.62 per cent of KVK beneficiaries belonged to small farmers category, 20.95 per cent of beneficiaries belonged to marginal. Both of the categories (small and marginal) make almost 48 per cent of respondents. Semi medium and large category KVK beneficiaries had 19.5% and 20.48 % respectively. Data also shows that only 11.43 per cent of KVK beneficiaries were having large land holding.

4.1.8 Occupation

Occupation is one of the most important factors that largely affect the economic and social status of the family. The KVKs provide vocational trainings to the farmers, rural youth and women on various aspects. Occupation of the individuals motivates them to extend their exposure and learn new things from KVKs. Hence, the occupation of KVK beneficiaries were studied and presented in table 8.

Table 8: Distribution of KVK beneficiaries according to occupation n=210

Sl. No.	Category	Frequency	Percent
1.	Farming as a sole occupation	107	50.95
2.	Farming + allied enterprise	63	30.00
3.	Farming + service	40	19.05
	Total	210	100

The table indicates that out of 210 farmers, 107 (50.95%) were dependent upon only farming, while 'farming + allied enterprise' and 'farming + service' share 30.00 per cent and 19.00 per cent, respectively. This finding is similar with the findings of Chaudhary *et al.* (2019).

9. Material Possession

Table 9: Distribution of KVK beneficiaries according to occupation n=210

Sl. No.	Material Possession	Frequency	Percent
A	Communication possession		
i.	Mobile	164	78.10
ii.	Radio	77	36.67
iii.	Television	184	87.62
iv.	Computer	13	6.19
B	Farm Power		
v.	Bullock Cart	59	28.10
vi.	Harrow	64	30.48
vii.	Wooden Plough	50	23.81
viii.	Power tillers	28	13.33
ix.	Seed drill	46	21.90
x.	Rotovator	20	9.52
xi.	Knapsack Sprayer	160	76.19
xii.	Power Sprayer	37	17.62
C	Irrigation		
xiii.	Pump set	164	78.10
D	Vehicles for transport		
xiv.	Tractor	58	27.62
xv.	Motor Cycle	158	75.24
xvi.	Car	22	10.48

As evident from the Table 4.1.9 it is clear that large majority of the KVK beneficiaries possessed television (87.62%), mobile (78.10%) and pump set (78.10%). It is also observed that majority of the farmers had knapsack sprayers (76.19%). Un case of vehicles, majority of farmers were having their own motor cycle (75.24 %), while 25 per cent of farmers possessed tractor and only 10 per cent of the respondents were having car with them. Under the farm power category, less than one third of the farmers possessed bullock cart (28.10 %), harrow (30.48 %), wooden Plough (23.81 %), seed drill (21.90 %). Less percentage of farmers possessed the power sprayer (17.62 %), power tillers (13.33 %) and rotovator (9.52 %).

Overall Material Possession

Table 10: Distribution of KVK beneficiaries according to overall material possession n=210

Sl. No.	Category		Frequency	Percentage
1	Low	(<8.59)	76	36.19
2	Medium	(8.59 to 14.11)	97	46.19
3	High	(>14.11)	37	17.62

Mean: 11.35; SD: 2.76

The overall material possession by the KVK beneficiaries is shown in table 9. It reveals that about 46 per cent of farmers belonged to medium category and 36 per cent belonged to low category. Only 17.62 per cent of the farmers were found in high category with the overall score more than 14.11. The mean score of was found as 11.35 with the standard deviation of 2.76.

10. Housing Pattern

Table 10: Distribution of KVK beneficiaries according to housing pattern n=210

Sl. No.	Category	Frequency	Percent
1.	Hut	12	5.71
2.	Kachcha	57	27.14
3.	Mixed	89	42.38
4.	Pucca	52	24.76
	Total	210	100

It was observed that the majority of the KVK beneficiaries were having Mixed type of houses. Kachcha and Pucca type of houses were possessed by 27.14 percent and 24.76 per cent of the KVK beneficiaries, respectively. It was also found that 5.71 per cent of the beneficiaries were having Hut (Table 10).

11. Social Participation

Social participation shows the involvement of farmers in various social institutions and organizations. Their extent of engagement in various organizations such as panchayat, co-operative society, youth club, Mahila mandals, NGOs, FPOs others greatly influence their exposure to new and relevant information. Such individuals are more likely to be in contact with KVK activities.

Table 11: Distribution of KVK beneficiaries according to social participation n=210

Sl. No.	Category	Frequency	Percent
1.	Not a member of any organization	88	41.90
2.	Members of one organization	48	22.86
3.	Member of two organizations	35	16.67
4.	Member of more than two organizations or office bearer	39	18.57
	Total	210	100

It is revealed in the table 11 that about 40 per cent of the KVK beneficiaries were not the member of any social organization. About 23 per cent of the beneficiaries were the member of one organization. Among the total respondents, 16.67 per cent were associated with two organizations as a member. However, 18.57 per cent of them were the member of more than two organizations. Inactiveness of social organizations in the villages might be one of the reasons for such findings also reported the similar findings.

12 Annual Income

Table 12: Distribution of KVK beneficiaries according to annual family income n=210

Sl. No.	Category	Frequency	Percentage
1.	Upto Rs. 60,000/-	63	30.00
2.	60,001/- to 1,50,000/-	99	47.14
3.	More than 150,001/-	48	22.86
	Total	210	100

The Table 12 shows the annual income of KVK beneficiaries from all sources. It depicts that the majority of the KVK beneficiaries (47.14%) were found in the medium category (with the annual income between ₹60,001 to ₹1,50,000) followed by 30.00 per cent in low income category having annual income up to ₹60,000/-. However, 22.86 per cent respondents reported annual income above ₹ 1,50,000/-.

The average income of KVK beneficiaries was found as ₹ 1,23,075/- which is higher than the national average of ₹ 77, 976/- as reported by Financial Survey, 2018-19. Sangode *et al.* (2019) [5] also reported the similar findings.

13. Extension Contact

Table 13: Distribution of different extension agencies as perceived by KVK beneficiaries n=210

S. No.	Category	Mean Score
1.	University Scientist	0.82
2.	KVK	0.88
3.	DAO/DHO	0.32
4.	DEO	0.11
5.	NGOs	0.24
6.	Input Agencies	1.79
7.	Others	0.86

Table 13 indicates that the majority of pulse growers preferred input agencies with the mean score of 1.79, followed by KVK (0.88) and others (0.82). The mean score of the preference to the university scientist was 0.82 followed by DAO/DHO (0.32), NGOs (0.24) and DEO (0.11) for extension contact.

Table 14: Distribution of pulse growers according to extension contact n=210

Sl. No.	Category	Frequency	Percentage
1.	Low (below 4)	52	24.76
2.	Medium (4 to 10)	115	54.76
3.	High (more than 10)	43	20.48
	Total	210	100

Mean: 7.27; SD: 3.13

For agricultural development in any district, extension activities carried out by the KVKs are of utmost importance. Various extension organizations cater their services in terms of guidance and technology and in return, farmers provide their feedback for improvement in technologies. Table 4.1.14 demonstrates that the majority of KVK beneficiaries (54.76%) had medium level of extension contact, while 20.48 per cent of beneficiaries had high level extension contact. Out of the total respondent beneficiaries, 24.76 per cent of beneficiaries had low level of extension contact.

14. Scientific Orientation
The data in table 15 indicates that about fifty per cent of the respondents shown medium level of scientific orientation with the score from 14 to 19. Almost 28 per cent of the

respondents were lying under the category of low scientific orientation, while 22.86 per cent scored more than 19 and showed high level of extent of scientific orientation.

Table 15: Distribution of KVK beneficiaries according to scientific orientation

Sl. No.	Category	Frequency	Percentage
1.	Low (below 14)	59	28.10
2.	Medium (14 to 19)	103	49.05
3.	High (more than 19)	48	22.86
	Total	210	100

Mean: 16.27; SD: 2.31

Hence, it was realized that there is a need to improve the scientific orientation of the KVK beneficiaries so that they could be able to harness the potential of innovations. This result is in line of findings.

15. Economic Motivation
In case of economic motivation, it was observed that the majority of the respondents (51.90%) had a medium level of economic motivation, followed by high (25.24%) and low (22.86%) as depicted in table 16.

Table 16: Distribution of KVK beneficiaries according to economic motivation n=210

Sl. No.	Category	Frequency	Percentage
1.	Low (below 10)	48	22.86
2.	Medium (10 to 16)	109	51.90
3.	High (more than 16)	53	25.24
	Total	210	100

The reason behind such findings might be that majority of KVK beneficiaries come under small and semi-medium landholdings with medium innovativeness level and majority are willing to take medium risks. Education and proper guidance can improve the level of economic motivation of the farmers. This result is in compliance with the observations.

16. Risk Orientation
It was found that majority (52.50 %) of respondents come under medium risk orientation category, followed by low (28.33 %) and high (19.17 %) risk orientation categories.

Table 17: Distribution of KVK beneficiaries according to risk orientation n=210

Sl. No.	Category	Frequency	Percentage
1.	Low (below 3)	53	25.24
2.	Medium (3 to 5)	110	52.38
3.	High (more than 5)	47	22.38
	Total	210	100

Mean: 3.90; SD: 0.74

Conclusion
1. The majority of the KVK beneficiaries (58.10%) fall in middle age group, 27.62 per cent belonged to young age group while 14.29 per cent beneficiaries were in old age group.
2. The majority of the KVK beneficiaries (24.80%) attained middle school level, followed by intermediate level (16.7%), graduation and above (16.2%), primary school (15.70%) and high school (13.3%). Among all the respondents, 13.3 per cent were found illiterate.
3. The majority of KVK beneficiaries (77.00%) were

married and 33 per cent of them were unmarried

4. The majority of KVK beneficiaries (43.81%) belonged to OBC caste category, followed by General (37.14%) and SC (12.38%). Majority of pulse growers (55.00%) belonged to OBC caste category, followed by General (33.33%) and SC (11.70%).

5. The majority of KVK beneficiaries (68.10%) were having joint families and 31.90 per cent were belonged to nuclear families.

6. The majority of KVK beneficiaries (61.90%) had large family size, having more than 5 members, while 38.10 per cent KVK beneficiaries belonged to small family size.

7. About 27.62 per cent of KVK beneficiaries belonged to small farmers category, 20.95 per cent of beneficiaries belonged to marginal.

8. The study also revealed that the semi medium and large category KVK beneficiaries had 19.5% and 20.48 % respectively.

9. It was found that out of 210 respondents, 107 (50.95%) were dependent upon only farming, while 'farming+allied enterprise' and 'farming+service' share 30.00 per cent and 19.00 per cent, respectively.

10. The farmers possessed bullock cart (28.10 %), harrow (30.48 %), wooden Plough (23.81 %), seed drill (21.90 %). Less percentage of farmers possessed the power sprayer (17.62 %), power tillers (13.33 %) and rotovator (9.52 %).

11. The majority of the KVK beneficiaries were having Mixed type of houses. Kachcha and Pucca type of houses were possessed by 27.14 percent and 24.76 per cent of the KVK beneficiaries, respectively.

12. About 40 per cent of the KVK beneficiaries were not the member of any social organization. About 23 per cent of the beneficiaries were the member of one organization.

13. The majority of the KVK beneficiaries (47.14%) were found in the medium category (with the annual income between ₹60,001 to ₹1,50,000) followed by 30.00 per cent in low income category having annual income up to ₹60,000/-. The average income of KVK beneficiaries was found as ₹ 1,23,075/-.

14. The majority of pulse growers preferred input agencies with the mean score of 1.79, followed by KVK (0.88) and others (0.82) for agro-advisory. The majority of KVK beneficiaries (54.76%) had medium level of extension contact, while 20.48 per cent of beneficiaries had high level extension contact.

15. About fifty per cent of the respondents shown medium level of scientific orientation with the score from 14 to 19. Almost 28 per cent of the respondents were lying under the category of low scientific orientation.

16. The majority of the respondents (51.90%) had a medium level of economic motivation.

17. The majority (52.50 %) of respondents come under medium risk orientation category, followed by low (28.33 %) and high (19.17 %) risk orientation categories.

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