

Original Article

A Study on the Knowledge and Attitudes of the Board of Directors of Farmer Producer Organisations (FPOs) Towards Governance & Management in the State of Assam

¹Mr. Utpal Goswami, ²Dr. Shazeed Ahmed

¹Research Scholar, Assam Science & Technology University, Tetelia Road, Jalukbari, Guwahati, Assam.

²Assistant Professor, Assam Institute of Management, Vigyan Path, Paschim Boragaon, Guwahati, Assam.

Received Date: 09 November 2025

Revised Date: 30 November 2025

Accepted Date: 07 December 2025

Published Date: 10 December 2025

Abstract: In India, Farmer Producer Organisations (FPOs) have become a vital model for enhancing the economic sustainability of small and marginal farmers. The primary reason for the promotion and formation of FPOs is to take advantage of economies of scale in the production and marketing of agricultural and allied products through collectivisation. However, despite immense potential, the FPO model is not free from various challenges. One key challenge is the governance and management of FPOs. This study evaluates the knowledge and attitudes of the Board of Directors of selected FPOs regarding their governance, management, and statutory compliance. Data were collected from 270 board members using a structured questionnaire that covered 10 knowledge domains related to FPOs and 10 attitude items, measured on a five-point Likert scale. The research utilised descriptive statistics, composite knowledge scores, inferential tests (t-tests & ANOVA), and measures of effect size. The study's findings reveal considerable variation in governance-related knowledge across areas, with particularly high awareness in fields such as recording minutes and understanding the maximum tenure of a board member. There are deficiencies that persist in a few areas, such as knowledge of the quorum in board meetings and the number of days' notice to be served prior to the AGM etc. However, the overall knowledge score indicates moderate governance competence among the board members. In terms of attitude, board members display positive attitudes towards the democratic election process, accountability, and board member participation. The results of the inferential statistics show that gender and education had no significant effect on board members' attitudes towards the FPO, whereas age was a significant factor, with older directors demonstrating a more positive attitude towards the organisation. Overall, the study highlights moderate governance practices and emphasises the need for targeted capacity-building interventions. For the long-term sustainability of the FPOs, strengthening governance knowledge and compliance awareness among board members is of utmost importance.

Keywords: Agricultural Collectives, Board Governance, Farmer Producer Organisations (FPOs).

I. INTRODUCTION

India is primarily an agricultural economy, and more than 58 per cent of the country's population earns their livelihood through agriculture. The country can take pride in agriculture being the highest contributor towards GDP at the time of its independence. However, the contribution from this sector gradually decreased and currently contributes a meagre 17 per cent to India's Gross Domestic Product (GDP) at current prices [1]. Currently, in India, small and marginal producers comprise around 87 per cent of the agricultural households who cultivate in small and fragmented plots and have the capacity to produce only low returns. The monthly income on average is Rs 6426, which makes cultivation on small fields unviable from an economic perspective [2].

Over the years, the small and marginal farmers of the country are facing various challenges. Some of such issues are the availability of quality inputs, poor technology, shrinking land holdings, lack of bargaining power due to low and inferior production quality and the like. Hence, the process of bringing the small and marginal farmers together to form their collective association in the form of the FPO has been acknowledged as the most effective and aptly suited institutional mechanism.

To reduce the gap between farmers and consumers, the Government of India decided to develop a new institutional alternative which allows the community of farmers a platform that can provide everyone with an opportunity based on equity and participate in the contemporary agro-food network [3]. The idea of FPO was the brainchild of the Y.K. Alagh Committee in 1999, whose primary motive was alleviating poverty [4]. FPOs have provisions for sharing profits through dividends with their members or shareholders. FPOs are formed fundamentally to augment farmers' competitiveness and boost their benefits in growing market opportunities [5].



The acronym FPO is a broad-based name that connotes the farmer-producers organisation being incorporated or registered under the Companies Act Part IXA or the Co-operative Societies Act of the States under consideration. [6].

FPOs face many challenges in governance and management. The prime difficulties with respect to governance are lack of ownership of the directors towards the FPO, lack of clarity on the role and responsibilities of directors, vested interest of the board members, such as political, economic or both, low financial literacy and business skills, lack of professional skills in managing a professional institution, resistance to new ideas or persons with new skills and knowledge and gender bias with respect to women participation in FPOs Board. [7]. Although FPOs help connect farmers to larger markets, but they struggle with managing the organisation and leadership [8].

With the launch of a dedicated scheme in the Central Sector for the 'Formation and Promotion of 10,000 Farmer Producer Organisations (FPOs) across the country, concerns persist regarding the governance and management capabilities of the board members, as most of the members are first-generation directors with limited exposure to business processes. Therefore, assessing the knowledge base and attitudinal orientation of board members is critical for understanding the institutional health of FPOs and identifying capacity-building needs.

II. LITERATURE REVIEW

Various studies on FPOs in India show that the knowledge and attitudes of Board of Directors are key factors in ensuring effective governance and management. Farmer Producer Organisations often become legally recognised as Farmer Producer Cooperatives (FPCs) under the Companies Act [9]. The success and sustainability of such an organisation depend largely on professional management practices and robust governance systems [10]. The research evaluates how well FPO boards perform, while few empirical studies report positive outcomes, such as directors' understanding of the company's long-term goals and their effective direction to their staff, which ultimately result in overall performance evaluation [11]. Other findings offer comparative insights. Specifically, management of functional FPOs has higher risk-bearing capacity, more economic motivation, and more innovation than the management of non-functional FPOs. Functional FPO managerial members have better business skills than non-functional FPOs [12].

The reviewed literature shows that there are constraints with respect to the knowledge and management skills of the board members. The prime difficulties with respect to governance are lack of ownership of the directors towards the FPO, lack of clarity on the role and responsibilities of directors, vested interest of the board members, such as political, economic or both, low financial literacy and business skills, lack of professional skills in managing a professional institution, resistance to new ideas or persons with new skills and knowledge and gender bias with respect to women participation in FPOs Board [7]. Further studies reveal that members of the Board of Directors in certain areas lack understanding of how to strengthen their FPOs. They are also not updated about the important agricultural technologies and various government schemes designed to promote the development of FPOs [13]. It is also seen that the knowledge gap is not confined to understanding only technical and governmental schemes, but also to important management skills. These gaps include ineffective negotiation, weak leadership, and, most importantly, the ability to create clear, actionable business plans [14, 15]. The literature highlights an urgent need for focused, ongoing capacity-building support to develop board members' skills [11].

The reviewed literature also highlights several attitudinal and governance challenges. Apart from technical capabilities, the board members' attitude and ethical behaviour create additional challenges for good governance. Under governance-related constraints, only a few members of FPO are active, less involvement of youth in activities of FPO, and a lack of proper coordination in collective work are the main reasons [13]. In order to make strong governance foundation, it is recommended that the FPOs should avoid political interventions, conduct regular elections/selections of the Board of Directors, and maintain transparency in financial transactions and office records [10]. Regarding the management of the FPOs, some of the key challenges are the non-availability of qualified and experienced CEO, managers, accountants and local talent to run the FPO, dependency on remotely located Chartered Accountants for financial and regulatory compliance, lack of business skills of CEO and Board of Directors, etc. [7, 9]. Overall the review of literature affirms that for long-term sustainability of the FPOs, the presence of a dedicated and knowledgeable Board of Directors is essential. It further reiterates that the FPOs face a number of challenges, such as a lack of managerial skills, including negotiation and leadership skills, and a lack of access to finance. Moreover, the Board of Directors of FPOs lacks the skills to prepare business plans for the FPOs [14].

III. SCOPE & SIGNIFICANCE OF THE STUDY

It is utmost important that for empowering small and marginal farmers, the promoted FPOs in the state of Assam becomes sustainable and profitable. One of the main gaps emerged from the review of literature is the limited knowledge of the board members regarding management of FPOs. While several studies emphasise the importance of these factors in other regions of the country, their relevance to Assam remains under-researched.

The present study was undertaken in the state of Assam to evaluate the performance of FPOs with regard to the knowledge level of the Board members concerning governance, management and their attitude towards the FPO. The study would help provide a comprehensive understanding of the factors that influence FPO effectiveness and their role in the state's rural development.

IV. OBJECTIVE OF THE STUDY

The primary objective of the study is to assess the knowledge and attitudes of the Board of Directors regarding various aspects of governance and management of FPOs. Hence, the study broadly covers aspects related to the Annual General Meeting of the FPO, board meetings, quorum requirements, the minimum and maximum tenure of board members, the requirement for notice to be served before meetings, and the documentation to be maintained for meetings held. It further examines the board members' attitudes towards the democratic functioning of the FPO, their participation and involvement, political neutrality in the FPO, financial accountability, and organisational autonomy.

V. METHODOLOGY

To achieve the aforementioned research objectives, both primary and secondary data have been utilised in the study. An appropriate sample was selected for the primary data, and a field survey was conducted using a structured schedule to gather the necessary information. The study adopted a quantitative method to assess the governance knowledge and organisational attitudes of 270 board members across 56 FPOs of the state. The sample consisted mostly of male respondents (76.7%), aged 35 to 54 years, with a graduation degree or higher (38.9%) and a tenure as a board member of 1 to 3 years (65.6%). The collected data were analysed using a knowledge assessment tool comprising 10 governance domains, including parameters such as board size, meeting procedures, quorum, and record-keeping.

The members' attitudes were analysed using an attitude scale (Cronbach's $\alpha = 0.714$) comprising 10 Likert-scale statements. The analysis utilised parametric statistical tests due to the sample size of 270 respondents, which exceeds the requirements of the Central Limit Theorem. Moreover [16] concluded that parametric tests remain robust and valid even if the data is skewed or non-normal, provided the sample size is 200 or more. [17] suggests that parametric methods are ideal when the sample size is 100 or greater, while [18] also highlighted the robustness of these methods in large-scale attitude research.

VI. RESULTS AND DISCUSSIONS

The analysis addresses the study's objective to evaluate the board of directors' knowledge and attitudes regarding various aspects of governance and management of FPOs.

A) Demographic Profile of the Respondents

The demographic profile of the respondents considered for this study is presented in the Table 1

Table 1: Demographic Profile

Factors considered	Categories	Percent
Gender	Male	76.7
	Female	23.3
	Total	100.0
Age	18-24	0.4
	25-34	20.4
	35-44	37.8
	45-54	31.1
	55-64	7.8
	65 & Above	2.6
	Total	100.0
Education	Illiterate	0.0
	Primary School	1.9
	High School	24.1
	Higher Secondary	32.2
	Diploma/ Certificate	3.0
	Graduate & Above	38.9
	Total	100.0

Source: Primary Data

Table 1 clearly demonstrates that the leadership of the FPO boards is dominated by male members, with women accounting for less than a quarter of the members. Most board members fall into the middle-aged category of 35 to 54 years, while very few are younger than 25 or older than 55. Their educational background is relatively strong, with a majority holding

graduate degrees or higher secondary qualifications, and only a small minority having just primary or high school education. None is illiterate. Overall, the boards are characterised by being predominantly male, middle-aged, and fairly well educated.

B) Knowledge of the Board of Directors

A composite knowledge score analysis was conducted across 10 key domains to assess the board of directors' understanding of the FPO's governance and management. The ten key domains are given in Table 2

Table 2: Knowledge Domain Framework and Performance Rankings

Rank	Description	Correct Responses	Performance (%)
1.	Knowledge about the maximum tenure a member to be on the Board	261/270	96.7%
2.	Knowledge about the importance of recording minutes of the meeting	254/270	94.1%
3.	Knowledge about the last AGM conducted by the FPO/FPC	211/270	78.1%
4.	Knowledge of the 1 st AGM to be conducted	197/270	73.0%
5.	Knowledge about any Extraordinary General Meeting	152/270	56.3%
6.	Knowledge about the number of board meetings to be convened in a year	110/270	40.7%
7.	Knowledge of the number of days of notice to be served before the Board Meeting	73/270	27.0%
8.	Knowledge about the quorum for the Board Meeting	65/270	24.1%
9.	Knowledge of the minimum and maximum number of members on the Board	24/270	8.9%
10.	Knowledge of the number of days of notice to be served before the AGM	8/269	3.0%

It is evident from the Table 2 that board members demonstrated a high level of knowledge regarding the maximum tenure of a board member (96.7%) and the importance of recording meeting minutes (94.1%). However, regarding the number of days' notice to be served before the AGM, only 8 of 269 respondents (3.0%) provided the correct number. Similarly, only a very few (8.9%) responded correctly to the statutory requirement for the minimum and maximum number of members on the Board. Also, noticeable deficiencies in knowledge were apparent regarding the valid quorum for the board meeting, with only 8.9% responding correctly. The knowledge level is also poor regarding the number of board meetings to be convened in a year; only 24.1% provide the correct answer. Overall, the analysis suggests an urgent need for targeted training to enhance board members' skills, particularly in critical legal and numerical knowledge areas, which are essential for effective governance.

a. Composite Score Calculation

The researcher further calculates the composite score as a percentage. To calculate the score, each correct answer was assigned a value of 1, and each incorrect answer was assigned a value of 0. The following formula was used for each respondent *i*.

$$CKS_i = (\sum_{j=1}^{10} X_{ij} / 10) \times 100$$

Where:

CKS_i = Composite Knowledge Score for respondent *i* (expressed as percentage)

X_{ij} = Transformed score for respondent *i* on knowledge domain *j* (0 or 1).

10 = Total number of knowledge domains assessed

The results of the ten-domain composite knowledge score based on the above formula is presented in Table 3

Table 3: Composite score as percentage

<i>Statistic</i>	<i>Value</i>	<i>Statistic</i>	<i>Value</i>
Mean	63.1%	Standard Deviation	14.0%
Median	60.0%	Minimum	20.0%
Maximum	90.0%	25th Percentile	50.0%
75th Percentile	70.0%	Interquartile Range	20.0%

The composite knowledge score across ten domains of governance competency for FPO board members indicates that board members generally possess moderate to adequate governance knowledge, with mean and median scores of 63.1% and 60.0%, respectively. The standard deviation (14.0%) suggests moderate variation among the observations. However, there are significant disparities in score ranges, from a minimum of 20.0% to a maximum of 90.0%; still, most results are reasonably close to the mean. The 25th and 75th percentiles indicate that 25% of board members scored 50% or less, and from the top, 75% scored 70.0% or lower. The interquartile range was 20.0%, showing scores were clustered in a narrow band, which means the overall average score does not reflect many extremes. Overall, the data present a picture of varied but generally moderate competency in governance across the sample.

Overall, the composite knowledge score represents satisfactory governance competence among FPO board members. Nevertheless, the domain-based assessment still identifies significant governance knowledge deficits in specific areas, which will require immediate, targeted capacity-building interventions.

b. Performance Classification

The researcher has classified the composite scores into three performance categories, that is, low knowledge (below 33.33%), moderate knowledge (33.34% - 66.66%) and high knowledge (above 67.0%). The result of the performance classification is presented under Table 4

Table 4: Classification of knowledge level

Performance Level	Score Range	Frequency	Percentage	Governance Competency
Low Knowledge	0.00% - 33.33%	1	0.4%	Inadequate governance competency
Medium Knowledge	33.34% - 66.66%	156	57.8%	Partial governance competency
High Knowledge	67.00% - 100.00%	113	41.9%	Adequate governance competency

As per Table 4, The “Low Knowledge” category (below 33.33%) had only 0.4% (1 respondent), indicating that it is an extremely small minority of board members with significant deficiencies and insufficient governance knowledge. The “Medium Knowledge” group accounted for 57.8% (156 respondents), indicating that the majority of board members had a moderate level of knowledge: they had working knowledge of many domains but had clear gaps that prevent them from being effective overall. The “High Knowledge” category, comprising 41.9% (113 respondents), demonstrated adequate governance knowledge, as they correctly answered 67% or more of the domains. Overall, the majority of members demonstrated significant gains in their knowledge of governance practices, and only a small percentage had below-adequate knowledge.

C) Attitude of Board Members towards the FPO

To understand the board of directors' attitude towards the FPO, the data collection tool included 10 well-constructed statements. Respondents were asked to provide their perspective on each statement using a five-point Likert scale ranging from 1 as strongly disagree to 5 as strongly agree.

a. Board Members' Attitude Towards the FPO

The 5-point scale featured responses categorised as "Strongly Disagree," "Disagree," "Neither Agree nor Disagree," "Agree," and "Strongly Agree." Weighted mean scores were calculated by assigning numerical values to each response: Strongly agree = 5, Agree = 4, Neither agree nor disagree = 3, Disagree = 2, and Strongly disagree = 1, creating a range where 5 represents the highest score and 1 the lowest. The calculation of these Weighted Mean Scores was based on the formula provided below.

$$\text{Weighted Mean Score} = \frac{(N_5 * 5) + (N_4 * 4) + (N_3 * 3) + (N_2 * 2) + (N_1 * 1)}{(N_5 + N_4 + N_3 + N_2 + N_1)}$$

Where,

N_5 , N_4 , N_3 , N_2 and N_1 denote the number of respondents who responded to the statement as "Strongly agree," "Agree," "Neither agree nor disagree," "Disagree," and "Strongly disagree", respectively. Table 5 provides the outcome of the respondents' answers.

Table 5: Board members' response to statements

Sl. No	Statements	SA (%)	A (%)	NAND (%)	D (%)	SD %	Weighted Mean	σ (st.d.)	Decision
1.	The Board of Directors is elected democratically by the members of the FPO/FPC	92 (34.1)	172 (63.7)	1 (0.4)	4 (1.5)	1 (0.4)	4.30	0.59	High Perception
2.	All the Board members are active and willing to take responsibility for	69 (25.6)	167 (61.9)	17 (6.3)	17 (6.3)	0 (0)	4.07	0.75	High Perception

Sl. No	Statements	SA (%)	A (%)	NAND (%)	D (%)	SD %)	Weighted Mean	σ (st.d.)	Decision
	the FPO/FPC								
3.	All the Board members give sufficient time for the development of the FPO/FPC	44 (16.3)	163 (60.4)	27 (10.0)	34 (12.6)	2 (0.7)	3.79	0.89	Low Perception
4.	The Board of Directors supervises the activities of the CEO and other FPO/FPC employees.	35 (13.0)	220 (81.5)	11 (4.1)	4 (1.5)	0 (0)	4.06	0.47	High Perception
5.	All the Board members attend meetings regularly.	30 (11.1)	205 (75.9)	17 (6.3)	16 (5.9)	2 (0.7)	3.91	0.68	Low Perception
6.	Board members are not affiliated with any political parties.	54 (20.0)	102 (37.8)	45 (16.7)	62 (23.0)	7 (2.6)	3.50	1.12	Low Perception
7	Board members check whether proper books of account are being maintained.	51 (18.9)	216 (80.0)	2 (0.7)	1 (0.4)	0 (0)	4.17	0.43	High Perception
8	Decisions at the Board meeting are arrived at by the majority of votes of directors present.	90 (33.3)	179 (66.3)	1 (0.4)	0 (0)	0 (0)	4.33	0.48	High Perception
9	Each director participates and contributes to discussions during board meetings; a minority of Directors does not control most discussions.	101 (37.4)	164 (60.7)	4 (1.5)	1 (0.4)	0 (0)	4.35	0.53	High Perception
10	Decision-making is done internally only without the control of any external person/ agency.	77 (28.5)	161 (59.6)	9 (3.3)	9 (3.3)	14 (5.2)	4.03	0.96	Low Perception
	Weighted Average						4.05		

Note: N=270, SA=Strongly Agree, A= Agree, NAND= Neither agree nor disagree, D= Disagree and SD= Strongly disagree

The weighted average of the ten items was calculated and found to be **4.05**. Based on the weighted average score, the researcher has analyses the perception of the members with respect to governance and management of the FPO.

Areas of high perception: It is evident from the Table 5 that board members are happy with the participation of the members in the board meeting (weighted mean = 4.35, σ = 0.53). Similarly, board members displayed confidence in the decisions taken at the board meeting (weighted mean = 4.33, σ = 0.48). It shows an equal representation of board members at the meetings as well as in the decision making. The perception with respect to the election of the board members are also

high (weighted mean = 4.30, $\sigma = 0.59$). They also perceived high on supervising the activities of the staff of the FPO (weighted mean = 4.06, $\sigma = 0.47$)

Areas of improvements: The board members have expressed low perception on certain areas which needs improvements. These includes devoting sufficient time for the development of the FPOs (weighted mean = 3.79, $\sigma = 0.89$), availability of all the board members during the board meetings (weighted mean = 3.91, $\sigma = 0.68$), political affiliation of the board members (weighted mean = 3.50, $\sigma = 1.12$) and decision making without the influence of any external forces (weighted mean = 4.03, $sd = 0.96$).

b. Analysis of one-sample t-test

The researcher collected individual responses from the frequency distributions and analysed them using one-sample t-tests against the neutral midpoint score of 3.0. Table 6 provides the details of the result

Table 6: t-test results

Item	Mean	t-statistic	p-value	Cohen's d	Effect Size	95% CI
1	4.30	35.976	<0.001	2.189	Large	[4.23,4.37]
2	4.07	23.255	<0.001	1.415	Large	[3.98,4.16]
3	3.79	14.569	<0.001	0.887	Large	[3.68,3.90]
4	4.06	36.535	<0.001	2.223	Large	[4.00,4.12]
5	3.91	21.727	<0.001	1.322	Large	[3.83,3.99]
6	3.50	7.238	<0.001	0.440	Small to Medium	[3.36,3.63]
7	4.17	45.286	<0.001	2.756	Large	[4.12,4.22]
8	4.33	45.633	<0.001	2.777	Large	[4.27,4.39]
9	4.35	41.908	<0.001	2.550	Large	[4.29,4.42]
10	4.03	17.629	<0.001	1.073	Large	[3.92,4.14]

The results showed statistically significant positive attitudes for all items ($p < 0.001$), with effect sizes (Cohen's d) ranging from small to medium to large, indicating a high level of positive response. Statements related to democratic governance processes and accountability mechanisms (Items 1, 7, 8, and 9) such as the Board of Directors is elected democratically by the members, board members check proper books of account, decisions at the board meeting are arrived at by the majority of votes and each director participates and contributes to discussions during board meetings showed the largest effect sizes ($d > 2.0$), signaling exceptionally strong positive sentiment. On the other hand most, other governance aspects statement (Items 2, 3, 4, 5 & 10) such as all the board members are active and willing to take responsibility, all the board members give sufficient time for the development of the FPO/FPC, Board of Directors supervises the activities of the CEO and employees, all the Board members attend meetings regularly and decision-making is done internally showed large effect sizes ($d > 0.8$). Notably, the statement (Item 6) board members are not affiliated with any political parties had a small to medium effect size ($d = 0.440$), representing the area of most significant concern among board members he confidence intervals confirmed this finding by excluding the neutral attitude value for all items, confirming that the board members generally viewed positively of the FPO/FPCs across all assessed governance dimensions.

c. Demographic Influences on Board Member Attitudes

The researcher further conducted ANOVA and t-tests to determine whether factors such as gender, age group, and education influence board members' attitudes towards the FPO. The result of the ANOVA and t-tests is given in Table 7

Table 7: ANOVA & t-test

Demographic Factor	N	Test Conducted	Test result	p-value	Effect Size	Interpretation
Gender	2	t-test	0.297	0.767	Cohen's d = 0.043	Not Significant
Age Group	5	One-way ANOVA	2.866	0.024*	$\eta^2 = 0.042$	Significant
Education	5	One-way ANOVA	0.915	0.456	$\eta^2 = 0.014$	Not Significant

Independent t-test for Gender: The researcher conducted an independent t-test for gender as it involves only two categories (male and female). Accordingly following null and alternative hypothesis were formed.

H_0 : There is no mean difference in attitude between male and female board members

H_1 : There is mean difference in attitude between male and female board members

Further, to calculate the effect size, Cohen's d was calculated using the formula

$$d = (\text{Mean}_1 - \text{Mean}_2) / \text{Pooled Standard Deviation}$$

The result of the independent sample t-test showed no significant difference in attitude between male and female members, as the p-value 0.767 is higher than the threshold limit of 0.05, hence the null hypothesis fails to be rejected. However, a minor effect size (Cohen's $d = 0.043$) indicates that both male and female board members hold similarly favourable or unfavourable attitudes toward FPOs.

One-way ANOVA for Age & Education: The researcher further conducted a one-way Analysis of Variance (ANOVA) test for Age Group and Education, as it contains three or more variables. In order to know if the means are significantly different from one another, eta-squared (η^2) was calculated. The eta-square calculation helps measure the effect size.

The ANOVA results showed that there are no statistically significant differences for education level ($F = 0.915$, $p = 0.456$, $\eta^2 = 0.014$). This implies that attitudes towards the FPO are relatively equivalent across education levels.

On the other hand, the age group ($F = 2.866$, $p = 0.024$, $\eta^2 = 0.042$) showed a significant effect, suggesting that board member attitudes respond meaningfully to age-based demographic segments. Specifically, older board members showed progressively more positive attitudes toward FPO governance and management. Overall, it has been observed from the findings that demographic factors have minimal influence on board member's attitude with respect to governance of the FPO.

Age Group Analysis: Since the age group shows significant differences in attitude ($p=0.024$), the researcher further conducted descriptive analysis.

Table 8: Age group Analysis

Age Group	N	Mean Score	Standard Deviation	Percentage of Sample
65 Above	7	4.37	0.59	2.6%
55-64	21	4.15	0.49	7.8%
45-54	84	4.09	0.35	31.1%
35-44	102	4.01	0.38	37.8%
25-34	55	3.96	0.35	20.4%

As shown in Table 8, board members aged 65 and above exhibit a strong positive attitude (Mean 4.37, $SD=0.59$), although they constitute the smallest portion of the sample (2.6%; $n=7$). Similarly, the age group between 55 and 64 years of age also shows a high positive attitude (Mean = 4.15, $SD = 0.49$), representing 7.8% of the sample ($n=21$).

On the contrary, the "25-34" age group has the least positive attitudes (Mean = 3.96, $SD = 0.35$), comprising 20.4% of the sample ($n = 55$). The "35-44" age group, which represents the largest segment (37.8% of sample; $n=102$), shows moderate attitudes (Mean = 4.01, $SD = 0.38$), while the "45-54" group ($n=84$, 31.1%) demonstrates strong positive attitudes (Mean = 4.09, $SD = 0.35$) towards the FPO governance and management.

VII. CONCLUSION

Overall, the analysis of board members' knowledge levels indicates satisfactory governance competence. More than half of the respondents (57.8%) demonstrated medium knowledge of governance and management, while more than two-fifths (41.9%) of the members showed a high level of knowledge; however, targeted training is needed to enhance their skills for effective governance. The training and capacity-building programme on governance and management of the FPOs should be an ongoing activity rather than a one-off event. Regarding attitudes, board members generally have positive perceptions of participation, member elections, and member supervision, while perceptions are low to moderate regarding dedicating time, attendance, political neutrality, and decision-making without influence.

VIII. CONTRIBUTION OF THE STUDY

By analysing multiple knowledge domains and attitudinal dimensions, this study contributes to the broader understanding of governance performance in FPOs, highlights structural issues, and provides evidence-based recommendations for institutional strengthening.

IX. LIMITATIONS OF THE STUDY

The primary limitation of the study is the limited time and resources, which led the researcher to focus on only a limited area. The study is restricted to three out of six agro-climatic zones. Therefore, it would not be appropriate to generalise the findings to other agro-climatic zones with different conditions. Furthermore, since the field survey was conducted in 2024, the respondents' perceptions reflect that time frame. As a result, respondents' opinions may differ in future.

Interest Conflicts

The authors declare that there is no conflict of interest concerning the publication of this paper.

Funding Statement

This study did not receive financial support from any public, commercial, or non-profit funding agency. It was personally financed by the researcher as a fulfillment of the academic requirements for the PhD in Assam Institute of Management under Assam Science and Technology University (ASTU).

X. REFERENCES

- [1] Dash, S., & Mazhar, S. H. (2021). A Study on the Impact of Farmer Producer Organisations on its Member Respondents in Puri District of Odisha. *International Journal of Advances in Agricultural Science and Technology*, 52-65.
- [2] Govil, A. N. (2020). *Farmer Producer Companies Past, Present and Future*. Bangalore: Azim Premji University.
- [3] Palanichamy, T. S. (2021). Farmer Producer Companies in India: An Overview. *Current Journal of Applied Science and Technology*, 1-8.
- [4] Shankar, G. (2019). *Farmer Producer Companies: Preliminary Studies on Efficiency and Equity from Maharashtra*. Chennai: The Hindu Centre for Politics and Public Policy.
- [5] Yashashwini, K. B. (2018). Evolution of Farmer Producer Organisations: Challenges and Opportunities. *Research Journal of Agricultural Sciences*, 709-715.
- [6] Welfare, M. o. (2020). *Formation and Promotion of 10,000 Farmer Producer Organisations (FPOs)*. New Delhi: Department of Agriculture, Cooperation & Farmers' Welfare.
- [7] BIRD. (n.d.). Governance and Management of FPOs.
- [8] Nikam, V., Singh, P., Ashok, A., & Kumar, S. (2019). Farmer producer organisations: Innovative institutions for upliftment of small farmers. In *Indian Journal of Agricultural Sciences* (Vol. 89, Issue 9, pp. 1383–1392). Indian Council of Agricultural Research. <https://doi.org/10.56093/ijas.v89i9.93451>
- [9] Singh, S., & Singh, T. (2014). *Producer Companies in India*. Allied Publishers Pvt Ltd.
- [10] Venkattakumar R. (2019). Importance of FPOs in Agricultural and Rural Development: Strategies for Effective Implementation and Scaling-up. *Journal of Extension Education*, 31(3), 5122–5127.
- [11] Gummagolmath, K., Yadav, S., & Singh, P. K. (2021). A Study on Human Resource Issues in Farmer Producer Companies in Maharashtra, India. *Journal of Agricultural Extension Management*.
- [12] Manjinder Singh, D. T. (2022). Behavioural Determinants of Functionality of Farmer Producer Organisations in Punjab. *Indian Journal of Extension Education*, 130-135.
- [13] Yadav, V. K., Singh, R., & Singh, A. K. (2022). Constraints as Perceived by FPO Board of Directors in Jharkhand, India. *Journal of AgriSearch*, 9(3), 195–199.
- [14] Kumar Bishnoi, R., & Kumari, S. (2020). Challenges Faced by FPOs & Strategies to Overcome: A Review. *International Journal of Advances in Agricultural Science and Technology*, 7(6), 28–34.
- [15] Bala, E. A. (2022). Role, issues and challenges faced by various agencies in promotion of FPO. *Indian Farmer Volume 9*, 380-386.
- [16] Pek J, W., & Wong ACM. (2018). How to Address Non-normality: A Taxonomy of Approaches, Reviewed and Illustrated. *Front Psychol*, 9.
- [17] Mishra P, P. C. S. U. G. A. S. C. K. A. (2019). Descriptive statistics and normality tests for statistical data. *Ann Card Anaesth*, 67–72.
- [18] Nahm FS. (2016). Nonparametric Statistical Tests for the Continuous Data. *Korean J Anesthesiol*, 69(1), 8–14..