**Perception and Aspirations of Undergraduate Agricultural Students Toward Agricultural Careers in Coimbatore District, Tamil Nadu**

***ABSTRACT***

Agriculture continues to be the backbone of India’s economy, yet declining youth participation threatens its long-term sustainability. This study investigates the perceptions, motivations, and challenges of undergraduate agricultural students toward agricultural careers in Coimbatore District, Tamil Nadu. A descriptive survey design was adopted, and data were collected from 69 respondents using a structured and pre-tested questionnaire.

Findings revealed that over 75% of students expressed positive interest in agricultural careers, with government employment being the most preferred option, followed by entrepreneurship and research. Major motivational factors included personal interest, innovation, and social contribution, while key constraints were limited job opportunities, low income, and inadequate exposure to technology. Family support was largely positive, but students emphasized the need for more institutional initiatives such as internships, mentorship, and career guidance.

The study concludes that although agricultural students exhibit enthusiasm, structural and financial barriers restrict their professional engagement. Strengthening skill-based education, industry linkages, and entrepreneurship training can enhance employability and youth retention in agriculture. These insights provide a foundation for policy and academic interventions to align agricultural education with modern career expectations.

**Keywords:** *Agricultural education, agricultural students, career aspirations, employability, motivation, agripreneurship, Tamil Nadu, youth perception*

***INTRODUCTION***

Agriculture remains the backbone of India’s economy, ensuring food security and rural livelihoods *(Velayudhan et al., 2021)*. However, youth participation in the sector is steadily declining, especially among educated graduates who often view non-agricultural jobs as more profitable and prestigious *(Arunachalam et al., 2020; Niranjan et al., 2022)*. This shift threatens the sustainability and modernization of Indian agriculture.

Technological advances and emerging fields such as agribusiness and artificial intelligence (AI) offer new opportunities, yet many students lack exposure, resources, and skills to capitalize on them *(Jayashree et al., 2024; Kavithambika et al., 2022)*. Mismatches between academic training and employer expectations further limit employability *(Sebastian, 2021; Krishnaveni & Arunachalam, 2020)*. Family background, landholding, and income also shape students’ perceptions of agriculture as a viable career *(Naik et al., 2024; Kamali et al., 2025).*

In Tamil Nadu, particularly in Coimbatore, where Tamil Nadu Agricultural University is located, students exhibit strong academic interest in agriculture but uncertainty about career prospects *(Niranjan et al., 2022; Nivedha et al., 2025).* Addressing this requires understanding how awareness, motivation, family support, and institutional initiatives influence their career choices.

This study, therefore, examines the perceptions, aspirations, and challenges of undergraduate agricultural students in Coimbatore District. The findings aim to inform educational and policy interventions that enhance youth engagement, employability, and entrepreneurship in the agricultural sector.

***PROBLEM STATEMENT***

Despite continuous efforts to modernize agricultural education and improve youth engagement, agricultural students in Tamil Nadu continue to face uncertainty regarding their career prospects, employability, and economic stability within the agricultural sector. Several studies *(Arunachalam et al., 2020; Niranjan et al., 2022; Naik et al., 2024)* have shown that while students display strong academic interest in agriculture, their willingness to pursue it as a professional career remains limited due to perceived low income, poor job security, and limited recognition of agricultural professions. Moreover, gaps persist between the skills imparted by universities and those required by employers *(Sebastian, 2021; Krishnaveni & Arunachalam, 2020).*

The problem is further compounded by limited institutional guidance, inadequate exposure to private-sector and entrepreneurial opportunities, and weak integration of emerging technologies such as artificial intelligence *(Jayashree et al., 2024)*. Consequently, many agricultural graduates remain uncertain or neutral toward agriculture as a viable long-term career option.

Given these challenges, there is a pressing need to examine how factors such as awareness, motivation, family support, and institutional assistance influence the career perceptions of undergraduate agricultural students. This study focuses on Coimbatore District, a major hub of agricultural education in Tamil Nadu, to understand how local educational and socio-economic contexts shape students’ career aspirations and challenges. The insights derived will contribute to policy formulation and academic strategies aimed at strengthening youth participation and employability in agriculture.

***RESEARCH OBJECTIVES***

The study was conducted with the following specific objectives:

1. To assess the level of awareness, interest, and perception of undergraduate agricultural students toward agricultural career opportunities.
2. To identify key motivational factors influencing students’ willingness to pursue agriculture as a career.
3. To analyze major challenges and constraints perceived by students in selecting agriculture as a career path.
4. To suggest appropriate institutional and policy-level interventions to enhance students’ employability, entrepreneurial orientation, and engagement in the agricultural sector.

Through these objectives, the study seeks to contribute empirical evidence that can guide educational institutions, policymakers, and industry stakeholders in designing effective strategies to promote youth participation and professional growth in Indian agriculture.

***LITERATURE REVIEW***

Several studies in Tamil Nadu have examined the aspirations and career choices of undergraduate agricultural students, highlighting both their ambitions and perceived obstacles. *Arunachalam et al. (2020)* surveyed 156 undergraduate agriculture students across the constituent colleges of Tamil Nadu Agricultural University (TNAU), finding that nearly all respondents aspired to complete their B.Sc. (Agriculture) degree, while approximately 70% preferred positions in government service after graduation. Around 30% expressed interest in self-employment ventures such as farming or mushroom production. The study also reported that many students hoped for monthly incomes in the range of INR 50,000 to 100,000, indicating rising economic expectations among agricultural students.

*Niranjan et al (2022)* surveyed 397 undergraduate, postgraduate, and doctoral students in Tamil Nadu to assess willingness to pursue agriculture. Only 11% intended to make it their primary career; nearly half preferred public sector jobs, while others delayed involvement in farming. Factors like owning farmland, rural residence, parental farming occupation, and gender positively influenced willingness, whereas enrollment level and farm size had unexpected negative effects. Key deterrents included poor price returns, limited credit access, and low social recognition of agriculture.

Skill gaps between student perceptions and employer requirements have also been documented. *Sebastian (2020)* examined the differences in perceptions of employability skills among students, graduates, and employers in Tamil Nadu. Students often rated themselves higher in interpersonal relations, listening, and self-motivation, while employers emphasized analytical thinking, creativity, visioning, and problem-solving. This mismatch suggests that curricula may need to place greater focus on developing higher-order cognitive and problem-oriented skills.

Employer expectations have been directly studied as well. *Krishnaveni & Arunachalam (2020)* surveyed 34 firms regarding recruitment criteria for agricultural graduates. Twelve selection parameters were identified, grouped under education, personality traits, and socio-economic characteristics. Knowledge, technical skills, and personal attributes were weighted more heavily than socio-economic status when considering candidates.

Emerging research has examined perceptions of newer technologies. *Jayashree et al. (2024)* investigated how agricultural students in Tamil Nadu view artificial intelligence (AI) in terms of usefulness, ease of use, emotional response, and challenges. Students believed AI could enhance decision-making and learning, but over 80% reported technical limitations such as a lack of infrastructure, tools, or software. Integration of AI with traditional agricultural practices was seen as difficult by most respondents.

Distance education and informal learning contexts have also been explored. *Nivedha et al. (2024)* studied graduates of the Bachelor of Farm Technology programme under TNAU’s distance/open learning system. Surveying 350 graduates, they found that most had favourable attitudes toward the programme, citing flexibility, accessibility, and relevance of content. Many reported that the programme positively impacted their knowledge and agricultural practices, though some noted limitations in practical exposure and access to equipment.

Agricultural entrepreneurship is another significant theme. *Jayasudha et al (2020)* assessed attitudes of final-year B.Sc. (Agriculture) students at TNAU, Coimbatore, toward agripreneurship. Although many students valued entrepreneurship and its potential for self-employment and innovation, actual intention to start agri-business ventures was weak. Constraints included lack of start-up capital, limited mentorship, market access issues, and risk aversion.

*Amaran & Krishnamoorthy (2023)* in “Perception of Students on Agriculture as an Occupation” revealed that postgraduate students view agriculture as an occupation with moderate to high esteem; however, the highest level of positive perception was not universal. Demographic variables like gender, rural/urban origin, and family type had less influence than institutional and socio-cultural factors, implying that changes in curriculum, exposure, and public image might shift perceptions more effectively than demographic targeting.

Recent research has also examined students' willingness to take up farming as a career path. Kamali *et al.* (2025) surveyed 132 agricultural students at TNAU and used a logit regression model to identify factors significantly influencing willingness. Students with farming backgrounds, access to agricultural land, and exposure to entrepreneurship were more likely to choose farming as a career, confirming that both personal background and exposure to agriculture/agribusiness are strong predictors.

Naik *et al.* (2024) studied factors influencing occupational perception of agricultural undergraduates toward agriculture as a profession in Punjab (PAU, Ludhiana) and Telangana (PJTSAU, Hyderabad). Based on a sample of 120 final-year B.Sc. Agriculture students found that family monthly income, landholding size, and family agricultural background significantly correlated with perception of agriculture as a profession. Family size also had an association. The study suggests that improving financial status and enhancing awareness of agribusiness opportunities could help improve perception among students.

Moreover, *Kavithambika et al. (2022)* examined entrepreneurial competency mapping among educated youth in Tamil Nadu. Gaps were especially high in knowledge of schemes/incentives, negotiation skills, and understanding legal/business environments. This suggests that while students are motivated toward entrepreneurship, competency gaps and lack of institutional support may hinder actual venture initiation.

***MATERIALS AND METHODS***

**Research Design**

A descriptive survey research design was adopted to collect quantitative data from undergraduate agriculture students in Coimbatore District, Tamil Nadu. This design was considered appropriate for identifying and describing patterns in students’ perceptions, awareness, motivations, and challenges related to agricultural career opportunities.

**Selection of Study Area**

The study was conducted in Coimbatore District, located in the western region of Tamil Nadu. The district was purposively selected due to its prominence in agricultural education and the presence of several recognized institutions offering undergraduate programmes in agriculture. The district also represents a diverse student population from both rural and urban backgrounds, making it suitable for assessing variations in perceptions toward agricultural careers.

**Selection of Respondents**

The respondents comprised undergraduate students pursuing agriculture degrees in various colleges within Coimbatore District. A total of 69 students participated in the study. Respondents were selected using the convenience sampling method to ensure easy accessibility through digital media while covering different academic years, gender categories, and residential backgrounds. This sampling technique was appropriate for exploratory research where representativeness and feasibility are balanced.

**Data Collection Instrument**

Primary data were collected using a structured and pre-tested questionnaire developed for this study. The instrument consisted of three sections:

1. Student profile and background (gender, year of study, and residential origin).
2. Awareness and interest in agricultural career options (government, research, private sector, agribusiness, and entrepreneurship).
3. Perceptions, motivations, and challenges influencing career decisions, including institutional support requirements.

The questionnaire was designed using Google Forms and distributed online through LinkedIn, Instagram, and student WhatsApp groups. The instrument was reviewed for clarity and relevance before administration.

**Validation of the Instrument**

The questionnaire was **pre-tested with a small group of students** from similar academic backgrounds to ensure content clarity, accuracy, and relevance. Feedback obtained during the pre-test phase was incorporated to refine the wording and sequencing of questions. This process enhanced the reliability and validity of the final instrument used for data collection.

**Data Collection Procedure**

The survey was conducted online during **September 2025**. Respondents were briefed about the objectives of the study and informed that participation was voluntary. Informed consent was obtained electronically before data collection. No personal identifiers were collected to maintain anonymity and confidentiality. The completed responses were automatically compiled in Google Sheets and later exported to Microsoft Excel for tabulation and analysis. Follow-up reminders were sent to ensure a satisfactory response rate and to encourage participation from different academic years. The collected data were carefully verified for completeness and consistency before proceeding with statistical analysis to maintain data quality and reliability.

**Data Analysis**

The collected data were analyzed using descriptive statistics, specifically percentage analysis, to summarize and interpret the responses. The percentage was calculated using the following formula:

**Percentage = No of Respondents / Total Number of Respondents \* 100**

This analytical approach helped identify prevailing trends and patterns in students’ awareness, perceptions, and preferences regarding agricultural careers. The results were presented in tables and figures for clarity and ease of interpretation.

**Ethical Considerations**

The study adhered to standard ethical research protocols. All participants were informed about the purpose of the study and participated voluntarily. Anonymity and confidentiality were maintained throughout, and the data collected were used solely for academic and research purposes. Participants were also given the right to withdraw from the study at any point without any negative consequences. Care was taken to ensure that the study posed no harm or discomfort to the participants.

**Limitations of the Study**

The study was limited to a sample of undergraduate agriculture students from Coimbatore District; hence, the findings may not fully represent the views of all agricultural students across the state or country. Additionally, as data were collected through online platforms, respondents without stable internet access might have been excluded. Despite these constraints, the study provides valuable insights into students’ perceptions and can serve as a foundation for future research on agricultural career orientation.

***RESULTS AND DISCUSSION***

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| --- | --- |
| **Category** | **Responses** |
| Interested | 29 |
| Neutral | 15 |
| Very interested | 23 |
| Not interested | 1 |
| Not at all interested | 1 |
| **Total** | **69** |

**Perception of Agricultural Career Opportunities**

**Table 1: Undergraduate Students’ Interest in Agricultural Careers (Total Responses)**

**Figure 1 - Students’ Interest in Agricultural Careers (Percentage)**

**Inference:** The survey results indicate a predominantly positive perception of agricultural careers among undergraduate students. A substantial proportion of respondents expressed interest, with 33% reporting being “very interested” and 42% “interested” in pursuing opportunities in the agricultural sector, together representing over three-fourths of the sample. This demonstrates that students recognize agriculture as a promising and viable career pathway. Meanwhile, 22% of respondents remained neutral, suggesting limited exposure or uncertainty rather than outright disinterest. Only a minimal fraction, 1.4% “not interested” and 1.4% “not at all interested,” expressed negative perceptions, indicating negligible resistance toward agricultural careers.

Overall, these findings highlight strong enthusiasm for agricultural professions among undergraduates, while also pointing to the need for enhanced guidance and awareness programs to further engage those who are neutral or undecided.

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| --- | --- |
| **Gender** | **Number of Respondents** |
| Female | 49 |
| Male | 20 |
| **Total** | **69** |

**Gender Distribution of Respondents**

**Table 2: Gender Distribution of Undergraduate Students (Total Responses)**

**Figure 2: Gender Distribution of Undergraduate Students (Percentage)**

**Inference:** The survey revealed a higher participation of female students, with 49 out of 69 respondents, representing approximately 71% of the total sample, while male respondents accounted for 20 students, or 29%. This indicates that female students were more responsive or accessible for the study on perceptions of agricultural careers. Despite their smaller proportion, male perspectives remain important for providing a balanced understanding of student attitudes. The predominance of female respondents should be taken into account when interpreting the results, although the inclusion of male responses ensures that the analysis reflects a broader demographic perspective.

**Residential Background of Respondents**

|  |  |
| --- | --- |
| **Residential Background** | **Number of Respondents** |
| Rural | 46 |
| Urban | 23 |
| **Total** | **69** |

**Figure 3: Distribution of Respondents by Residential Background (Percentage)**

**Table 3: Distribution of Respondents by Residential Background (Total Responses)**

**Inference:** The data indicate that a majority of respondents (46 out of 69, approximately 67%) come from rural areas, while 23 students (33%) reside in urban areas. This suggests that students from rural backgrounds form the dominant portion of the sample, which may influence their perceptions of agricultural career opportunities due to greater exposure to agricultural practices and lifestyles. Urban respondents, though fewer, provide essential insights into the perspectives of students with limited direct engagement in agriculture. Overall, the residential distribution highlights the importance of considering background when analyzing attitudes toward agricultural careers.

**Distribution of Respondents by Year of Study**

|  |  |
| --- | --- |
| **Year of Study** | **Number of Respondents** |
| 1st Year | 3 |
| 2nd Year | 27 |
| 3rd Year | 14 |
| 4th Year | 25 |
| **Total** | **69** |

**Figure 4: Respondents by Year of Study (Percentage)**

**Table 4: Respondents by Year of Study (Total Responses)**

**Inference:** The survey data show that the largest proportion of respondents belongs to the 2nd year (39.1%), followed closely by 4th-year students (36.2%). Third-year students contribute 20.3%, while first-year students represent the smallest group at 13%. This distribution suggests that mid-to-late undergraduates are more engaged or available for surveys regarding perceptions of agricultural careers, possibly due to increased exposure to academic and career-oriented activities. The varied participation across years ensures a broad perspective on student attitudes toward agriculture.

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| --- | --- |
| **Response** | **Number of Respondents** |
| Yes | 51 |
| No | 18 |
| **Total** | **69** |

**Awareness of Career Opportunities in Agriculture**

**Figure 5: Awareness of Career Opportunities in Agriculture (Percentage)**

**Table 5: Awareness of Career Opportunities in Agriculture(Total Responses)**

**Inference:** The findings indicate that 74% of undergraduate students are aware of the various career opportunities available in agriculture, while 26% are not. This shows that a majority of respondents possess a fair understanding of the sector’s career potential. However, the lack of awareness among a quarter of the students highlights the need for increased dissemination of information and career guidance. Enhancing awareness programs could further encourage student participation and broaden their perception of agriculture as a viable professional field.

**Awareness of Agricultural Career Paths (Students Could Select Multiple Options)**

**Figure 6: Awareness of Career Options in Agriculture (Total Responses)**

**Figure 6: Awareness of Career Options in Agriculture (Percentage)**

|  |  |
| --- | --- |
| **Career Option** | **Count** |
| Agri-business / Entrepreneurship | 12 |
| Research / Academia | 6 |
| Government / Public Sector Jobs | 26 |
| Private Sector (Agro-companies, FMCG) | 3 |
| All of the Above | 31 |

**C**

**Inference:** The data indicate that among the 69 students who participated in the survey, 44.9% were aware of all major agricultural career options, showing broad familiarity with opportunities in the sector. Government and public sector jobs were identified by 37.7% of respondents, followed by agri-business and entrepreneurship (17.4%) and research or academia (8.7%). Only 4.3% were aware of private sector opportunities. As students were permitted to select multiple options, these figures reflect overlapping awareness levels. Overall, the findings suggest that while knowledge of government and diverse career paths is strong, greater emphasis is needed on promoting awareness of private and research-based agricultural careers.

|  |  |
| --- | --- |
| **Source of Awareness** | **Count** |
| College Curriculum | 24 |
| Seminars / Workshops | 11 |
| Social Media / Internet | 16 |
| Family / Friends | 14 |
| All of the Above | 25 |

**Sources of Awareness of Agricultural Career Opportunities (Multiple Responses Allowed)**

**Table 7: Sources of Awareness on Agricultural Careers (Total Responses)**

**Figure 7: Sources of Awareness on Agricultural Careers (Percentage)**

**Inference:** Among the 69 students surveyed, 36.2% reported learning about agricultural career options through all listed sources, showing diverse exposure channels. College curriculum was a key source for 34.8% of respondents, followed by social media and the internet (23.2%), family and friends (20.3%), and seminars or workshops (15.9%). As students could select multiple options, these figures represent overlapping sources of awareness. Overall, the findings suggest that academic programs and digital media significantly shape students’ understanding of agricultural careers, supported by personal and institutional interactions.

|  |  |
| --- | --- |
| **Source of Information** | **Count** |
| College Placement Cell / Faculty Guidance | 26 |
| Online Resources / Websites | 32 |
| Social Media / Blogs / Forums | 16 |
| Family / Friends / Relatives | 13 |
| Workshops / Seminars / Career Fairs | 11 |
| All of the Above | 13 |

**Primary Sources of Agricultural Career Information (Multiple Responses Allowed)**

**Figure 8: Primary Sources Students Rely on for Career Information (Percentage)**

**Table 8: Sources Students Rely on Most for Career Information (Total Responses)**

**Inference:** Among the 69 students surveyed, 46.4% rely primarily on online resources and websites for information about agricultural careers, highlighting the growing role of digital platforms. College placement cells and faculty guidance were identified by 37.7% of respondents, showing the importance of institutional support. Social media, blogs, and forums contributed 23.2%, while 18.8% mentioned family, friends, or relatives, and 15.9% cited workshops, seminars, or career fairs. Additionally, 18.8% indicated they use all sources collectively. As multiple selections were allowed, these figures reflect overlapping reliance. Overall, students access a diverse mix of institutional, digital, and personal sources, with online platforms and formal guidance being the most influential. This suggests that combining multiple channels could further enhance students’ awareness and decision-making regarding agricultural careers.

**Perception of Promising Nature of Agricultural Careers**

|  |  |
| --- | --- |
| **Perception Category** | **Responses** |
| Very Promising | 17 |
| Promising | 18 |
| Neutral | 21 |
| Not Promising | 9 |
| Not at all Promising | 4 |
| **Total** | **69** |

**Table 9: Students’ Perception of Agricultural Career Prospects (Total Responses)**

**Figure 9: Students’ Perception of Agricultural Career Prospects (Percentage)**

**Inference:** The survey results indicate that a majority of students hold a positive view of agricultural careers. Specifically, 24.6% of respondents consider a career in agriculture “very promising,” while 26.1% regard it as “promising,” together representing just over half of the participants. Neutral responses account for 30.4%, suggesting that a significant portion of students remain uncertain or may lack sufficient information to form a strong opinion. Meanwhile, 13% perceive agricultural careers as “not promising,” and 5.8% as “not at all promising,” reflecting a relatively small group with negative perceptions. These findings highlight that although optimism exists, a substantial number of students are ambivalent or skeptical. This underscores the importance of awareness initiatives, career guidance programs, and exposure to real-world agricultural opportunities to enhance understanding and confidence. Additionally, sharing success stories and highlighting emerging sectors within agriculture could help shift neutral or negative perceptions, motivating more students to recognize agriculture as a viable and rewarding career path.

|  |  |
| --- | --- |
| **Confidence Level** | **Responses** |
| Very Confident | 18 |
| Confident | 17 |
| Neutral | 20 |
| Not Confident | 11 |
| Not at all Confident | 3 |
| **Total** | **69** |

**Students’ Confidence in Securing Agricultural Jobs (Multiple Responses Allowed)**

**Figure 10: Confidence in Securing Agricultural Jobs (Percentage)**

**Table 10: Students’ Confidence in Agricultural Job Prospects (Total Responses)**

**Inference:** Among the 69 students surveyed, just over half (50.7%) feel confident about securing a suitable job in agriculture after graduation, with 26.1% reporting “very confident” and 24.6% “confident.” A notable proportion, 29%, remained neutral, suggesting that many students are uncertain about the nature of job opportunities or lack sufficient information regarding career prospects in the agricultural sector. Meanwhile, 15.9% of respondents are “not confident,” and 4.3% are “not at all confident,” indicating that a smaller group faces apprehensions about finding suitable employment. As multiple selections were allowed, these percentages reflect overlapping preferences. These results underscore the need for targeted interventions such as career counselling, internships, skill development programs, and industry exposure to improve students’ understanding of the job market. By strengthening guidance and practical experience, educational institutions can enhance student confidence and better prepare undergraduates to pursue rewarding careers in agriculture. Furthermore, aligning academic curriculum with industry needs and showcasing success stories of agricultural professionals can help motivate students and reduce uncertainties about career prospects in the sector.

**Preferred Career-Related Support from Colleges (Multiple Responses Allowed)**

|  |  |
| --- | --- |
| **Type of Support** | **Count** |
| Internship Opportunities | 36 |
| Workshops / Seminars on Careers | 27 |
| Mentorship from Faculty / Professionals | 21 |
| Guidance on Agribusiness / Startups | 20 |
| Information on Government / Private Sector Jobs | 34 |
| Placement Opportunities | 32 |

**Figure 11: Types of Career-Related Support Students Desire (Percentage)**

**Table 11: Types of Career-Related Support Students Desire (Total Responses)**

**Inference:** Among the 69 students surveyed, the most commonly desired support includes internship opportunities (52.2%) and information on government or private sector jobs (49.3%), highlighting the importance of hands-on experience and clear career pathways. Placement opportunities were also highly sought after (46.4%), followed by workshops or seminars on careers (39.1%), mentorship from faculty or professionals (30.4%), and guidance on agribusiness or startups (29%). As multiple selections were allowed, these percentages reflect overlapping preferences. Overall, the findings suggest that students seek a combination of practical exposure, professional guidance, and structured career support to better prepare for diverse opportunities in the agricultural sector. Providing such comprehensive support could significantly enhance students’ employability and confidence in pursuing agricultural careers.

|  |  |
| --- | --- |
| **Motivating Factor** | **Count** |
| Interest in Farming / Agriculture | 41 |
| Financial Stability | 20 |
| Innovation / Entrepreneurship | 27 |
| Family Tradition / Expectations | 11 |
| Contribution to Society / Sustainability | 23 |
| Research and Development | 18 |

**Motivating Factors for Pursuing a Career in Agriculture (Multiple Responses Allowed)**

**Figure 12: Factors Motivating Students to Pursue Agricultural Careers (Percentage)**

**Table 12: Factors Motivating Students to Pursue Agricultural Careers (Total Responses)**

**Inference:** Among the 69 students surveyed, the primary motivation for pursuing a career in agriculture is a personal interest in farming or the sector itself (59.4%). Innovation and entrepreneurship opportunities motivate 39.1% of students, while 31.9% are driven by the desire to contribute to society and sustainability. Financial stability is a factor for 29%, and research and development attracts 26.1% of respondents. Family tradition or expectations influence 15.9% of students. As participants could select multiple options, these percentages reflect overlapping motivations. Overall, the findings suggest that personal interest, societal contribution, and entrepreneurial potential are key drivers shaping students’ decisions to pursue careers in agriculture. This also highlights the importance of creating supportive environments that nurture innovation, practical exposure, and community-oriented initiatives within agricultural education.

|  |  |
| --- | --- |
| **Perceived Challenge** | **Count** |
| Low Financial Returns | 31 |
| Limited Job Opportunities | 44 |
| Lack of Modern Facilities / Technology | 15 |
| Rural-Urban Migration / Urban Preference | 21 |
| Policy / Market Uncertainties | 17 |
| Others | 8 |

**Perceived Challenges in Pursuing a Career in Agriculture (Multiple Responses Allowed)**

**Figure 13: Students’ Perceived Challenges in Agricultural Careers (Percentage)**

**Table 13: Students’ Perceived Challenges in Agricultural Careers (Total Responses)**

**Inference:** Among the 69 students surveyed, the most commonly perceived challenge in pursuing a career in agriculture is limited job opportunities, identified by 63.8% of respondents. Low financial returns are a concern for 44.9%, while rural-urban migration and urban preference were noted by 30.4%. Policy and market uncertainties were perceived as obstacles by 24.6%, and lack of modern facilities or technology by 21.7%. Other challenges were cited by 11.6% of students. As multiple selections were allowed, these percentages reflect overlapping concerns. Overall, the findings suggest that structural, economic, and societal factors significantly influence students’ perceptions of agricultural careers, highlighting the need for targeted interventions, policy support, and modernization initiatives to make the sector more attractive and viable. Internships, skill development programs, and exposure to emerging agricultural technologies could help address these concerns, while awareness of government schemes and private sector opportunities may enhance students’ confidence in pursuing sustainable and rewarding careers in agriculture.

|  |  |
| --- | --- |
| **Category** | **Responses** |
| Government Exams | 36 |
| Agri-business / Entrepreneurship | 15 |
| Private sector jobs | 10 |
| Bank Exams | 6 |
| No idea | 2 |
| **Total** | **69** |

**Students’ Preferred Career Types after Graduation**

**Figure 14: Career Types Students Are Most Interested in (Percentage)**

**Table 14: Career Types Students Are Most Interested in (Total Responses)**

**Inference:** Among the 69 students surveyed, the majority (52.2%) are interested in government exams, reflecting a preference for stable employment. Agri-business and entrepreneurship attracted 21.7%, while private sector jobs and bank exams were chosen by 14.5% and 8.7%, respectively. Overall, students prioritize stability and growth potential, with some also inclined toward entrepreneurship. These findings highlight the need for career guidance and support for both government-oriented and entrepreneurial pathways.

**Likelihood of Pursuing Further Studies in Agriculture**

**Figure 15: Students’ Likelihood of Pursuing Masters or PhD in Agriculture (Percentage)**

|  |  |
| --- | --- |
| **Likelihood Level** | **Responses** |
| Very Likely | 14 |
| Likely | 12 |
| Neutral | 12 |
| Unlikely | 13 |
| Very Unlikely | 18 |
| **Total** | **69** |

**Table 15: Students’ Likelihood of Pursuing Masters or PhD in Agriculture (Total Responses)**

**Inference:** Among the 69 students surveyed, 20.3% were “very likely” and 17.4% “likely” to pursue higher studies in agriculture, totalling 37.7%. Meanwhile, 17.4% remained neutral, 18.8% were “unlikely,” and 26.1% “very unlikely.” These results suggest limited interest in pursuing postgraduate or doctoral studies, possibly due to a lack of awareness or a preference for immediate employment. Strengthening academic guidance, scholarships, and exposure to research opportunities could motivate more students to consider advanced education in agriculture.

**Family Support Toward Pursuing a Career in Agriculture**

|  |  |
| --- | --- |
| **Support Level** | **Responses** |
| Very Supportive | 32 |
| Supportive | 27 |
| Neutral | 9 |
| Unsupportive | 1 |
| Very Unsupportive | 0 |
| Total | 69 |

**Table 16: Students’ Perception of Family Support in Pursuing a Career in Agriculture (Total Responses)**

**Figure 16: Students’ Perception of Family Support in Pursuing a Career in Agriculture (Percentage)**

**Inference:** Among the 69 students surveyed, 46.4% reported their families as “very supportive” and 39.1% as “supportive,” showing that most students receive strong encouragement to pursue agricultural careers. Only 13% expressed neutrality, while 1.4% felt their families were unsupportive. The absence of “very unsupportive” responses indicates an overall positive family attitude toward agriculture. This strong support network may play a crucial role in motivating students to consider agriculture as a viable and respected profession.

**Key Factors Influencing Career Choice in Agriculture (Multiple Responses Allowed)**

|  |  |
| --- | --- |
| **Factor** | **Responses** |
| Financial Security | 43 |
| Job Satisfaction | 49 |
| Social Recognition | 18 |
| Innovation Opportunities | 22 |
| Contribution to Sustainable Development | 25 |

**Figure 17: Factors Considered Important When Choosing a Career in Agriculture (Percentage)**

**Table 17: Factors Considered Important When Choosing a Career in Agriculture (Total Responses)**

**Inference:** Among the 69 students surveyed, job satisfaction (71%) and financial security (62.3%) emerged as the most important factors influencing career choice in agriculture. Other notable considerations included contribution to sustainable development (36.2%), innovation opportunities (31.9%), and social recognition (26.1%). Since students were allowed to select multiple factors, these results highlight a multidimensional view of agricultural careers—balancing personal fulfillment, stability, and societal impact. The findings suggest that promoting agriculture as both rewarding and secure could further enhance students’ interest and engagement in the sector. Furthermore, emphasizing opportunities for research, entrepreneurship, and sustainable practices can make agriculture more appealing. Integrating practical experiences and industry exposure within the curriculum may also help students better understand career pathways. Strengthening mentorship and showcasing role models in agriculture could reinforce positive perceptions and motivate students to pursue this field.

**Support Measures to Facilitate Careers in Agriculture (Multiple Responses Allowed)**

|  |  |
| --- | --- |
| **Support Measure** | **Responses** |
| Scholarships / Financial Assistance | 49 |
| Internship Opportunities | 32 |
| Mentorship Programs | 23 |
| Entrepreneurship Training / Workshops | 29 |
| Access to Modern Technology / Tools | 28 |
| Networking Events / Career Fairs | 23 |

**Table 18: Support Measures Students Consider Helpful for Pursuing Agricultural Careers (Total Responses)**

**Figure 18: Support Measures Students Consider Helpful for Pursuing Agricultural Careers (Percentage)**

**Inference:** Among the 69 students surveyed, scholarships or financial assistance (71%) were identified as the most important support measure, followed by internship opportunities (46.4%) and entrepreneurship training/workshops (42%). Access to modern technology or tools (40.6%) and mentorship programs or networking events (33.3% each) were also considered valuable. These results indicate that both financial and experiential support are crucial in motivating students to pursue agricultural careers. Providing a combination of scholarships, practical exposure, skill development, and networking opportunities can significantly enhance students’ confidence, preparedness, and long-term commitment to careers in agriculture. Additionally, consistent guidance and access to real-world projects can help students better understand industry expectations and career pathways.

***OVERALL DISCUSSION***

The results of this study reveal an encouraging trend: a substantial majority (over 75%) of undergraduate agricultural students in Coimbatore expressed positive interest in agricultural careers. This finding aligns with the earlier work of Arunachalam et al. (2020), who reported similar aspirations among TNAU undergraduates, and confirms that agriculture continues to be viewed as a viable professional option despite economic uncertainties. The predominance of respondents from rural backgrounds (67%) further reinforces the idea that rural upbringing and direct exposure to farming practices strongly influence students’ positive attitudes toward agriculture *(Naik et al., 2024; Kamali et al., 2025).*

Nevertheless, awareness and confidence gaps persist. While 74% of the students were aware of agricultural career opportunities, many lacked understanding of emerging roles in the private sector, agritech, and research organizations. This limited awareness mirrors the findings of *Niranjan et al. (2022)*, who emphasized that exposure to modern agricultural enterprises and policy awareness significantly enhances willingness to pursue farming as a career. Most students in this study relied on online sources (46.4%) and college placement guidance (37.7%) for career information, demonstrating the growing influence of digital media but also highlighting the need for structured institutional mentorship.

Career preferences showed that 52% of students favoured government employment—reflecting enduring perceptions of stability and prestige associated with public-sector jobs *(Arunachalam et al., 2020; Niranjan et al., 2022)*. Only 21.7% indicated interest in agri-entrepreneurship, echoing previous research that identified financial constraints, risk aversion, and inadequate mentorship as barriers to self-employment *(Jayasudha & Shantha Sheela, 2021; Kavithambika et al., 2022)*. Despite this, a considerable number expressed enthusiasm for innovation and sustainability, showing potential to cultivate future agri-innovators if supported through policy and institutional mechanisms.

The students’ confidence levels were moderate, with about half feeling capable of securing suitable agricultural jobs. This reflects broader trends of employability anxiety reported by *Sebastian (2021)*, who emphasized the mismatch between academic learning and employer expectations. Moreover, 50% of respondents viewed agricultural careers as promising or very promising, although 30% remained neutral—an indication of uncertainty rather than disinterest. Addressing this neutral segment through awareness drives and exposure visits could significantly enhance overall engagement.

Regarding motivation, the strongest drivers were intrinsic interest in agriculture (59%), opportunities for innovation and entrepreneurship (39%), and the desire to contribute to sustainability (32%). These align with contemporary research highlighting youth interest in sustainable development and climate-smart agriculture *(Jayashree et al., 2024; Amaran & Krishnamoorthy, 2023).* On the contrary, limited job opportunities (63.8%) and low financial returns (44.9%) emerged as major deterrents—consistent with findings *by Niranjan et al. (2022) and Naik et al. (2024).*

Students also expressed a strong need for institutional and policy support. Scholarships (71%), internships (46%), and entrepreneurship workshops (42%) were rated as the most desirable measures for improving career readiness. These preferences align with *Nivedha et al. (2025),* who found that flexible, well-supported programs enhance students’ engagement and practical competencies. Collectively, these results underscore that while agricultural students demonstrate enthusiasm, tangible support in the form of skill development, financial incentives, and mentorship remains crucial for transforming aspirations into sustainable careers.

***RECOMMENDATIONS***

**Comprehensive Career Guidance and Mentorship Networks**: Establishing structured career counselling cells and alumni mentorship programs can help students explore multiple career paths beyond government jobs. Regular seminars featuring entrepreneurs, researchers, and policy experts can broaden professional awareness *(Krishnaveni & Arunachalam, 2020).*

**Promotion of Agripreneurship and Start-up Ecosystems**: Introducing seed funding schemes, incubation centres, and entrepreneurial training within colleges can empower students to initiate agri-based ventures. This aligns with recommendations by *Kavithambika et al. (2022) and Jayasudha and Shantha Sheela (2021),* who emphasized the need for institutional support to translate ideas into enterprises.

**Industry–Academia Collaboration and Internships**: Stronger linkages with agro-industries, research institutes, and private organizations can provide internships, apprenticeships, and placements. Such partnerships enhance employability and expose students to contemporary technologies and business models *(Naik et al., 2024).*

**Financial and Policy Support Mechanisms**: Expanding scholarships, subsidized loans, and start-up grants for agricultural graduates can mitigate economic constraints. Digital dissemination of information about government schemes and entrepreneurship programs can increase accessibility *(Niranjan et al., 2022).*

**Technology Integration and Innovation Exposure**: Establishing AI and data analytics labs within agricultural universities, as suggested by *Jayashree et al. (2024)*, can improve technological literacy and prepare students for modern agri-professions.

**Recognition and Motivation Strategies**: Media campaigns and institutional awards highlighting successful young farmers, innovators, and agri-entrepreneurs can elevate the social prestige of agriculture *(Amaran & Krishnamoorthy, 2023*).

**Encouraging Higher Education and Research**: Providing research fellowships, project-based learning, and international collaborations can motivate students to pursue postgraduate studies in agriculture *(Nivedha et al., 2025).*

***CONCLUSION***

The present study concludes that undergraduate agricultural students in Coimbatore District hold generally positive perceptions and aspirations toward agricultural careers, though tempered by concerns over job scarcity and income instability. Their interest is driven by intrinsic motivation, family support, and exposure to innovation, but hindered by limited awareness of emerging opportunities in the private and research sectors. The study corroborates earlier findings *(Arunachalam et al., 2020; Niranjan et al., 2022; Naik et al., 2024)* that economic factors, social perceptions, and institutional preparedness significantly shape students’ career choices.

It also underscores the importance of policy interventions aimed at enhancing employability, promoting entrepreneurship, and improving access to modern technologies. Strengthening industry linkages, offering financial incentives, and embedding real-world experience in the curriculum will be key to bridging the gap between academic preparation and career realization.

Ultimately, empowering agricultural students through skill-based education, mentorship, and innovation-driven opportunities will not only enhance their career prospects but also contribute to the long-term sustainability of India’s agricultural sector. When appropriately supported, these young graduates can serve as catalysts for technological advancement, rural transformation, and inclusive growth, ensuring that agriculture remains both a noble and a lucrative profession in the decades to come.

***REFERENCES***

Amaran, K., & Krishnamoorthy, A. (2023). Perception of students on agriculture as an occupation: A reference to Pondicherry University postgraduate students. *International Journal of Social Sciences and Management, 10*(3), 55–59. <https://doi.org/10.3126/ijssm.v10i3.57134>

Arunachalam, K. S., Shri, K., & Sasmitha, R. (Trans.). (2020). An analysis of the aspirations of undergraduate agricultural students. *Indian Journal of Extension Education, 56*(4), 14–18. <https://journals.acspublisher.com/index.php/ijee/article/view/4285>

Jayashree, V., Ramasubramanian, M., Karthikeyan, C., Gnanasanjevi, G., & Kamali, S. P. (2024). Agricultural students’ perceptions of artificial intelligence: Challenges and opportunities in Tamil Nadu, India. *Journal of Scientific Research and Reports, 30*(12), 255–262. <https://doi.org/10.9734/jsrr/2024/v30i122670>

Jayasudha, J., & Shantha Sheela, M. (2021). Attitude of agricultural students towards agricultural entrepreneurship. *Madras Agricultural Journal, 108*(1–3), 119–122. <https://doi.org/10.29321/MAJ.10.000489>

Kavithambika, S., Palanichamy, N. V., Sheela, M. S., & Vasanthi, R. (2022). Entrepreneurial competency mapping: A study with reference to the educated youth of Tamil Nadu. *Asian Journal of Agricultural Extension, Economics & Sociology, 40*(8), 262–270. <https://doi.org/10.9734/ajaees/2022/v40i830964>

Krishnaveni, T. R., & Arunachalam, R. (2020). Employers’ placement expectations in agricultural graduates of Tamil Nadu Agricultural University. *Indian Journal of Extension Education, 56*(2), 83–88. <https://epubs.icar.org.in/index.php/IJEE/article/view/107765>

Naik, B. M., Kaur, R., & Raveendran, A. (2024). Factors influencing occupational perception of agricultural undergraduates towards agriculture as a profession. *Asian Journal of Agricultural Extension, Economics & Sociology, 42*(8), 11–18. <https://doi.org/10.9734/ajaees/2024/v42i82526>

Niranjan, S., Singh, D. R., & Krishnakumare, B. (2022). Factors influencing agricultural students’ willingness to pursue farming as a career. *Indian Journal of Economics and Development, 18*(2), 292–302. <https://doi.org/10.35716/IJED/21135>

Nivedha, C. K., Sriram, N., Balasubramaniam, P., Niramala Devi, M., Prahadeeswaran, M., & Patil, S. G. (2025). Attitude of distance learners towards the Bachelor of Farm Technology degree programme and its impact on agricultural knowledge and practices. *Plant Science Today, 11*(sp4). <https://doi.org/10.14719/pst.5846>

Sebastian, S. (2021). Employability skills: A perception of agricultural students, graduates and employers. *Journal of Extension Education, 32*(2), 6508–6514. <https://doi.org/10.26725/JEE.2020.2.32.6508-6514>

Velayudhan, P. K., Singh, A., Jha, G. K., Kumar, P., Thanaraj, K. I., & Srinivasa, A. K. (2021). What drives the use of organic fertilizers? Evidence from rice farmers in Indo-Gangetic Plains, India. *Sustainability, 13*(17), 9546. <https://doi.org/10.3390/su13179546>