



## Socio-personal Profile of Agriculture and Animal Science Undergraduates

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Received: 25.01.2018 | Revised: 2.03.2018 | Accepted: 7.03.2018

### ABSTRACT

Agriculture is an important sector of the Indian economy, accounting for 14.40 per cent of the nation's GDP, about 10.23 per cent of its exports, to an estimate of 52.00 per cent of the population still relies on agriculture as its principal source of income and also act as a source of raw material for large number of industries (Anonymous, 2012-2013). Apart from contributing to the nation economy, Agriculture remains an integral part of the rural society and culture. Development of agriculture sectors would either directly results in the improvement of rural society. Education is a key factor playing lead role in achieving the diversified goals of development. Agricultural universities assumes responsibility to contribute for improving the standard of rural living. The primary purpose of any agricultural universities apart from research and extension activities is to produce skilled and trained manpower "Agricultural Graduates" to meet the service based needs of the Indian farming community. Every year graduates passing out from agriculture and allied sector universities find it difficult to acquire an appropriate job with a reasonable wage packages. On the other hand, there is acute shortage of skilled and trained manpower in agricultural related sectors, especially in private organizations. To certain extend the social-personnel characteristics of the undergraduates would have direct or indirect impact on their career preference and career development. Keeping in mind this notion, the study has been carried out in Agricultural and allied universities of the Telangana State. Results revealed that one-third of undergraduates belonged to very young age, every four out five responders come across were belonged to Hindu religion. Half of the responder's fall under OBC category and similarly half of the respondents hailed from rural area with negligible gender variation. Majority belonged to nuclear family with three to five family members. Semi of the respondents had medium level of family education and 40.00 per cent of them had low family income with 30.00 per cent of the respondents' parents hold agriculture as main occupation followed by business (25.00 %).

**Key words:** Socio-personnel profile, Agriculture, Animal Science, Undergraduates

**Cite this article:** Ramesh, N., Sagar, M.P., Kannadhasan, M.S. and Anbazhagan, K., Socio-personal Profile of Agriculture and Animal Science Undergraduates, *Int. J. Pure App. Biosci.* 6(2): 898-905 (2018). doi: <http://dx.doi.org/10.18782/2320-7051.6199>

## INTRODUCTION

India accounts for only about 2.40 per cent of the world's geographical area and 4.00 per cent of its water resources but has to support about 17.00 per cent and 15.00 per cent of the world's human and livestock population, respectively. Agriculture is an important sector of the Indian economy, 52.00 per cent of the population still relies on agriculture as its principal source of income and it is a source of raw material for a large number of industries. Agricultural sector accounts for 14.40 per cent of the nation's GDP and contributes about 10.23 per cent of export commodities<sup>2</sup>. Agriculture remains an integral part of the rural society and culture. Development of agriculture and related sectors would either directly or indirectly result in the improvement of rural society and environment there by elevate the standard of living of the rural people.

Education is a key factor playing lead role in achieving the diversified goals of development. By inculcating social, economic, political, technological and cultural competencies in people, 'man' can be converted into 'productive and competent human capital' to undertake various progressive skilled tasks. Agriculture education existed in India even during the medieval period, evidenced by historical documentation of the curriculum of Nalanda and Takshashila universities which had comprised agriculture as one of the eighteen subjects taught<sup>9</sup>. Agriculture being such an integral part of our economy and rural based societies it is bound to get attention for the economic development of the nation. Since education is the ladder for development in any field of interest, agricultural education also gains prime importance. The SAUs/SVUs are the major contributors in growth and development of agriculture and allied sectors through academics, research, and extension under the NARS.

According to ICAR education division at present India has 62 State Agricultural Universities, five Deemed-to-be universities, two Central Agricultural Universities and four

Central Universities with agriculture and related sectors faculty<sup>4</sup>. The primary purpose of any agricultural universities apart from research and extension activities is to produce skilled and trained manpower "Agricultural Graduates" to meet the service based needs of the Indian farming community. The agricultural university shoulders greater accountability to contribute for improving standard of rural societies through rendering service and other suitable inputs in order to inculcate precise and scientific farming for more profitable returns. For fulfilling this responsibility, universities nurture their students in concern sectors with the recent updates in the scientific knowledge and also molding them capable enough to provide services which enable growth and development in the rural agricultural and its allied farming. These universities are advancing in the frontiers of human knowledge, skills and values of higher professional education empowering them to providing the required technical trained and skilled manpower to its farming sectors. In order to serve the function, agricultural universities system has attempted to identify activities for improving agricultural education, research, and extension for integration at all level of institutional management<sup>5</sup>.

Every year graduates passing out from agriculture and allied sector universities find it difficult to acquire an appropriate job with a reasonable wage packages. Paradoxically, there occurs an acute shortage of skilled manpower and the relative proportion of agricultural graduates finding employment especially in public sector of India is shrinking gradually. University has to nurture the apprentices to instil and encourage entrepreneurship qualities making them inevitable for exploring self-employment opportunities thus their entrepreneurial qualities can be improved to make them a job provider than a job seeker. Recent understandings indicate that the economic progress of few countries, particularly developed countries were due to the contribution from large number of newly emerged small entrepreneurs. So, large

numbers of such entrepreneurs are needed for developing and transforming village clusters into sustainable economics units<sup>6</sup>. There is a tremendous scope for empowering agricultural graduates through establishment of dairy, poultry, fishery, food processing and value addition, floriculture, green house, poly house enterprises *etc*, either funded through Government or by private nor by Public private partnership mode. To certain extend the social-personnel characteristics of the undergraduates would have direct or indirect impact on their career preference and career development. Keeping in mind this notion, the study on socio-personnel profile of undergraduates has been carried out in Agricultural and related universities of the Telangana State.

### MATERIAL AND METHODS

Exploratory research design was employed for the present study. Telangana state was purposively selected as it has all desired streams and disciplines of graduates in agricultural higher education *i.e.*, agriculture, horticulture, veterinary and dairy technology. In Telangana, currently the supervision and governances of Agriculture education, Horticulture education, Veterinary and Dairy Technology education were under Professor Jaya Shankar Telangana State Agricultural University (PJ TSAU), Sri Konda Laxman Telangana State Horticultural University (SKLTSHU) and P.V. Narasimha Rao Telangana State Veterinary University (PVNRTSVU), respectively. From each major stream, one well-established college under these three universities was selected purposefully. Thirty final year undergraduates' students from each selected college in each stream *i.e.* B.Sc., (Agri.), B.Sc., (Horti.), B.V.Sc & A.H. and B.Tech. (Dairy) were selected randomly, making total sample size of 120 respondents and data were collected using pre-tested interview schedule through personal interview method.

### RESULTS AND DISCUSSION

#### Age

Perusal of data presented in Table 1 indicates that majority (75.00%) of the respondents

belonged to very young group of 20-22 years of age, while remaining (25.00%) respondents fall under young age of 23- 25 years of age at the time of data collection. The mean age of undergraduates investigated was 21.9 years with a range of 20 to 25 years of age. The study further revealed that overwhelming majority of B. Tech. (Dairy) (90.00%), 80 per cent of B.Sc (Hort.), 70 per cent of B.Sc. (Agri.) and 60 per cent B.V.Sc & A.H undergraduates were found to be very young age group in all the stream *i.e.* 20-22 years of age. This might be correlated to the fact that majority of the undergraduates were done with their schooling by 17 years of age and thus turn 20-22 years of age during their final year of graduation. Several past studies also revealed that typical entrepreneurs were young in age with a formal educational qualification. This could be an appropriate stage to develop the entrepreneurial activity among the students to startup with, along with the educational support and technical inputs may set on entrepreneurship qualities within the undergraduates to become potential entrepreneurs. These results are in line with the conclusions of Daniel<sup>3</sup>, Thilakar<sup>14</sup>, Lakshmi<sup>8</sup>, and Amitha<sup>1</sup>.

#### Gender

There were not much variation in the gender of respondents as a whole, with 58.30 per cent of them were male and rests were female (41.70%). This shows that there doesn't exist much of gender inequality when it comes to undergraduate studies. But there exist a gender variation under each stream *viz.* Dairy Technology program were found congested with 86.70 per cent of male students and Veterinary and Animal Husbandry with 60.00 per cent of male respondents. Whereas in Agriculture partway of the respondents were females (53.00%) and in Horticulture program 60.00 per cent were females. Majority of female candidates prefer agriculture and horticulture courses as their professional education in par comparison with Dairy Technology and Veterinary Science course. This gender variation within different stream of studies could be related to the more labor-

intensive type of tasks involved in dairy technology and veterinary science based jobs which demands more physical work and irregular working hours. These fallouts were in accordance with Karimi *et al.*<sup>7</sup>, Thilakar *et al.*<sup>14</sup>, and Sasidhar<sup>10</sup>.

### Religion

It is evident from the result that majority of the respondents belonged to Hindu religion (83.30%) next followed by Islam (11.70%) and Christian (5.00%). In aspect of Stream wise, 90.00 per cent of B.Tech. (Dairy) undergraduates were found to belong to Hindu religion. Similarly, 86.70 per cent in B.Sc (Horti.), 80.00 per cent in B.Sc (Agri.) and 76.70 per cent in B.V.Sc & A.H. were Hindu religion. Islam and Christian religions under different stream wise were in meager in percentage.

### Category

Table 1 indicates that students in total belonged to OBC category were 52.50 per cent followed by general category of 33.30 per cent, SC of 9.20 per cent and ST of 5.50 per cent. Stream wise, analysis revealed that majority of the undergraduates of B.V.Sc & A.H (63.30%) and B.Tech. (Dairy) (53.30%) fall under OBC category, while 50 per cent undergraduates of B.Sc (Agri.) belonged to OBC category. In contrast, 46.7 percent of B.Sc. (Horti.) undergraduates belonged to General category, followed by OBC (43.30%), SC (6.70%), and ST (3.30%) categories.

### Background

It is observable from Table 1 that more than half of the undergraduates hailed from rural area (52.50%), followed by urban (30.80%) and suburban (16.70%). Stream wise analysis also showed similar trends. This might be due to the fact that majority of their parent's occupation were agriculture which made them settle in the rural area. These findings were supported by Lakshmi *et al.*<sup>8</sup>, Sen<sup>11</sup>, and Thilakar<sup>14</sup>.

### Academic performance

On an overall basis, 44.20 per cent undergraduates achieved medium level academic performance obtaining OGPA between 7.0 to 7.9 out of 10 grade point scale, followed by high level 8.0-8.9 OGPA

(30.80%), low level 6.0-6.9 OGPA (20.80%) and 4.20 per cent in very high level OGPA (9.0-10.0) category. Stream wise, majority of the B.V.Sc & A.H. undergraduates (53.30%) belonged to medium level of academic performance (7.0-7.9 OGPA), followed by low (23.30%), high (20.00%) and very high (3.30%). Whereas in B.Sc.(Agri.), dissimilar in trend of academic performance was recorded as 46.70 percent undergraduates were in high performance level academic level with OGPA between 8.0 to 8.9, followed by medium (40.00%), low (10.00%) and very high level OGPA (3.30%). These results are in concurrence with findings of Lakshmi *et al.*<sup>8</sup>.

### Family type

The data given in Table 1 reveals that overwhelming majority (86.70%) of respondents in all the streams was from nuclear families *viz.*, 80.00 per cent in B.Sc. (Agri), 90.00 per cent in B.Sc. (Horti.), 86.70 per cent in B.V.Sc & A.H. and 90.00 in B.Tech. (Dairy) were from nuclear families. This was similar to the findings of Gulehyat and Amita<sup>1</sup>, who had reported similar findings.

### Family size

On a whole, the average family size was 5.06 members. Majority of the respondents (69.20%) came from small size families (3-5 members), followed by 25.00 per cent belong to medium size (6-8 members), and rest were large families. The majority of respondents in all the streams 76.70 per cent in B.Sc. (Agri.), 66.70 per cent in B.Sc. (Horti.), 70.00 per cent in B.V.Sc & A.H and 63.30 per cent in B. Tech. (Dairy) had small family size of three to five members. Findings are in concurrence with Tekale<sup>13</sup>.

### Family education status

Table 1 reveals that majority (55.00%) of the undergraduates had medium level family education status followed by low (27.50%) and high level family education status (17.50%). Stream wise, analysis revealed that majority of the undergraduates B.V.Sc & A.H (60.00%), B.Tech (Dairy) (46.70%), B.Sc (Agri.) (60.00%) and B.Sc. (Horti.) (53.30%) were belonged medium family education status.

### Father's education status

Father's education status of the respondents has been presented in Table 1. Up on looking in to the table, it could be seen that nearly one-fourth of the respondents (25.00%) paternal were illiterate followed by 21.70 per cent had education up to primary education level, 16.70 per cent had completed graduates, 12.50 per cent had middle school, 9.20 per cent had postgraduates, 8.30 per cent had secondary schooling and rest (6.70%) had education up to intermediate level. Stream wise B.Sc. (Agri.) (36.70%) and B.V.Sc & A.H. (26.70%) father were illiterate. B.Sc. (Horti.) (30.00%) and B.Tech (Dairy) were completed primary schooling.

Paternal education had an influence in choosing and deciding the career paths of most of the respondents. The higher educational status among the parents might empower and boost the undergraduates to get admission in professional courses. Shree *et al.*,<sup>12</sup> observed that mothers' education was positively and significantly relate to opinion taken regarding girls' education in rural areas of Dharwad district, Karnataka. Similarly, Vamadevappa<sup>15</sup>, reported that there exist an affirmative and significant relationship between parental involvement and academic achievement. These results were in covenant with Amita<sup>1</sup>.

### Mother's education status

Table 1 reveals that 26.70 per cent respondents mother were illiterate on overall basis followed by 25.80 per cent had primary schooling, 16.70 per cent had secondary schooling, 10.80 per cent had middle schooling, 10.00 per cent had graduates level of education, 5.80 per cent had intermediate level and rest (4.20%) had postgraduate level of education. Stream wise percentage of respondents mother belonging to illiterate level of education status were as follows *viz.* 33.30 per cent in B.Sc. (Agri.), 26.70 per cent in B.Tech. (Dairy), 26.70 per cent in B.V.Sc & A.H. and 26.70 per cent in B.Sc. (Horti.).

### Family occupation

Observations made on the family occupation (Table 1) reveals that roughly one-third (30.80%) of the undergraduates' parents had

agriculture as their major occupation for their livelihood, followed by Government service (26.75%), business (25.00%), private sector service (11.70%), and very meager (5.80%) had other occupations like medical practitioner, lawyer *etc.*. Under stream wise perspective, B.Tech (Dairy) undergraduates' parents had Agriculture and Government service with 46.70 and 23.30 per cent share, respectively. Similarly, in B.Sc. (Horti.) programme undergraduates' parents had Agriculture (30.00%), business (23.30%) and Government service (30.00%) were major family occupations. Likewise, in B.V.Sc & A.H programme undergraduates' parents had Agriculture (30.00%), business (26.75%) and Government service (26.70%) as family occupations, respectively. But in B.Sc. (Agri.) programme followed unlike trend, undergraduates' parents of this stream were found 36.70 per cent had business as family occupation, followed by 26.70 per cent Government service, 16.75 per cent had Agriculture and rest (16.75%) had private service as the family occupation. Results indicates that the parents having business and Government service as their major occupation place their descendants in Agriculture based education system recognizing the scope of agriculture in near future. This might be due to the fact that majority of undergraduates were had come from rural background, where farming was the primary occupation to have sound livelihood. The results were in tune with the observation of Sasidhar<sup>10</sup>, and Thilakar<sup>14</sup>.

### Parental annual income

It is obvious from Table 1 that on overall basis, majority (41.70%) of undergraduates' family had low annual income (Rs.40,000-2,00,000) followed 27.50 per cent had medium income (Rs.2,00,001-4,00,000), 20.00 per cent had high income (Rs.4,00,001-6,00,000) and 10.80 per cent had very high income (Rs.6,00,001-8,00,000). Stream wise analysis revealed, B.Sc. (Agri.) undergraduates belonged to low family income (53.35%), followed by medium level (30.00%), high (10.00%) and very high (6.70%) family income level. Under B.Sc (Horti.)

undergraduates also similar trend were found from low to very high income except equal distribution of undergraduates in medium and high income categories. On the other hand, under B.V.Sc & A.H. stream undergraduates followed different trends low, high, medium and very high family income level in order. In

case of B.Tech (Dairy), equal percentage of undergraduates (33.30%) were belonging to low and medium family income, while rest (16.70%) were also equally distributed in to high and very high income category. The results were in concurrence with findings of Tekale<sup>13</sup>.

**Table: 1 Socio-economic profile of undergraduates in agriculture and animal sciences**

Variable	B.Sc.(Agri) n=30		B.Sc.(Horti.) n=30		B.V.Sc & A.H. n=30		B. Tech. (Dairy) n=30		Pooled (N=120)	
	F	%	F	%	F	%	F	%	F	%
<b>Age range (in years)</b>										
Very young (20-22yrs)	21	70.00	24	80.00	18	60.00	27	90.00	90	75.00
Young (23-25yrs.)	9	30.00	6	20.00	12	40.00	3	10.00	30	25.00
<b>Gender</b>										
Male	14	46.70	12	40.00	18	60.00	26	86.70	70	58.30
Female	16	53.30	18	60.00	12	40.00	4	13.30	50	41.70
<b>Religion</b>										
Hindu	24	80.00	26	86.70	23	76.70	27	90.00	100	83.30
Islam	4	13.30	3	10.00	5	16.70	2	6.70	14	11.70
Christian	2	6.70	1	3.30	2	6.70	1	3.30	6	5.00
<b>Category</b>										
General	9	30.00	14	46.70	6	20.00	11	36.70	40	33.30
OBC	15	50.00	13	43.30	19	63.30	16	53.30	63	52.50
SC	4	13.30	2	6.70	3	10.00	2	6.70	11	9.20
ST	2	6.70	1	3.30	2	6.70	1	3.30	6	5.00
<b>Background</b>										
Urban	9	30.00	11	36.70	8	26.70	9	30.00	37	30.80
Suburban	7	23.30	3	10.00	6	20.00	4	13.30	20	16.70
Rural	14	46.70	16	53.30	16	53.30	17	56.70	63	52.50
<b>Academic performance level (in terms of OGPA)</b>										
Low (6-6.9)	3	10.00	6	20.00	7	23.30	9	30.00	25	20.80
Medium (7-7.9)	12	40.00	12	40.00	16	53.30	13	43.30	53	44.20
High (8-8.9)	14	46.70	9	30.00	6	20.00	8	26.70	37	30.80
Very high (9-10)	1	3.30	3	10.00	1	3.30	0	0.00	5	4.20

Family type										
Nuclear	24	80.00	27	90.00	26	86.70	27	90.00	104	86.70
Joint	6	20.00	3	10.00	4	13.30	3	10.00	16	13.30
Family size										
Small (3-5)	23	76.70	20	66.70	21	70.00	19	63.30	83	69.20
Medium (6-8)	6	20.00	8	26.70	9	30.00	7	23.30	30	25.00
Large (9-11)	1	3.30	2	6.70	0	0.00	4	13.30	7	5.80
Family education status										
Low (1.5-4.5)	5	16.70	10	33.3	6	20.0	12	40.0	33	27.5
Medium (4.6-7.5)	18	60.00	16	53.3	18	60.0	14	46.7	66	55.0
High (7.6-10.6)	7	23.30	4	13.3	6	20.0	4	13.3	21	17.5
Family occupation										
Agriculture	5	16.70	9	30.00	9	30.00	14	46.70	37	30.80
Business	11	36.70	7	23.30	8	26.70	4	13.30	30	25.00
Govt.job	8	26.70	9	30.00	8	26.70	7	23.30	32	26.70
Private service	5	16.70	5	16.70	1	3.30	3	10.00	14	11.70
Others	1	3.30	-	-	4	13.30	2	6.70	7	5.80
Family income (₹)										
Low (₹40,000-2,00000)	16	53.30	12	40.00	12	40.00	10	33.30	50	41.70
Medium (₹200001-4,00000)	9	30.00	8	26.70	6	20.00	10	33.30	33	27.50
High (₹4,00001-6,00000)	3	10.00	8	26.70	8	26.70	5	16.70	24	20.00
Very high (₹6,00001-8,00000)	2	6.70	2	6.70	4	13.30	5	16.70	13	10.80

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