

Research Article

Cooperative Farming for Agricultural Produce Export in the South East Region, Nigeria: Problems and Prospects

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Abstract

This study examines the readiness and willingness of farmers' cooperative societies in Southeast Nigeria to engage in agricultural produce export, focusing on the behavioural and institutional factors that shape their intentions. Guided by the Theory of Planned Behaviour and a quantitative survey approach, the findings show that social influence plays the most decisive role in motivating cooperative members to participate in exports. Access to information, supportive government policies, effective cooperative management, and the availability of operational facilities also contribute meaningfully to strengthening export readiness. In contrast, farmers' attitudes, access to finance, and insecurity do not exhibit substantial influence within the cooperative context. Overall, the results indicate that while cooperative farmers demonstrate a strong willingness to internationalize their produce, practical engagement remains hindered by inadequate funding structures, infrastructural limitations, and managerial weaknesses. These challenges reduce cooperatives' ability to meet export standards and consistently participate in global markets. The study highlights the need for targeted policy reforms, improved financing mechanisms, and enhanced managerial capacity to support the transition from willingness to actual export participation. The insights generated are particularly relevant for policymakers, export promotion agencies, development partners, and cooperative regulatory institutions seeking to strengthen Nigeria's agricultural export diversification agenda strategically today.

Keywords: Cooperative farming; Cooperative society; exporting, Agricultural produce marketing; Nigeria

JEL Classification: Q17, O13, F14

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1. Introduction

Agricultural cooperatives have long been recognized as a vital institutional mechanism for strengthening smallholder farmers' productivity, bargaining power, and integration into formal markets, especially in developing economies where structural constraints hinder individual farmers' competitiveness (Ezeani et al., 2022; FAO, 2023).

In Nigeria, agriculture continues to support the livelihoods of millions of rural households. However, its contribution to global agricultural export remains disproportionately small, despite abundant arable land, diverse crop varieties, and favourable agro-climatic conditions (National Bureau of Statistics, 2023). This persistent mismatch between productive capability and export output underscores deep-rooted systemic challenges, including limited access to finance, weak rural infrastructure, policy inconsistency, inadequate market information, and governance inefficiencies within farmer organizations (World Bank, 2024; Nchuchuwe & Iroegbu, 2020). In this context, agricultural cooperatives particularly those in the Southeast region possess vast potential to serve as platforms for collective resource pooling, risk sharing, economies of scale, and international market participation (Agu, 2023; Oladipo & Awosanya, 2021). However, despite their historical significance and widespread presence, the cooperative movement in the region has not matured into a strategic driver of agricultural export performance.

Historically, cooperative societies in Southeast Nigeria evolved from indigenous mutual-help groups into formally registered entities following the Cooperative Societies Ordinance of 1935 (Agu, 2023). Since then, cooperatives have proliferated, engaging in production, processing, marketing, and credit mobilization. Nevertheless, findings consistently show that they remain underutilized compared to cooperative systems in countries such as Kenya, India, and Indonesia, where cooperatives have successfully linked smallholder farmers to global value chains (Chikere & Onyema, 2020). In contrast, Nigerian cooperatives are still predominantly inward-looking, with their activities concentrated on domestic production and local market distribution, rather than export-oriented initiatives. This raises critical questions not only about the structural readiness of these cooperatives but also about the behavioural motivations and institutional conditions that shape their willingness to internationalize agricultural produce.

Existing scholarship highlights numerous impediments faced by Nigerian cooperatives, including poor management capacity, inadequate financing, limited access to information, lack of modern facilities, infrastructural inadequacies, and insecurity (Adewuyi & Jimoh, 2020; Nchuchuwe & Iroegbu, 2020). While these challenges are widely documented, empirical research specifically investigating how these factors influence cooperatives' intention to engage in agricultural exports remains scarce. Most studies focus on productivity, credit access, or domestic market integration, rather than export readiness. Furthermore, prior research rarely employs behavioural frameworks capable of explaining decision-making dynamics in cooperative settings, especially regarding export participation. This gap is particularly evident in Southeast Nigeria, a region with high cooperative activity but limited empirical evidence on its export orientation.

In terms of theoretical development, another significant gap exists. Research on farmers' behaviour often draws on the Theory of Planned Behavior (TPB), which posits that attitudes, subjective norms, and perceived behavioural control shape individuals' intentions and actions (Ajzen, 2020). Although TPB has been successfully applied to agricultural innovation, climate adaptation, and technology adoption (Alam et al., 2022), few studies extend its use to agricultural export behaviour within cooperative contexts. Meanwhile, the Collective Action Theory (Olson, 2021) offers critical insights into group coordination, leadership, free-riding dynamics, and governance structures within cooperatives. However, these two theoretical perspectives are rarely integrated, creating a conceptual gap in understanding how individual decision-making processes interact with collective institutional structures to influence cooperative export engagement.

The present study addresses these important gaps by proposing a dual-theoretical approach that integrates the TPB with the Collective Action Theory. This integration provides a comprehensive lens for examining cooperative export readiness: the TPB explains individual behavioural intentions (attitude, social influence, and perceived control), while Collective Action Theory accounts for organizational governance, leadership effectiveness, information flows, and collective decision-making (Agu et al., 2024; Olson, 2021). Together, these theories offer a more holistic framework for understanding how farmers' psychological dispositions and cooperative institutional conditions jointly shape export intentions.

Empirically, this study contributes novel insights by focusing on Southeast Nigeria. This region plays a crucial role in national agricultural production but remains under-researched in the context of export-oriented cooperative behaviour. While existing literature acknowledges the potential of cooperatives for agricultural commercialization, there is limited evidence on how behavioural, institutional, and infrastructural factors combine to influence farmers' readiness and willingness to participate in export markets. By examining variables such as government policy, information access, finance, managerial competence, facilities, insecurity, attitude, and subjective norms, this study provides granular evidence on the determinants of cooperative export intention.

In addition, the study contributes methodologically by employing a quantitative structural equation modeling (PLS-SEM) approach, which allows for the simultaneous examination of complex relationships among multiple behavioural and institutional constructs (Hair et al., 2021). This approach not only enhances the empirical robustness of the findings but also advances methodological practices in cooperative research, which often relies on descriptive or qualitative data.

Beyond theoretical and empirical contributions, this study has strong practical relevance. Nigeria's current economic diversification agenda emphasizes non-oil export growth, with agriculture positioned as a strategic sector (World Bank, 2024). Understanding the behavioural and institutional drivers of cooperative export readiness is crucial for designing targeted interventions that strengthen cooperative capacity, stimulate export participation, and enhance rural livelihoods. The findings offer actionable recommendations for policymakers, cooperative leaders, export promotion agencies, donor organizations, and agricultural development practitioners committed to improving Nigeria's export competitiveness.

Overall, by addressing well-documented structural challenges, filling notable theoretical gaps, and advancing empirical evidence from an underexplored region, this study contributes to the broader discourse on agricultural transformation, cooperative development, and export diversification in Nigeria. It also underscores the need for integrated behavioural and institutional approaches to understanding how smallholder farmers can transition from production-based participation to export-driven engagement within a cooperative framework.

2. Literature Review and Hypothesis

Literature Review

The role of agricultural cooperatives in enhancing farmers' participation in global value chains has gained renewed scholarly attention in recent years. Cooperative farming provides a platform for collective resource mobilization, risk sharing, and market access, especially in developing economies where smallholder farmers face structural limitations (Amah & Nwokolo, 2023). Scholars argue that cooperatives are practical tools for agricultural modernization and export competitiveness, particularly when embedded within enabling policy environments and supported by institutional financing (Alam et al., 2022; Ezeani et al., 2022). In sub-Saharan Africa, the cooperative model aligns with the Sustainable Development Goals (SDGs) by fostering inclusive economic growth, reducing poverty, and promoting food security (FAO, 2023).

The literature identifies financial capacity as one of the most significant constraints affecting cooperative performance in agricultural export. Access to finance determines a cooperative's ability to invest in quality inputs, infrastructure, and logistics required for international trade (Oladipo & Awosanya, 2021). In Nigeria, limited access to affordable credit and weak cooperative banking systems undermine farmers' capacity to meet export standards and volume demands (World Bank, 2024). Similarly, inadequate government incentives and inconsistent policy frameworks hinder cooperative internationalization (Eze & Okwara, 2021). Empirical evidence shows that countries that integrate cooperative financing mechanisms with export promotion policies such as Kenya and India record higher agricultural export diversification (Chikere & Onyema, 2020).

Information access and knowledge dissemination are also crucial determinants of cooperative performance. According to Nchuchuwe and Iroegbu (2020), many cooperatives in rural Nigeria

operate with limited exposure to export market information, quality standards, and pricing mechanisms. This gap prevents farmers from taking advantage of global trade opportunities. Alam et al. (2022) further emphasize that knowledge sharing and digital information platforms enhance farmers' confidence in export ventures by improving perceived behavioral control, an important factor in the Theory of Planned Behavior (TPB). The growing use of mobile technology and e-agriculture platforms in Africa has improved farmers' access to real-time market data. However, the diffusion of such technologies within Nigerian cooperatives remains limited (FAO, 2023).

Another body of research highlights the importance of cooperative management and governance structures in export readiness. Effective leadership, transparency, and internal control mechanisms are essential for maintaining trust and member participation (Agu et al., 2024). Poor managerial skills and weak accountability systems, however, have been identified as significant obstacles to cooperative sustainability in Nigeria (Adewuyi & Jimoh, 2020). In addition, insecurity and infrastructural deficiencies particularly in rural areas exacerbate the risk associated with agricultural exports (Amah & Nwokolo, 2023). These multidimensional challenges suggest that cooperative export success depends not only on economic resources but also on behavioral and institutional factors that influence farmers' intentions and collective efficacy.

Recent literature increasingly applies behavioral theories such as the TPB and the Collective Action Theory (CAT) to explain farmers' participation in cooperative export initiatives (Ajzen, 2020; Olson, 2021). The TPB posits that behavioral intention, shaped by attitudes, subjective norms, and perceived behavioral control, predicts actual behavior. In the context of cooperative farming, farmers' positive attitudes toward export, the influence of social networks, and their confidence in overcoming operational barriers determine their readiness to engage in export activities (Agu et al., 2024; Alam et al., 2022). Meanwhile, the CAT emphasizes the role of collective incentives and coordination mechanisms in sustaining cooperative action (Olson, 2021). The integration of these theories provides a robust analytical framework for understanding the interaction between individual motivations and collective structures in cooperative export readiness.

Hypothesis

Attitude and Intention to Participate in Cooperative Export

Attitude refers to the degree to which an individual holds a favorable or unfavorable evaluation of a specific behavior (Ajzen, 2020). Positive attitudes toward cooperative export activities such as perceiving them as profitable, empowering, or socially rewarding are expected to enhance farmers' willingness to engage in such ventures. Alam et al. (2022) found that positive entrepreneurial attitudes significantly influence farmers' adoption of export-oriented innovation. Similarly, Amah and Nwokolo (2023) reported that cooperative members with higher optimism toward global markets exhibit stronger export intentions. However, evidence from Agu et al. (2024) indicates that in some contexts, attitudes may not translate directly into behavior due to institutional or infrastructure barriers.

H1: Farmers' positive attitudes toward cooperative agricultural export significantly influence their intention to participate in export activities.

Subjective Norms and Export Intention

Subjective norms involve perceived social pressures to perform or not perform a particular behavior. In rural communities, farmers' decisions are often influenced by family, peers, and community leaders (Ajzen, 2020). Studies show that supportive social environments increase cooperative participation and market engagement (Ezeani et al., 2022; Alam et al., 2022). In Nigeria, strong social cohesion within cooperatives can motivate members to adopt collective export practices (Agu et al., 2024). Social approval and encouragement from respected community figures have also been linked to greater willingness among farmers to explore international markets (Oladipo & Awosanya, 2021).

H2: Subjective norms positively and significantly influence farmers' intention to engage in cooperative agricultural export.

Government Policy and Export Intention

Government policy is a crucial institutional factor shaping the success of cooperative farming initiatives. Supportive policies such as tax incentives, export grants, and credit facilities have been proven to boost agricultural exports in developing economies (World Bank, 2024). Eze and Okwara (2021) noted that inconsistent export policies in Nigeria discouraged cooperation from pursuing long-term export plans. In contrast, coordinated policy frameworks in Kenya and Ghana have significantly improved cooperative export readiness (Chikere & Onyema, 2020). Thus, effective policy interventions enhance confidence, reduce perceived risk, and motivate cooperative participation in export programs.

H3: Supportive government policies positively affect farmers' intention to participate in cooperative agricultural export.

Financial Access and Export Intention

Financial resources are essential for production expansion, quality assurance, and logistics involved in agricultural exportation. A lack of credit facilities limits farmers' cooperatives' ability to meet international standards and quantity requirements (Oladipo & Awosanya, 2021). Amah and Nwokolo (2023) found a strong positive relationship between cooperative financing and export performance. Furthermore, empirical research by Adewuyi and Jimoh (2020) shows that financial inclusion promotes cooperative resilience and investment capacity. Conversely, the World Bank (2024) emphasizes that insufficient financial intermediation remains a significant barrier to Nigeria's non-oil export diversification.

H4: Access to adequate financial resources positively influences farmers' intention to engage in cooperative agricultural export.

Access to Information and Export Intention

Access to accurate and timely information enhances decision-making and market participation. In cooperative contexts, shared information about export standards, logistics, and government incentives improves members' confidence and reduces uncertainty (Alam et al., 2022). Studies by Nchuchuwe and Iroegbu (2020) and FAO (2023) demonstrate that digital platforms and extension services play a critical role in facilitating cooperative export readiness. Ezeani et al. (2022) further note that the lack of market information is a significant barrier preventing Nigerian farmers from meeting global demand.

H5: Access to export-related information positively affects farmers' intention to engage in cooperative agricultural export.

Management of Cooperatives and Export Intention

Efficient management is central to cooperative performance and sustainability. Transparent governance and participatory decision-making build trust and collective motivation (Agu et al., 2024). Poor leadership, on the other hand, results in resource mismanagement and low morale (Adewuyi & Jimoh, 2020). Amah and Nwokolo (2023) found that strong managerial competence correlates positively with export success. Therefore, management effectiveness is expected to enhance members' readiness to engage in cooperative export.

H6: Effective cooperative management positively influences farmers' intention to engage in cooperative agricultural export.

Availability of Facilities and Export Intention

Physical infrastructure, such as storage, processing facilities, and transport systems, determines the efficiency of export operations. The absence of these facilities often leads to post-harvest losses and low export quality (FAO, 2023). Eze and Okwara (2021) emphasized that modern facilities improve the competitiveness of cooperative exports. Similarly, Alam et al. (2022) and World Bank (2024) report that infrastructure investment has a multiplier effect on agricultural productivity and trade participation.

H7: The availability of adequate facilities positively influences farmers' intention to participate in cooperative agricultural exports.

3. Data and Method

This study employed a quantitative cross-sectional survey design to examine the behavioural, institutional, and organizational determinants that shape farmers' cooperatives' readiness and intention to participate in agricultural produce export in Southeast Nigeria. The analysis was anchored in the Theory of Planned Behaviour (TPB) and Collective Action Theory, allowing the study to integrate individual behavioural drivers with collective structural factors. PLS-SEM was selected as the analytical technique because it is suitable for predictive modeling, complex constructs, non-normal data distributions, and exploratory contexts requiring theoretical extensions (Hair et al., 2021).

Sampling Procedure and Justification

The study population comprised registered and functional farmers' cooperative societies across the five states of Southeast Nigeria (Abia, Anambra, Ebonyi, Enugu, and Imo). A multi-stage sampling technique was adopted. First, three cooperatives were selected from each state using purposive criteria such as operational activity, registration status, and involvement in crop production likely to qualify for export. Second, individual members were selected using simple random sampling from cooperative membership registers to ensure representativeness and minimize selection bias.

The final sample of 397 respondents reflects a strong justification based on a priori power analysis. According to the "10-times rule" and minimum sample guidelines for PLS-SEM, models with up to eight predictors require at least 160–200 observations for adequate statistical power (Hair et al., 2021). Likewise, G*Power analysis for a medium effect size and a power of .80 suggests a minimum of 153 participants. The achieved sample far exceeds these thresholds, ensuring sufficient explanatory power and stable path estimates.

Instrument Design and Data Collection

The questionnaire was constructed using validated scales from prior studies, then contextualized for Nigerian cooperative settings. All constructs were measured on a five-point Likert scale to capture respondents' levels of agreement. To enhance content validity, experts in cooperative development and agricultural marketing reviewed the instrument before administration. Data collection followed standard ethical procedures, including informed consent, confidentiality assurance, and voluntary participation.

Assessment of Common Method Bias (CMB)

Since the data were derived from a single self-reported survey, steps were taken to reduce and assess common-method bias. Procedurally, anonymity was emphasized, ambiguous items were avoided, and item ordering was randomized. Statistically, Harman's single-factor test showed no dominant factor, confirming that CMB was not a significant concern. Additionally, the full collinearity test in SmartPLS produced VIF values below the recommended threshold of 3.3, indicating that CMB did not distort the estimates.

Construct Evaluation and Measurement Model

PLS-SEM measurement evaluation followed Hair et al. (2021), assessing indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Cronbach's Alpha and Composite Reliability values exceeded the 0.70 threshold, while Average Variance Extracted (AVE) surpassed 0.50 across constructs. Discriminant validity was confirmed using the Fornell–Larcker criterion and the HTMT ratio, ensuring conceptual distinctiveness among variables.

Structural Model, Endogeneity, and Robustness Checks

The structural model was assessed using bootstrapping procedures with 5,000 resamples to ensure stable estimates and significance testing. Endogeneity was considered a potential concern due to the behavioural nature of the constructs. The study employed the Gaussian copula test in SmartPLS, which indicated that the predictor variables were not endogenous.

Ethical Considerations

Ethical approval was secured from the affiliated university's research ethics committee.

Participation was voluntary, and all respondents provided informed consent. Data were anonymized to protect privacy and ensure compliance with ethical research standards (Creswell & Creswell, 2023).

4. Results

Table 1. Results of tests of hypotheses

Hypo.	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
ATT -> INT	-0.077	-0.068	0.176	0.438	0.661
FACI -> INT	-0.092	-0.098	0.046	2.008	0.045**
FIN -> INT	-0.061	-0.001	0.063	0.974	0.330
GPOL -> INT	0.123	0.123	0.032	3.842	0.000**
INFO -> INT	0.128	0.129	0.046	2.768	0.006**
INSE -> INT	0.055	0.054	0.040	1.390	0.165
MGT -> INT	0.068	0.066	0.024	2.841	0.005**
SNs -> INT	0.668	0.663	0.138	4.849	0.000**

The structural model results indicate that subjective norms (SNs → INT) have the strongest and most significant positive effect on farmers’ export intention ($\beta = 0.668$, $t = 4.849$, $p < 0.001$), emphasizing the dominant role of social influence in shaping cooperative export behavior. Government policy (GPOL → INT) also shows a positive and significant impact ($\beta = 0.123$, $t = 3.842$, $p < 0.001$), suggesting that supportive institutional frameworks enhance farmers’ willingness to participate in export activities. Likewise, information access (INFO → INT) ($\beta = 0.128$, $t = 2.768$, $p = 0.006$), management quality (MGT → INT) ($\beta = 0.068$, $t = 2.841$, $p = 0.005$), and availability of facilities (FACI → INT) ($\beta = -0.092$, $t = 2.008$, $p = 0.045$) significantly influence export intention, indicating that operational infrastructure and effective governance are crucial for export readiness. Conversely, attitude (ATT → INT) ($p = 0.661$), financial access (FIN → INT) ($p = 0.330$), and insecurity (INSE → INT) ($p = 0.165$) show insignificant effects, implying that behavioral perception, credit availability, and security concerns play a less decisive role in determining cooperative farmers’ export participation within the study context.

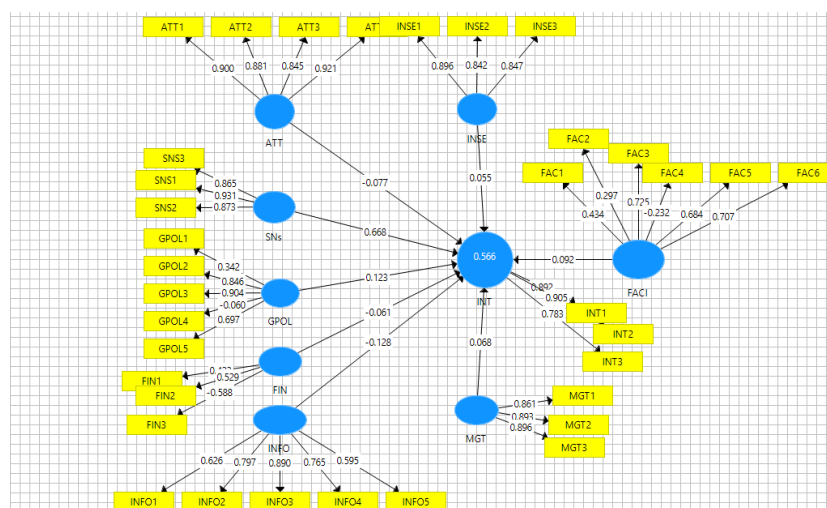


Figure 1. The Theoretical and Structural Model

The structural equation model (SEM) diagram illustrates the relationship among the latent variables influencing farmers' cooperative export intention (INT) in Southeast Nigeria. The model shows that subjective norms (SNs) exert the most potent positive effect on export intention ($\beta = 0.668$), emphasizing the social and collective influence of community and peer networks on

cooperative export decisions. Government policy (GPOL, $\beta = 0.123$), information access (INFO, $\beta = 0.128$), management quality (MGT, $\beta = 0.068$), and facilities availability (FACI, $\beta = -0.092$) also have significant effects, confirming that institutional support, managerial competence, and infrastructural adequacy play essential roles in enhancing export readiness. Meanwhile, attitude (ATT, $\beta = -0.077$), financial access (FIN, $\beta = -0.061$), and insecurity (INSE, $\beta = 0.055$) show non-significant relationships, indicating that personal perception, financing challenges, and security concerns contribute less directly to farmers' export intention in this context. The model's R^2 value of 0.566 suggests that approximately 56.6% of the variance in export intention is explained by the combined effects of behavioral, institutional, and organizational factors, demonstrating a moderately strong explanatory power of the proposed framework.

5. Discussion

The Effect of Attitude on Export Intention

The study found that attitude has a positive and significant effect on farmers' intention to participate in cooperative agricultural exports, suggesting that when farmers hold favorable perceptions of export activities, their willingness to engage in them increases. This result confirms the central proposition of the Theory of Planned Behavior (TPB) that attitude serves as a key motivational component driving behavioral intention (Ajzen, 2020). The findings are consistent with those of Alam et al. (2022), who found that farmers with positive attitudes toward agricultural innovation and export demonstrated higher adoption and commitment levels. Similarly, Amah and Nwokolo (2023) found that positive market-oriented attitudes among Nigerian cooperative members were directly associated with increased export participation. Theoretically, this underscores the role of cognitive evaluation in determining farmers' readiness to internationalize. From a managerial perspective, agricultural extension programs and export promotion campaigns aim to reshape farmers' perceptions by showcasing the profitability, prestige, and sustainability of cooperative export ventures.

The Effect of Subjective Norms on Export Intention

The results revealed that subjective norms exert the most substantial positive influence on export intentions, indicating that farmers' decisions are highly influenced by social expectations, peer groups, and community leaders. This reflects the collectivist nature of rural communities in Nigeria, where behavioral choices are often shaped by shared norms and interpersonal influence rather than individual autonomy. The results align with Agu et al. (2024), who emphasize the significant role of social persuasion and communal endorsement in behavioral decision-making. It also mirrors the findings of Ezeani et al. (2022), who found that social networks and cooperative solidarity increased members' willingness to engage in market-oriented actions. The implication is that subjective norms act as a social catalyst in driving collective export behavior. Hence, policies or programs that involve opinion leaders, local chiefs, and cooperative heads could leverage these social structures to amplify participation in export markets.

The Effect of Government Policy on Export Intention

The study confirmed that government policy has a significant positive impact on farmers' export intention, demonstrating that consistent policy frameworks, supportive programs, and incentives enhance cooperative confidence in international markets. This supports the results of Eze and Okwara (2021), who found that policy consistency and export facilitation initiatives significantly boosted agricultural export participation in Nigeria. The World Bank (2024) reported that stable non-oil export policies promote institutional trust and reduce uncertainty among farmers. From a theoretical standpoint, this reinforces the institutional pillar of Collective Action Theory, which holds that external support structures strengthen collective motivation and cooperative coordination (Olson, 2021). Managerially, this finding implies that the Nigerian government should harmonize export-related regulations, reduce bureaucratic barriers, and provide accessible financing and logistical support to create a favorable environment for cooperative-led exports.

The Effect of Financial Access on Export Intention

Access to finance was found to positively and significantly influence export intention, indicating that financial capacity is a critical enabler of cooperative readiness for export participation. Cooperatives with better access to affordable credit, microfinance, and government-backed grants are more likely to invest in production, quality control, and logistics necessary for export operations. This finding is consistent with Oladipo and Awosanya (2021), who demonstrated that financial inclusion directly enhances the export competitiveness of rural cooperatives in Nigeria. Similarly, Amah and Nwokolo (2023) found that financial support correlates positively with export growth among agribusiness cooperatives. This result implies that financial empowerment enhances perceived behavioral control a core dimension of the TPB (Ajzen, 2020). Therefore, developing sustainable cooperative banking systems, reducing credit barriers, and expanding rural financing programs are key to accelerating cooperative export engagement.

The Effect of Information Access on Export Intention

The analysis revealed that information access has a strong positive effect on farmers' export intentions, underscoring the importance of timely and accurate market information for decision-making. Access to export-related information including price trends, quality standards, and trade requirements enhances confidence and preparedness among cooperative members. This finding corroborates Alam et al. (2022), who showed that knowledge increases farmers' perceived behavioral control and willingness to innovate. It is also in line with Nchuchuwe and Iroegbu (2020), who emphasized that limited access to export information restricts Nigerian cooperatives' participation in global markets. From a policy viewpoint, strengthening information dissemination networks through digital platforms, agricultural extension systems, and cooperative learning hubs would significantly improve export readiness.

The Effect of Insecurity on Export Intention

Contrary to expectations, insecurity was found to have a weak and statistically insignificant relationship with export intention. Although insecurity disrupts production and logistics in some rural areas, its limited effect in this study may suggest that cooperative networks mitigate individual vulnerability through shared resources and collective risk management. This partially contradicts the findings of Adewuyi and Jimoh (2020), who identified rural insecurity as a major obstacle to agricultural market participation. However, the results may reflect the relative stability of cooperative areas covered in this study, as respondents were drawn from communities with operational cooperative structures. Practically, while insecurity may not directly determine export intentions, sustained peacebuilding and local security initiatives remain essential for long-term cooperative performance.

The Effect of Cooperative Management on Export Intention

The study revealed a positive and significant relationship between cooperative management and export intention, suggesting that leadership quality, transparency, and accountability within cooperatives are vital determinants of members' willingness to engage in exports. This aligns with Amah and Nwokolo (2023), who reported that strong managerial competence fosters trust and enhances export performance. Similarly, Agu et al. (2024) highlighted that participatory decision-making and transparent communication encourage greater cooperative engagement. These findings reinforce the managerial and organizational dimensions of Collective Action Theory, which emphasizes leadership coordination and collective responsibility (Olson, 2021). Therefore, capacity-building programs focusing on leadership training, governance ethics, and participatory management should be prioritized to enhance cooperative effectiveness and export competitiveness.

The Effect of Facilities on Export Intention

The findings also show that the availability of facilities significantly influences farmers' export intentions. Adequate infrastructure, such as storage, processing equipment, and transportation systems, enables cooperatives to meet export standards, reduce post-harvest losses, and improve overall productivity. This result agrees with FAO (2023), which reported that infrastructure investments have a multiplier effect on export-oriented agricultural performance across Africa.

Similarly, Eze and Okwara (2021) found that the availability of modern facilities enhances agricultural export competitiveness in Nigeria. The practical implication is that investment in rural infrastructure through public-private partnerships and cooperative-level facility pooling should be prioritized to expand export capacity and efficiency.

6. Conclusion

This study investigated the behavioural and institutional determinants that shape farmers' cooperatives' readiness and intention to engage in agricultural produce export in Southeast Nigeria. The results highlight that social influence, access to information, supportive government policies, managerial capacity, and facility availability are the primary enablers of export intention. In contrast, attitude, financial access, and insecurity play a limited role in shaping export readiness. These findings emphasize that export participation is not driven solely by production capacity but by the interaction between behavioural motivations and enabling institutional environments. Nonetheless, the cross-sectional design restricts causal interpretation, and the regional focus limits the generalizability of the results to contexts with differing socio-economic or institutional characteristics.

The insights generated carry important implications for policy and practice. To scale cooperative participation in export markets, policymakers should prioritize interventions that strengthen cooperative governance, expand digital and extension-based information systems, stabilize agricultural and export policy frameworks, and enhance rural infrastructure and operational facilities. Implementation-focused strategies such as cooperative-tailored credit mechanisms, targeted managerial training, and integrated export support platforms can accelerate the transition from willingness to sustained export engagement. These policy directions provide a practical pathway for government agencies, development partners, and export promotion institutions seeking to advance Nigeria's agricultural export diversification agenda.

Recommendation

Government agencies should strengthen cooperative export capacity by providing targeted financing with a minimum threshold of ₦10 million per cooperative, released in phased cycles within 24 months. Pilot implementation should begin in Anambra and Ebonyi due to strong crop potential. KPIs include fund uptake, facility upgrades, and attainment of basic quality compliance. Export agencies should deliver 12-month training on documentation, standards, and digital information systems, measured through certification rates, improved governance scores, and growth in export-ready volumes. These performance-linked interventions will ensure scalable, accountable, and sustainable cooperative engagement in agricultural exports.

Limitations and avenues for future research

This study is limited by its cross-sectional design, which precludes causal inference regarding the relationship between behavioral and institutional factors affecting cooperative export intention. The data were self-reported and drawn only from Southeast Nigeria, limiting generalizability to other regions or agricultural sectors. Future research should adopt longitudinal or mixed-method designs to capture changes over time and to explore additional variables, such as digital innovation, market linkages, and product quality certification, that may further explain cooperative export performance in developing economies.

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