Assessing the effectiveness of agricultural policy implementation in rural Vietnam: Evidence from the Mekong Delta

Phan Van Tuan[a]

Nguyen Khanh Ly[b]

Nguyen Chi Hai[c †]

[a]*Faculty of Politics and Journalism, University of Social Sciences and Humanities, Vinh University, Vietnam.*
[b]*Faculty of Basic Sciences, Nghe An University, Vietnam.*
[c]*Faculty of Law and Political Science, An Giang University, Vietnam National University Ho Chi Minh City, Vietnam.*

[†] ✉ *nchai@agu.edu.vn (Corresponding author)*

ABSTRACT

This paper aims to scientifically evaluate the effectiveness of agricultural policy implementation in An Giang and Vinh Long provinces in Vietnam, two localities with different production characteristics but playing an important role in the agrarian structure of the Mekong Delta region. The research objective is not only to measure the effectiveness of policies but also to identify the factors determining the differences in government policy implementation. The research design combines a quantitative survey of 400 farmer households with qualitative analysis from expert interviews to ensure the multidimensionality of the data. The Sustainable Equation Modeling was used to examine the structural relationships between variables and assess the suitability of the scale and model. The analysis results showed four groups of factors significantly impacting implementation effectiveness: the governance capacity of local authorities; the adequacy of resources and supporting infrastructure; farmer participation; and monitoring and feedback mechanisms. In this context, local governance is a strong factor, reflecting the role of the implementation apparatus in transforming policy objectives into concrete results. The practical implications of the study suggest that strengthening management capacity, consolidating production infrastructure, establishing a two-way feedback mechanism, and expanding citizen participation are necessary to improve the effectiveness of agricultural policy implementation in the future.

Contribution/Originality: This study contributes to the literature by empirically examining agricultural policy implementation at the local level in Vietnam using survey-based SEM. It is among the few studies comparing two Mekong Delta provinces. The paper's primary contribution lies in identifying governance and feedback mechanisms as key determinants of policy effectiveness.

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1. INTRODUCTION

Agriculture continues to play a fundamental role in Vietnam's socio-economic development, especially in the Mekong Delta region, which contributes more than half of the country's rice production and the majority of its agricultural export value (Ha & Hai, 2020). Over the years, the Vietnamese government has issued and implemented a series of agricultural policies aimed at restructuring the sector, increasing farmers' incomes, and promoting sustainable rural development. However, practical implementation reveals significant differences in policy effectiveness among localities, even within the same ecological and economic region, like the Mekong Delta (Khan, Ni, Man, & Saud, 2025). This disparity raises questions not only about the policy content but, more importantly, about how the policies are implemented at the grassroots level. Vietnam has issued many policies to promote sustainable agricultural and rural development, increase farmers' income, and narrow the development gap between regions (Huyen & Thanh, 2025). Resolution No. 26-NQ/TW on agriculture, farmers, and rural areas has identified the role of agriculture in national economic development. The national target program on new rural construction for 2010–2025 aims to comprehensively improve infrastructure and community governance in rural areas. The strategy for sustainable agricultural and rural development for 2021–2030, with a vision to 2050, aims to develop ecological agriculture and modern rural areas. The effectiveness of policy implementation in localities and population groups varies (Kremmydas, Athanasiadis, & Rozakis, 2018). Many studies on public policy suggest that a policy is valuable when it is effectively implemented, ensuring suitability to the local context and the ability of participating entities to implement it (Esposti & Sotte, 2013). There are many studies evaluating the results of agricultural policies such as preferential credit policies, technical training support policies, agricultural extension policies, and investment in production infrastructure (Nordbeck, Hogl, & Schaller, 2025). The studies have examined the factors affecting the effectiveness of policy implementation in the relationship between institutions, local capacity, and social participation (Ngoc, Hung, & Pham, 2021). The research aims to answer the following questions: (i) What is the current level of effectiveness of agricultural policy implementation in the two localities? (ii) What factors significantly affect the effectiveness of policy implementation at the household level? and (iii) What is the relative role of governance capacity, support resources, farmer participation, and monitoring-feedback mechanisms in practical implementation?

By combining household survey data with structural equation modeling (SEM), the research contributes empirical evidence to the theory of policy implementation in the agricultural sector and offers specific governance implications to enhance the effectiveness of agricultural policy implementation within the context of green transition and sustainable development in Vietnam.

The research results are expected to contribute in three directions: (1) supplementing the theoretical basis for evaluating the effectiveness of agricultural policy implementation in the context of transitioning to a multi-level governance model and sustainable development; (2) providing practical evidence for improving implementation capacity at the grassroots level, especially considering the dual impact of climate change and agricultural digital transformation; and (3) proposing policy implications to enhance the effectiveness of new agricultural and rural programs, aiming for sustainable and ecological agricultural development in Vietnam.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Effective implementation of agricultural policies has long been a central theme in the study of public administration and rural development (Nguyen & Phung, 2024). Policy implementation is the "life moment" of the public policy process, where the will of the planner is transformed into concrete results in practice. Many scholars believe that, while policy planning represents strategic vision, policy implementation is the decisive factor in the success of the policy (Masupha, Moeletsi, & Tsubo, 2025). The effectiveness of agricultural policy implementation is measured by the level of achievement of economic objectives, reflecting the ability to meet the practical needs of rural people (Barbier, 2025; Mumtaz & de Oliveira, 2023). Agricultural policy research has developed approaches to explain the effectiveness of implementation, in which a model is designed to combine the advantages of interaction between central and local levels, as well as between the State and the community, creating a unity of orientation suitable for local characteristics (Chen et al., 2025b). Recent studies have highlighted the role of agricultural policy in promoting sustainable growth and development, with analyses focusing on policy content and outcomes at various levels. Studies by the OECD (2022) and FAO (2023) show that policy effectiveness is highly dependent on the implementation context at the local level, and empirical evidence at the household level is limited, particularly in developing countries like Vietnam (FAO, 2023; OECD, 2022). This highlights the need for research approaching policy effectiveness from the beneficiary's perspective, based on practical experience and the level of benefits achieved.

In the agricultural sector, studies have expanded the application of theoretical frameworks to evaluate policy effectiveness in many countries. Research on three groups of influencing factors includes (i) institutional capacity and financial resources of local governments; (ii) the of participation of farmers and civil society; and (iii) mechanisms for monitoring, evaluating, and adjusting policies. Effective implementation of agricultural policies depends on the ability to "translate policies," the process of turning strategic goals into concrete actions appropriate to local natural, social, and cultural conditions. In policy implementation, numerous studies have indicated a gap between design and implementation, a systemic issue (Hill & Hupe, 2021). Recent studies in Southeast Asia show that local governance capacity, decentralization of power, and inter-sectoral coordination are key factors affecting the effectiveness of agricultural policies (Secretariat ASEAN, 2023). These studies are primarily based on qualitative analysis or secondary data and have not been validated using quantitative models capable of measuring the relationship between implementation factors and policy effectiveness. Studies in the Southeast Asian region provide valuable evidence. In Indonesia, the Blue Economy Policy (BEP) framework has been effectively implemented due to a strong inter-sectoral

coordination mechanism and close monitoring. In Thailand, the One Tambon One Product (OTOP) policy is highly regarded for linking community initiatives with government support. These models highlight the importance of connecting national policies and local actions in agriculture and rural development (Mamat, Ghazali, & Rosdi, 2025). However, there is a lack of systematic studies evaluating the implementation of agricultural policies in Vietnam, a country with centralized institutional characteristics but strongly promoting decentralization of agricultural and rural management (Phan, Filomeni, & Kok, 2024; Su & Liu, 2025). Studies on citizen participation and monitoring mechanisms indicate that policy implementation is more effective when citizens are involved in the implementation and feedback process (Lipsky, 2023). In the ASEAN region, co-management models in agriculture in Thailand and the Philippines demonstrate that citizen participation enhances policy relevance. In Vietnam, empirical studies on the relationship between farmer participation, monitoring mechanisms, and the effectiveness of agricultural policy implementation remain fragmented and unsystematic. Since the early 1990s, the institutional reform process has brought fundamental changes to agricultural management. Policies such as the National Target Program on New Rural Development (2010–2025) and the Sustainable Agricultural Development Strategy (2021–2030) affirm a development orientation based on a "household economy" and "farmer-centered" approaches."

Based on the theoretical and empirical overview, this study proposes a conceptual framework to evaluate the effectiveness of agricultural policy implementation in Vietnam. Accordingly, effectiveness is understood as the extent to which agricultural policy achieves its objectives in practice, reflected in the level of improvement in productivity, income, and living standards of farmers, with the level of satisfaction and participation of the rural community. This study proposes the following hypotheses.

Hypothesis 1: Public administration capacity and local government institutions positively impact the effectiveness of agricultural policy implementation at the local level. This hypothesis reflects the role of civil servants, operational mechanisms, and the ability to coordinate between different levels of local government in translating policy objectives into practical results.

Hypothesis 2: Supporting resources and infrastructure positively impact the effectiveness of agricultural policy implementation at the local level. This hypothesis emphasizes the role of public investment, irrigation infrastructure, rural transportation, and support services in improving farmers' access to and enjoyment of policies.

Hypothesis 3: The participation of farmers and community organizations has a positive impact on the effectiveness of agricultural policy implementation at the local level. This hypothesis suggests that the level of beneficiary participation determines the relevance and practical effectiveness of the policy.

Hypothesis 4 states that policy monitoring and feedback mechanisms positively impact the effectiveness of agricultural policy implementation at the local level. This hypothesis emphasizes the importance of monitoring, feedback, and accountability channels in agricultural policy governance.

The groups of factors affecting the effectiveness of agricultural policy implementation are shown in Figure 1.
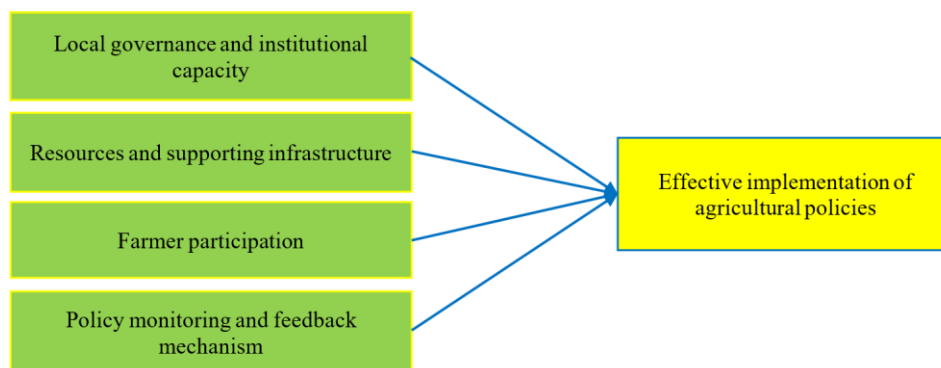

Figure 1. Research structure.

Institutional capacity refers to the ability of local governments to plan, coordinate, and monitor activities. Resources and infrastructure encompass finance, technology, training, and production infrastructure. Farmers' participation, initiative, cooperation, and linkage are vital in implementation. A monitoring and feedback mechanism, along with policy evaluation, is essential for effective management.

From the theoretical framework, the study will develop a quantitative model to measure each factor's influence on the effectiveness of agricultural policies in the Mekong Delta region, providing empirical evidence to improve Vietnam's policy implementation mechanism for the next stage.

3. METHODOLOGY

The study used mixed methods to evaluate the effectiveness of agricultural policy implementation in rural areas of the Mekong Delta, specifically in two provinces, An Giang and Vinh Long. These localities have different agricultural development characteristics, but are both strongly affected by climate change and production structure transformation. An Giang province exemplifies large-scale rice and aquaculture production, while Vinh Long is typical of fruit tree production and household agriculture combined with cooperatives. The selection of these two provinces ensures regional representativeness and allows for comparison of policy implementation effectiveness under different development conditions. This study was conducted in An Giang and Vinh Long provinces, representing two typical agricultural production sub-regions of the Mekong Delta. According to local statistics up to June 2025, the total

number of farming households in An Giang was 4,952,238, and in Vinh Long was 4,257,581. These are farming households directly involved in agricultural production and capable of accessing or benefiting from government agricultural support policies. The research sample consisted of 400 farming households, selected using a random sampling method to ensure representativeness and reduce sampling bias. Data was collected through direct surveys using structured questionnaires. Figure 2 the study area is in An Giang and Vinh Long provinces, Vietnam.
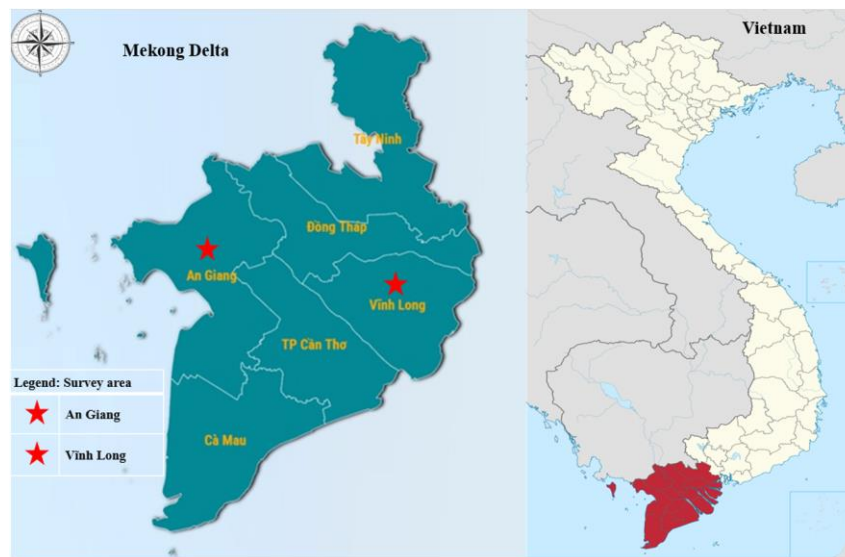

Figure 2. Research area.

The scales used in the study were developed based on public policy implementation theory, adapted to the context of Vietnamese agriculture, and validated through field surveys. In total, there were 31 observed variables, 5 demographic and 26 measured variables, comprising 4 independent and 1 dependent variable, measured using a 5-point Likert scale (1 = Strongly disagree; 5 = Strongly agree) as shown in Table 1.

Table 1. Constructs and observed variables in the study.

Construct	Code	Items	Observed variables	Source
Local governance and institutional capacity	LGIC	LGIC1–LGIC6	(1) Local authorities implement agricultural policies in accordance with regulations; (2) agricultural officials have appropriate capacity and expertise; (3) coordination between agencies implementing policies is effective; (4) information about policies is fully communicated to the public; (5) local authorities address farmers' concerns promptly; (6) internal inspection and monitoring mechanisms are effective.	Adapted from Hill and Hupe (2021); field survey
Resources and supporting infrastructure	RESI	RESI1–RESI5	(1) Funding for agricultural programs is allocated promptly; (2) agricultural infrastructure meets production needs; (3) effective support activities; (4) farmers have easy access to capital, supplies, and input services; (5) agricultural cooperatives and enterprises are supported in their development.	FAO (2023); field survey
Farmer participation	FAPA	FAPA1–FAPA4	(1) Farmers are involved in contributing opinions on policies; (2) farmers' organizations play an active role in policy implementation; (3) the government encourages people to actively participate in and monitor support programs; (4) policies help strengthen linkages and cooperation among farming households.	Lipsky (2023); field survey
Policy monitoring and feedback mechanism	PMFM	PMFM1–PMFM5	(1) Agricultural programs have clear mechanisms; (2) people can provide feedback on policy implementation; (3) functional agencies regularly improve policies; (4) the government publishes information on support program effectiveness; (5) a two-way feedback mechanism helps increase transparency and public trust.	OECD (2022); field survey
Effective implementation of agricultural policies	EIAP	EIAP1–EIAP4	(1) Agricultural policies improve the productivity of farming households; (2) household income is improved; (3) policies raise people's awareness of sustainable production; (4) people are satisfied with the effectiveness of agricultural policies.	Adapted from policy outcome literature

Structural Equation Modeling (SEM) is used to test the structure of research because it allows for the estimation of latent variables through multiple observed variables, accurately reflecting the nature of the study. SEM enables the simultaneous testing of both the measurement model and the structural model, ensuring the reliability of the scale and the causal relationships between variables. It is superior to linear regression, which focuses only on the relationships between observed variables. SEM allows for the simultaneous processing of multiple relationships, suitable for the complex nature of agricultural policy implementation, where governance, resources, participation, and monitoring factors can interact.

4. RESULTS

4.1. Survey Sample Characteristics

The survey results show that the research sample is representative of the agricultural structure of the Mekong Delta, Vietnam. The group of rice-growing households accounts for 43.5%, highlighting rice's leading role in the agricultural economy. The fruit-growing households make up 38.5%, mainly mango, orange, and durian trees. The aquaculture group is 18%, typical of the Mekong River Delta. The age group of 30-40 accounts for 27.8%, indicating this is the main agricultural labor force.

The level of education and policy participation reflects a positive trend in rural development. Nearly 70% of people have college, university, or vocational secondary education, indicating improved human resource quality in agriculture. About 75% of households participate in at least one agricultural support program, with credit, technical training, and new rural programs being the most popular. This demonstrates that agricultural policies at the grassroots level have broad coverage, creating favorable conditions for assessing the actual effectiveness of policy implementation locally. Shown in Table 2.

Table 2. Demographic characteristics of the survey sample.

Demographic characteristics and survey area	Number of survey respondents	Percentage
1. Survey area	400	100%
An Giang Province	204	51%
Vinh Long Province	196	49%
2. Production types	400	100%
Rice cultivation	174	43.5%
Fruit trees	154	38.5%
Aquaculture	72	18%
3. Years (Age)	400	100%
<30	100	25%
30-40	111	27.8%
40-50	82	20.5%
>50	107	26.8%
4. Education	400	100%
Bachelor	16	4%
College	146	36.5%
Professional diploma holders	116	29%
Other	122	30.5%
5. Participation in agricultural support policies	400	100%
Credit support	100	25%
Technical training	111	27.8%
Agricultural extension	82	20.5%
New rural development	107	26.8%

4.2. Reliability and Validity of the Scale

The survey data were processed using SPSS and AMOS to test reliability through Cronbach's Alpha, Exploratory Factor Analysis (EFA), and Confirmatory Factor Analysis (CFA). The results indicated that all scale groups achieved good reliability thresholds. Shown in Table 3.

Table 3. Reliability testing of scales.

Factors	Encode	Number of observed variables	Mean	Cronbach's alpha	Corrected item–total correlation range
Local governance and institutional capacity	LGIC	6	3.361	0.868	0.560 - 0.810
Resources and supporting infrastructure	RESI	5	3.398	0.840	0.603 - 0.678
Farmer participation	FAPA	4	3.105	0.932	0.722 - 0.880
Policy monitoring and feedback mechanism	PMFM	5	3.681	0.851	0.577 - 0.794
Effective implementation of agricultural policies	EIAP	4	3.751	0.937	0.802 - 0.889

The results of the scale reliability test show that all factor groups achieved Cronbach's Alpha > 0.8, proving that the scale is highly reliable and stable (Cronbach, 1951). Specifically, the group "Effective implementation of agricultural policies (EIAP)" has the highest Alpha coefficient (.937) with item-total correlations ranging from 0.802 to 0.889, demonstrating high consistency between observed variables. The group "Farmer participation (FAPA)" also has very good reliability (.932), confirming the key role of this factor in the research model. The remaining three groups, "Local governance capacity (LGIC)", "Resources and supporting infrastructure (RESI)", and "Responsive monitoring mechanism (PMFM)" meet the reliability standard, ranging from 0.840 to 0.868. The average values of the groups (3.1–3.7) reflect the average level of positive assessment by people on aspects of agricultural policy implementation in the locality.

The results of EFA analysis show that Kaiser–Meyer–Olkin (KMO) = 0.827 and Bartlett's Test of Sphericity has a significance level of Sig. = 0.000, indicating that the data is suitable for factor analysis. The analysis extracted five factors with eigenvalues greater than 1, explaining 69.449% of the total variance. After Varimax rotation, the observed variables have factor loadings from 0.680 to 0.923, ensuring convergent and discriminant validity. Shown in Table 4.

Table 4. Rotated Component Matrix.

	Component				
	1	2	3	4	5
LGIC6	0.892				
LGIC5	0.815				
LGIC4	0.796				
LGIC3	0.731				
LGIC2	0.707				
LGIC1	0.624				
FAPA4		0.923			
FAPA1		0.920			
FAPA3		0.875			
FAPA2		0.835			
PMFM5			0.852		
PMFM3			0.781		
PMFM2			0.768		
PMFM1			0.750		
PMFM4			0.680		
EIAP2				0.887	
EIAP4				0.860	
EIAP1				0.832	
EIAP3				0.810	
RESI1					0.772
RESI4					0.758
RESI5					0.752
RESI2					0.739
RESI3					0.704
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.					
Rotation converged in 6 iterations.					

Testing CFA shows that the scales in the model achieve reliability and convergent validity according to accepted SEM criteria. The Composite Reliability (CR) coefficient of the latent variables is greater than 0.8, indicating high reliability. The Average Variance Extracted (AVE) value exceeds 0.5, demonstrating satisfactory variance explanation. The MaxR(H) value is higher than CR, clearly indicating the stability and reliability of the scale within the research model (Baumgartner & Homburg, 1996). Shown in Table 5.

Table 5. Testing confirmatory factor analysis.

	CR	AVE	MSV	MaxR(H)	LGIC	FAPA	PMFM	EIAP	RESI
LGIC	0.871	0.537	0.195	0.919	0.733				
FAPA	0.921	0.750	0.144	0.999	0.053	0.866			
PMFM	0.853	0.541	0.234	0.886	0.074	0.224***	0.736		
EIAP	0.938	0.792	0.234	0.944	0.187***	0.380***	0.484***	0.890	
RESI	0.842	0.516	0.195	0.845	0.441***	0.148**	0.257***	0.404***	0.718

Note: Significance of Correlations:
** $p < 0.010$
*** $p < 0.001$.

The results show that the square root of AVE (the values on the diagonal) is always greater than the correlation coefficient between pairs of variables. The Maximum Shared Variance (MSV) of each variable is less than AVE,

confirming that the concepts are statistically different. The validation results confirm that the measurement model meets the requirements for reliability, convergent validity, and discriminant validity, providing a basis for subsequent structural model analysis.

4.3. Results of SEM Analysis

The SEM model validation results indicate that the research model is appropriate. Evaluation indices show Chi-square/df = 3.307, GFI = 0.863, CFI = 0.927, RMSEA = 0.076, and PCLOSE = 0.914, all within acceptable limits as recommended, shown in Figure 3. This indicates that the proposed structural model can reasonably explain the empirical data, thereby ensuring the reliability and validity of the scales (Hu & Bentler, 1999).

The R^2 (Adjusted Square Correlation) for the effective implementation of agricultural policies (EIAP) is 0.382, indicating that this regression model is appropriate. The model shows that the independent variables explain 38.2% of the variance in the dependent variable.
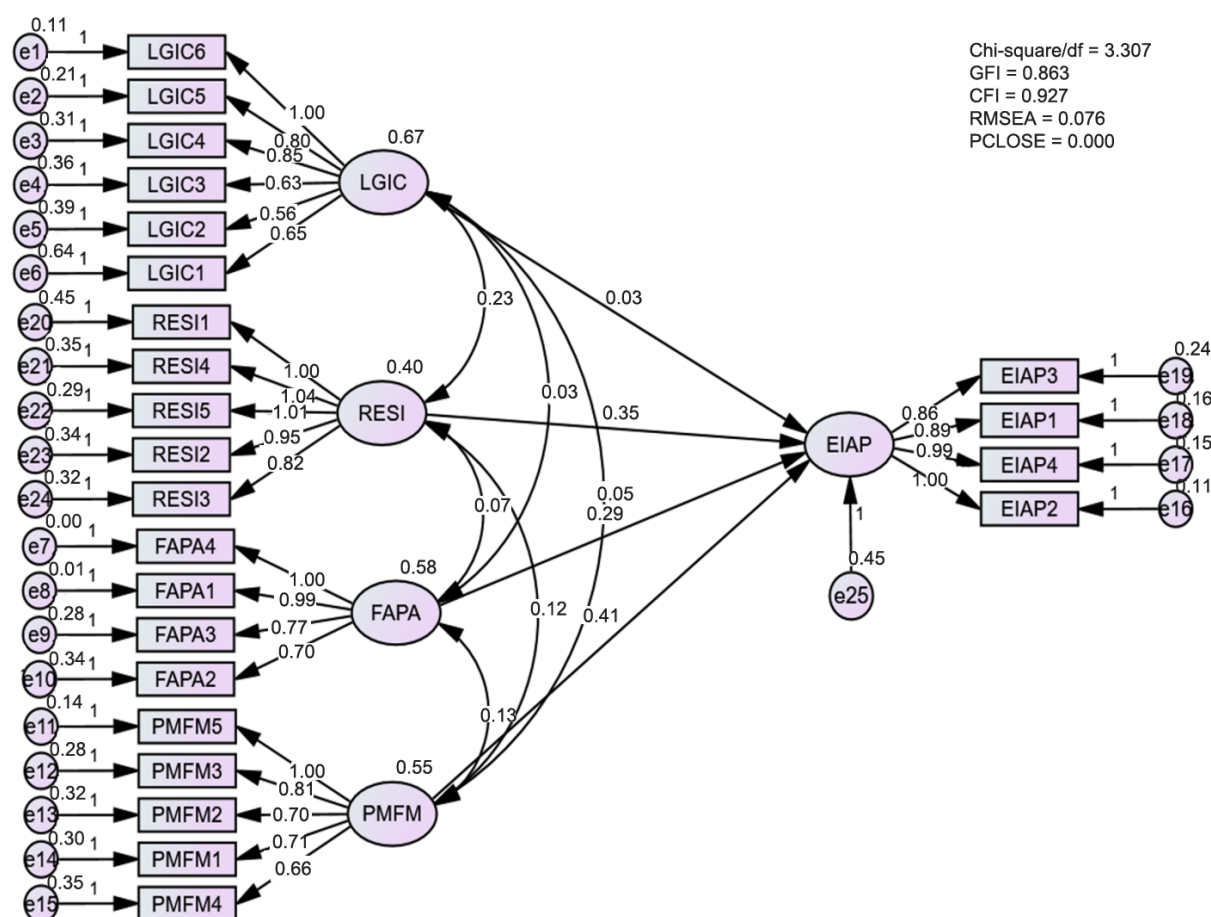

Figure 3. Results of the research model.

The results of analysis by the SEM model show that there are four factors that have positive and statistically significant impacts on the effectiveness of agricultural policy implementation in the Mekong Delta. Local governance and institutional capacity have (β = 0.33, SE = 0.053, p < 0.001); resources and supporting infrastructure have (β = 0.259, SE = 0.077, p < 0.001); Farmers' participation has (β = 0.259, SE = 0.049, p < 0.001); policy monitoring and feedback mechanism has (β = 0.357, SE = 0.056, p < 0.001). Shown in Table 6.

Table 6. The influence of factors on the effectiveness of agricultural policy implementation.

Independent factors influence dependent factors	Estimate	S.E.	P	Standardized regression weights
EIAP <--- LGIC	0.034	0.053	0.000	0.033
EIAP <--- RESI	0.350	0.077	0.000	0.259
EIAP <--- FAPA	0.291	0.049	0.000	0.259
EIAP <--- PMFM	0.411	0.056	0.000	0.357

The findings in the study show that four factors affect the effectiveness of agricultural policy implementation: local governance and institutional capacity, resources and supporting infrastructure, farmer participation, and policy monitoring and feedback mechanisms.

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5. DISCUSSION

The study's findings indicate that the effectiveness of agricultural policy implementation in An Giang and Vinh Long provinces is influenced by four groups of factors: local governance and institutional capacity; supporting resources and infrastructure; farmer participation; and policy monitoring and feedback mechanisms. These four factors have a positive and statistically significant impact, suggesting that agricultural policy implementation is not a purely administrative process but a complex governance process. Institutional factors, resources, and social interactions play a crucial role in shaping policy outcomes (Pacini, Merante, Lazzerini, & Van Passel, 2015; Pradhan, Su, Fu, Zhang, & Yang, 2017).

These results are in clear agreement with recent analyses by the OECD and FAO, which have emphasized the importance of policy implementation in agriculture and rural development. Many countries face challenges related to limited resources, inter-sectoral coordination, and policy feedback mechanisms in policy implementation. This study provides empirical evidence in Vietnam regarding agricultural policy implementation, demonstrating that it is a multi-stakeholder governance process, going beyond the scope of a local study (Colen et al., 2016; Dongmei, Tao, Bing, & Chaoping, 2025).

Local governance capacity and institutions influence the effectiveness of agricultural policy implementation. This finding aligns with reports by the OECD, which emphasize that institutional capacity at the local level is a decisive factor in the success of agricultural policies (OECD, 2022). Countries that achieve high results in agricultural reform have clearly defined decentralized governance systems, linking authority with accountability (Dehhaghi, Choobchian, & Azadi, 2024).

The study highlights institutional differences between Vietnam and OECD countries. In many OECD nations, decentralized agricultural management is paired with high autonomy and performance-based evaluation mechanisms. In Vietnam, however, local governments' autonomy in the agricultural sector remains limited (Đurić, Lukač Bulatović, Tomaš Simin, & Glavaš-Trbić, 2023).

Policy implementation primarily relies on administrative guidelines from the central government, limiting the potential for flexible adaptation at the local level (Gao, Zeng, & Liu, 2024). This enriches academic dialogue on local governance in agricultural policy implementation, especially in transitional countries like Vietnam (Chen, Ren, & Heerink, 2025a).

Supporting resources and infrastructure positively impact the effectiveness of agricultural policy implementation (Giles et al., 2021). Policies can only be effectively implemented when backed by appropriate infrastructure. The FAO emphasizes that investment in irrigation, agricultural logistics, extension services, and digital infrastructure is essential for sustainable agricultural policies, ensuring food security and climate change adaptation (FAO, 2023). This study expands on the FAO's analytical framework by demonstrating that infrastructure is a crucial condition for policy implementation (Kangasniemi, Bhalla, Knowles, Pereira, & Gentilini, 2025). Empirical results show that the impact of infrastructure only becomes apparent when it is closely linked to the policy implementation capacity of local authorities (Kundu, Morgan, & Smart, 2024).

Farmers' participation impacts the effectiveness of agricultural policy implementation. Policies are only effective when beneficiaries are not merely recipients but active participants in the implementation process (Malusà et al., 2021; Tran, Lee, & Ko, 2025).

This finding is similar to many studies in the ASEAN region, particularly in Thailand, the Philippines, and Indonesia, where agricultural governance models involve community participation. Studies in Thailand show that community-based agricultural programs enhance policy acceptance and effectiveness. In the Philippines and Indonesia, studies on agricultural reform show that community participation contributes to increased policy flexibility and adaptability (Shennan-Farpón et al., 2025; Zobeidi & Komendantova, 2025).

Policy monitoring and feedback mechanisms positively influence agricultural policy implementation effectiveness. Monitoring serves as a compliance check and a tool for policy adjustments during implementation (Saqib, Kaleem, Yaseen, Yang, & Visetnoi, 2024; Yuan et al., 2025).

Monitoring and evaluation are central to modern policy governance. According to an OECD report, linking policy inputs, outputs, and outcomes through specific measurement indicators enhances transparency, accountability, and resource efficiency. In the ASEAN region, many studies indicate that policy monitoring effectiveness depends on inter-sectoral coordination and data quality. In Indonesia and Malaysia, data system fragmentation and lack of agency coordination are significant obstacles (Secretariat ASEAN, 2023).

This study has extended the theoretical framework of public policy implementation to agriculture, approaching it from the perspective of production economics and rural development effectiveness (Marini, Caro, & Thomsen, 2023; Zhou & Li, 2024). This study applies an SEM model to examine latent variables related to governance, resources, farmer participation, and monitoring-feedback mechanisms. The research indicates that agricultural policy implementation should be viewed as a multi-stakeholder governance process. This approach supports empirical evidence from the OECD, FAO, and studies on public governance.

Vietnam is a typical example of a transitional country where agricultural policies are well-designed, but their effective implementation largely depends on local governance capacity and practical coordination mechanisms (Seyhan, Tanürün, Aydin, & Ayyildiz, 2025). Challenges identified in the study include limited decentralization and a lack of data infrastructure, issues facing many ASEAN countries.

The value of this research lies in connecting Vietnam's experience with current discussions. It provides evidence for comparison with analytical frameworks by the OECD and FAO. The study's findings should be translated into

practical recommendations relevant to Vietnam and valuable for other countries undergoing transition (Pe'er et al., 2020).

6. CONCLUSION

Analyzing the effectiveness of agricultural policy implementation in rural areas of the Mekong Delta, this study surveyed farmers in An Giang and Vinh Long provinces. Data analysis revealed that policy effectiveness is influenced by four groups of factors: local governance and institutional capacity, supporting resources and infrastructure, farmer participation, and policy monitoring and feedback mechanisms.

This finding suggests that agricultural policy implementation should be approached as a complex governance process, not an easy one to carry out.

This paper broadens discussions on public policy implementation in agriculture by providing quantitative evidence. It demonstrates a hybrid implementation model combining central direction, local capacity, and community participation. The findings offer a scientific basis for administrators and local authorities to adjust policy implementation to suit practical realities and enhance effectiveness.

The study has several limitations that must be considered, such as its scope being limited to only two provinces, An Giang and Vinh Long. Data was collected through self-administered questionnaires, which may be subject to bias. The paper uses an SEM model design, allowing for testing relationships between variables, but not sufficient to confirm causal relationships.

Future studies should expand the scope to more provinces and regions in the Mekong Delta or other agricultural regions of Vietnam to improve generalizability. Applying a multi-level SEM model would help analyze the impact of factors at the household, local, and regional levels, more fully reflecting the multi-level nature of agricultural policy implementation.

REFERENCES

Barbier, E. B. (2025). Greening agriculture for rural development. *World Development*, *191*, 106974. https://doi.org/10.1016/j.worlddev.2025.106974

Baumgartner, H., & Homburg, C. (1996). Applications of structural equation modeling in marketing and consumer research: A review. *International Journal of Research in Marketing*, *13*(2), 139-161. https://doi.org/10.1016/0167-8116(95)00038-0

Chen, M., Ren, G., & Heerink, N. (2025a). The long-term impact of land certification on factor reallocation and household welfare in rural China. *Journal of Rural Studies*, *119*, 103762. https://doi.org/10.1016/j.jrurstud.2025.103762

Chen, X., Dong, J., Li, Z., Sun, L., Ren, C., Du, G., . . . Liao, X. (2025b). Same soybean policy, different responses of agricultural systems: Comparing effectiveness of cropping pattern adjusting in state farms and rural household farms of Heilongjiang, China. *Geography and Sustainability*, *6*(5), 100330. https://doi.org/10.1016/j.geosus.2025.100330

Colen, L., Gomez y Paloma, S., Latacz-Lohmann, U., Lefebvre, M., Préget, R., & Thoyer, S. (2016). Economic experiments as a tool for agricultural policy evaluation: Insights from the European CAP. *Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie*, *64*(4), 667-694. https://doi.org/10.1111/cjag.12107

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297-334. https://doi.org/10.1007/BF02310555

Dehhaghi, S., Choobchian, S., & Azadi, H. (2024). Measurement and comparison of different dimensions of renewable energy policy implementation in the agricultural sector. *Socio-Economic Planning Sciences*, *96*, 102106. https://doi.org/10.1016/j.seps.2024.102106

Dongmei, G., Tao, G., Bing, L., & Chaoping, X. (2025). Trade policy uncertainty and agricultural specialization: Evidence from rural household in China. *China Economic Review*, *94*, 102506. https://doi.org/10.1016/j.chieco.2025.102506

Đurić, K., Lukač Bulatović, M., Tomaš Simin, M., & Glavaš-Trbić, D. (2023). Monitoring and evaluation as a mechanism for agricultural policy management. *Journal of Agronomy, Technology and Engineering Management*, *6*(5), 934-943. https://doi.org/10.55817/XETH8265

Esposti, R., & Sotte, F. (2013). Evaluating the effectiveness of agricultural and rural policies: an introduction. *European Review of Agricultural Economics*, *40*(4), 535-539. https://doi.org/10.1093/erae/jbt014

FAO. (2023). *The State of food and agriculture 2023. Revealing the true cost of food to transform agrifood systems*. Rome: FAO.

Gao, J., Zeng, Y., & Liu, M. (2024). Policy interventions and market innovation in rural China: Empirical evidence from Taobao villages. *Economic Analysis and Policy*, *81*, 1411-1429. https://doi.org/10.1016/j.eap.2024.02.015

Giles, J., Grosjean, G., Le Coq, J.-F., Huber, B., Bui, V. L., & Läderach, P. (2021). Barriers to implementing climate policies in agriculture: a case study from Viet Nam. *Frontiers in Sustainable Food Systems, 5,* 439881. https://doi.org/10.3389/fsufs.2021.439881

Ha, P. N., & Hai, N. T. H. (2020). Facilitating results-based planning in developing countries: the case of vietnam's ministry of agriculture and rural development. *Public Administration Issues,* (5), 59-80. https://doi.org/10.17323/1999-5431-2020-0-5-59-80

Hill, M., & Hupe, P. (2021). *Implementing public policy: An introduction to the study of operational governance* (5th ed.). United Kingdom: SAGE Publications Ltd.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55. https://doi.org/10.1080/10705519909540118

Huyen, N. T. T., & Thanh, T. T. (2025). Developing sustainable and resilient agriculture system of European countries in the rise of digital governance. *Sustainable Futures, 10,* 101292.

Kangasniemi, M., Bhalla, G., Knowles, M., Pereira, K. C., & Gentilini, U. (2025). The role of social protection in achieving resilient and inclusive rural transformation. *Global Food Security, 44,* 100836. https://doi.org/10.1016/j.gfs.2025.100836

Khan, M. A., Ni, G., Man, T., & Saud, S. (2025). Impacts of transport infrastructure on agricultural total factor productivity in Asian countries. *Transport Policy, 171,* 18-27. https://doi.org/10.1016/j.tranpol.2025.05.022

Kremmydas, D., Athanasiadis, I. N., & Rozakis, S. (2018). A review of agent based modeling for agricultural policy evaluation. *Agricultural Systems, 164,* 95-106. https://doi.org/10.1016/j.agsy.2018.03.010

Kundu, S., Morgan, E. A., & Smart, J. C. (2024). Farmers perspectives on options for and barriers to implementing climate resilient agriculture and implications for climate adaptation policy. *Environmental Science & Policy, 151,* 103618. https://doi.org/10.1016/j.envsci.2023.103618

Lipsky, M. (2023). The critical role of street-level bureaucrats. In Social work. In (pp. 194–198). United Kingdom: Routledge.

Malusà, E., Berg, G., Biere, A., Bohr, A., Canfora, L., Jungblut, A. D., . . . Mocali, S. (2021). A holistic approach for enhancing the efficacy of soil microbial inoculants in agriculture: From lab to field scale. *Global Journal of Agricultural Innovation, Research & Development, 8,* 176-190. https://doi.org/10.15377/2409-9813.2021.08.14

Mamat, R., Ghazali, M. F., & Rosdi, S. M. (2025). Potential of renewable energy technologies for rural electrification in Southeast Asia: A review. *Cleaner Energy Systems, 12,* 100207. https://doi.org/10.1016/j.cles.2025.100207

Marini, M., Caro, D., & Thomsen, M. (2023). Investigating local policy instruments for different types of urban agriculture in four European cities: A case study analysis on the use and effectiveness of the applied policy instruments. *Land Use Policy, 131,* 106695. https://doi.org/10.1016/j.landusepol.2023.106695

Masupha, T. E., Moeletsi, M. E., & Tsubo, M. (2025). Assessing the effectiveness of drought disaster policies in South Africa: A focus on implementation in the agricultural sector. *International Journal of Disaster Risk Reduction, 127,* 105684. https://doi.org/10.1016/j.ijdrr.2025.105684

Mumtaz, M., & de Oliveira, J. A. P. (2023). A framework for analyzing the implementation of climate adaptation policies in the agriculture sector at the subnational level. *Environmental Science & Policy, 147,* 126-137. https://doi.org/10.1016/j.envsci.2023.06.002

Ngoc, V. B., Hung, N. M., & Pham, P. T. (2021). Agricultural restructure policy in Vietnam and practical application for sustainable development in agriculture. *Journal of Nanomaterials, 2021,* 5801913. https://doi.org/10.1155/2021/5801913

Nguyen, C. V., & Phung, T. D. (2024). Financial incentives for sanitation take-up: A randomized control trial in rural Vietnam. *Journal of Health Economics, 97,* 102916. https://doi.org/10.1016/j.jhealeco.2024.102916

Nordbeck, R., Hogl, K., & Schaller, L. (2025). The integration of peatlands into the EU common agricultural policy: Recent progress and remaining challenges. *Environmental Science & Policy, 169,* 104077. https://doi.org/10.1016/j.envsci.2025.104077

OECD. (2022). *Agricultural policy monitoring and evaluation 2022: Reforming agricultural policies for climate change mitigation.* Paris: OECD Publishing.

Pacini, G. C., Merante, P., Lazzerini, G., & Van Passel, S. (2015). Increasing the cost-effectiveness of EU agri-environment policy measures through evaluation of farm and field-level environmental and economic performance. *Agricultural Systems, 136,* 70-78. https://doi.org/10.1016/j.agsy.2015.02.004

Pe'er, G., Bonn, A., Bruelheide, H., Dieker, P., Eisenhauer, N., Feindt, P. H., . . . Lakner, S. (2020). Action needed for the EU Common Agricultural Policy to address sustainability challenges. *People and Nature, 2*(2), 305-316. https://doi.org/10.1002/pan3.10080

Phan, C., Filomeni, S., & Kok, S. K. (2024). The impact of technology on access to credit: A review of loan approval and terms in rural Vietnam and Thailand. *Research in International Business and Finance, 72,* 102504. https://doi.org/10.1016/j.ribaf.2024.102504

Pradhan, N. S., Su, Y., Fu, Y., Zhang, L., & Yang, Y. (2017). Analyzing the effectiveness of policy implementation at the local level: A case study of management of the 2009–2010 drought in Yunnan Province, China. *International Journal of Disaster Risk Science, 8*(1), 64–77. https://doi.org/10.1007/s13753-017-0118-9

Saqib, S. E., Kaleem, M., Yaseen, M., Yang, S.-H., & Visetnoi, S. (2024). From green fields to housing societies: Unraveling the mysteries behind agricultural land conversion in Pakistan. *Land Use Policy, 144,* 107256. https://doi.org/10.1016/j.landusepol.2024.107256

Secretariat ASEAN. (2023). *ASEAN regional guidelines for sustainable agriculture in ASEAN.* Jakarta: Secretariat ASEAN.

Seyhan, M., Tanürün, H. E., Aydin, N., & Ayyildiz, E. (2025). Strategic site selection for biohydrogen production: Enhancing rural sustainability through agricultural biomass. *Energy for Sustainable Development, 89,* 101838. https://doi.org/10.1016/j.esd.2025.101838

Shennan-Farpón, Y., Vion-Loisel, A., van Soesbergen, A., López-Gunn, E., Asenjo, C. G., van Delden, H., . . . Mulligan, M. (2025). Understanding regenerative agriculture in Europe: An analysis of academic literature, stakeholder perceptions and policy comparing Spain and the UK. *Environmental Science & Policy, 172,* 104172. https://doi.org/10.1016/j.envsci.2025.104172

Su, H., & Liu, T. (2025). Disappearance of rural settlements in China: Characterizing and interpreting the implementation of the "increasing vs. decreasing balance" policy. *Habitat International, 166,* 103593. https://doi.org/10.1016/j.habitatint.2025.103593

Tran, T. M. A., Lee, K., & Ko, D. W. (2025). Influence of communication channels on forestry programs participation: Evidence from smallholders in Vietnam. *Forest Policy and Economics, 178,* 103585. https://doi.org/10.1016/j.forpol.2025.103585

Yuan, F., Ospina, R., Perumal, A. B., Noguchi, N., He, Y., & Liu, Y. (2025). Smart agriculture in Asia. *Plant Communications, 6*(7), 101377. https://doi.org/10.1016/j.xplc.2025.101377

Zhou, K., & Li, J. (2024). Impact of the comprehensive agricultural water use reform policy on food production: Quasinatural experimental evidence from China. *Agricultural Water Management, 302,* 108981. https://doi.org/10.1016/j.agwat.2024.108981

Zobeidi, T., & Komendantova, N. (2025). Comparative analysis of adaptation policies and policy instruments for water management in Europe. *Journal of Hydrology: Regional Studies, 62,* 102819. https://doi.org/10.1016/j.ejrh.2025.102819