



# Social Governance in the Fresh Fruit Bunch Marketing Program among Farmer Organizations in Johor, Malaysia

<sup>1</sup>Mohd Ismail Roslan, <sup>2</sup>Asnul Dahar Minghat, <sup>3</sup>Hayati@Habibah Abd Talib

Faculty of Social Sciences and Humanities<sup>1,2</sup>, Faculty of Artificial Intelligence<sup>3</sup>, Universiti Teknologi Malaysia

Corresponding Author Email: Mohd62@graduate.utm.my

DOI Link: <http://dx.doi.org/10.6007/IJAREMS/v15-i3/29032>

Published Online: 30 September 2026

## Abstract

Farmer organizations coordinate agricultural marketing, facilitate service access, and connect smallholders with buyers. Effectiveness depends on infrastructure, management, information systems, and participation. This study investigates social governance within the Fresh Fruit Bunch (FFB) marketing program among farmer organizations in Johor, Malaysia, addressing three research questions concerning infrastructure and technology, management and accountability, and member participation. Using qualitative methodology, the study analyses semi-structured interview data through inductive coding. Analysis identifies themes for each research question: infrastructure and technology; operational proficiency, decision-making, governance, and relationships; and operational involvement, participation through benefits, decision-making, and expectations. Findings indicate social governance manifests in service delivery, coordination, transaction management, and member input opportunities. A distinction emerges between formal accountability and member experiences of disclosure and participation.

**Keywords:** Social Governance, Fresh Fruit Bunch, Farmer Organizations, Collective Marketing, Smallholders, Accountability, Member Participation, Malaysia

## Introduction

Agricultural marketing extends beyond producing and selling crops. It requires coordinated production, harvesting, collection, weighing, grading, transportation, and payment. These processes are especially critical for unpreserved products when producers rely on traders or collective organizations to access buyers. Farmer organizations support collective marketing by coordinating services, aggregating supply, and facilitating member engagement. However, their presence does not guarantee effective operations or meaningful participation. Outcomes depend on resources, coordination, communication, and implementation.

Recent research supports the importance of examining farmer organizations through their information networks and institutional settings. Kusnandar et al. (2024) found that farmers

drew on different social and supply-chain actors for information, including peers and traders. Relationships between actors, rather than formal membership alone, shape information flow. Similarly, Ouerghemmi et al. (2024) highlighted that farmer organizations contribution depends on context. These considerations apply to the FFB marketing program among farmer organizations in Johor, Malaysia. The program coordinates facilities, transport, weighing, digital systems, and member services. Findings highlight operational factors including collection center distance, road conditions, lorry availability, fruit quality, and digital system limitations. Management concerns include operational planning, financial decisions, and communication.

Research on agricultural supply-chain governance provides comparative perspective. Kissi and Herzig (2024) examining governance factors in Ghana's cocoa value chain consider relationships between governance arrangements and economic and social upgrading. Although their commodity and setting differ from Johor FFB context, their work supports examining governance in relation to relationships and processes through which value-chain participants operate. Digital systems may support recording and retrieval of transaction information. Yet technology does not automatically guarantee transparency or efficiency. Digital systems face constraints from connectivity, cost, equipment condition, staff capability and lack of integration. Research on digitalization in smallholder agriculture identifies the importance of digital infrastructure, competencies and social context in which technology is used. Consequently, technological capacity must align with organizational routines.

This study examines social governance in the FFB marketing program among farmer organizations in Johor through three research questions of (1) What infrastructure and technological conditions are described as enabling or constraining the implementation of FFB marketing?, (2) How do management accounts explain operational decisions, managerial competencies, and accountability under market and organizational pressures?, and (3) How do farmer members describe participation, transparency, fairness, trust and the services they receive?

## **Background Overview**

### *Farmer Organisations and Agricultural Marketing*

Farmer organisations facilitate collective agricultural marketing by coordinating produce collection, transportation, market information, transactions and communication between farmers and buyers. They may also provide access to agricultural inputs, financial assistance and technical services. Their role therefore extends beyond marketing to coordinating operational activities and relationships within agricultural supply chains (Ouerghemmi et al., 2024; Rosairo & Esham, 2021). Effective collective marketing requires coordination among members, management, governing boards, transport providers and buyers. Kusnandar et al. (2024) highlight the importance of information networks in farmer organisations. In FFB marketing, harvesting, collection, weighing, grading and transportation are interconnected activities. Delays or inadequate transport capacity may disrupt the supply chain, emphasising the importance of operational coordination (Klerkx et al., 2022; Ouerghemmi et al., 2024). Therefore, evaluating farmer organisations requires consideration of both operational performance and members' experiences, including service accessibility, communication and transaction transparency. This perspective provides the foundation for examining social governance in Johor's FFB marketing programme.

*The Importance of Social Governance in Farmer Organisations*

Social governance concerns how responsibilities, decision-making, accountability and relationships with members are established and implemented. It encompasses formal organisational structures and everyday practices, including information sharing, service delivery and responses to members' concerns (Rosairo & Esham, 2021; Kissi & Herzig, 2024). Formal structures, such as governing boards, management units, standard operating procedures and financial controls, do not necessarily guarantee effective accountability. Their effectiveness depends on consistent implementation, clear responsibilities and appropriate record-keeping. Research on farmer companies and cooperatives highlights the importance of understanding organisational arrangements within their specific institutional contexts (Rosairo & Esham, 2021; Organisational attributes of cooperatives and farmer companies, 2021).

In FFB marketing, accountability involves transparent weighing, transaction records, pricing, grading and payment arrangements. Simwita (2022) identifies monitoring systems and information flows as relevant to collective marketing agent performance. Clear communication is equally important because members need understandable information and appropriate responses to their concerns. Kissi and Herzig (2024) examine governance and economic and social upgrading in Ghana's cocoa value chain, while Are Collective Trading Organisations Necessarily Inclusive of Smallholder Farmers? (2022) highlights the need to examine whether collective trading arrangements provide inclusive participation. Accordingly, this study examines governance through actual organisational practices, information accessibility, accountability and member experiences.

*Infrastructure and Logistics in FFB Marketing*

FFB marketing depends on weighing centres, collection points, transportation, estate roads and suitable handling facilities. Their availability, condition and accessibility influence collection, grading and transportation. Distant collection centres, damaged roads, insufficient or ageing lorries and limited handling space may constrain operational efficiency. Magakwe and Olorunfemi (2024), in a systematic review of collective marketing among smallholder farmers in sub-Saharan Africa, examine factors associated with participation and its constraints. Magakwe et al. (2025) also investigate participation in collective marketing in South Africa, highlighting the relevance of practical conditions such as storage and marketing information.

Abdulai et al. (2020), studying rice farmers in Ghana, found that group membership and collective marketing were associated with higher prices and lower input costs in their research context. However, these findings cannot automatically be generalised to Malaysian FFB marketing. The present study identifies unripe and overripe fruit, low oil extraction rate (OER), delayed collection and high diesel costs as operational concerns. These findings connect infrastructure and logistics with fruit quality, collection arrangements and operating expenses. Infrastructure also shapes members' experiences of organisational services, making it important to examine logistics alongside management and governance.

*Technology, Digitalisation and Transaction Transparency*

Digital technologies can support transaction recording, operational monitoring, inventory management and financial administration. However, effective digitalisation requires reliable

connectivity, compatible systems, suitable equipment, user competence and clear procedures. Klerkx et al. (2022) emphasise that digitalisation in smallholder farming involves not only technology but also the resources, competencies and practices of its users.

The study findings identify digital weighing, FFB management systems, Malaysian Palm Oil Board (MPOB)-related systems, CCTV and accounting systems. Constraints include weak internet connectivity, expensive systems, outdated equipment, limited digital skills and unintegrated systems. These findings indicate that technology availability does not necessarily guarantee effective implementation. Digital records, weighing tickets and audit trails may improve traceability and support transaction verification. Nevertheless, transparency also depends on record accuracy, access to information and procedures for addressing discrepancies. Digitalizing Traditional Agri-Food Supply Chains in Developing Economies (2025) similarly discusses integrating digital technologies with supply-chain processes and governance. For Johor's FFB marketing programme, technology-enabled transparency therefore depends on how systems are integrated into daily operations and how information is maintained, reviewed and communicated.

#### *Management Capability and Organisational Accountability*

Management capability involves coordinating collection planning, transportation, weighing-centre operations, grading and problem-solving. The findings also identify MPOB-related price information, OER, cost control, cash flow and member payments as strategic and financial considerations. These responsibilities require managers to balance operational requirements, service delivery and financial sustainability. Competition from private traders is another contextual consideration. The findings identify competitive prices, immediate cash payments and farm-level collection as features of alternative marketing channels. However, they do not quantify members' movement between buyers or establish the financial advantages of particular channels.

The findings further identify the Area Farmers' Organisation Board (AJP), general manager, marketing unit, finance unit, subcommittee, standard operating procedures and policies as components of organisational governance. Effective accountability depends on whether responsibilities are clearly understood and procedures consistently implemented. Simwita (2022) highlights monitoring and information flows in collective marketing, while Rosairo and Esham (2021) emphasise examining actual organisational practices rather than assuming that formal institutional arrangements automatically produce effective outcomes. Accordingly, management capability in this study encompasses operational coordination, strategic and financial decision-making, and accountability.

#### *Member Participation, Trust and Membership Benefits*

Member participation includes operational activities, such as harvesting, notifying weighing centres, arranging transportation and receiving payments. It also involves access to input credit, loans, farm-management services, incentives and harvesting support. Members may communicate their views through unit meetings, annual general meetings, customer days, direct discussions and representative structures. Operational participation does not necessarily mean members influence organisational decisions. Ahmad et al. (2024), examining collective action in Indonesia's rice value chain, highlight the relevance of member voice inclusion. Magakwe et al. (2025) similarly investigate factors associated with

smallholder participation in collective marketing. These studies provide comparative perspectives on the relationship between organisational arrangements and participation.

The present findings identify participation channels alongside limitations, including infrequent meetings, suggestions not implemented, unclear reports and inconsistent follow-up. The qualitative analysis characterises participation as closer to consultation than equal decision-making power. This represents an analytical interpretation of the findings rather than a claim that all members experience participation identically. Membership benefits include input credit, loans, farm-management services, incentives, harvesting services and social benefits. The findings also identify member responsibility, family continuity and trust in weighing and PPK. Trust may be shaped by transparent information, consistent procedures and the handling of discrepancies, rather than formal membership alone. Members' expectations include competitive prices, rebates or vouchers, farm visits, regular meetings, harvesting services and improved collection centres. These expectations demonstrate that membership value extends beyond selling FFB to include service quality, communication and organisational responsiveness.

## **Methodology**

### *Design*

A qualitative approach is employed to examine social governance in the FFB marketing program among farmer organizations in Johor. The research design addresses three research questions focused on infrastructure and technology, management and accountability, and member participation. Qualitative methods are particularly suitable for exploring processes, perceptions, and organizational practices in depth, capturing nuances not easily quantified. The researcher adopts an interpretive stance, prioritizing participants' perspectives while acknowledging the researcher's positionality on data collection, coding, and interpretation. This reflexivity enhances credibility and transparency.

The analysis follows an inductive coding process, grouping initial codes into categories and developing them into wider themes aligned with the three research questions. Qualitative thematic analysis delivers a systematic way to identify and interpret patterns within qualitative material. The findings present coding analysis of data. Its tables organize initial codes into categories and themes aligned with the three research questions. The semi-structured interview methods are complementary. Interviews provide accounts of participants' experiences and perspectives on the marketing program, including operational arrangements, management practices and member participation.

### *Participants and Context*

The study concerns farmer organizations in FFB marketing in Johor, Malaysia. These perspectives illuminate coordination, management, and member participation in the program. Participants selected using purposive sampling of district farmer officers, managers, and farmer members with FFB marketing experience. Final participant counts should be reported from fieldwork records, not inferred from code labels, because the findings state codes are analytical labels rather. Purposive sampling is suitable for qualitative research when participants are selected for relevant experience. However, the study does not claim the sample is statistically representative of Johor organizations.

*Data Analysis Procedure*

The findings were organized using an inductive coding process. Initial codes were grouped into categories and developed into analytical themes. Code labels are retained to preserve analysis. For Research Question 1, coding covers infrastructure and logistics, operational quality, technology integration, and transparency. For Research Question 2, it covers supply-chain capability, decision-making, governance structure, management–member relationships, and implementation weaknesses. For Research Question 3, it covers operational involvement, participation through benefits, decision-making participation, limits to participation. The analysis uses code labels as analytical categories, not as counts of participant views. The findings are reported qualitatively, and no prevalence estimates are calculated from the codes.

**Findings**

*Research Question 1: What infrastructure and technological conditions are described as enabling or constraining the implementation of FFB marketing?*

The analysis detects four themes: physical infrastructure and logistics; operational quality and capability; technology and system integration; and technology-enabled transparency illustrated in Table 1:

Table 1

*Findings from Research Question 1*

| Theme                                 | Category                        | Initial codes                                                                                                                                    | Analytical interpretation                                                                                                                             |
|---------------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical infrastructure and logistics | Marketing facilities            | I1: Weighing centers;<br>I2: Collection centers;<br>I3: Transportation;<br>I4: Estate roads;<br>I5: Storage facilities                           | Facilities and transport infrastructure support the collection, weighing, grading, temporary storage and bulk delivery of FFB.                        |
| Physical infrastructure and logistics | Physical constraints            | I6: Distant collection centers;<br>I7: Damaged roads;<br>I8: Insufficient lorries;<br>I9: Old lorries;<br>I10: Limited space                     | Distance, road conditions, vehicle capacity and limited operating space can disrupt collection and increase operating and maintenance costs.          |
| Operational quality and capability    | FFB quality and operating costs | K1: Unripe fruit;<br>K2: Override fruit;<br>K3: Low oil extraction rate (OER);<br>K4: Delayed collection;<br>K5: High diesel costs               | Collection delays, inconsistent fruit quality and high transport costs may affect delivery efficiency, product quality and marketing margins.         |
| Technology and system integration     | Digital systems                 | T1: Digital weighing;<br>T2: FFB management system;<br>T3: MPOB-related system;<br>T4: CCTV;<br>T5: Accounting system                            | Digital tools support the recording of weights, transactions, inventory and financial information, as well as monitoring and auditing.                |
| Technology and system integration     | ICT constraints                 | T6: Weak internet connectivity;<br>T7: Expensive systems;<br>T8: Outdated equipment;<br>T9: Limited digital skills;<br>T10: Unintegrated systems | Connectivity, cost, equipment condition, staff capability and fragmented systems can limit the effective use of digital technology.                   |
| Technology-enabled transparency       | Traceability and control        | G1: Weighing tickets;<br>G2: Audit trails;<br>G3: Controls against misconduct;<br>G4: Data access                                                | Digital records and monitoring tools can improve transaction traceability, if data are accurate, secure, maintained and accessible to relevant users. |

*Physical Infrastructure and Logistics*

The first theme concerns the facilities and transport arrangements required for FFB marketing. Codes I1–I5 identify weighing centers, collection centers, transportation, estate roads and storage facilities. These resources support the collection, weighing, grading, temporary storage and delivery of FFB. The coding also identifies constraints under I6–I10: distant collection centers, damaged roads, insufficient lorries, old lorries and limited space. The analytical interpretation provided in the findings is that distance, road conditions, vehicle capacity and operating space can disrupt collection and increase operating and maintenance costs. This theme indicates that infrastructure needs to be considered as a connected operational arrangement. The presence of a facility does not necessarily mean that it can be accessed conveniently or used effectively. Collection centers depend on transportation and accessible routes, while the effectiveness of transportation depends partly on vehicle capacity and condition. The findings therefore emphasize the relationship between the availability of facilities and the conditions under which they operate.

*Operational Quality and Capability*

The second theme is represented by codes K1–K5: unripe fruit, overripe fruit, low OER, delayed collection and high diesel costs. The coding groups these issues under FFB quality and operating costs. The findings interpret collection delays, inconsistent fruit quality, and high transport costs as conditions that may affect delivery efficiency, product quality, and marketing margins. This theme links the operational process with the commercial considerations associated with FFB marketing. It also highlights the relevance of considering logistics and operating expenses together. The analysis does not quantify the contribution of each code or establish the size of its effect. Rather, it identifies the issues that form part of the qualitative account of operational quality and capability.

*Technology and System Integration*

The third theme concerns the use and limitations of digital systems. Codes T1–T5 identify digital weighing, the FFB management system, MPOB-related systems, CCTV, and accounting systems. The results show that these tools support the recording of weights, transactions, inventory, and financial information, as well as monitoring and auditing. However, codes T6–T10 identify weak internet connectivity, expensive systems, outdated equipment, limited digital skills, and unintegrated systems. The findings interpret these constraints as factors that may limit the effective use of digital technology. The analytical distinction is between technology availability and technology integration. Systems may be present but still fail to operate as a connected process when equipment is outdated, connectivity is unreliable, or staff have limited digital skills. Unintegrated systems may also require information to be entered separately throughout various processes. The findings therefore identify digital capability as a combination of equipment, connectivity, user skills and system integration.

*Technology-Enabled Transparency*

The fourth theme is represented by codes G1–G4: weighing tickets, audit trails, controls against misconduct and data access. These codes relate to the traceability and control of marketing transactions. The results show that digital records and monitoring tools can improve transaction traceability when data are accurate, secure, maintained, and accessible to relevant users. The presence of records is therefore considered important but not sufficient on its own. The quality of record keeping and the arrangements for accessing and reviewing

information are also relevant. This theme connects technology with governance. Weighing tickets and audit trails can provide a basis for tracing transactions, while data access and controls relate to how information can be reviewed. They identify traceability and control as key areas in the analysis of social governance.

Findings from Research Question 1 indicted that the four themes identify the physical, operational, and digital conditions associated with FFB marketing. Infrastructure and logistics establish the practical conditions for collection and delivery; operational quality and costs are linked to the functioning of the marketing process; digital systems support the recording and monitoring of transactions; and traceability mechanisms deliver a basis for reviewing information. The coding identifies both enabling conditions and constraints, rather than portraying the operational environment as uniformly effective or ineffective.

*Research Question 2: How do management accounts explain operational decisions, managerial competencies and accountability under market and organizational pressures?*

The findings identify four connected areas of supply-chain operating efficiency, strategic and financial decision-making, governance structure and control, and management–member relationships with an additional theme concerning implementation weaknesses illustrated in Table 2:

Table 2  
*Findings from Research Question 2*

| Theme                                   | Category                                     | Initial Codes                                                                                                                                                                                 | Analytical Interpretation                                                                                                                          |
|-----------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Supply-chain operational efficiency     | Logistics and quality                        | M1: Collection planning;<br>M2: Lorry management;<br>M3: Weighing-center management;<br>M4: Grading;<br>M5: Problem-solving                                                                   | Managers coordinate collection schedules, transport, weighing, grading and operational responses to maintain the flow of FFB.                      |
| Strategic and financial decision-making | Price, costs and payments                    | M6: MPOB-related price information;<br>M7: OER;<br>M8: Cost control;<br>M9: Cash flow;<br>M10: Member payments                                                                                | Pricing and operational decisions need to consider market information, fruit quality, operating costs, competition and the ability to pay members. |
| Governance structure and control        | Division of responsibilities                 | U1: Area Farmers' Organisation Board (AJP);<br>U2: General Manager;<br>U3: Marketing unit;<br>U4: Finance unit;<br>U5: Subcommittee;<br>U6: Standard operating procedures (SOPs) and policies | Formal roles and procedures allocate responsibilities for policy, operations, marketing, finance and monitoring.                                   |
| Governance structure and control        | Record-based transparency and accountability | U7: Weighing tickets;<br>U8: Transaction records;<br>U9: Audits;<br>U10: Reports;<br>U11: Corrective action                                                                                   | Records and audit processes provide evidence for reviewing transactions, identifying discrepancies and following up on problems.                   |

|                                 |                         |                                                                                                                              |                                                                                                                            |
|---------------------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Management–member relationships | Trust and communication | H1: Two-way communication;<br>H2: Management visits to members;<br>H3: Feedback;<br>H4: Trust;<br>H5: Fair treatment         | Responsive communication and fair treatment can support members' confidence in the organisation and its marketing service. |
| Implementation weaknesses       | Inconsistent practices  | L1: Infrequent meetings;<br>L2: Insufficiently detailed reports;<br>L3: Suggestions not accepted;<br>L4: Insufficient skills | Members' experiences of communication, reporting, responsiveness and management capability are not uniform.                |

### *Supply-Chain Operational Capability*

The first theme comprises codes M1–M5: collection planning, lorry management, weighing-center management, grading and issue resolution. These codes identify the operational responsibilities involved in coordinating FFB marketing. The findings interpret these activities as interdependent tasks. Collection planning must be coordinated with transport arrangements, while weighing-center operations and grading need to support the flow of FFB. Managers are also required to respond to operational problems. The coding therefore presents managerial capability as involving the coordination of multiple activities rather than the management of isolated tasks. The theme complements the infrastructure findings in Research Question 1. Physical facilities and vehicles provide operational resources, while management activities organize their use. The coding does not measure the effectiveness of individual managers, but it identifies the range of responsibilities associated with operational coordination.

### *Strategic and Financial Decision-Making*

The second theme includes codes M6–M10: MPOB-related price information, OER, cost control, cash flow and member payments. The findings identify these as relevant considerations in management decisions. The analytical interpretation is that pricing and operational decisions need to account for market information, fruit quality, operating costs, competition, and the capacity of members to pay. These considerations connect commercial decisions with the organization's ability to maintain services and meet payment obligations. The findings also identify competition from private traders as a relevant pressure, particularly where alternative buyers offer daily price information, immediate cash payment or collection directly from farms. This context adds a member-facing dimension to financial decision-making. Decisions about cost and payment may be experienced by members through the practical conditions of marketing. The analysis does not establish that every organization faces the same constraints or that one pricing or payment strategy would necessarily produce better results. It identifies the issues considered relevant to management decisions in the supplied coding analysis.

### *Governance Structure and Control*

The third theme identifies formal organizational responsibilities through codes U1–U6: the AJP, general manager, marketing unit, finance unit, subcommittee, and SOPs and policies. The coding indicates that responsibilities for policy, operations, marketing, finance, and monitoring are distributed across organizational roles and procedures. These structures

provide a basis for allocating duties. Their practical contribution, however, depends on whether responsibilities are understood and procedures are applied consistently. The findings therefore distinguish the existence of formal structures from their implementation. The second category under this theme concerns record-based openness and answerability. Codes U7–U11 identify weighing tickets, transaction records, audits, reports and corrective action. These mechanisms supply a basis for reviewing transactions, detecting discrepancies and following up on problems. The inclusion of corrective action is important to the coding structure because it connects records with organizational responses. The analytical interpretation is that documentation can support accountability, but the process also requires review and follow-up. The findings do not provide a quantitative assessment of how consistently these procedures were completed; they identify them as relevant governance mechanisms.

#### *Management–Member Relationships*

The fourth theme is represented by codes H1–H5: two-way communication, management visits to members, feedback, trust and fair treatment. The coding identifies these practices as relevant to the relationship between the organization and its members. Members experience organizational governance through routine interactions, including the handling of weighing, pricing, payment and service concerns. Two-way communication and management visits provide possible channels for discussing these matters, whilst feedback provides a means of conveying members' views. Trust and fair treatment are included as analytical codes because the findings consider them relevant to the member–organization relationship. They are not presented as measured measures of member satisfaction or as outcomes demonstrated to be caused by a particular management practice.

#### *Implementation Weaknesses*

The additional theme of implementation weaknesses comprises codes L1–L4: infrequent meetings, insufficiently detailed reports, suggestions not accepted and insufficient skills. These codes provide a counterbalance to the formal governance structures identified above. They indicate that members' experiences of communication, reporting, responsiveness and management capability are not uniform. The findings therefore do not portray governance as consistently effective across all settings. The coding also identifies a distinction between the existence of formal channels and the experience of using them. Meetings may provide an opportunity for communication, but infrequent meetings can limit that opportunity. Reports may exist but provide insufficient detail for members to understand particular issues. Suggestions may be raised but not accepted, while skills limitations may constrain implementation. The finding that a suggestion was not accepted does not by itself establish that the decision was inappropriate. The coding identifies the issue as part of members' reported experience. Whether a decision was justified would call for further evidence about the suggestion, the reasons for the decision, and any subsequent explanation or follow-up.

Findings from Research Question 2 indicted that the management findings connect operational coordination, financial decision-making, formal governance, record-keeping and member relationships. The coding identifies both mechanisms that can support accountability and weaknesses in implementation. It therefore provides a basis for analyzing management as an operational and social-governance function.

*Research Question 3: How do farmer members describe participation, transparency, fairness, trust and the services they receive?*

The findings identify five themes: operational involvement; participation through benefits and membership; decision-making participation; limits to participation; and members' expectations illustrated in Table 3:

Table 3

*Findings from Research Question 3*

| Theme                                         | Category                         | Initial codes                                                                                                                                                       | Analytical interpretation                                                                                                                                |
|-----------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operational involvement                       | Harvesting, delivery and payment | A1: Members' own harvesting arrangements;<br>A2: PPK harvesting services;<br>A3: Notification to weighing center;<br>A4: PPK transport;<br>A5: Monthly payment      | Members participate through the practical arrangements that move FFB from the farm into the marketing process and determine how they receive payment.    |
| Participation through benefits and membership | Economic support and services    | B1: Input credit;<br>B2: Loans;<br>B3: Farm-management services; B4: Incentives;<br>B5: Harvesting services                                                         | Financial and operational support can reduce members' immediate burdens and form part of the value they associate with membership.                       |
| Participation through benefits and membership | Trust and membership identity    | K1: Member responsibility;<br>K2: Family continuity;<br>K3: Trust in weighing;<br>K4: Trust in PPK;<br>K5: Social benefits                                          | Continued participation is associated with a combination of service experience, confidence in the organisation and a sense of membership responsibility. |
| Decision-making participation                 | Formal and informal channels     | D1: Unit meetings;<br>D2: Annual general meetings;<br>D3: Customer days;<br>D4: Direct discussion;<br>D5: Unit representatives or AJP                               | Members can communicate views through meetings, direct contact, feedback and representation in organisational structures.                                |
| Limits to participation                       | Uneven influence                 | P1: Views accepted;<br>P2: Follow-up action;<br>P3: Infrequent meetings;<br>P4: Suggestions not implemented; P5: Unclear reports                                    | Members may have opportunities to express opinions, but the extent to which those opinions affect decisions varies.                                      |
| Members' expectations                         | Economic value and relationships | H1: Competitive prices;<br>H2: Rebates or vouchers;<br>H3: Farm visits;<br>H4: Regular meetings;<br>H5: PPK harvesting services;<br>H6: Improved collection centers | Members identify economic, operational and communication-related improvements that they consider important to the value of participation.                |

Notes: The K codes in this table refer to membership trust and identity, not the K codes used for operational quality in Table 1.

#### *Operational Involvement*

The first theme comprises codes A1–A5: members' own harvesting arrangements, PPK harvesting services, notification to the weighing center, PPK transport, and monthly payment. The findings interpret these activities as practical forms of participation. Members' involvement is not limited to attending meetings or holding membership status. It also

includes the arrangements through which FFB moves from the farm into the marketing process and the way payment is received. This theme accentuates the operational nature of member participation. Harvesting arrangements, communication with weighing centers, and the use of transport services are part of members' interaction with the organization. The coding identifies these activities without claiming that every member follows the same arrangement.

#### *Participation Through Benefits and Membership*

The second theme comprises economic support and services, codes B1–B5, and trust and membership identity, codes K1–K5. The economic-support codes include input credit, loans, farm-management services, incentives and harvesting services. The membership-identity codes include member responsibility, family continuity, trust in weighing, trust in PPK and social benefits. The findings interpret these codes as indicating that members may associate participation with a combination of practical services, economic considerations and relationships with the organization. Price is not the only consideration identified in the coding analysis. Members may also consider the support available to them, their confidence in weighing, and their sense of membership responsibility. However, the findings do not establish that every member uses or values these services equally. The coding identifies the relevant dimensions of participation rather than a uniform member preference.

#### *Decision-Making Participation*

The third theme is represented by codes D1–D5: unit meetings, annual general meetings, customer days, direct discussion, and unit representatives or the AJP. These codes identify official and informal channels through which members can communicate views. The findings interpret the channels as opportunities for interaction between members and management. They do not, however, equate the existence of communication channels with equal influence over decisions. Formal meetings may provide a space for discussion, while open communication may allow members to raise individual concerns. Representation through unit leaders or the AJP provides another route for conveying views. The practical value of these channels depends on how they operate and how members experience the process.

#### *Limits to Participation*

The fourth theme comprises codes P1–P5: views accepted, follow-up measures, infrequent meetings, suggestions not implemented and unclear reports. The coding indicates that members' experiences of participation vary. Some views may be accepted or followed up, while other accounts identify limited meeting opportunities, suggestions that are not implemented or reports that are not sufficiently clear. The findings make an important analytical distinction between being able to express a view and being able to influence a decision. The source analysis characterizes the participation described in the records as closer to consultative participation than to equal decision-making power. The interpretation is that members may have opportunities to speak, but the extent of their influence varies with factors such as meeting frequency, report clarity, as well as management follow-up. This finding should not be generalized to every member or organization. It identifies a pattern in the coding analysis, not a claim that all members experience the same limitations.

*Members' Expectations*

The fifth theme comprises codes H1–H6: competitive prices, rebates or vouchers, farm visits, regular meetings, PPK harvesting services and improved collection centers. These codes identify economic, operational and relationship-related improvements that members consider important to the value of participation. A request for a service may reflect a perceived shortcoming, a desire to improve an existing service or a comparison with another provider. The findings caution against treating every request as proof that a service is absent. The coding also places these expectations within the context of competition from outside buyers. Alternative buyers may be attractive when they offer immediate cash payment, competitive prices, harvesting assistance, or collection directly from farms. These options form part of the marketing context in which members assess the value of organizational services. The findings do not establish how many members choose alternative buyers or which factor determines an individual decision. Instead, the analysis finds expectations and alternative marketing arrangements as relevant to understanding member participation.

Findings from Research Question 3 indicted that the member findings identify participation as a combination of operational involvement, use of services, membership relationships and opportunities to contribute to organizational decisions. They also identify variation in the influence members experience and a range of expectations concerning price, services, communication and infrastructure.

*Cross-Cutting Synthesis*

The synthesis of the findings demonstrates that organizational resources, management practices, and member experience are not merely parallel but dynamically interconnected dimensions that collectively shape social governance within the FFB marketing program. Specifically, the analysis shows that the state of operational infrastructure and digital systems directly informs and constrains management practices, such as resource coordination, decision-making, and the implementation of accountability mechanisms. In turn, these management practices mediate the ways in which members engage with the organization, influencing their opportunities for participation, access to information, and perceptions of transparency and fairness. Member experiences and feedback then loop back to inform management priorities and adjustments in operational arrangements, creating a cyclical relationship among the three dimensions. By explicitly tracing these interdependencies across the three research questions, this cross-theme synthesis elucidates the mechanisms through which organizational capacity, governance practices, and member participation mutually shape one another.

Table 4

*Cross-cutting synthesis of the findings*

| Research question                        | Main analytical dimensions                                                                                             | Social-governance implications                                                                                                                                                                         |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RQ1: Infrastructure and technology       | Physical facilities, logistics, FFB quality, digital systems and transaction traceability                              | Infrastructure and technology create the operational conditions for collective marketing. Their contribution depends on accessibility, reliability, integration and appropriate access to information. |
| RQ2: Management and accountability       | Operational coordination, price and cost decisions, organisational responsibilities, records, audits and communication | Management must coordinate resources while maintaining explainable decisions, consistent procedures and follow-up on operational or transaction-related problems.                                      |
| RQ3: Member participation and experience | Service use, membership benefits, trust, communication channels, influence and expectations                            | Meaningful participation depends on both the value of services and members' opportunities to understand decisions, express concerns and receive feedback.                                              |

Across the three questions, the analysis suggests that social governance cannot be understood through formal structures alone. Infrastructure and technology shape the conditions under which services can be delivered. Management coordinates resources, responsibilities and procedures. Members encounter these arrangements through services, transactions, communication and participation. The findings also distinguish formal accountability from experienced accountability. Digital records, weighing tickets, reports and audits provide mechanisms for reviewing transactions, but members' experiences may also depend on whether information is explained, concerns are heard, and corrective action is communicated. Likewise, meetings create opportunities to participate, but their existence does not establish that members can influence decisions.

### Discussion

This study examines social governance in the FFB marketing programme in Johor through six interconnected dimensions: infrastructure and logistics, digitalisation, management capability, member participation, membership benefits and organisational governance. The findings highlight the relationship between organisational capacity, governance practices and members' experiences. However, the qualitative findings do not establish causal relationships or statistical generalisability. The absence of direct participant quotations also limits the presentation of individual perspectives. The discussion therefore interprets the identified themes in relation to relevant literature while remaining within the scope of the available evidence.

First, infrastructure and logistics provide the operational foundation for collective marketing. However, their contribution depends not only on the availability of physical resources but also on accessibility, coordination and effective utilisation. Second, digital technologies can support transparency, but their practical value depends on system integration, connectivity and users' digital capabilities. Third, management capability encompasses operational coordination, financial decision-making and accountability. Finally, member participation must be understood in terms of both opportunities to express opinions and the extent to

which those opinions receive consideration and follow-up. These findings support a multidimensional understanding of social governance in farmer organisations. The findings also suggest that members assess collective marketing through their experiences of service delivery, communication, trust and membership benefits. Competition from alternative buyers provides an additional context for understanding members' expectations.

#### *Infrastructure and Logistics Support Governance*

The findings identify weighing centres, collection centres, transportation, estate roads and storage facilities as essential components of FFB marketing. Constraints include damaged roads, insufficient or ageing lorries, distant collection centres and limited space. These findings demonstrate that organisational capacity involves not only possessing physical resources but also ensuring their accessibility and effective coordination. Infrastructure and logistics are closely connected to operational quality. Collection arrangements, transportation capacity and handling facilities must work together to support the movement of FFB. Therefore, assessing infrastructure solely by counting available facilities may overlook practical limitations affecting service delivery. The findings also reveal a social-governance dimension. Members experience infrastructure constraints through collection arrangements, delays and difficulties accessing facilities. How management communicates and responds to these issues may shape members' experiences of organisational services. Although organisations may face financial or physical limitations, transparent communication can help members understand operational constraints. Accordingly, infrastructure improvements should be considered alongside transport coordination, facility accessibility and service management. This integrated approach recognises that physical resources and organisational practices jointly shape the implementation of collective marketing.

#### *Digital Systems Enable Transparency*

The findings identify digital weighing, FFB management systems, MPOB-related systems, CCTV and accounting systems as technological components of the marketing programme. However, weak internet connectivity, high system costs, outdated equipment, limited digital skills and unintegrated systems present implementation challenges. These findings demonstrate that acquiring digital equipment does not necessarily result in effective digitalisation. Systems must be accessible, compatible with operational requirements and supported by appropriate staff capabilities. Klerkx et al. (2022) conceptualise digitalisation in smallholder farming as a process shaped by technological resources, competencies and everyday practices. This perspective supports understanding digitalisation as a socio-technical process rather than a purely technical investment. Eastwood et al. (2019) also provide a relevant perspective on the relationship between digital technologies and the social and organisational contexts of agricultural innovation. Digital weighing tickets, audit trails and data access can support transaction traceability and accountability. Nevertheless, these mechanisms do not automatically guarantee transparency. Their effectiveness depends on accurate records, appropriate access to information and procedures for investigating discrepancies. Research on digitalisation in agri-food supply chains similarly emphasises the relationship between digital information, operational coordination and governance (Digitalizing Traditional Agri-Food Supply Chains in Developing Economies, 2025). For the Johor FFB marketing programme, attention should therefore be given to how information moves between weighing, logistics, inventory management, payment and accounting. System

integration, staff capability and reliable access to information are important considerations when strengthening technology-enabled transparency.

#### *Managerial Capability Requires Coordination and Follow-Up*

The findings indicate that FFB marketing management involves operational coordination and strategic financial decision-making. Operational responsibilities include collection planning, lorry management, weighing-centre operations, grading and problem-solving. Financial considerations include price information, OER, cost control, cash flow and member payments. These responsibilities demonstrate that management capability extends beyond administrative compliance. Managers must coordinate resources, respond to operational problems and consider financial implications while maintaining marketing services. The findings identify the general manager, marketing unit, finance unit, AJP, subcommittee, standard operating procedures and policies as components of the governance structure. Weighing tickets, audits, transaction records and reports provide mechanisms for monitoring and reviewing transactions. However, formal arrangements alone do not establish effective accountability. Rosairo and Esham (2021) offer a comparative perspective on institutional facilitation and organisational practices in farmer companies. Their research reinforces the importance of examining how organisational structures function in practice, although the Sri Lankan context differs from Johor. The findings also identify implementation weaknesses, including infrequent meetings, insufficiently detailed reports, suggestions not accepted and inadequate skills. These issues highlight the distinction between establishing governance mechanisms and implementing them consistently. Management capability therefore involves making decisions, communicating their rationale and following up on identified problems. Records and procedures support accountability, but their practical value depends on how information is reviewed and how concerns are addressed.

#### *Member Participation and the Distinction Between Voice and Influence*

The findings show that participation occurs through operational activities, including harvesting, notifying weighing centres, transportation and payment arrangements. Members also participate through meetings, customer days, direct discussions and representation. These activities demonstrate that participation extends beyond meeting attendance to include members' involvement in the marketing process and their access to organisational services. Kusnandar et al. (2024) highlight the importance of information networks and relationships among actors within farmer organisations. In the Johor context, the findings similarly identify formal and informal communication channels, alongside limitations affecting their implementation. An important distinction emerges between having opportunities to express opinions and having influence over decisions. The supplied qualitative analysis characterises member participation as primarily consultative rather than involving equal decision-making power. This interpretation is supported by codes concerning whether members' views are accepted, whether follow-up occurs and whether suggestions are implemented. Meaningful participation should therefore be examined as a process involving several stages: expressing a concern, having it considered, receiving feedback and understanding the outcome. Not every suggestion must be accepted, as decisions may involve financial, operational or institutional constraints. Nevertheless, communicating the reasons for decisions and providing appropriate follow-up are important aspects of organisational responsiveness. These findings suggest that participation should be evaluated according to

how communication channels function in practice, rather than merely whether formal opportunities for participation exist.

#### *Membership Benefits, Trust and Competition*

The findings identify input credit, loans, farm-management services, incentives and harvesting services as membership benefits. They also highlight member responsibility, trust in weighing, trust in PPK and social benefits. These themes suggest that membership experiences extend beyond the immediate sale of FFB to include practical support and relationships with the organisation. Members' expectations include competitive prices, rebates or vouchers, farm visits, regular meetings, harvesting services and improved collection centres. These expectations highlight the importance of service quality, communication and organisational responsiveness. However, they should not be interpreted as evidence that every requested service is entirely unavailable. Competition from private traders provides an additional context for understanding members' expectations. The findings identify competitive prices, immediate cash payments and collection directly from farms as features of alternative marketing channels. These factors may influence how members evaluate the convenience and benefits of collective marketing. Nevertheless, the findings do not establish how many members change buyers or quantify the relative financial advantages of alternative channels. Kissi and Herzig (2024) provide a broader agricultural value-chain perspective on governance and economic and social upgrading. Although their study does not directly examine FFB farmers in Johor, it supports considering governance in relation to the experiences and interests of value-chain participants. For farmer organisations, the findings highlight the importance of understanding membership through service delivery, trust, communication and perceived benefits. Organisational responses should take account of members' expectations while recognising actual operational capacity and available resources.

#### *Integrating Organisational Governance Dimensions*

The findings support an integrated interpretation of social governance involving three interconnected dimensions: organisational capacity, governance practices and member experiences. Organisational capacity encompasses physical infrastructure, transportation, technology and operational resources. Governance practices involve management coordination, financial decision-making, accountability, record-keeping and communication. Member experiences include service use, trust, membership benefits, participation and expectations. These dimensions are analytically interconnected. Organisational resources provide the capacity to undertake marketing activities, while management practices determine how resources are coordinated and used. Members experience these arrangements through service delivery and their interactions with the organisation. Their feedback also provides information about operational constraints and expectations. This interpretation is consistent with broader discussions of collective action and institutional governance (Agrawal, 2001; Ostrom, 1998). The qualitative findings identify related issues but do not establish that improvements in one dimension necessarily produce specific outcomes in another. Overall, the study demonstrates the importance of examining social governance beyond formal structures and administrative procedures. Infrastructure alone does not guarantee reliable services, digital systems do not automatically ensure transparency, and formal meetings do not necessarily produce meaningful member influence. Understanding social governance therefore requires attention to how organisational resources, management

practices and member relationships operate together within the FFB marketing programme in Johor.

### Conclusions

This study investigated social governance in the FFB marketing program among farmer organizations in Johor, addressing three research questions related to infrastructure and technology, management and accountability, and member participation. The study investigated social governance in the FFB marketing program among farmer organizations in Johor, addressing three research questions related to infrastructure and technology, management and accountability, and member participation. The findings are organized according to the original coding structure, preserving the codes, categories, and themes. Social governance is articulated through the interaction of organizational capacity, management practices, and member experience. While formal structures, digital records, and communication channels serve as important mechanisms, their effectiveness depends on implementation and member experience. The findings differentiate between formal and experienced accountability, as well as between participation opportunities and the influence perceived by members. Collectively, these results highlight the complexities involved in translating governance structures into meaningful organizational practices that directly impact members' experiences and perceptions. In practical terms, the findings suggest that farmer organizations should prioritize not only the establishment of formal mechanisms, but also their consistent implementation through improved communication, regular feedback opportunities, and accessible reporting. Efforts to enhance the integration of digital systems, strengthen staff skills, and clarify procedures for member participation may increase both transparency and trust.

### References

- Abdulai, A. (2020). Farmer groups, collective marketing and smallholder farm performance in rural Ghana. *Journal of Agribusiness in Developing and Emerging Economies*, 10(5), 511–527. <https://doi.org/10.1108/JADEE-07-2019-0095>
- Ahmad, S. R., Shadbolt, N., & Reid, J. (2024). Collective action for rice smallholder's value chain: Insight from Yogyakarta, Indonesia. *Journal of Co-operative Organization and Management*, 12(1), Article 100236. <https://doi.org/10.1016/j.jcom.2024.100236>
- Are collective trading organisations necessarily inclusive of smallholder farmers? A comparative analysis of farmer-led auctions in the Javanese chilli market. (2022). *Journal of Agricultural and Environmental Ethics*, 35, Article 19. <https://doi.org/10.1007/s10806-022-09891-6>
- Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. SAGE Publications.
- Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, 9(1), 3–26.
- Digitalizing traditional agri-food supply chains in developing economies: A pathway to regulated sustainable governance. (2025). *Sustainable Futures*, 10, Article 101356. <https://doi.org/10.1016/j.sftr.2025.101356>
- Fresh agricultural product logistics network governance: Insights from small-holder farms in a developing country. (2022). *International Journal of Logistics Research and Applications*.
- Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine*, 292, Article 114523.

- Kissi, E. A., & Herzig, C. (2024). The implications of governance factors for economic and social upgrading in Ghana's cocoa value chain. *Agricultural and Food Economics*, 12, Article 1.
- Klerkx, L., Jakku, E., & Labarthe, P. (2022). Toward digitalization futures in smallholder farming systems in Sub-Sahara Africa: A social practice proposal. *Frontiers in Sustainable Food Systems*, 6, Article 866331.
- Kusnandar, K., Apriliyani, E. K., Wicaksono, A., & Saville, R. (2024). Local supply chain actor roles in farmer organisation information networks: Empirical findings from two Indonesian farmer organisations. *World Development Perspectives*, 35, Article 100619.
- Li, Y., Li, J., Li, X., & Lu, Q. (2025). Does participation in digital supply and marketing promote smallholder farmers' adoption of green agricultural production technologies? *Land*, 14(1), Article 54.
- Magakwe, N., & Olorunfemi, O. (2024). A systematic review of the trends, effects, and deterrents of collective marketing participation among smallholder farmers in Sub-Saharan Africa. *Sustainability*, 16(21), Article 9578.
- Magakwe, N., Olorunfemi, O., & Sithole, A. (2025). Factors influencing smallholder farmers' participation in collective marketing: Micro-level evidence from Ehlanzeni, South Africa. *Frontiers in Sustainable Food Systems*, 9, Article 1567943.
- Ouerghemmi, H., Frija, A., Souissi, A., Carpentier, I., Shiri, Z., Dhehibi, B., & Rejeb, H. (2024). Are farmer organizations effective intermediaries and facilitators of agricultural innovations processes? Evidence from Tunisia. *Frontiers in Sustainable Food Systems*, 8, Article 1440086.
- Rosairo, H. S. R., & Esham, M. (2021). Pitfalls of external institutional facilitation of farmer organizations: Insights from farmer companies in Sri Lanka. *Millennial Asia*, 12(3), 367–389.
- Simwita, Y. (2022). Determinants of collective marketing agents' performance: An empirical study of smallholders' collective marketing with evidence from Malawi tobacco growers. *ORSEA Journal*, 12(1).