



Assessing the Attitude of Entrepreneurs towards Agri-Business in Tamil Nadu Using a Standardized Measurement Scale

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: <https://doi.org/10.9734/ajaees/2024/v42i122658>

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/128088>

Original Research Article

Received: 11/10/2024

Accepted: 18/12/2024

Published: 24/12/2024

ABSTRACT

This study examines the attitudes of entrepreneurs towards agribusiness, focusing on how various factors influence their entrepreneurial ventures in the agricultural sector. The study employs a robust methodology, using Thurstone and Chave's scaling technique to construct and validate an attitude scale. Results indicate that the majority of entrepreneurs (51.33%) exhibit a moderately

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favorable attitude towards agribusiness, with a notable proportion 28.67% showing a highly favorable disposition. This favorable attitude is attributed to factors such as opportunity identification, resource pooling and resilience, despite the inherent risks and seasonal fluctuations viz., weather conditions, supply and demand etc., associated with agribusiness.

Keywords: Agribusiness; entrepreneurial attitude; attitude scale; validity; reliability.

1. INTRODUCTION

Entrepreneurship in the agricultural sector, commonly referred to as agribusiness, is increasingly recognized as a vital component for economic development and food security. Understanding the attitudes of entrepreneurs towards agribusiness is crucial for fostering a supportive environment that can enhance the success and sustainability of agricultural enterprises (Ulvenblad et al., 2020; Kanwat et al., 2011; Burman et al., 2020). Existing literature suggests that entrepreneurs in agribusiness display varied attitudes influenced by personal, social, and economic factors. Carree and Thurik (2002) emphasize the entrepreneurial ability to identify and seize new profit opportunities. Friijs et al. (2002) describe the multifaceted roles of entrepreneurs, including innovation and decision-making. The emotional resilience of entrepreneurs, as noted by Cross and Travaglione (2003), plays a significant role in overcoming challenges. Raman (2004) and Swinney and Runyan (2007) further illustrate the importance of motivational factors and support systems to build attitude of entrepreneurs. This study aims to build on these findings by employing a systematic approach to evaluate the attitudes of agribusiness entrepreneurs and to identify key factors that influence their entrepreneurial endeavors.

2. REVIEW OF LITERATURE

2.1 Attitude of Entrepreneurs towards Agribusiness

Previous studies have reported differential attitudinal levels among farmers towards agri-entrepreneurship. Entrepreneurs excel at

perceiving and seizing new profit opportunities (Carree and Thurik, 2002). Entrepreneurship often encompass roles such as coordination, innovation, uncertainty bearing, capital supply, decision-making, ownership, and resource allocation (Friijs et al. 2002). Entrepreneurs' emotional intelligence allows them to convert adversity into determination, frustration into motivation, and stress into self-reflection (Cross and Travaglione, 2003). Motivational factors such as initiative, third-party assistance, encouragement from family and friends, skills, and experience contribute significantly to the success of entrepreneurs (Raman, 2004). Generating income and creating jobs for themselves, along with support from family and friends, are primary motivators for successful entrepreneurship (Swinney and Runyan, 2007). Method of summated rating scale, by Likert3 (1932) was used to construct the attitude scale of rural youth towards agri entrepreneurship (Shivacharan et al, 2017). The student attitudes were measured by their tendency toward entrepreneurship which was based on four domains: personal skills, technical skills, managerial skills and leadership skills (Wajeha Thabit Al-Ani et al, 2020)

3. METHODOLOGY

3.1 Attitude of Entrepreneurs towards Agri-entrepreneurship

“Random sample method” was adopted to select the respondents from the Entrepreneurial Hubs. Out of total population of 600, one-fourth of them were selected as sample respondents from each zone. Totally 150 respondents were selected for the study.

The details of the selection of respondents:

Entrepreneurial Hubs	Total respondents	Selected respondents
Business Planning and Development Unit, TNAU, Coimbatore	200	50
Agricultural College & Research Institute, Madurai	140	35
Tamil Nadu Rice Research Institute, Aduthurai	100	25
Oilseeds Research Station, Tindivanam	160	40
Total	600	150

The scale was constructed using the 'Equal Appearing Interval' scaling technique developed by Thurstone and Chave (1929). The steps involved in constructing the attitude scale are detailed below.

3.2 Operationalization of Attitude of Entrepreneurs towards Agripreneurship

In this study, attitude was operationalized as the mental disposition of entrepreneurs towards agripreneurship, ranging from unfavorable to favorable.

3.3 Collection of Attitude Items

Statements concerning the psychological object, 'agripreneurship,' were gathered based on a

literature review and discussions with scientists and extensionists. A total of 80 statements were collected, organized, and structured as items. These items were screened according to the criteria suggested by Edwards (1969) for editing statements used in attitude scale construction. Ultimately, 65 items were selected, forming the universe of content.

3.4 Item Scoring and Computation of Scale Values and Q Values

The 65 statements were rated by 60 judges, comprising scientists from State Agricultural Universities, on a five-point continuum ranging from most unfavorable to most favorable. Scale values and Q values for the statements were computed using Thurstone and Chave's (1929) 'Equal Appearing Interval' scaling technique.

Table 1. List of statements sent for judges opinion

Sl. No.	Statements	MUF	UF	N	F	MF
1.	Agribusiness Entrepreneurs have the ability to identify goods or services what people want					
2.	Agribusiness Entrepreneurs do not have the tendency to identify unmet customer needs					
3.	Agribusiness Entrepreneurs look for products that provide real benefits					
4.	Agribusiness Entrepreneurs capture high-quality business opportunity					
5.	Agribusiness Entrepreneurs are over enthused to initiate business					
6.	Agribusiness Entrepreneurs have personal bias in assessing consequences of business					
7.	Agribusiness Entrepreneurs possess over confidence to start a business without adequate resources					
8.	Agribusiness Entrepreneurs have good social network					
9.	Agribusiness Entrepreneurs take decision by interacting with team members					
10.	Agribusiness Entrepreneurs have decide on their own without consulting others					
11.	Agribusiness Entrepreneurs have low intention to start business					
12.	Agribusiness Entrepreneurs are the first persons to initiate any new activities					
13.	Agribusiness Entrepreneurs try to learn from mistakes					
14.	Prior experience is essential to support Agribusiness Entrepreneurs to make business successful					
15.	Family motivation is necessary for the entrepreneur to succeed their business					
16.	Previous experience have no association with the business performance of entrepreneurs					

Sl. No.	Statements	MUF	UF	N	F	MF
17.	Business related education / training helps to improve the business in right way					
18.	Management know-how is important for Agribusiness Entrepreneurs to run a business					
19.	Age is one of the important criteria to start a business					
20.	Education is merely a support factor for any entrepreneur to start a business					
21.	Continuous practice in business is needed for Agribusiness Entrepreneurs to gain management know-how					
22.	Industrial experience supports the entrepreneurs to run in a better way					
23.	Parents entrepreneurial skill creates self-confidence in the minds of kids/next generation					
24.	Agribusiness Entrepreneurs have the passion to become self-employed					
25.	Agribusiness Entrepreneurs are eager to provide jobs to others through businesses					
26.	Agribusiness Entrepreneurs have an aversion to work under others as an employee					
27.	Agribusiness Entrepreneurs have attribute to develop new products or innovation					
28.	Agribusiness Entrepreneurs can easily allocate and manage time for business and family					
29.	Agribusiness Entrepreneurs allocate time to spend with family on their own					
30.	It is possible to contribute more time with business by entrepreneurs					
31.	Agribusiness Entrepreneurs possess good communication skill					
32.	Opportunity alertness is more in the mind of entrepreneur to grab chance					
33.	Agribusiness Entrepreneurs are interested to work independently					
34.	Agribusiness Entrepreneurs rummage support to develop new products by experimentation					
35.	Agribusiness Entrepreneurs have the tendency to take bold actions					
36.	Agribusiness Entrepreneurs possess forward looking behaviour to run a business					
37.	Futuristic perspective of an entrepreneur is a barrier to look into the present conditions					
38.	At the initial stage, there lacks encouragement to start business by an entrepreneur					
39.	Agribusiness Entrepreneurs have quick decision making ability					
40.	Agribusiness Entrepreneurs have talent to face challenges					
41.	Out-of-box thinking (above normal person) in business is high among entrepreneurs					
42.	Agribusiness Entrepreneurs easily prioritize the work with consecutive plan					

Sl. No.	Statements	MUF	UF	N	F	MF
43.	Agribusiness Entrepreneurs are willing to take risks					
44.	Agribusiness Entrepreneurs are willing to make personal sacrifices for their business					
45.	Agribusiness Entrepreneurs have the ability to continue despite setbacks					
46.	Agribusiness Entrepreneurs are ready to adapt new skills/approaches					
47.	Agribusiness Entrepreneurs have determined, dedicated and committed for their business					
48.	Agribusiness Entrepreneurs set specific vision to achieve					
49.	Agribusiness Entrepreneurs have flexibility for changes in business environment					
50.	Agribusiness Entrepreneurs make timely decisions to implement					
51.	Agribusiness Entrepreneurs encourage and accept criticism					
52.	Agribusiness Entrepreneurs maintain a strong work ethic					
53.	Agribusiness Entrepreneurs rebound quickly from setbacks					
54.	Agribusiness Entrepreneurs get out of their comfort zone periodically to pursue something important to elevate the business					
55.	Agribusiness Entrepreneurs uses resources efficiently					
56.	Agribusiness Entrepreneurs have the ability to turn ideas into reality					
57.	Agribusiness Entrepreneurs possess sound financial background					
58.	Agribusiness Entrepreneurs able to pool resources from financial institutions					
59.	Finance position is a hindrance to start business					
60.	Agribusiness Entrepreneurs join as a member in organisation which support their business					
61.	Agribusiness Entrepreneurs seeking guidance for marketing the product in member organisation					
62.	Agribusiness Entrepreneurs use Mass media for quick dissemination and popularization of technologies/products					
63.	Agribusiness Entrepreneurs participate in promotional activities like exhibition, workshop, forum etc.					
64.	Agribusiness Entrepreneurs have adequate knowledge on government schemes related to entrepreneurship development					
65.	Agribusiness Entrepreneurs approach government officials to acquire financial assistance					

Note: MUF- Most unfavourable UF- Unfavourable N- Neutral
 F- Favourable MF- Most favourable

Table 2. Compartment of Scale Values for the Selection of the Attitude Items

Statement No.	Q Value	S Value	Difference	Cumulative Frequency	Compartments
48	1.09	1.44			I
50	1.08	1.44	0.00		
3	1.00	1.50	0.06	0.06	
18	1.10	1.54	0.04	0.10	
52	1.31	1.57	0.03	0.13	
36	1.39	1.58	0.01	0.14	
1	0.52	1.63	0.05	0.19	
56	1.13	1.63	0.00	0.19	
31	1.10	1.65	0.02	0.21	
17	1.12	1.65	0.00	0.21	
41	1.16	1.67	0.02	0.23	
32	1.14	1.72	0.05	0.28	
43	1.35	1.72	0.00	0.28	
55	1.08	1.73	0.01	0.29	
64	1.09	1.74	0.01	0.30	
46	1.14	1.75	0.01	0.31	II
63	1.08	1.76	0.01	0.32	
4	1.34	1.78	0.02	0.34	
13	1.19	1.81	0.03	0.37	
8	1.18	1.82	0.01	0.38	
47	1.31	1.83	0.01	0.39	
42	1.40	1.87	0.04	0.43	
14	1.63	1.88	0.01	0.44	
27	1.30	1.89	0.01	0.45	
35	1.31	1.89	0.00	0.45	
2	0.55	1.91	0.02	0.47	
49	0.51	1.92	0.01	0.48	
62	0.51	1.92	0.00	0.48	
61	0.42	1.94	0.02	0.5	
65	0.37	1.94	0.00	0.5	
33	1.22	1.95	0.01	0.51	
39	1.23	1.97	0.02	0.53	
40	1.25	1.98	0.01	0.54	
9	0.41	1.99	0.01	0.55	III
58	0.36	2.07	0.08	0.63	
60	0.72	2.09	0.02	0.65	
51	0.69	2.10	0.01	0.66	
21	0.58	2.11	0.01	0.67	
11	0.57	2.12	0.01	0.68	
15	0.68	2.13	0.01	0.69	
44	1.70	2.14	0.01	0.7	
23	1.67	2.17	0.03	0.73	
25	0.67	2.17	0.00	0.73	
30	1.45	2.17	0.00	0.73	
45	1.82	2.17	0.00	0.73	
54	0.62	2.18	0.01	0.74	
22	1.54	2.19	0.01	0.75	
5	1.56	2.21	0.02	0.77	
59	1.49	2.27	0.06	0.83	
24	1.67	2.28	0.01	0.84	
34	0.65	2.31	0.03	0.87	
12	0.82	2.33	0.02	0.89	IV
53	0.66	2.36	0.03	0.92	

Statement No.	Q Value	S Value	Difference	Cumulative Frequency	Compartments
28	0.74	2.63	0.27	1.19	
38	1.05	2.73	0.10	1.29	V
37	1.03	3.00	0.27	1.56	VI
57	0.78	3.02	0.02	1.58	
29	0.85	3.05	0.03	1.61	
6	1.53	3.12	0.07	1.68	
26	0.72	3.36	0.24	1.92	VII
20	1.03	3.38	0.02	1.94	
7	0.93	3.65	0.27	2.21	VIII
16	0.96	3.68	0.03	2.24	
19	1.11	3.71	0.03	2.27	
10	0.55	4.12	0.41	2.68	IX

Thereby, nine items were selected with equal appearing interval and with a uniform distribution along the psychological continuum

Table 3. Final set of attitude items selected with corresponding S and Q values and the nature of statement

Statement No.	Scale Value	Q Value	Statement	Nature of the statement
10	4.12	0.55	Agribusiness Entrepreneurs decide on their own without consulting others	Favourable
7	3.65	0.93	Agribusiness Entrepreneurs possess over confidence to start a business without adequate market research	Unfavourable
26	3.36	0.72	Agribusiness Entrepreneurs have an aversion to work under others as an employee	Favourable
57	3.02	0.78	Agribusiness Entrepreneurs possess sound financial background	Unfavourable
38	2.73	1.05	Agribusiness Entrepreneurs possess forward looking behaviour to run a business	Favourable
53	2.38	0.66	Agribusiness Entrepreneurs rebound quickly from setbacks	Favourable
58	2.07	0.36	Agribusiness Entrepreneurs able to pool resources from financial institutions	Favourable
65	1.94	0.37	Agribusiness Entrepreneurs approach government officials to obtain financial assistance	Favourable
1	1.63	0.52	Agribusiness Entrepreneurs have the ability to identify goods or services what people want	Favourable

3.5 Selection of Attitude Items

Items with high scale values and low Q values were selected from each compartment to ensure that the items represented the content universe and covered various aspects of agripreneurship.

3.6 Reliability of the Scale

The reliability of the scale was assessed using the 'split-half' method. The nine selected attitude items were divided into two equal halves, and

administered separately to 30 entrepreneurs in a non-sample area. The scores were analyzed using the product-moment correlation test to determine half-test reliability, which was found to be 0.580, significant at the 5% level.

$$R_{whole} = (2r)/(1+r)$$

Where, r is the correlation coefficient between the two halves of the test

n is the factor by which the number of items will be multiplied.

Table 4. The scoring procedure for attitude

Nature of the statement	Continuum				
	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Favourable	7	5	4	3	1
Unfavourable	1	3	4	5	7

The reliability coefficient for the entire test, computed using the Spearman-Brown prophecy formula, was 0.742, indicating adequate reliability.

3.7 Content Validity of the Scale

Content validity was assessed by evaluating the representativeness of the items. Thirty judges rated each item on a four-point continuum of 'most adequately covers,' 'more adequately covers,' 'less adequately covers,' and 'least adequately covers.' With a mean score of 3.0, indicating that the scale most adequately covers the intended content, the scale was deemed valid.

3.8 Administration of the Scale

The nine selected attitude items were randomly arranged to prevent biased responses. A five-point continuum of 'strongly agree,' 'agree,' 'undecided,' 'disagree,' and 'strongly disagree' was used for responses.

The attitude score for each respondent was computed by summing the scores for each statement, ranging from 63 (maximum) to 9 (minimum). Responses were categorized as less favorable, moderately favorable, or highly favorable based on the cumulative frequency method.

4. RESULTS AND DISCUSSION

4.1 Analysis of Attitude of Entrepreneurs towards Agribusiness

The Table 4 indicates that the majority of entrepreneurs (51.33%) had a moderately favorable attitude towards agribusiness, followed by 28.67% with a highly favorable attitude and 20.00% with a less favorable attitude. Key factors influencing a favorable attitude include the ability to identify opportunities, confidence in managing resources, and resilience. Despite the risks and seasonal fluctuations associated with agribusiness, entrepreneurs with prior farming experience show a strong preference for this sector. These factors contribute to the moderate to highly favorable attitudes observed.

4.2 Limitations of the Study

- Sample Size and Generalizability:** The study's findings may be limited by the sample size and specific characteristics of the respondents. To enhance the generalizability of the results, a larger and more diverse sample could be considered.
- Cultural and Regional Nuances:** The study's findings may be specific to the cultural and regional context of the study area. Further research is needed to explore how attitudes towards agribusiness vary across different regions and cultures.
- Depth of Analysis:** While the study provides valuable insights into entrepreneurs' attitudes, a deeper exploration of the underlying motivations, barriers, and facilitators of agribusiness ventures could be undertaken.

4.3 Future Directions for Research

- Comparative Analysis:** A comparative analysis of entrepreneurs' attitudes and behaviors across different countries or regions could provide valuable insights into the global landscape of agribusiness entrepreneurship.
- Qualitative Research:** Qualitative research methods, such as interviews and case studies, can provide a deeper understanding of the factors influencing entrepreneurs' decisions and the challenges they face.
- Digital Technologies and Agribusiness:** The impact of digital technologies on agribusiness entrepreneurship can be explored in future research. This includes the use of e-commerce, mobile technologies and data analytics to improve efficiency, market access and decision-making.
- Social and Environmental Impact:** The social and environmental impact of agribusiness ventures can be assessed. This includes the impact on rural livelihoods, food security, and sustainable agriculture practices.

Table 5. Distribution of entrepreneurs based on their attitude levels towards agribusiness: (n=150)

S. No.	Category	No. of respondents	Percentage
1.	Less favourable	30	20.00
2.	Moderately favourable	77	51.33
3.	Highly favourable	43	28.67
Total		150	100.00

5. CONCLUSION

The analysis of attitudes towards agribusiness reveals a predominantly moderate to highly favorable disposition among entrepreneurs. The study's findings suggest that the entrepreneurs' ability to identify opportunities, their confidence in managing resources and their resilience in the face of challenges are critical determinants of their attitude towards agribusiness. Despite the risks associated with seasonal fluctuations in agriculture, entrepreneurs who have prior experience in farming or related activities demonstrate a strong inclination towards agribusiness. The validated attitude scale used in this study provides a reliable measure of entrepreneurial disposition, offering valuable insights for policymakers and support organizations aiming to foster a conducive environment for agribusiness ventures. Encouraging and supporting entrepreneurs through motivational strategies and resource allocation can further enhance their positive attitudes and contribute to the overall success of the agribusiness sector.

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1. Gemini

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

Al-Ani, W. T., Al Musawi, A. S., & Osman, M. E. T. (2020). Development of a scale for measuring university students' attitudes toward entrepreneurship in Oman. *SSRG*

International Journal of Humanities and Social Science, 7(1), 1–11. <https://doi.org/10.14445/23942703/IJHSS-V7I1P101>

Burman, R. R., Goswami, A. K., Sharma, J. P., Sahu, S., Gills, R., Rani, A., & Roy, P. (2020). Behavioural pattern of farmer entrepreneurs and success factors for establishment of agribusiness ventures under ACABC scheme. *Indian Journal of Agricultural Sciences*, 90(9), 1653–1657.

Carree, M., & Thurik, R. A. (2002). The impact of entrepreneurship on economic growth. In Z. Acs & D. B. Audretsch (Eds.), *International handbook of entrepreneurship research* (pp. xx-xx). Kluwer Academic Publishers.

Cross, B., & Travaglione, A. (2003). The untold story: Is the entrepreneur of the 21st century defined by emotional intelligence? *International Journal of Organizational Analysis*, 11, 221–228.

Edwards, A. L. (1969). *Techniques of attitude scale construction*. Vakils, Feffer and Simons Pvt. Ltd.

Frijs, C., Paulsson, T., & Karlsson, C. (2002). Entrepreneurship and economic growth: A critical review of empirical and theoretical research. Institute for Tillväxtpolitiska Studier.

Kanwat, M., Chargoitra, M., Kumar, P. S., & Mishra, B. P. (2011). Attitude of the agricultural graduate towards agri-clinic and agri-business centres in Arunachal Pradesh. *Indian Research Journal of Extension Education*, 11(1), 117–119.

Raman, R. (2004). Motivating factors of educated self-employed in Kerala: A case study of Mulanthuruthy Block Ernakulum. Discussion Paper No. 90. Kerala Research Programme on Local Development, Center for Development Studies.

Shivacharan, G., Sudharani, V., Vasantha, R., & Supriya, K. (2017). Construction of attitude scale for rural youth towards agri-entrepreneurship. *International Journal of Pure & Applied Bioscience*, 5(4), 1117–1121. <https://doi.org/10.18782/2320-7051.5638>

- Swunney, J., & Runyan, R. (2007). Native American entrepreneur and strategic choice. *The Journal of Development Entrepreneurship*, 2(3), xx–xx.
- Thurstone, L. L., & Chave, E. J. (1929). *The measurement of attitude*. University of Chicago Press.
- Ulvenblad, P., Barth, H., Ulvenblad, P. O., Ståhl, J., & Björklund, J. C. (2020). Overcoming barriers in agri-business development: Two education programs for entrepreneurs in the Swedish agricultural sector. *The Journal of Agricultural Education and Extension*, 26(5), 443–464.

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Peer-review history:
The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/128088>