Vocational Interests Expressed by the Agriculture Graduates for Entrepreneurship under SRP

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Abstract

The study was conducted across seven agricultural universities in South India to explore the vocational interests of agriculture graduates, particularly after participating in the Experiential Learning Programmes under Student Rural Entrepreneurship Awareness Development Yojana programme. A total of 350 agriculture graduates from seven universities were surveyed using personal interviews and Google Forms, employing Garrett's ranking method for comprehensive analysis. The study unveiled a spectrum of vocational interests among graduates, with a focus on entrepreneurship. Notably, mushroom cultivation emerged as the most preferred entrepreneurial venture across universities, suggesting its appeal as a sustainable and profitable agricultural pursuit. Bio-agents and biofertilizers followed closely, reflecting the increasing demand for organic and biobased products in both domestic and international markets. However, beekeeping garnered the least interest, possibly due to its perceived complexity and specialized skill requirements. The comparative analysis of vocational interests among agriculture graduates from various universities revealed subtle preferences. While poultry farming ranked prominently in some institutions, others showed a preference for dairy and livestock or bio-agents and bio-fertilizers. Mushroom cultivation consistently ranked high across most universities, indicating its universal appeal among aspiring agriculture entrepreneurs. Overall, mushroom cultivation emerged as the top vocational interest, highlighting its potential as a productive entrepreneurial endeavor within the agricultural sector. The study underscores the importance of understanding vocational preferences and entrepreneurial aspirations among agriculture graduates, providing valuable insights for educational and policy interventions aimed at fostering innovation and entrepreneurship in agriculture.

Keywords : Agriculture graduates, Entrepreneurship, Experiential learning programme, Student READY programme, Vocational interests

 T_{HE} Indian Council of Agricultural Research (ICAR) recommended Student Rural Entrepreneurship Awareness Development Yojana (READY) Programme and it was launched by Hon'ble Prime Minister of India Shri. Narendra Modi on July 25th, 2015 in the AU's of the country (Vaishnavi and Nithya Shree, 2024). The programme has been introduced for one complete year in the last year of the degree programme for UG education in the disciplines of agriculture, agricultural engineering, biotechnology, community science, dairy technology, food technology, forestry, fisheries, horticulture and sericulture since 2016-2017 (Arundhathi *et al.*, 2024). This program aims to promote final-year undergraduates with the necessary skills and knowledge to become successful entrepreneurs in the agricultural sector (Anonymous, 2017).

In this connection the vocational interests of agriculture graduates play a crucial role in shaping the future of agricultural practices and innovations. It aims enterepreneurship and awarness development among the graduates (Saba et al., 2021). In a comprehensive study, the distribution of vocational preferences among graduates from various agricultural universities were analyzed, shedding light on the diverse career paths pursued by these individuals. Detailed examination of data provided in tables, enclosed preferences of graduates from different institutions. This survey not only highlighted the popularity of specific vocational interest, but also unveils trends and variations across different university cohorts. Such an investigation is pivotal in understanding the evolving landscape of agricultural education and the entrepreneurial aspirations of its graduates through READY programme (Anonymous, 2016).

METHODOLOGY

The study was conducted in seven agricultural universities of South India, *viz.*, University of Agricultural Sciences, Bengaluru (UAS-B); University of Agricultural Sciences Dharwad, (UASD); University of Agricultural Sciences, Raichur (UASR); Acharya N. G. Ranga Agricultural University (ANGRAU), Professor Jayashankar Telangana State Agricultural University (PJTSAU), Tamil Nadu Agricultural University (TNAU) and Kerala Agricultural University (KAU). From each university, one agriculture college was selected for the study. From each agriculture college 50 graduates who had passed out in the year of 2022 were selected randomly for the research. Thus the total sample size for the study was 350 agriculture graduates. These graduates expressed a diverse range of vocational interests particularly in entrepreneurship following their participation in Experiential Learning Programmes (ELP) within the Student READY Programme (SRP) initiative. The collection of data was executed through a combination of personal interviews and Google Forms, utilizing an interview schedule. The vocational interests of the agriculture graduates were measured using Garrett's ranking method for comprehensive analysis and interpretation of the gathered data.

RESULTS AND DISCUSSION

Totally 10 vocational interests were expressed by the agriculture graduates for entrepreneurship after undergone ELP in SRP. The results revealed that, the major vocational interest preferred by UASB

TABLE 1	
Distribution of UASB agriculture graduates according	ng to vocational interest

8	8	8		$(n_1 = 5)$
Vocational interest	Garrett's score	Mean Garrett's score	Rank	
Poultry farm	2860	57.20	Ι	
Seed Production	2750	55.00	II	
Dairy and Livestock	2731	54.62	III	
Food Processing	2664	53.28	IV	
Mushroom Cultivation	2634	52.68	V	
Commercial Horticulture	2514	50.28	VI	
Bio-agents and Bio-fertilizers	2435	48.70	VII	
Sericulture	2328	46.56	VIII	
Agro service / Agri business	2218	44.36	IX	
Bee Keeping	2116	42.32	Х	

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Vocational interest	Garrett's score	Mean Garrett's score	Rank		
 Dairy and Livestock	3099	61.98	Ι		
Poultry farm	2839	56.78	II		
Seed Production	2814	56.28	III		
Mushroom Cultivation	2783	55.66	IV		
Bio-agents and Bio-fertilizers	2617	52.34	V		
Commercial Horticulture	2377	47.54	VI		
Sericulture	2286	45.72	VII		
Bee Keeping	2267	45.34	VIII		
Agro service / Agri business	2155	43.1	IX		
Food Processing	2013	40.26	Х		

TABLE 2 Distribution of UASD agriculture graduates according to vocational interest

 $(n_3 = 50)$

(Table 1) graduates was poultry farm with Mean Garrett Score of 57.20. UASD (Table 2) graduates expressed a major vocational interest in dairy and livestock with Mean Garrett Score of 61.98. The major vocational interest preferred by UASR (Table 3) graduates was bio-agents and bio-fertilizers with Mean Garrett Score of 70.76.

Further, the results showed the major vocational interest preferred by ANGRAU (Table 4), PJTSAU (Table 5) and TNAU (Table 6) graduates was mushroom cultivation with Mean Garrett Score of 56.78, 55.18 and 55.74 respectively. KAU graduates expressed (Table 7) major vocational interest in food processing with Mean Garrett Score of 58.10.

Overall, across all universities, mushroom cultivation emerged as the major vocational interest expressed by the agriculture graduates for entrepreneurship with Mean Garrett Score of 55.99 (Table 8). This might be due to consideration of mushroom cultivation as a sustainable and profitable venture in agriculture. It requires relatively low investment, uses agricultural waste as substrate, and offers high returns, making it an attractive option for aspiring entrepreneurs. The findings are supported by Murthy et al., (2019), shirur and shivalingegowda (2015).

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Distribution of UASR agriculture graduates according to vocational interest

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Vocational interest	Garrett's score	Mean Garrett's score	Rank	
Bio-agents and Bio-fertilizers	3538	70.76	Ι	
Dairy and Livestock	3106	62.12	II	
Poultry farm	3052	61.04	III	
Commercial Horticulture	3020	60.40	IV	
Seed Production	2969	59.38	V	
Mushroom Cultivation	2906	58.12	VI	
Food Processing	2882	57.64	VII	
Sericulture	2779	55.58	VIII	
Agro service / Agri business	2602	52.04	IX	
Bee Keeping	2509	50.18	Х	

		-		$(n_4 = 50)$
Vocational interest	Garrett's score	Mean Garrett's score	Rank	
Mushroom Cultivation	2839	56.78	Ι	
Food Processing	2789	55.78	II	
Commercial Horticulture	2756	55.12	III	
Seed Production	2685	53.70	IV	
Dairy and Livestock	2557	51.14	V	
Agro service / Agri business	2468	49.36	VI	
Poultry farm	2401	48.02	VII	
Bio-agents and Bio-fertilizers	2389	47.78	VIII	
Bee Keeping	2243	44.86	IX	
Sericulture	2123	42.46	Х	

TABLE 4

Distribution of ANGRAU agriculture graduates according to vocational interest

TABLE 5

Distribution of PJTSAU agriculture graduates according to vocational interest $(n_{s} = 50)$

				(5)
 Vocational interest	Garrett's score	Mean Garrett's score	Rank	
 Mushroom Cultivation	2759	55.18	Ι	
Bio-agents and Bio-fertilizers	2746	54.92	II	
Poultry farm	2741	54.82	III	
Seed Production	2731	54.62	IV	
Dairy and Livestock	2669	53.38	V	
Commercial Horticulture	2412	48.24	VI	
Food Processing	2407	48.14	VII	
Sericulture	2339	46.78	VIII	
Bee Keeping	2267	45.34	IX	
Agro service / Agri business	2179	43.58	Х	

TABLE 6

Distribution of TNAU agriculture graduates according to vocational interest

				(n ₆ = 50)
Vocational interest	Garrett's score	Mean Garrett's score	Rank	
Mushroom Cultivation	2787	55.74	Ι	
Bio-agents and Bio-fertilizers	2764	55.28	II	
Poultry farm	2728	54.56	III	
Seed Production	2705	54.10	IV	
Dairy and Livestock	2593	51.86	V	
Commercial Horticulture	2548	50.96	VI	
Food Processing	2408	48.16	VII	
Sericulture	2248	44.96	VIII	
Bee Keeping	2237	44.74	IX	
Agro service / Agri business	2232	44.64	Х	

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(n = 50)

TABLE 7

Distribution of KA	U agriculture	graduates	according to	vocational interest
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				$(\Pi_{7} = 0.0)$
Vocational interest	Garrett's score	Mean Garrett's score	Rank	
Food Processing	2905	58.10	Ι	
Mushroom Cultivation	2891	57.82	II	
Bio-agents and Bio-fertilizers	2729	54.58	III	
Commercial Horticulture	2672	53.44	IV	
Bee Keeping	2471	49.42	V	
Seed Production	2372	47.44	VI	
Dairy and Livestock	2349	46.98	VII	
Agro service / Agri business	2306	46.12	VIII	
Poultry farm	2297	45.94	IX	
Sericulture	2258	45.16	Х	

TABLE 8

Overall distribution of agriculture graduates according to vocational interest

				$(n_8 = 350)$
Vocational interest	Garrett's score	Mean Garrett's score	Rank	
Mushroom Cultivation	19599	55.99	Ι	
Bio-agents and Bio-fertilizers	19218	54.91	II	
Dairy and Livestock	19104	54.58	III	
Seed Production	19026	54.36	IV	
Poultry farm	18918	54.05	V	
Commercial Horticulture	18299	52.28	VI	
Food Processing	18068	51.62	VII	
Sericulture	16361	46.75	VIII	
Agro service / Agri business	16160	46.17	IX	
Bee Keeping	16110	46.03	Х	

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Bio-agents and bio-fertilizers emerged as second major vocational interest expressed by the agriculture graduates for entrepreneurship with Mean Garrett Score of 54.91. It clearly states that there is a rising demand for organic and bio-based products in the agriculture sector, both in domestic and international markets. Bio-agents and bio-fertilizers are essential components of sustainable agriculture practices to minimize the use of synthetic chemicals and enhance the quality of produce. Graduates recognize this market demand and see opportunities to capitalize on it through entrepreneurship.

Further, bee keeping was the least vocational interest expressed by the agriculture graduates for

entrepreneurship with Mean Garrett Score of 46.03. It was found that beekeeping requires specific knowledge, skills and expertise. Graduates may perceive it as a more complex and challenging field compared to other entrepreneurial options. They might be hesitant to venture into a less familiar area.

The comparison of vocational interest of agriculture graduates in various agricultural universities is shown in the Table 9. In UAS-B, poultry farm ranked first followed by seed production and dairy and livestock were ranked second and third, respectively. In UASD, dairy and livestock, poultry farm and seed production were in first, second and third ranks, respectively. In

TABLE 9

Comparison of agriculture graduates according to vocational interests in selected State Agricultural Universities

(n = 350)

State Agricultural Universities									
Vocational interest	$UASB (n_1 = 50)$	$\begin{array}{c} \text{UASD} \\ (n_2 = 0) \end{array}$	UASR (n ₃ = 50)	ANGRAU $(n_4 = 0)$	$PJTSAU (n_5 = 50)$	$TNAU (n_6 = 0)$	$\begin{array}{c} \text{KAU} \\ (n_7 = 0) \end{array}$	Overall (n=350)	
	Garrett's rank								
Poultry farm	Ι	II	III	VII	III	III	IX	V	
Seed Production	II	III	V	IV	IV	IV	VI	IV	
Dairy and Livestock	III	Ι	II	V	V	V	VII	III	
Food Processing	IV	Х	VII	II	VII	VII	Ι	VII	
Mushroom Cultivation	V	IV	VI	Ι	Ι	Ι	II	Ι	
Commercial Horticulture	VI	VI	IV	III	VI	VI	IV	VI	
Bio-agents and Bio-fertilizers	VII	V	Ι	VIII	II	II	III	II	
Sericulture	VIII	VII	VIII	Х	VIII	VIII	Х	VIII	
Agro service / Agri business	IX	IX	IX	VI	Х	Х	VIII	IX	
Bee Keeping	Х	VIII	Х	IX	IX	IX	V	Х	

UASR, bio-agents and bio-fertilizers ranked first followed by dairy and livestock, poultry farm were ranked second and third, respectively. In ANGRAU, mushroom cultivation, food processing and commercial horticulture were in first, second and third ranks, respectively. In PJTSAU and TNAU, mushroom cultivation ranked first followed by bio-agents and bio-fertilizers and poultry farm were second and third ranks respectively. In KAU, food processing, mushroom cultivation and bio-agents and bio-fertilizers were in first, second and third ranks, respectively.

In terms of overall ranking of vocational interests across all universities, mushroom cultivation were ranked first followed by bio-agents and bio-fertilizers and dairy and livestock were ranked second and third, respectively. Further, seed production, poultry farm, commercial horticulture and food processing were ranked from fourth, fifth, sixth and seventh, ranks respectively. Sericulture, agro service/agri business and bee keeping were eighth, ninth and tenth ranks, respectively. The study revealed fascinating insights into the vocational interests of agriculture graduates regarding entrepreneurship opportunities. Across various universities, mushroom cultivation emerged as the top choice, reflecting its perceived sustainability, profitability and relatively low investment requirements. This trend underscores the growing market for organic and bio-based products in both domestic and international agriculture sectors.

The rankings across universities provide an understanding of regional preferences, with each university showing distinct inclination towards specific entrepreneurial ventures. Overall, the findings highlight the dynamic nature of agricultural entrepreneurship, shaped by market trends, technological advancements and environmental considerations. As graduates explore diverse avenues, they contribute to the evolving landscape of sustainable and innovative agricultural practices.

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