ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 4| April 2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

MEASURING ENTREPRENEURIAL BEHAVIOUR OF STUDENT AGRIPRENEURS IN PATHANAMTHITTA DISTRICT: A BEHAVIOURAL INDEX APPROACH

Binimol Mathew, **Dr. Jaya Jacob M**
Department of Commerce, CMS College, Kottayam, Kerala, India

Article DOI: https://doi.org/10.36713/epra27284
DOI No: 10.36713/epra27284

ABSTRACT

This study measures and analyses entrepreneurial behaviour among student agripreneurs in Pathanamthitta District, Kerala, employing a structured Entrepreneurial Behavioural Index (EBI) as the primary analytical tool. A multi-stage random sample of 120 student agripreneurs was drawn from aided colleges and universities operating entrepreneurship or agribusiness programmes within the district. Data were collected through a validated five-point Likert-scale questionnaire covering eight behavioural dimensions: risk-taking ability, creativity and innovation, decision-making ability, leadership, goal setting and planning, persistence, market orientation, and proactiveness. Descriptive statistics, inter-component Pearson correlation, and standardised index scoring were employed for analysis. The computed overall EBI mean of 3.553 (SD = 0.176), standardised to 71.06 on a 100-point scale, indicates a moderately high level of entrepreneurial behaviour. Proactiveness (M = 3.681) and market orientation (M = 3.671) emerged as the strongest dimensions, while risk-taking ability and persistence (M = 3.425 each) remained comparatively moderate. Entrepreneurial intentions were uniformly high (M = 3.67–3.93). Inter-component correlation analysis revealed significant positive relationships among all EBI dimensions, with the proactiveness–market orientation pair recording the highest coefficient ($r = 0.743$, $p < 0.01$). The constraint analysis identified difficulty in accessing government schemes (M = 3.91) and family pressure against agricultural careers (M = 3.83) as the most acute barriers. The findings have direct implications for agripreneurship policy design, institutional capacity-building, and agricultural education reform.

KEYWORDS: *Entrepreneurial Behavioural Index; student agripreneurs; agripreneurship; Pathanamthitta; Likert analysis; Pearson correlation; Kerala*

1. INTRODUCTION

The structural transformation of Indian agriculture—driven by market integration, digital disruption, and institutional reforms—has expanded the conceptual and practical scope of entrepreneurship within the agrarian economy. Agripreneurship, defined as the application of entrepreneurial principles and practices to agricultural and allied activities, has emerged as a critical mechanism for revitalising rural economies, generating employment, and stimulating value-added production. Within this paradigm, the student agripreneur represents a particularly strategically significant actor: a young, educated individual who integrates academic knowledge with active agribusiness engagement, thereby bridging the gap between formal learning and practical enterprise.

Kerala presents a contextually distinctive setting for examining student agripreneurship. The state's high literacy rate, robust educational infrastructure, and access to digital technologies provide fertile conditions for nurturing entrepreneurially oriented youth. At the same time, the state's agricultural sector confronts structural vulnerabilities including fragmented smallholdings, escalating production costs, and chronic labour shortfalls. Pathanamthitta District, in particular, embodies this duality: characterised by high educational attainment, strong remittance inflows, and a tradition of labour emigration, the district has simultaneously witnessed the emergence of student-driven agribusiness ventures spanning ornamental aquaculture, microgreens cultivation, organic production, and food value addition.

Entrepreneurial behaviour—understood as the constellation of cognitive dispositions, attitudinal orientations, and action tendencies that enable individuals to identify, pursue, and sustain agribusiness ventures—constitutes the foundational variable of interest in this study. The capacity to systematically measure entrepreneurial behaviour through a composite index offers researchers and policymakers a reliable instrument for benchmarking, monitoring, and intervening in the agripreneurial development of student cohorts. The Entrepreneurial Behavioural Index (EBI), which aggregates scores across multiple behavioural dimensions, provides precisely such an instrument.

Despite growing scholarly and policy interest in youth agripreneurship, empirical research at the district level in Kerala remains limited. Existing studies have tended to focus on

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 4| April 2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

established farmers or graduates of specialised agricultural programmes, leaving the broader population of student agripreneurs—including those from commerce, arts, and general science disciplines—largely unexamined. The present study addresses this lacuna by administering the EBI to a representative sample of 120 student agripreneurs in Pathanamthitta District, analysing their behavioural profiles through descriptive and correlational methods, and identifying the constraints that impede their transition from entrepreneurial intention to enterprise creation.

2. REVIEW OF LITERATURE

Research on entrepreneurial behaviour within agricultural contexts has generated a substantial evidence base, revealing consistent patterns of influence across personal, psychological, and environmental variables. Seminal theoretical contributions by Shane and Venkataraman (2000) established entrepreneurship as a scholarly field centred on opportunity recognition and resource mobilisation, a framework subsequently extended to agribusiness contexts by Kahan (2012) and Hisrich et al. (2017). The theory of planned behaviour (Ajzen, 1991) has provided an especially generative foundation for studying agricultural entrepreneurial intention, as it links subjective norms, behavioural attitudes, and perceived control to actual enterprise-related conduct.

In the Indian context, Ramesh (2015) examined vegetable farmers in Tamil Nadu and documented medium-level entrepreneurial behavior, with innovativeness and achievement motivation as primary determinants. Rani and Sharma (2016) similarly identified decision-making ability and institutional support as significant predictors among Haryana dairy farmers. Thomas and Mathew (2017) reported strong innovativeness and leadership traits among Kerala's award-winning farmers, attributing these to sustained training and extension contact. Nirmala (2018), focusing on agripreneurs under the Agri-Clinic and Agri-Business Centers Scheme, found that trained participants demonstrated superior opportunity recognition and market orientation relative to untrained counterparts.

Krishna and Pillai (2019) and Sreelatha (2020) both reported that youth and women agripreneurs in Kerala exhibited moderate-to-high entrepreneurial behavior, with innovativeness as a strength and resource mobilisation as a persistent weakness. Lekshmi and Raj (2021) specifically studied student agripreneurs in Kerala's agricultural universities, finding positive attitudes toward entrepreneurship but limited practical engagement due to capital and market access deficits. Sangeetha (2022) demonstrated through intervention research that structured training programmes significantly enhanced achievement motivation and planning ability, while Binu and Joseph (2023) identified medium entrepreneurial behaviour in Pathanamthitta District, constrained primarily by financial and marketing infrastructure gaps.

Taken together, this body of literature confirms that entrepreneurial behaviour is a multi-dimensional, contextually embedded construct. Gaps persist, however, in systematic measurement of EBI across diverse student cohorts, particularly those spanning non-agricultural disciplines. The present study responds to this gap by deploying a validated eight-component EBI instrument and supplementing descriptive analysis with inter-component correlation to elucidate the relational structure of behavioural dimensions.

3. MATERIALS AND METHODS

3.1 Research Design and Study Area

A descriptive-cum-analytical cross-sectional research design was adopted. The investigation was conducted in Pathanamthitta District, Kerala, selected purposively on the basis of its educational advancement, active Krishi Vigyan Kendra (KVK) programmes, and documented emergence of student-led agribusiness ventures. The district's socio-economic diversity—encompassing rural, semi-urban, and peri-urban agricultural contexts—provides a contextually representative environment for the study of student agripreneurship behaviour.

3.2 Population, Sampling, and Sample

The target population comprised student agripreneurs enrolled in undergraduate or postgraduate programmes in aided colleges and universities within Pathanamthitta District who were concurrently engaged in agricultural or agribusiness activities. A multi-stage random sampling procedure was applied. Stage one: purposive selection of educational institutions offering entrepreneurship or agriculture-related curricula. Stage two: enumeration of eligible student agripreneurs with faculty assistance. Stage three: random selection of 120 respondents from institutional lists, ensuring proportionate representation across gender, programme level, and academic stream. The adequacy of the sample for correlation and regression analyses was confirmed by power analysis ($\alpha = 0.05$, $\beta = 0.80$, medium effect size), yielding a minimum requirement of 85 respondents.

3.3 Instrument Development and Validation

A structured questionnaire was developed through systematic literature review and expert consultation. The instrument comprised (i) socio-demographic and economic profile items; (ii) four Likert items measuring entrepreneurial intention; (iii) 32 Likert items (four per dimension) measuring eight EBI components; and (iv) eight items assessing perceived constraints. All attitudinal and behavioural items used a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree; for constraints, 1 = Highly Unaffected to 5 = Highly Affected). Content validity was established through expert panel review. The instrument achieved satisfactory internal consistency (overall Cronbach's $\alpha = 0.847$), with component-level α values ranging from 0.761 (leadership) to 0.812 (market orientation).

3.4 Construction of the Entrepreneurial Behavioural Index

The EBI was constructed following a three-step procedure. First, item-level mean scores were computed for each of the 32 behavioural items. Second, component-level means were derived by averaging the four item means within each dimension. Third, the overall EBI was calculated as the arithmetic mean of eight component means. The composite score was standardized to a 0–

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 4| April 2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

100 scale using the formula: Standardized EBI = [(EBI Mean − 1) / (5 − 1)] × 100. Respondents were classified as low (EBI < 60), moderate (60–75), or high (> 75) agripreneurs.

3.5 Statistical Analysis

Descriptive statistics—mean, standard deviation, median, minimum, and maximum—were computed for all EBI components and the composite index. A Pearson inter-component correlation matrix was constructed to examine the bivariate relationships among the eight EBI dimensions. Significance was tested at $p < 0.01$ (two-tailed). Constraint severity was assessed through weighted mean ranking. All analyses were performed using SPSS version 26.0.

4. RESULTS AND DISCUSSION

4.1 Socio-Demographic Profile of Student Agripreneurs

Table 1 presents a consolidated socio-demographic profile of the 120 respondents. Female students constituted the majority (56.67%, n = 68), a finding indicative of the growing participation of young women in agribusiness education and entrepreneurial activities in Kerala. The predominance of the 17–20 years age group (60%) reflects the emergence of agripreneurial interest at an early educational stage, suggesting that motivational foundations are being established during undergraduate study. Graduate-level students constituted 70% of the sample, consistent with the district's educational profile. A substantial majority (63.33%) came from farming family backgrounds, which likely facilitates practical familiarity with agricultural operations; however, the significant participation of non-farming background students (36.67%) points to the broadening appeal of agribusiness beyond traditional agricultural households. All 120 respondents (100%) reported mobile and internet access for agricultural purposes, confirming a universal digital foundation for agritech adoption.

Table 1: Consolidated Socio-Demographic Profile of Student Agripreneurs

Variable	Category	n	%
Gender	Female	68	56.67
	Male	52	43.33
Age	17–20 years	72	60.00
	20–24 years	48	40.00
Education	Graduate	84	70.00
	Post-graduate	36	30.00
Family Background	Farming	76	63.33
	Non-farming	44	36.67
Agricultural Land	Yes	72	60.00
	No	48	40.00
Internet Access	Yes	120	100.00

Source: Primary data (n = 120)

The stream-wise and activity-wise distributions, illustrated in Figure 2, underscore the interdisciplinary character of agripreneurship in the district. B.Com students dominated (26.67%), followed by B.A. (20%) and M.Com (18.33%), confirming that agribusiness is no longer confined to students with a natural sciences or agricultural background but is attracting commerce and humanities students who perceive it as a commercially viable enterprise. Ornamental fish farming (28.33%) and organic vegetable farming (21.67%) were the most common activities, preferred for their low capital requirements, short production cycles, and growing market demand. Microgreens cultivation (15%) and mushroom production (13.33%) also featured prominently.

4.2 Entrepreneurial Intentions

Table 2 and Figure 3 present the entrepreneurial intention scores. All four items recorded high mean scores (range: 3.67–3.93), with an overall intention mean of 3.813. The highest-scoring item—'I am motivated by successful agripreneurs' (M = 3.93)—confirms the powerful role of role-model exposure and vicarious learning in shaping agripreneurial aspirations, consistent with Bandura's (1977) social learning framework. The second-highest item, 'I have already planned a business idea in agriculture' (M = 3.88), indicates that for many respondents, entrepreneurial intention has already progressed to the ideation and planning stage, reflecting a forward-looking, proactive orientation. The convergence of high intention scores across all four items signals a population with a strong motivational substrate for agripreneurship, though the translation of intention into action remains contingent on resolving structural barriers identified in Section 4.5.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 4| April 2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

Table 2: Entrepreneurial Intentions of Student Agripreneurs

Code	Statement	SD	D	N	A	SA	Mean
I1	I am interested in starting my own agribusiness	0	0	50	48	22	3.77
I2	I want to be self-employed after my studies	0	0	58	44	18	3.67
I3	I have already planned a business idea in agriculture	0	0	46	42	32	3.88
I4	I am motivated by successful agripreneurs	0	0	36	56	28	3.93
	Overall Mean	–	–	–	–	–	**3.813**

Source: Primary data (n = 120). SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree

4.3 Entrepreneurial Behavioural Index: Component Analysis

4.3.1 Descriptive Statistics

Table 3 presents the descriptive statistics for all eight EBI dimensions and the composite index. The overall EBI mean of 3.553 (SD = 0.176, Median = 3.563) corresponds to a standardised score of 71.06, placing the student agripreneurs in the moderate-to-high entrepreneurial behaviour category. The relatively low standard deviation for the composite EBI (0.176) compared to individual components indicates that the index provides a stable and reliable aggregate measure.

Proactiveness (M = 3.681, SD = 0.259) and market orientation (M = 3.671, SD = 0.267) recorded the highest component means. Proactiveness reflects the respondents' tendency to anticipate challenges, seek opportunities ahead of competitors, and initiate new enterprise activities. High market orientation scores indicate that these students are attuned to consumer demand, actively seek market information before making business decisions, and systematically gather customer feedback. Goal setting and planning (M = 3.616, SD = 0.271) and decision-making ability (M = 3.595, SD = 0.284) also registered above the composite mean, reflecting organised, analytical, and forward-looking behavioural tendencies.

Conversely, risk-taking ability (M = 3.425, SD = 0.312) and persistence (M = 3.425, SD = 0.335) tied for the lowest component means. The moderate risk tolerance observed among student agripreneurs is consistent with prospect theory, which predicts heightened loss aversion in populations characterised by resource scarcity and limited prior enterprise experience. The higher standard deviations for these components suggest greater individual variation in risk orientation and resilience, indicating that targeted interventions in these areas may yield differential returns depending on the individual baseline. Leadership (M = 3.460) also fell below the composite mean, likely reflecting limited opportunities for team leadership in academic agribusiness settings.

Table 3: Descriptive Statistics of EBI Components

Sl.	Dimension	Mean	SD	Median	Min	Max
1	Risk-taking ability	3.425	0.312	3.375	2.80	4.20
2	Creativity & innovation	3.550	0.298	3.583	2.75	4.25
3	Decision-making ability	3.595	0.284	3.625	2.75	4.25
4	Leadership	3.460	0.321	3.458	2.50	4.25
5	Goal setting & planning	3.616	0.271	3.625	2.75	4.25
6	Persistence	3.425	0.335	3.375	2.50	4.25
7	Market orientation	3.671	0.267	3.688	2.75	4.25
8	Proactiveness	3.681	0.259	3.688	2.75	4.50
–	**Overall EBI**	**3.553**	**0.176**	**3.563**	**3.00**	**3.94**

SD = Standard Deviation. Standardised Overall EBI = 71.06 / 100

Table 4: Entrepreneurial Behavioural Index – Component Summary with Likert Distributions

No.	EBI Component	SD	D	N	A	SA	Mean
1	Risk-taking ability	0	20	244	148	48	**3.425**
2	Creativity & innovation	0	40	194	188	58	**3.550**
3	Decision-making ability	0	24	190	222	44	**3.595**
4	Leadership	0	44	192	218	26	**3.460**
5	Goal setting & planning	0	17	195	253	21	**3.616**
6	Persistence	0	58	207	168	47	**3.425**
7	Market orientation	0	20	170	238	52	**3.671**
8	Proactiveness	0	16	170	245	49	**3.681**
	Overall EBI	–	–	–	–	–	**3.553**

SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree. Colour coding: Green = High; Blue = Moderate-High; Red = Moderate

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 4| April 2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

4.3.2 Inter-Component Correlation Analysis

Table 5 presents the Pearson inter-component correlation matrix for the eight EBI dimensions. All 28 pairwise correlations were positive and statistically significant at $p < 0.01$, confirming that the EBI dimensions are meaningfully inter-related and collectively constitute a coherent behavioural construct. This finding lends construct validity to the EBI framework.

The strongest inter-component correlation was observed between proactiveness and market orientation (r = 0.743), indicating that students who seek out opportunities proactively are also more likely to be attuned to market dynamics. This pairing reflects an underlying outward-looking, opportunity-seeking orientation that simultaneously drives both forward action and market sensitivity—a combination particularly valuable in fast-moving agribusiness environments. The goal setting and planning–proactiveness pair (r = 0.701) and the goal setting and planning–decision-making pair (r = 0.694) also recorded high coefficients, suggesting that well-structured planning facilitates both proactive action and rational decision-making, consistent with prior entrepreneurship literature (Hisrich et al., 2017).

The weakest correlation was observed between leadership and risk-taking ability (r = 0.481), suggesting that these two dimensions are relatively more domain-specific and less mutually reinforcing. The risk-taking–persistence correlation (r = 0.671) was notably among the stronger pairings, implying that students with higher risk tolerance tend to exhibit greater resilience in the face of setbacks—a coherent and theoretically expected relationship.

Table 5: Pearson Inter-Component Correlation Matrix of EBI Dimensions (n = 120)

	RT	CI	DM	LD	GP	PE	MO	PR
RT	1.00	0.61**	0.54**	0.48**	0.50**	0.67**	0.49**	0.52**
CI	–	1.00	0.63**	0.56**	0.62**	0.59**	0.67**	0.65**
DM	–	–	1.00	0.60**	0.69**	0.54**	0.62**	0.66**
LD	–	–	–	1.00	0.57**	0.61**	0.53**	0.57**
GP	–	–	–	–	1.00	0.60**	0.69**	0.70**
PE	–	–	–	–	–	1.00	0.56**	0.58**
MO	–	–	–	–	–	–	1.00	0.74**
PR	–	–	–	–	–	–	–	1.00

*RT=Risk-Taking; CI=Creativity & Innovation; DM=Decision-Making; LD=Leadership; GP=Goal Setting & Planning; PE=Persistence; MO=Market Orientation; PR=Proactiveness. ** p < 0.01 (two-tailed). Green = r ≥ 0.65; Blue = diagonal (r = 1.00)*

4.4 Constraints Analysis

Table 6 and Figure 8 present the constraint severity rankings for student agripreneurs. Difficulty in accessing government schemes ranked first (M = 3.91), confirming that awareness gaps, procedural complexity, and bureaucratic barriers prevent students from leveraging available policy support. This finding aligns with Binu and Joseph (2023) and resonates with broader concerns about scheme accessibility for first-generation agricultural entrepreneurs. Family pressure toward non-agricultural careers ranked second (M = 3.83), highlighting the socio-cultural stigma attached to farming within educated households—a barrier that financial interventions alone cannot resolve.

Lack of mentoring (M = 3.72) and absence of land or physical infrastructure (M = 3.68) followed closely, underscoring the need for institutional scaffolding in bridging the gap between entrepreneurial intention and viable venture creation. Fear of failure (M = 3.60) emerged as a psychologically significant barrier, particularly relevant given the moderate scores observed on risk-taking and persistence. Financial and training-related constraints—lack of market information (M = 3.45), startup capital (M = 3.38), and training access (M = 3.37)—though real, ranked lower, suggesting that non-financial barriers may be comparatively more limiting for this cohort.

Table 6: Constraints Faced by Student Agripreneurs (Ranked by Mean Severity)

Rank	Constraint	HA	A	N	U	HU	Mean
1	Difficulty accessing government schemes	38	36	42	4	2	3.91
2	Family pressure toward non-agriculture careers	38	42	24	14	2	3.83
3	Lack of mentoring support	28	44	38	6	4	3.72
4	No land or physical infrastructure	26	42	42	8	2	3.68
5	Fear of failure	28	38	36	14	4	3.60
6	Lack of market information	22	42	35	12	8	3.45
7	Lack of startup capital	14	48	36	14	8	3.38
8	Limited access to training	18	36	42	20	4	3.37

HA=Highly Affected; A=Affected; N=Neutral; U=Unaffected; HU=Highly Unaffected. Row shading: Red = Most Severe; Orange = Severe

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 12| Issue: 4| April 2026|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2026: 8.753 || ISI Value: 1.188

9. *Krishna, S., & Pillai, R. (2019). Entrepreneurial behaviour of youth agripreneurs in Kerala. International Journal of Agricultural Sciences, 9(4), 200–208.*
10. *Kumaresan, M., & Nain, M. S. (2019). Factors influencing entrepreneurial intentions among agricultural students in India. Journal of Community Mobilization and Sustainable Development, 14(1), 10–15.*
11. *Lekshmi, V., & Raj, M. (2021). Entrepreneurial behaviour of student agripreneurs in agricultural colleges of Kerala. Journal of Agricultural Extension Education, 27(1), 77–83.*
12. *Nirmala, R. (2018). Entrepreneurial behaviour of agripreneurs under Agri-Clinic and Agri-Business Centres Scheme. Agricultural Economics Research Review, 31(2), 88–94.*
13. *Ramesh, P. (2015). Entrepreneurial behaviour of vegetable growers in Tamil Nadu. Journal of Agricultural Extension Management, 16(2), 45–52.*
14. *Rani, S., & Sharma, K. (2016). Factors influencing entrepreneurial behaviour among dairy farmers in Haryana. Indian Journal of Extension Education, 22(3), 102–108.*
15. *Sangeetha, P. (2022). Impact of training on entrepreneurial behaviour among agri start-ups in South India. Indian Journal of Agricultural Extension, 58(1), 90–96.*
16. *Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review, 25(1), 217–226. https://doi.org/10.5465/amr.2000.2791611*
17. *Singh, A. K., & Gupta, R. K. (2017). Entrepreneurial orientation and agripreneurship development in India. Journal of Rural Studies, 55, 1–12. https://doi.org/10.1016/j.jrurstud.2017.07.010*
18. *Sreelatha, P. (2020). Entrepreneurial behaviour of women agripreneurs in Thrissur District, Kerala. Journal of Rural Development, 39(3), 451–459.*
19. *Swaminathan, M., & Jeyaraj, K. L. (2021). Determinants of youth agripreneurship: Evidence from developing economies. International Journal of Agricultural Economics, 6(2), 65–72.*
20. *Thomas, L., & Mathew, J. (2017). Entrepreneurial behaviour of awardee farmers in Kerala. Kerala Journal of Agricultural Research, 39(1), 55–61.*
21. *Yadav, V. P. S., & Srivastava, P. (2018). Entrepreneurial traits among agricultural graduates: An empirical analysis. Agricultural Economics Research Review, 31(1), 79–86.*