

## Original Research Article

# Demographic Characteristics of Agriculture Students of Selected Farm Universities in Karnataka

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## ABSTRACT

An effort is made in the present investigation to collect the demographic characteristics of agriculture students of selected farm universities in Karnataka state. The students who were in the final year were selected for the study. Four agriculture universities in the state were selected for the study viz., university of agricultural sciences Bangalore, Dharwad, Raichur and one more university of agricultural and horticultural sciences Shimoga were selected and from each university, the agriculture college situated at head quarters of university were selected for the investigation. 200 students were taken as sample for the study that is randomly 50 agriculture students were selected from each university. It was interposed that greater than bisection of repliers (56.00 %) were male, better part of the respondents (78.50 %) were belong to the rural area, nearly half (49.00 %) respondents' fathers were farmers, thirty five point five zero of the respondents (35.50 %) had modest proportion of cosmopoliteness, less than bisection of the students (40.50 %) and 38.50 per cent had modest proportion of perception towards entrepreneurship and carrier aspiration. Subsequently 44.50 per cent and 40.50 per cent had low proportion of technical orientation and scientific orientation accordingly.

## Keywords

Agriculture students, Farm universities, Entrepreneurship, Career aspiration, scientific orientation

## Introduction

Farm universities are mostly public entities in India that are engaged in education, research and tier of extension in agriculture and associated disciplines. The Indian Council of Agricultural Research (ICAR) is an apex organisation under the Department of Agricultural Research and Education (DARE) in the purview of Ministry of Agriculture and Farmers Welfare. The autonomous body is entrusted for harmonizing, leading and managing the education and research wing in agriculture

including fisheries, horticulture, and animal husbandry in the whole country. ICAR with its 101 institutes and agricultural universities counting 71 in number spanning throughout the country, it is one of the colossal national agricultural network structure in the universe. It has taken part as a key player in the furtherance of excellence and expertise in higher education oriented with agriculture and associated fields.

In Karnataka, there are six Farm universities located in Bengaluru, Dharwad, Shimoga, Raichur, Bagalkote and Bidar under these

universities, the state has 39 agriculture and related discipline colleges. These colleges were attributed for the responsibility of providing education in agriculture and federated disciplines in the state along with research and extension activities in these areas. The streak of education has to be reshaping to an etiquette level, where the institutes embody the students who are potential for accepting the challenges. There is an obligation to reframe the new policies to attract the youth and retain them sustainably for betterment of agricultural research and education. With this brief background the present study entitled as “Demographic characteristics of Agriculture students of selected farm universities in Karnataka”.

### **Materials and Methods**

The present study was undertaken during 2019-20 for collecting the demographic information of agriculture students of farm universities in Karnataka. Fifty students who were in 8<sup>th</sup> semester yet to complete the student ready programme were interviewed. Based on the cumulative score, the students were categorized and mean and standard deviation were used as a measure of check.

### **Results and Discussion**

#### **Distribution of agricultural students based on their portrait characteristics**

The portrait characteristics of agricultural students of farm universities viz., university of agricultural sciences (UAS) Bengaluru, Dharwad, Raichur and university of agricultural and horticultural sciences Shimoga were presented in table 1.

#### **Gender**

The data in the table 1 shows that distribution of the respondents based on their personnel

characteristics. Data reveals that out of 200 respondents slightly more than half of the respondents (56.00 %) were male followed by 44 per cent of the respondents were female. Since the gender is an important factor in the study, it is evident from the above data that Girls are enrolling at higher rates in recent years for agriculture graduation for obvious reasons which includes quality education, job opportunities, good campus and academic atmosphere. Further in general females were almost on par with the males' enrolment even in other degrees which includes agriculture course; this shows the empowerment of female with respect to education. The findings are in line with the Dilip Kumar (2017).

#### **Rural-urban background**

With respect to the pooled data, out of two hundred respondents of selected farm universities, majority of the respondents (78.50 %) were had rural back ground followed by only 21.50 per cent of the respondents had urban background respectively. It is quite obvious that, majority (more than three fourth) of the respondents were from the rural area. It May be due to the fact that since rural students were exposed to farming sector because of their parental occupation and even 40 per cent of the students got admission under agriculture quota were obviously from rural area might have developed fascination towards this subject as result agriculture is a natural choice for those students. Shridevi (2013) had found almost similar findings in her study.

#### **Caste**

From the table 1 the overall data shows that just more than two fifth (63.00 %) of the respondents were belong to the other backward class (OBC) category followed by 23.00 per cent and 09.50 per cent were

belonged to the general and schedule caste category respectively. Barely few respondents (04.50 %) were belong to the scheduled tribe category. It can be concluded that more than 60.00 per cent of the respondents were belong to the OBC category. This infers that backward classes were more in number in state like Karnataka and majority of them were depending on agriculture for their livelihood as a result people of this community realizes the importance of agriculture education that might provide an opportunity to the respondents to join agriculture degree. This finding is similar with the Ghambi (2014).

### **Family size**

The pooled data in the table 1 depicting that, out of the 200 respondents of the selected farm universities more than quarter half of the respondents (83.50 %) were from small family followed by 16.50 % respondents were from big family respectively. The probable reason for this might be due to the fact that small family becoming more popular because of convenience and economic conditions as a result they felt father, mother and two children were ideal to lead a comfortable life and Chaudhari (2006) has also reported similar findings.

### **Family type**

Regarding family type of the respondents, bird eye view of the table 1 also shows that the pooled data of the selected farm universities, among total two hundred respondents majority of the respondents (86.00 %) had belong to nuclear family followed by only little more than one tenth of the respondents had belong to joint family. The probable reason for this is a change in the social structure of the society in the recent decade due to high cost of living and lack of understanding between the members of the

family and findings are quite different with the Paul *et al.* (2010).

### **Academic performance**

Table 1 reveals that just more than two fifth of the respondents (65.00 %) having to 8.00 to 9.00 grade followed by 15.50 per cent of the respondents had to 7.00 to 8.00 grade, 15.00 per cent of the respondents had 6.00 to 7.00 grade category respectively. Finally only less than one tenth (03.50 %) of respondents had belong to 9.00 and above grade category upto sixth semester. The probable reason for this was, the students who joined agriculture degree neither having high academic performance nor poor academic performance which resulted in current CGPA. This is quite moderate with few expansions that who got good CGPA because of their hardwork. This finding is on par with the Pallavi (2011).

### **Parents education level**

Table 1 inferred that by and large fathers of student respondents of farm universities were more educated than their mothers. Out of total respondents nearly equal to one third respondents fathers (32.50) had educated upto graduated and above level followed by 24.00, 18.00, 15.00 07.50, 03.00 per cent of the fathers had educated upto PUC, high school, primary school, can read and write and illiterate respectively. Whereas coming to mothers education level more or less equal to three tenth of the respondents mothers (29.50 %) had educated upto high school level followed by 26.00, 18.00, 13.50, 08.00, 5.00 per cent of the respondents mothers had educated upto PUC, primary school, graduate and above, can read and write and illiterate respectively.

**Table.1** Portrait characteristics of agriculture students of farm universities

(n=200)

Sl. No.	Characteristics	Category	Agriculture students									
			UAS(B) (n <sub>1</sub> =50)		UAS(D) (n <sub>2</sub> =50)		UAS(R) (n <sub>3</sub> =50)		UAHS(S) (n <sub>3</sub> =50)		Overall (n=200)	
			f	%	f	%	f	%	f	%	f	%
1.	Gender	Male	27	54.00	30	60.00	26	52.00	29	58.00	112	56.00
		Female	23	46.00	20	40.00	24	48.00	21	42.00	088	44.00
2.	Rural-urban background	Rural area	37	74.00	40	80.00	41	82.00	39	78.00	157	78.50
		Urban area	13	26.00	10	20.00	09	18.00	11	22.00	043	21.50
3.	Caste	Scheduled tribe	01	02.00	02	04.00	03	06.00	03	06.00	009	04.50
		Scheduled caste	07	14.00	03	06.00	05	10.00	04	08.00	019	09.50
		Other backward class (OBC)	32	64.00	33	66.00	31	62.00	30	60.00	126	63.00
		General	10	20.00	12	24.00	11	22.00	13	26.00	046	23.00
4.	Family Size	Small Family (Upto 5 Members )	41	82.00	42	84.00	44	88.00	40	80.00	167	83.50
		Big Family (> 5 Members)	09	18.00	08	16.00	06	12.00	10	20.00	033	16.50
5.	Family Type	Nuclear	43	86.00	45	90.00	40	80.00	44	88.00	172	86.00
		Joint	07	14.00	05	10.00	10	20.00	06	12.00	028	14.00
6.	Academic Performance	6.00 to 7.00	09	18.00	07	14.00	06	12.00	08	16.00	030	15.00
		7.00 to 8.00	12	24.00	07	14.00	07	14.00	07	14.00	033	15.50
		8.00 to 9.00	28	56.00	35	70.00	33	66.00	34	68.00	130	65.00
		9.00 and above	01	02.00	01	02.00	04	08.00	01	02.00	007	03.50
7.	Parents education level	Illiterate	02	04.00	03	06.00	03	06.00	02	04.00	010	05.00
7a.	Mother education level	Can read and write	04	08.00	04	08.00	03	06.00	05	10.00	016	08.00
		Primary school	09	18.00	07	14.00	09	18.00	11	22.00	036	18.00
		High school	14	28.00	16	32.00	15	30.00	14	28.00	059	29.50
		PUC	15	30.00	12	24.00	13	26.00	12	24.00	052	26.00
		Graduate and above	06	12.00	08	16.00	07	14.00	06	12.00	027	13.50
7b.	Father education level	Illiterate	01	02.00	01	02.00	02	04.00	02	04.00	006	03.00
		Can read and write	02	04.00	04	08.00	06	12.00	03	06.00	015	07.50
		Primary school	06	12.00	07	14.00	09	18.00	08	16.00	030	15.00
		High school	10	20.00	06	12.00	08	16.00	12	24.00	036	18.00
		PUC	15	30.00	12	24.00	11	22.00	10	20.00	048	24.00
		Graduate and above	16	32.00	20	40.00	14	28.00	15	30.00	065	32.50

**Table.2** Socio-economic characteristics of agriculture students of farm universities

(n=200)

Sl. No.	Characteristics	Category	Agriculture students									
			UAS(B) (n <sub>1</sub> =50)		UAS(D) (n <sub>2</sub> =50)		UAS(R) (n <sub>3</sub> =50)		UAHS(S) (n <sub>3</sub> =50)		Overall (n=200)	
			f	%	f	%	f	%	f	%	f	%
8.	Parents occupation	Government	03	06.00	07	14.00	05	10.00	06	12.00	021	10.50
		Private	03	06.00	00	00.00	01	02.00	00	00.00	004	02.00
8a.	Mothers' occupation	Corporate	01	02.00	02	04.00	00	00.00	00	00.00	003	01.50
		Farmer	03	06.00	07	14.00	06	12.00	05	10.00	021	10.50
		Business	00	00.00	01	02.00	00	00.00	00	00.00	001	00.50
		House wife	40	80.00	33	66.00	38	76.00	39	78.00	150	75.00
8b.	Fathers' occupation	Government	18	36.00	16	32.00	14	28.00	11	22.00	059	29.50
		Private	02	04.00	01	02.00	04	08.00	03	06.00	010	05.00
		Corporate	01	02.00	01	02.00	00	00.00	00	00.00	002	01.00
		Farmer	24	48.00	23	46.00	26	52.00	25	50.00	098	49.00
		Business	03	06.00	05	10.00	06	12.00	08	16.00	022	11.00
		Others	02	04.00	04	08.00	00	00.00	03	06.00	009	04.50
9.	Family annual income	Up to Rs. 1,00,000/-	17	34.00	19	38.00	20	40.00	18	36.00	074	37.00
		Above RS. 1,00,0001/- to 2,50,000	15	30.00	15	30.00	17	34.00	21	42.00	068	34.00
		Above Rs. 2,50,0001/- to 5,00,000	10	20.00	09	18.00	08	16.00	06	12.00	033	16.50
		Above Rs. 5,00,001/-	08	16.00	07	14.00	05	10.00	05	10.00	025	12.50

**Table.3** Communication characteristics of agriculture students of farm universities

(n=200)

Sl. No.	Characteristics	Category	Agriculture students									
			UAS(B) (n <sub>1</sub> =50)		UAS(D) (n <sub>2</sub> =50)		UAS(R) (n <sub>3</sub> =50)		UAHS(S) (n <sub>3</sub> =50)		Overall (n=200)	
			f	%	f	%	f	%	f	%	f	%
10.	Cosmopoliteness Mean=23.20 SD=2.97	Low (<21.71)	12	24.00	14	28.00	19	38.00	14	28.00	59	29.50
		Medium (21.71-24.68)	18	36.00	20	40.00	16	32.00	17	34.00	71	35.50
		High (>24.68)	20	40.00	16	32.00	15	30.00	19	38.00	70	35.00
11.	Information seeking behaviour Mean=25.05 SD=3.93	Low (<23.08)	14	28.00	13	26.00	13	26.00	16	32.00	56	28.00
		Medium(23.08-27.01)	18	36.00	18	36.00	17	34.00	20	40.00	73	36.50
		High (>27.01)	18	36.00	19	38.00	20	40.00	14	28.00	71	35.50

**Table.4** Psychological characteristics of agriculture students of farm universities

(n=200)

Sl. No.	Characteristics	Category	Agriculture students									
			UAS(B) (n <sub>1</sub> =50)		UAS(D) (n <sub>2</sub> =50)		UAS(R) (n <sub>3</sub> =50)		UAHS(S) (n <sub>3</sub> =50)		Overall (n=200)	
			f	%	f	%	f	%	f	%	f	%
12.	Perception towards entrepreneurship Mean=15.31 SD=3.89	Low (<13.36)	16	32.00	19	38.00	16	32.00	13	26.00	64	32.00
		Medium (13.36-17.26)	22	44.00	19	38.00	18	36.00	22	44.00	81	40.50
		High (>17.26)	12	24.00	12	24.00	16	32.00	15	30.00	55	27.50
13.	Career aspiration Mean=18.52 SD=4.87	Low (<16.08)	16	32.00	16	32.00	14	28.00	14	28.00	60	30.00
		Medium(16.08-20.96)	20	40.00	18	36.00	20	40.00	19	38.00	77	38.50
		High (>20.96)	14	28.00	16	32.00	16	32.00	17	34.00	63	31.50
14.	Technical Orientation Mean=37.59 SD=11.24	Low (<31.97)	28	56.00	24	48.00	18	36.00	19	38.00	89	44.50
		Medium (31.97-43.20)	12	24.00	16	32.00	17	34.00	16	32.00	61	30.50
		High (>43.20)	10	20.00	10	20.00	15	30.00	15	30.00	50	25.00
15.	Scientific orientation Mean=20.28 SD=3.41	Low (<18.58)	22	44.00	21	42.00	20	40.00	18	36.00	81	40.50
		Medium(18.58-21.98)	14	28.00	16	32.00	15	30.00	16	32.00	61	30.50
		High (>21.98)	14	28.00	13	26.00	15	30.00	16	32.00	58	29.00



The probable reason for this was, it is obvious that in Indian condition the women who were living in rural areas normally possessing lower education upto high school so that they can be a house wife, serve well for their family and children and similar trend seen in majority of the villages and the results are in line with the Dhakre (2014).

### **Distribution of agricultural students based on their socio-economic characteristics**

The socio-economic characteristics of agricultural students of farm universities viz., university of agricultural sciences (UAS) Bengaluru, Dharwad, Raichur and university of agricultural and horticultural sciences Shimoga were presented in table 2. The socio-economic characteristics selected for the study were parents' occupation, parents land holding and family annual income.

#### **Parents occupation level**

The numerical facts in the table 2 showing that out of total respondents exactly quarter half of the respondents mother (75.00 %) were house wife, followed by 10.50 per cent each of the respondents mothers were farmers and government employee respectively. Only 02.00 per cent of the mothers were had private job followed by 01.50 per cent of the mothers were working for corporate companies and 0.50 per cent of the mothers doing business respectively. While coming to the fathers' occupation level in pooled situation, nearly half of the respondents' fathers (49.00 %) were farmers followed by 29.50 per cent of the fathers had government job, 11.00 per cent of the farmers were had business, 05.00 per cent of the farmers were had private job, 04.50 per cent of the farmers were doing other jobs which were not listed in the schedule and

only 01.00 per cent of the farmers were working for corporate companies respectively.

From the above facts it depicting that majority of the fathers were farmers because most of the students (more than three fourth) having rural background and they obtained the benefit of agriculture quota upto 40 per cent. Hence naturally the percentage of parents depending on agriculture is more followed by in few cases where some parents depending on government jobs nearer to their villages as teachers, Bank employee and serving in different government office along with agriculture. So majority number of students was not having business background. The results obtained are in line with the Dilipkumar (2017).

#### **Family annual income**

The facts in the table 2 depicting that out of total respondents of farm universities, little more than one third of the respondents (37.00 %) had family annual income up to one lakh rupees followed by 34.00 per cent of the respondents had family annual income of Rs. 1, 00,001 to 2, 50,000/-, 16.50 per cent of the respondents had family annual income of Rs. 2,50,001/- to 5,00,000/- 12.50 per cent of respondents had family annual income of above Rs. 5,00,001/- respectively. From this it can be inferred that since more number of parents were agriculturists, also they possessing small and medium size of land holdings and depending on rainfed agriculture which resulted in lower family annual income of Rs. less than one lakh. Further farmers expressing lesser income may be because of obtaining benefits from the government. Even then they sent their children to higher education in agriculture irrespective of their money constraint. Dhakre (2014) also recorded the similar findings.

### **Distribution of agricultural students based on their communication characteristics**

The communication characteristics of agricultural students of farm universities viz., university of agricultural sciences (UAS) Bengaluru, Dharwad, Raichur and university of agricultural and horticultural sciences Shimoga were presented in table 3. The communication characteristics selected for the study were cosmopolitanism and information seeking behaviour.

#### **Cosmopolitanism**

With regard to the overall cosmopolitanism pooled data of all the four farm universities selected in the Karnataka state the facts in the table 3 indicating that out of 200 hundred respondents just more than one third of the respondents (35.50 %) had medium level of cosmopolitanism followed by 35.00 per cent of the respondents had high level of cosmopolitanism and 29.50 per cent of the respondents had low level of cosmopolitanism, respectively. This might be due to the reason that since all these campus located far-off place from the main centre of the city.

Most of the students were restricted their movement within the campus and full filling their daily requirements through existing stationary, canteen, small petty shop, etc., and in few cases only they will visit nearby cities for obtaining necessary materials and services. Further because of their tight academic schedule in the semester period the students hardly find time to visit cities frequently. Therefore, naturally all put together the cosmopolitanism of the students stands medium in the study. Anitha (2004), Suresh (2004) and Nagesha (2005) have also reported the similar findings in their study.

### **Information seeking behaviour**

Table 3 representing that overall information seeking behaviour of all the four agriculture universities of the state, the table 3 was representing that overall information seeking behaviour of the total 200 respondents. Out of the total respondents little more than one third of the respondents (36.50 %) had medium level of information seeking behaviour followed by, 35.50 per cent had high level of information seeking behaviour and 28.00 per cent of the students had low level of information seeking behaviour respectively.

The probable reason for this majority of students who joined agriculture was having good percentage in their PUC level so that they were very much eager to hear and understand new information quickly. Also now days every students had well versed knowledge in using modern information communication technologies and gadgets. Further normally for students at their time of studies not much information is required from outside expect from parents who were helping them all the way from finance to career guidance followed by friends, teachers, relatives, neighbours, media, etc.,. So the results are obtained as above and the results were on par with the Dilipkumar (2017).

### **Distribution of agricultural students based on their psychological characteristics**

The psychological characteristics of agricultural students of farm universities viz., university of agricultural sciences (UAS) Bengaluru, Dharwad, Raichur and university of agricultural and horticultural sciences Shimoga were presented in table 4. The psychological characteristics selected



for the study were perception towards entrepreneurship, career aspiration, technical orientation and scientific orientation.

### **Perception towards entrepreneurship**

With respect to the pooled data of the perception towards entrepreneurship the data in the table 4 indicating that out of the total respondents of all the farm universities selected in the Karnataka state, just more than two fifth of the students (40.50 %) had medium level of perception towards entrepreneurship followed by 32.00 per cent each of the students had low level of perception towards entrepreneurship and 27.50 per cent had high level of perception towards entrepreneurship respectively. Majority of the students had medium to low perception about entrepreneurship. It might be possible because since they were not much exposed to various kinds of enterprises and successful cases rather they were much concentrated on higher studies, government jobs which were influenced by senior and parents. Thus the results were obtained like this and the results are in line with the Dilip Kumar (2017).

### **Career aspiration**

Hopping for the better future is very important for career aspiration and hard work by the students. The students were asked the question related to their expected standard of living in the next five years and the responses were depicted in the Table 4. Finally the overall data of all the four agriculture colleges of farm universities, the data in the table 4 showing that just above one third of the respondents (38.50 %) had medium level of career aspiration followed by 31.50 per cent of the students had high level of career aspiration and 30.00 per cent of the students had low level of career aspiration respectively. This might be due to

the reason that normally any student who joins technical graduation will have greater career aspiration, which may be academics, civil services or choosing their respective department for their future career expect few cases they may opting business and entrepreneurship. This finding was supported by Linus *et al.* (2004), Prasad (2006) and Arabiun *et al.*, (2014).

### **Technical orientation**

For starting of any new business, the technical confidence and in-depth knowledge of related preferred enterprise is very important for success of business. To measure the technical orientation of students related to agriculture and allied sectors, the obtained responses were analyzed and results were presented in the table 4.

Finally the data in the table 4 showing that pooled data related to technical orientation of two hundred respondents, out of that more than two fifth of the students (44.50 %) had low technical orientation in the agriculture and allied sector followed by 30.50 per cent had medium and high level and exactly quarter of the students (25.00 %) had high level of technical orientation in the agriculture and allied fields respectively.

The probable reasons for the above results were the students have less practical exposure, on field problems, challenges while doing operations and less chance to improve the technicality in their selected fields etc., further majority of the students study their subject superficially than going in depth to study technicality of the subject. Sometimes their rural background, less exposure to practical's might have also resulted in low technical orientation. Paul *et al.* (2010) has also noted almost similar findings.

## Scientific orientation

With respect to the overall data the table 4 inferring that out of total respondents just more than two fifth of the respondents (40.50 %) had low level of scientific orientation followed by, 30.50 per cent of respondents had medium and 29.00 per cent of the respondents had high level of scientific orientation respectively. This might be due to the reason that the students were still young and they were not independent to plan, take decision regarding their studies, finance etc., hence for them to make plan and think scientifically is not easy. Further though students learning scientific way of crop production in regular course curriculum but majority of their parents practicing primitive agriculture, it was seen by the students since childhood resulted in low scientific orientation. This finding was supported by Linus *et al.*, (2004), Prasad (2006) and Arabiun *et al.*, (2014).

## Conclusion

Based on the result of the study it showing that majority of the agriculture students were having low to medium technical orientation and scientific orientation and medium to low perception towards entrepreneurship and career aspiration, so the universities and the teachers should give more focus on improving scientific orientation, perception towards entrepreneurship, career aspiration, technical orientation and scientific orientation.

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