

FACTORS AFFECTING SOCIO-ECONOMIC DEVELOPMENT POLICIES FOR ETHNIC MINORITIES IN RURAL AREAS

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Abstract: Socio-economic development policies for ethnic minority areas in rural areas aim to promote socio-economic development, comprehensively improve the lives of ethnic minorities in rural areas, and at the same time protect culture and environment. Factors influencing socio-economic development policies for ethnic minority areas in rural areas play an important role in shaping, implementing, and effectiveness of policies. Understanding and adjusting these factors will help policies achieve better results, creating sustainable and equitable development conditions for ethnic minority areas. The study aims to identify and analyze factors affecting the implementation of socio-economic development policies in ethnic minority areas in rural areas. The research data was collected in the Mekong Delta, Vietnam. In the questionnaire survey, 936 people directly answered the questionnaire. SPSS 25 and AMOS 24 software were used for data analysis. The data collection process was carried out between April and July 2024. The implementation methods include data descriptive statistics, testing scales, analysis of factor fit, and testing research structure. The research results show six factors affecting socio-economic development policies for ethnic minority areas in rural areas, including nature and geography, socio-economics, socio-culture, policy and law, politics and security, and international cooperation. This study provides administrators with a comprehensive view of the factors affecting development policies, thereby helping to optimize development strategies and improve efficiency for ethnic minority areas in rural areas.

Keywords: policy implementation, ethnic minority, socio-economic development, development challenges, Vietnamese rural development

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INTRODUCTION

Ethnic minorities in Vietnam have diverse and complex socio-economic characteristics, reflecting differences in the natural environment, culture, and development conditions. Ethnic minorities in Vietnam live in mountainous and midland areas where natural conditions are difficult. The main economy of ethnic minorities is based on subsistence agriculture, such as growing rice, corn, cassava, and raising livestock (Do and Nguyen, 2023). Cultivation methods are backward, and dependent on weather and nature. Ethnic minorities have many traditional crafts such as weaving, knitting, and making handicrafts. These crafts not only generate income but also preserve and promote the cultural identity of each ethnic group. In some areas with favorable conditions for tourism development, ethnic minorities participate in tourism service businesses, sell handicrafts, and organize traditional cultural activities to attract tourists (Feng and Cheung, 2008).

Ethnic minorities in Vietnam account for about 14.6% of the country's population and are mainly distributed in the northern mountainous regions, the Central Highlands, and the Mekong Delta. The literacy rate of ethnic minorities is lower than the national average. Learning conditions in ethnic minority areas are still difficult, with a lack of schools, teachers, and facilities. However, the government is trying to improve the education system for ethnic minorities through many support programs (Nguyen and Nguyen, 2019). Health services in ethnic minority areas are still limited,

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leading to substandard health care. The government and non-governmental organizations have implemented many health programs to improve the health of ethnic minority communities. Ethnic minorities in Vietnam have diverse and rich cultures, with their languages, costumes, customs, practices, and beliefs. However, the cultures of some ethnic groups are gradually being lost under the impact of the integration and globalization process. Preserving and promoting traditional cultural values is a big challenge (Abdulkareem et al., 2023).

The Vietnamese Government has had many policies to support ethnic minorities, focusing on areas such as hunger eradication and poverty reduction, infrastructure development, and improving the quality of education and health care. Policy programs such as 135, and 134, and policies to support residential land, production land, and domestic water have significantly improved the lives of ethnic minorities. However, there are still many challenges in sustainable socio-economic development for ethnic minorities, including reducing the gap between rich and poor, protecting the environment, and preserving cultural identity (Nguyen-Anh et al., 2022). Socio-economic development policies for ethnic minorities in rural areas are important in improving lives, promoting sustainable development, and maintaining social stability.

The socio-economic development policy for ethnic minorities in rural areas of Vietnam is established to improve living conditions, promote sustainable economic development, preserve cultural identity, and ensure social security. These goals aim to create a comprehensive and sustainable development for ethnic minorities in rural areas, which helps improve the people's quality of life, develop the economy, protect culture, and ensure security and social stability. For the socio-economic development policy for ethnic minorities in rural areas to be effective, research to discover factors affecting the policy needs to be carried out, which helps the socio-economic development policy achieve results (He et al., 2024).

LITERATURE REVIEW

Ethnic minority areas in rural Vietnam are home to many ethnic minority groups, mainly concentrated in mountainous, border, and remote areas. These areas have distinct geographical, economic, cultural, and social characteristics. Geographical distribution in the Northwest region includes provinces such as Lao Cai, Son La, Dien Bien, Lai Chau, Yen Bai, and Hoa Binh, home to ethnic groups such as H'Mong, Thai, Dao, Tay, and Nung. The terrain is mainly high mountains, and dense forests, with a cool climate but harsh winter, in the Central Highlands, including Dak Lak, Dak Nong, Gia Lai, Kon Tum, and Lam Dong provinces. This is home to ethnic groups such as E De, Gia Rai, Bana, and Xo Dang. The terrain here is mainly plateau, suitable for growing industrial crops such as coffee, rubber, and pepper. In the Mekong Delta, the Khmer, Cham, and Chinese, live mainly in provinces such as An Giang, Kien Giang, Soc Trang, and Tra Vinh. This is a fertile alluvial plain where ethnic minorities primarily practice agriculture. Ethnic minority areas have poor infrastructure, difficult transportation, and a lack of electricity and water, greatly hindering economic development (Tuyen, 2015).

Ethnic minority groups in rural areas maintain many traditional cultural features such as costumes, languages, festivals, and beliefs. However, due to cultural exchange, some customs and practices are gradually disappearing. Ethnic minority areas face many challenges such as poverty, lack of infrastructure, and limited access to health and education services. They are having difficulty preserving and promoting their culture under the impact of urbanization and globalization (Tran et al., 2015). Ethnic minority groups have underdeveloped economic conditions, leading to low incomes and high poverty rates; they have limited access to the labor market. Ethnic minority areas in rural areas of Vietnam have great development potential, but they require a lot of support to overcome difficulties and develop sustainably (Nguyen et al., 2021).

Socio-economic development policies for ethnic minority areas are measures, programs, and plans implemented by the government to promote economic growth and improve social conditions in ethnic minority areas. This policy aims to improve living standards, reduce poverty, enhance social welfare, and promote comprehensive and sustainable development (Yousaf et al., 2024). The main goal of socio-economic development policies is to create sustainable economic development, including income growth, development of industry, services, agriculture, and job creation for workers. Support ethnic minority areas to reduce income disparities and improve living conditions (Tan et al., 2023). Ensure ethnic minority areas have access to health, education, and social security services equitably and effectively. Improve the education level, vocational skills, and health of the workforce to promote labor productivity and economic competitiveness. Protect the environment, use natural resources efficiently, and promote forms of economic development that do not harm the environment and communities (Ye et al., 2024). Socio-economic development policies for ethnic minority areas in rural Vietnam are facing many difficulties such as natural conditions, economic, social, and management. Ethnic minority areas in mountainous areas with hilly terrain, fragmentation, and difficult access cause difficulties in building infrastructure, transportation, and providing public services (Tuan et al., 2023). The poverty rate in rural ethnic minority areas is still high, employment opportunities are few, and income is unstable. The economy mainly relies on self-sufficient agriculture, low productivity, and low ability to respond to economic changes. The education level and skills of ethnic minority people in rural areas are still low, limiting their ability to participate in modern economic and industrial activities (Zhao et al., 2021).

According to Phuong et al. (2023) in the study of livelihood of climate change in ethnic minority communities. The authors believe that these ethnic minority communities are heavily dependent on agriculture and natural resources, making them vulnerable to climate change, such as droughts, floods, and changes in weather patterns (Phuong et al., 2023). The authors make policy recommendations for communities, including strengthening adaptive capacity and sustainable development for ethnic minorities to mitigate the impacts of climate change. The study has focused on the difficulties in natural conditions in minority areas. However, research has not shown solutions for improving infrastructure; diversifying livelihoods, and policies to support ethnic minority communities to ensure sustainable development for ethnic minority communities facing climate change have not been identified. Fahad et al. (2023) studied for multidimensional poverty of rural households and proposed economic growth policies. The study analyzed the multidimensional poverty status of rural

households based on the sustainable livelihood framework focusing on five important types of household assets. The authors discussed policies that affect human, social, natural, financial, and physical capital factors, and proposed improving access to health services, education, infrastructure, and natural resources to reduce poverty sustainably (Fahad et al., 2023). Policies should focus on developing human resources and facilitating households' access to financial capital, land, and social networks to enhance their livelihood capabilities. Policy recommendations for sustainable economic growth, aiming to improve the quality of life and reduce poverty in rural areas (Hatma Indra Jaya et al., 2024).

According to Nguyen-Anh et al. (2024, 506) in the study "Drivers of land use efficiency among ethnic minority groups in Vietnam: a longitudinal study". The study analyzed the factors affecting the land-use efficiency of ethnic minority groups. The study highlighted the role of traditional land tenure systems, government land allocation and land reform policies, and access to agricultural technology and markets. In addition, factors such as climate change, land degradation, and social factors, including gender roles and community cooperation, were also considered (Nguyen-Anh et al., 2024). This study proposed how ethnic minority groups can adapt to environmental, economic, and social changes to improve land use efficiency. Policy recommendations to improve land use efficiency in ethnic minority areas.

Currently, some socio-economic development policies for ethnic minority areas are not suitable for reality, leading to low efficiency. The allocation of financial resources and investment for ethnic minority areas is not effective. Managers in ethnic minority areas lack skills and knowledge, reducing the effectiveness of policy implementation. Lack of people's participation often makes monitoring and evaluating the effectiveness of development programs difficult, leading to waste of resources and not achieving the expected results. Rural ethnic minority areas often face severe impacts of climate change, such as floods, droughts, and landslides (Pham and Mukhopadhyaya, 2022). It is necessary to carefully consider socio-economic development policies for ethnic minority areas to detect factors affecting these policies.

THEORETICAL FRAMEWORK AND RESEARCH STRUCTURE

Theoretical framework

Research on socio-economic development policies in ethnic minority areas is an area that has received much attention from scientists, international organizations, and governments. Many studies have focused on various aspects of this issue. The works aim to identify economic, social, political, cultural, and environmental factors that may affect the development of ethnic minority areas, and evaluate the effectiveness of policies. Van and Guzikova (2024) studied the factors affecting the poverty rate in ethnic minority areas. According to the author, sustainable poverty reduction is being urgently implemented by governments in parallel with each stage of socio-economic development. The study identified and assessed the impact of factors on the level of multidimensional poverty in ethnic minority areas including transportation, electricity, cultural centers, health, education and other social issues, commodity exchange, civil servant qualifications, and arable land (Van and Guzikova, 2024). However, the study did not mention the government's policies and priorities for rural areas. The study proposed a reasonable allocation of resources to reduce poverty, towards sustainable social development.

According to Kanagawa and Nakata (2008, 2016) in the study "Assessment of access to electricity and the socio-economic impacts in rural areas of developing countries". Investment in infrastructure is considered the key to increasing access to markets and services. Sustainable livelihoods and agriculture have been pointed out by studies and analyzed the dependence of ethnic minority communities on subsistence agriculture (Kanagawa and Nakata, 2008). The need for measures to support sustainable economic development, applying new technology in agricultural production.

In the study "Socio-Economic factors of poverty in rural areas of almaty region and prospects for their regulation" by Kuzembekova and Zhanbyrbayeva (2022, 81). Social, educational, and health factors were considered, and the study emphasized the important role of education and health in improving the quality of life of ethnic minorities. The study showed the influence of social, educational, and health factors on the implementation of socio-economic development policies in rural areas (Kuzembekova and Zhanbyrbayeva, 2022). The culture and customs of ethnic minority groups are considered one of the important factors affecting the ability to absorb and implement policies. The study shows that policies that are not suitable for local culture are often not very effective.

According to Minh et al. (2020), research on cultural and human identity in ethnic minority areas has an impact on socio-economic development in rural areas. The authors argue that political and legal factors should be considered, and land policies include land ownership, compensation policies, and land management. It shows the difficulties that ethnic minorities face in accessing land rights. This directly affects the implementation of economic development policies for ethnic minorities in rural areas. Ethnic policies have analyzed the role of programs for ethnic minorities in rural areas (Minh et al., 2020). The government should issue more policies to support poverty reduction, infrastructure development, and improving the quality of life of ethnic minorities (Shao and Zoh, 2024).

According to Nguyen and Hanh (2024), human resource development for ethnic minorities is a development strategy that includes improving education and training. Local authorities should focus on vocational skills for ethnic minorities, and areas that are suitable for local resources such as agriculture and ecotourism. In addition, policies to support and develop infrastructure such as the Internet and transportation should be prioritized to connect mountainous areas with the wider economic network. Community participation in decision-making ensures sustainable development and creates economic development opportunities for ethnic minorities (Nguyen and Hanh, 2024). The study also addresses resource conflicts between ethnic minority communities and resource exploitation enterprises.

According to Ha (2023), strengthening international cooperation to support socio-economic development in ethnic minority areas. Forms of cooperation between governments, international organizations, non-governmental organizations, and the private sector play an important role in providing resources, knowledge, and technology to address the unique

challenges in these areas. Developing infrastructure in ethnic minority areas such as investing in transportation, health, education, and digital infrastructure to improve living standards and expand economic opportunities. Preserving ethnic minority culture, maintaining cultural identity, and promoting community tourism and traditional crafts (Ha, 2023). The government should support economic development policies and provide technical assistance to improve ethnic minority communities in rural areas, improve management capacity, and provide social services.

Pham and Mukhopadhyaya (2022) social capital plays an important role in poverty reduction for ethnic minority groups in rural areas. Social capital includes community networks, trust, mutual support, and access to resources through relationships, which are considered important factors in poverty reduction. Strong social networks provide people with more opportunities to access finance, information, and employment. Strengthening social capital helps improve lives and increase the ability to escape poverty sustainably for ethnic minority communities in rural areas (Pham and Mukhopadhyaya, 2022). The government should consider income-based poverty reduction, and evaluate it according to many aspects such as health, education, living standards, and access to basic services (Vercher et al., 2023).

Research in Vietnam has focused on specific cases in the Northwest, Central Highlands, Northern mountainous regions of Vietnam, and the Southwest, where ethnic minorities have a high proportion. According to Le et al. (2023) in the study "Vietnam's poverty reduction policies for ethnic minorities". This study evaluates the effectiveness of policies such as the Hunger Eradication and Poverty Reduction Program, and the National Target Program for Sustainable Poverty Reduction, and proposes adjustments to better suit practical conditions (Le et al., 2023). Research on development policies for ethnic minorities has focused on reducing poverty and inequality within communities. Many studies have shown that ethnic minorities face economic, social, and cultural barriers, leading to higher poverty rates than the majority. Financial support programs, vocational training, and job creation are proposed solutions to alleviate this situation.

Building social government for ethnic in rural by Chen (2024). Effective social governance is considered an important foundation for improving living standards, preserving cultural identity, and promoting sustainable development in ethnic minority areas. Community participation will help policies to be suitable for local needs and customs, creating community autonomy and responsibility. A suitable combination of traditional and modern governance will maintain traditional customs alongside modern policies to ensure comprehensiveness and adaptability to new contexts (Chen, 2024). Encourage ethnic minority communities to participate in economic activities such as ecotourism, handicrafts, and sustainable agriculture. Local governments invest in education and health to facilitate the development of ethnic minority communities.

According to Sabet and Khaksar (2024), local government performance, social capital, and citizen participation play a role in sustainable rural development. Local government performance is the foundation for implementing policies and programs that meet community needs, ensuring the rational and transparent use of resources (Wu et al., 2024). Social capital, including relationships and trust within the community, enhances the ability to cooperate, support each other, and recover from difficulties. Active citizen participation is a key factor, in facilitating the implementation of sustainable initiatives, enhancing self-management capacity, and environmental responsibility (Sabet and Khaksar, 2024). The close coordination between these three factors creates a solid foundation for sustainable rural development, protecting resources, and promoting social welfare. In general, the research situation on factors affecting socio-economic development policies for ethnic minorities in rural areas is very rich and multi-dimensional. However, the research still faces many challenges in implementing highly practical policies that are suitable for the cultural, geographical, and social characteristics of each ethnic group.

Hypotheses

The research hypothesis on factors affecting the socio-economic development policy in ethnic minority areas in rural areas is put forward. Factors that are likely to affect this policy, and have a great influence on the success of socio-economic development policy in ethnic minority areas in rural areas. Factors related to natural and geographical conditions affect the development of infrastructure, agriculture, and transportation (Csata et al., 2024). This directly affects the planning and implementation of socio-economic development policies. Policies need to consider sustainable resource exploitation while protecting the environment and ensuring long-term livelihoods for people.

H1: Natural and geographical conditions affect socio-economic development policies for ethnic minorities in rural areas.

Socio-economic factors include the level of economic development of ethnic minority areas in rural areas, economic structure, and human resources. It requires policies to focus on poverty reduction, improving living standards, supporting economic restructuring, and diversifying income sources (Hoang et al., 2020). The educational level and skills of ethnic minority people in rural areas are still low. Policies need to focus on education, vocational training, and improving production skills for people.

H2: Socio-economic factors have an impact on socioeconomic development policies for ethnic minority areas in rural areas.

Ethnic minority groups have a diversity of languages, cultures, and customs. Development policies need to respect and preserve traditional cultural values while encouraging integration and socio-economic development (Vlasov et al., 2024). Rural ethnic minority areas have a high sense of community. Solidarity and mutual support within the community are important factors in successfully implementing policies.

H3: Socio-cultural factors have an impact on socio-economic development policies for ethnic minorities in rural areas.

Policy and legal factors show that the government needs to implement many specific support programs for ethnic minority areas in rural areas. Financial resources from the state budget and international organizations play an important role in implementing development programs (Le et al., 2024). Policies need to ensure fair and transparent allocation of these resources while encouraging private investment in areas such as agriculture, tourism, and small-scale industry.

H4: Policy and legal factors have an impact on socio-economic development policies for ethnic minority areas in rural areas.

The capacity of local officials in rural areas need to have skills, knowledge, and understanding of ethnic minority culture and customs to effectively manage and implement policies. Policies need to encourage the active participation of people in the process of planning, implementing, and monitoring development programs (Hai et al., 2023). This helps to increase transparency and ensure the sustainability of projects.

H5: The factor of capacity for policy management and implementation has an impact on socio-economic development policies in rural ethnic minority areas.

Security and political stability in rural ethnic minority areas are important for stability. Development policies ensure political stability and security in the region while creating conditions for socio-economic development (Hai and Ngan, 2022). Development policies with consensus from the support of local people will ensure success in implementing development programs.

H6: Political and security factors have an impact on socio-economic development policies in rural ethnic minority areas.

Financial and technical support from international organizations can help improve the effectiveness of rural ethnic minority development programs (Hu et al., 2024). Policies need to make good use of these international resources and coordinate closely to ensure sustainability.

H7: International cooperation factors have an impact on socio-economic development policies for ethnic minority areas in rural areas.

These hypotheses need to be tested through the analysis of data collected from ethnic minority areas, to determine the causal relationship and impact.

Research structure

The research structure is based on existing studies and theoretical frameworks. Factors affecting socio-economic development policies for ethnic minority areas in rural areas, Vietnam. Seven factors can affect socioeconomic development policies for ethnic minority areas, including Nature and geography; Socio-economic; Culture and Society; Policy and law; Management and policy implementation capacity; Politics and security; and International cooperation. It is shown in Figure 1.

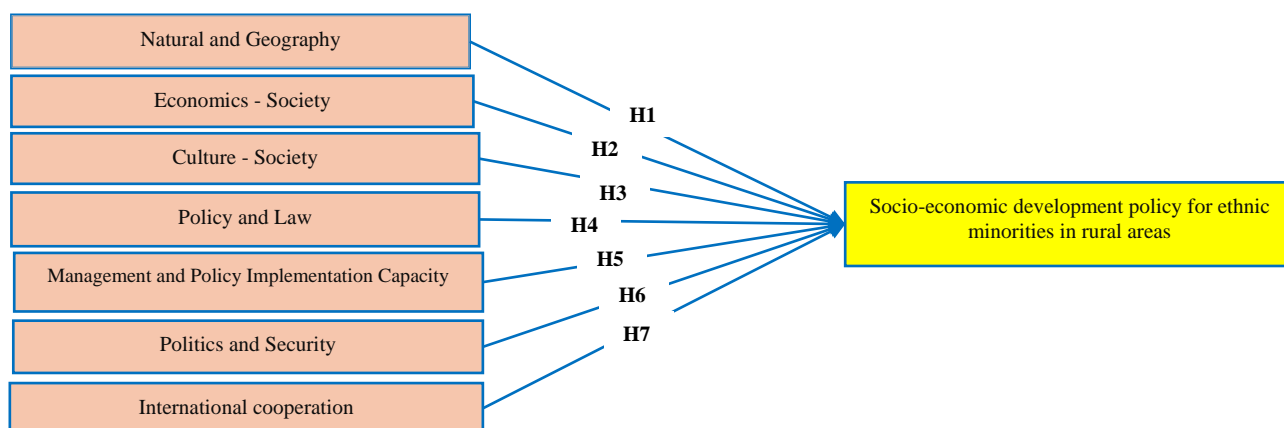


Figure 1. Structural model (Source: Authors, 2024)

Factors and variables observed in the structural model of factors affecting socio-economic development policies for ethnic minority areas. It is shown in Table 1.

Table 1. Factors and observed variables in the structure(Source: The authors synthesized from available studies, 2024)

Factors in the structural model	Encode	Observed variables within the factor
Natural and Geography	NAGE	(1) Geographical location; (2) Natural resources; (3) Climate change; (4) Natural environment; (5) Transportation.
Economics – Society	EC SO	(1) Economic structure; (2) Education level; (3) Professional level; (4) Level of economic development; (5) Human resources.
Culture – Society	CUSO	(1) Cultural identity; (2) Customs and practices; (3) Community solidarity; (4) Cultural enjoyment; (5) Education and health care.
Policy and Law	POLA	(1) Special support policies; (2) Financial investment; (3) Land policy; (4) Ethnic policy; (5) Rural policy.
Management and Policy Implementation Capacity	MPIC	(1) Government policy; (2) Local implementation; (3) Capacity of civil servants; (4) Cooperation of people; (5) Policy suitability; (6) Maintenance of policy implementation.
Politics and Security	POSE	(1) Political stability; (2) Rural security; (3) Ethnic minority consensus; (4) Border stability; (5) People's trust in the government; (6) Crime situation.
International cooperation	INCO	(1) Financial support; (2) Technical support; (3) Customers; (4) Business environment; (5) Cultural exchange.
Socio-economic development policy for ethnic minorities in rural areas	SEDP	(1) Poverty reduction and improvement of living standards; (2) Sustainable economic development; (3) Preservation and promotion of ethnic minority cultural identity; (4) Improvement of human resource quality.

METHODOLOGY

The methods used in the study include descriptive statistics, scale testing, factor fit analysis, and research structure testing. The steps of the research method are shown in Figure 2.

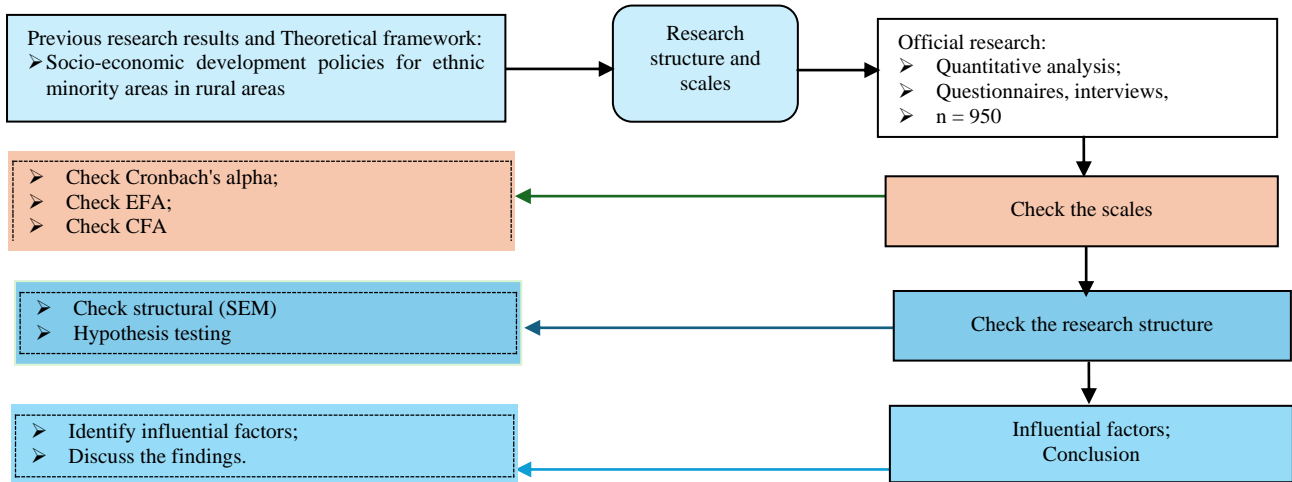


Figure 2. Flowchart of research methodology steps (Source: Authors)

Research area

The Mekong Delta is an important economic region of Vietnam, home to many ethnic minorities, but it faces challenges in socio-economic development. This region is characterized by a flooded ecosystem, with many areas of saltwater wetlands and river deltas. These natural conditions directly affect agricultural production methods and people's lives. The Mekong Delta is strongly affected by climate change, such as rising sea levels, saltwater intrusion, and riverbank erosion. These phenomena negatively affect the livelihoods and lives of ethnic minorities. The research area is shown in Figure 3.

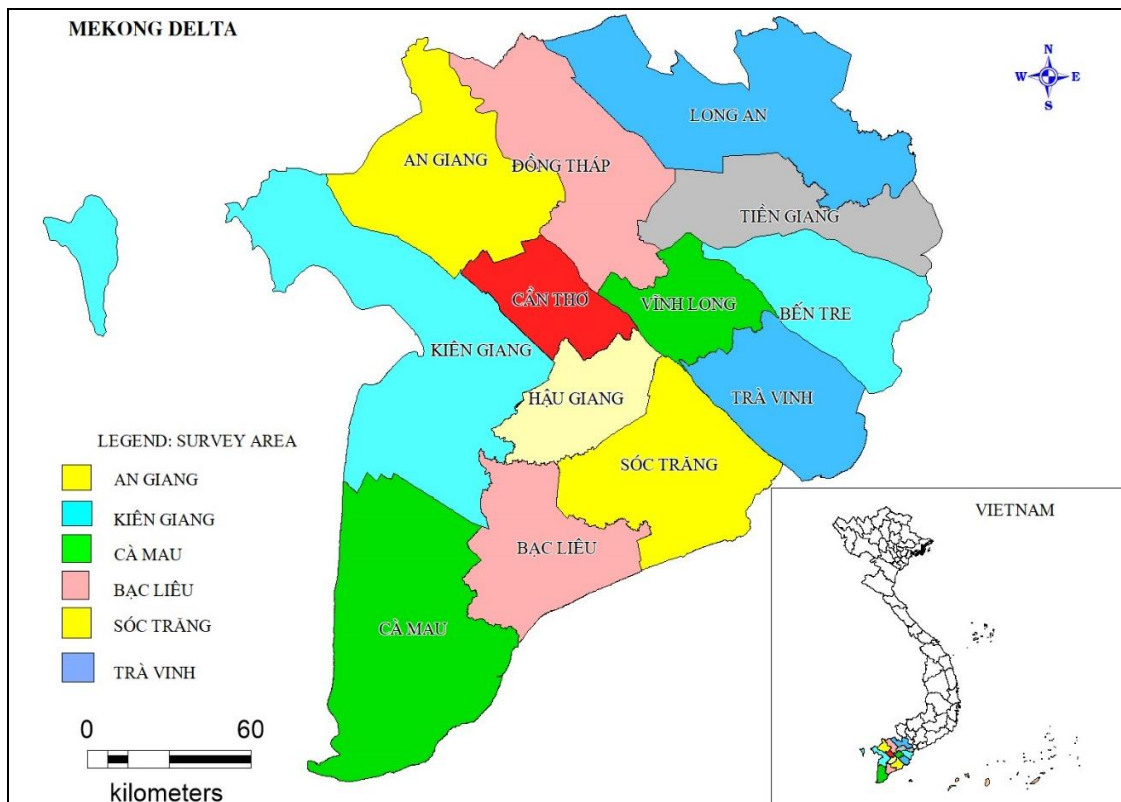


Figure 3. Research survey area in the Mekong Delta, Vietnam (Source: Authors)

The Mekong Delta region is home to many ethnic minority groups, of which the three main ethnic groups are the Khmer, the Chinese, and the Cham. The number and distribution of ethnic minorities in the Mekong Delta according to data from the General Statistics Office of Vietnam, as of 2019. The Khmer group has a population of 1.3 million people, concentrated in the provinces of Tra Vinh, Soc Trang, Kien Giang, An Giang, and some other provinces. They account for about 7% of the population of the entire Mekong Delta. The Chinese group has a population of 230,000 people, mainly distributed in Can Tho, Soc Trang, Bac Lieu, Tra Vinh, and Kien Giang. The Cham group has a population of 17,000

people, mainly distributed in An Giang, especially in Tan Chau and An Phu districts. In addition to the three main ethnic groups above, the Mekong Delta also has the presence of several other ethnic minorities, but in very small numbers and scattered distribution. In total, ethnic minorities in the Mekong Delta account for about 9-10% of the region's population (General Statistics Office, 2019). The Khmer have their own culture, language, and beliefs, which greatly influence the socio-economic development policies in the region. The Cham people live scattered in An Giang and neighboring areas, and their own Islamic culture and customs, influence the formulation and implementation of development policies. The Mekong Delta has a young population, but the proportion of ethnic minorities with access to education and social services is lower than that of the Kinh people, leading to a development gap between population groups.

Survey sampling

Based on the theoretical framework and previous studies, a questionnaire was developed on factors affecting the socio-economic development policy of ethnic minorities in rural areas. The survey questionnaire has 47 Likert items, including 6 demographic scales, and 41 scales measuring for eight factors. The survey data collection process took place from April to July 2024. The Likert scale 5-point (range of 1 to 5) was used to measure respondents' perceptions (1: strongly disagree to 5: strongly agree). Respondents answered the questionnaire directly. The questionnaire was distributed to 950 people in the Mekong Delta, Vietnam. A total of 936 valid responses were collected (98.5%), 14 invalid responses were eliminated (1.5%), it is shown in Figure 4, and the study was conducted. The responses from the survey were coded and analyzed using SPSS version 25 and AMOS version 24 software.

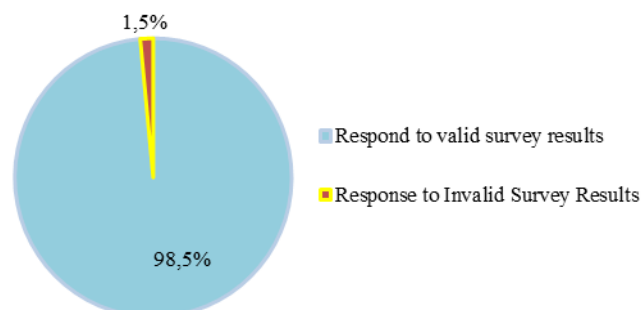


Figure 4. Response results by respondents (Source: Authors)

Research data analysis

The collected data were coded and analyzed for the study of factors affecting the socio-economic development policies of ethnic minorities in rural areas. The statistical results describing the demographic characteristics of the survey area are shown in Table 2.

Table 2. Demographic characteristics of the survey sample (Source: Authors' analysis of survey data, 2024, n = 936)

Demographic characteristics and survey area	Number of survey respondents	Percentage
1. Survey area (ĐBSCL)	936	100%
An Giang Province	158	16.9
Kien Giang Province	136	14.5
Bac Lieu Province	133	14.2
Ca Mau Province	180	19.2
Soc Trang Province	163	17.4
Tra Vinh Province	166	17.7
2. The gender	936	100%
Female	456	48.7
Male	480	51.3
3. Occupation	936	100%
Government Employee	66	7.1
Company Manager	97	10.4
Starting a Business	90	9.6
Salesperson	202	21.6
Technical Employee	63	6.7
Agricultural Worker	166	17.7
Freelance Worker	111	11.9
Other	141	15.1
4. Years (Age)	936	100%
<30	226	24.1
30-40	204	21.8
40-50	169	18.1
>50	337	36.0
5. Education	936	100%
Master's degree or higher	61	6.5
College or Bachelor's degree	245	26.2
Professional degree holder	203	21.7
Other	427	45.6
6. Monthly Income (million VND)	936	100%
<10	185	19.8
10-20	245	26.2
20-30	169	18.1
>30	337	36.0

Cronbach's Alpha reliability test is a test that reflects the close correlation between observed variables in the same factor (Cronbach, 1951). The results of survey data analysis show that all eight scales have high reliability. Cronbach's Alpha coefficient of the scales $> (.8)$ and Corrected Item-Total Correlation $> (.3)$, is shown in Table 3. It shows the appropriateness of the rankings in the research structure. Exploratory factor analysis (EFA) of the structure showed Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .838 ($.5 \leq KMO \leq 1$), and Sig Bartlett's Test of Sphericity = .000 ($< .5$). The test results show that Total Initial Eigenvalues = 1.217 (≥ 1). The Cumulative Extraction Sums of Squared Loadings = 68.274% ($\geq 50\%$); (EFA) analysis shows that the structure of the model is appropriate (Hair et al., 2010). Therefore, all eight factors in the structure are retained in the research model. Table 4. The rotated component matrix shows 41 observed variables, which are classified into eight factors. All observed variables have factor loadings $> (.5)$. Therefore, all eight factors are retained in the research model (Doll et al., 1994). Confirmatory factor analysis (CFA) of the research model is shown in Table 5. The results of reliability and convergence testing of the factors. The test result (CR) $> (.7)$, shows that the reliability of the scale is guaranteed (Nunnally and Bernstein, 1994). Besides, (AVE) $> (.5)$ and (MSV) $< (AVE)$, the square root of AVE (SQRTAVE) $>$ Correlation coefficient between the structures. Therefore, reliability and convergence in the structure are guaranteed in all scales (Baumgartner and Homburg, 1996).

Table 3. Test results of eight scales (Source: SPSS data analysis by authors, 2024, n = 936)

Factors	Encode	Number of observed variables	Mean	Cronbach's Alpha	Corrected Item-Total Correlation range
Natural and Geography	NAGE	5	2.930	.884	.651 - .826
Economics - Society	ECISO	5	3.394	.854	.637 - .705
Culture - Society	CUSO	5	3.677	.867	.593 - .831
Policy and Law	POLA	5	3.099	.958	.851 - .909
Management and Policy Implementation Capacity	MPIC	6	3.360	.867	.563 - .810
Politics and Security	POSE	6	4.020	.937	.686 - .899
International cooperation	INCO	5	3.575	.948	.713 - .931
Socio-economic development policy for ethnic minorities in rural areas	SEDP	4	3.762	.933	.793 - .903

Table 4. Rotated component matrix (Source: Authors' analysis of survey data, 2024, n = 936)

	Factor							
	1	2	3	4	5	6	7	8
POSE5	.948							
POSE6	.943							
POSE1	.861							
POSE4	.837							
POSE2	.718							
POSE3	.674							
POLA4		.912						
POLA1		.909						
POLA3		.886						
POLA5		.867						
POLA2		.849						
INCO3			.970					
INCO5			.962					
INCO4			.961					
INCO2			.792					
INCO1			.692					
NAGE5				.863				
NAGE3				.766				
NAGE4				.736				
NAGE1				.690				
NAGE2				.642				
MPIC6					.908			
MPIC5					.780			
MPIC4					.764			
MPIC3					.667			
MPIC2					.633			
MPIC1					.590			
CUSO5						.889		
CUSO3						.824		
CUSO2						.649		
CUSO1						.638		
CUSO4						.591		
ECISO5							.754	
ECISO4							.745	
ECISO3							.703	

ECSO2											.700	
ECSO1											.658	
SEDP2												.790
SEDP4												.717
SEDP1												.676
SEDP3												.573

Table 5. The results of reliability and convergence testing of the factors (Source: Survey data analyzed by the authors, 2024, n = 936)

Factor construct	CR	AVE	MSV	MaxR(H)	LAMA	FABS	COIN	LOGP	EDAT	TINF	LSPR
LAMA	.945	.743	.091	.998	.862						
FABS	.953	.776	.040	.997	-.130***	.881					
COIN	.924	.677	.086	.998	.122**	.083*	.823				
LOGP	.914	.645	.278	.947	.274***	-.076*	.118**	.803			
EDAT	.900	.614	.207	1.003	.210***	.038	.142***	.381***	.783		
TINF	.888	.576	.153	.935	.064†	-.040	.124**	.264***	.216***	.759	
LSPR	.937	.787	.278	.946	.302***	.201***	.293***	.528***	.455***	.391***	.887

RESULTS AND DISCUSSION OF THE FINDINGS

The results of the structural test by AMOS of factors affecting socio-economic development policies for ethnic minority areas are shown in Figure 5. The results show that Chi-square/df = 5.221; GFI = .860; CFI = .940; RMSEA = .067; PCLOSE = .000. The analysis results show that the structural model is suitable.

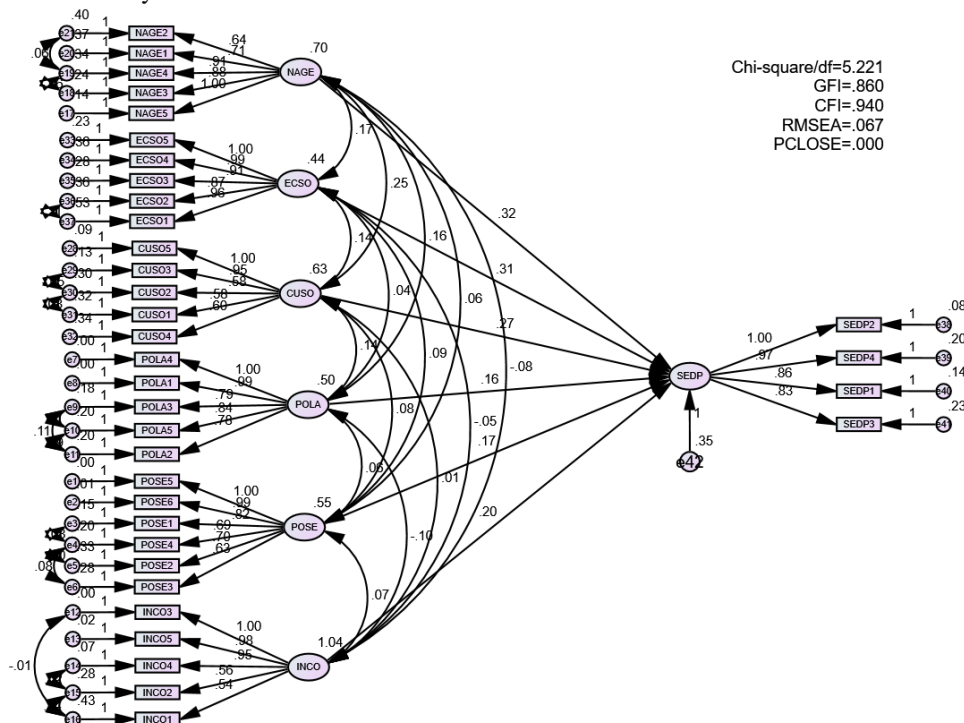


Figure 5. Results of structural test of factors affecting socio-economic development policies for ethnic minority areas (Source: Analysis of survey data by the authors, 2024, n=936)

The results of the linear regression test of the model of factors affecting socio-economic development policies for ethnic minority areas are shown in Table 6. The analysis data shows that the P-value (Sig) of the NAGE scale = .000 (<.05), ECSO = .000 (<.05), CUSO = .000 (<.05), POLA = .000 (<.05), MPIC = .179 (>.05), POSE = .000 (<.05), INCO = .000 (<.05). The Management and Policy Implementation Capacity (MPIC) factor was eliminated from the research model because it had a P-value (Sig) = .179. Thus, six factors have proven to have an impact relationship between the independent variables and the dependent variable (Hu and Bentler, 1999).

Table 6. Results of testing the relationship between concepts in the research structure (Source: Analysis of survey data by the authors, 2023, n = 735)

The relationship direct effects	Estimates	P-value (Sig)	Standardized estimates
SEDP <----- NAGE	.323	.000	.318
SEDP <----- ECSO	.299	.000	.238
SEDP <----- CUSO	.272	.000	.253
SEDP <----- POLA	.155	.000	.130
SEDP <----- MPIC	.036	.179	.123
SEDP <----- POSE	.176	.000	.152
SEDP <----- INCO	.199	.000	.238

Table 6. Results of testing the relationship between concepts in the research structure, and Figure 6. Results of structural test of factors affecting socio-economic development policies for ethnic minority areas. It shows that there are six factors affecting socio-economic development policies for ethnic minority areas by level, including NAGE = (0.318), ECSO = (0.238), CUSO = (0.253), POLA = (0.130), POSE = (0.152), INCO = (0.238).

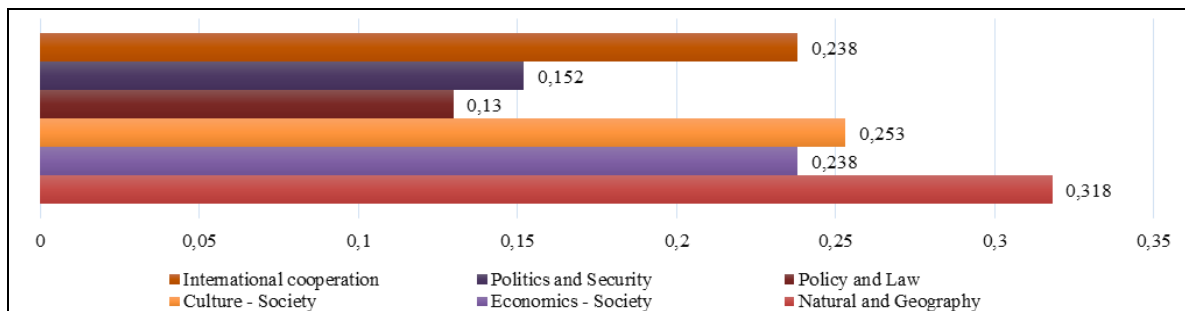


Figure 6. Level of factors affecting socio-economic development policies for ethnic minority areas
(Source: Analysis of survey data by the authors, 2024, n = 936)

RESULTS AND DISCUSSION OF THE FINDINGS

The study findings show that there are 6 factors affecting the socioeconomic development policy for ethnic minority areas in rural areas: Nature and geography; Socio-economic; Culture and Society; Policy and law; Politics and security; and International cooperation. Natural and geographical factors affecting socio-economic development policies for ethnic minority areas in rural areas are .318. Ethnic minority areas in rural areas are located in difficult terrain such as mountains, plateaus, or remote areas. These characteristics cause major limitations in terms of poorly developed transport infrastructure, and narrow or insufficient roads, leading to difficulties in transporting goods, and accessing markets and public services (Nyika, 2020). This directly affects the effectiveness of economic development and improving the quality of life. Natural resources such as land, forests, and water resources are important factors in the livelihoods of ethnic minority communities. However, resource exploitation is unsustainable or limited by natural conditions. This requires policies to focus on developing sustainable agricultural models, such as ecological agriculture or planting trees suitable for local soils (Wang et al., 2021). Natural and geographical factors have a direct impact on socio-economic development policies in ethnic minority areas in rural areas. A clear understanding of the terrain, climate, and local resources will help design more effective policies that are suitable to the actual conditions of each region while ensuring long-term sustainability and feasibility (Megoran and Rakhmatullaev, 2022).

The Socio-Economic factor affecting socio-economic development policies for ethnic minorities in rural areas is .238. Socio-economic development policies help reduce poverty rates and improve living standards and incomes for ethnic minorities through supporting livelihoods, creating jobs, and developing sustainable industries. Policies need to ensure that ethnic minorities in rural areas have access to basic services such as health, education, clean water, and transport infrastructure, thereby improving the quality of life and comprehensive human development (Ray, 2000). Promoting sustainable economic development is important for ethnic minorities in rural areas. Policies to support the development of agriculture, forestry, and traditional industries based on natural conditions and characteristics of each region, thereby improving economic efficiency and ensuring food security (Terluin, 2003). Policies to encourage the diversification of economic activities, including community tourism, handicraft production, and services, help ethnic minorities in rural areas reduce their dependence on agriculture and increase their resilience to economic fluctuations.

The socio-cultural factor affecting the socio-economic development policy for ethnic minority areas in rural areas is .253. Preserving and promoting ethnic culture plays an important role in protecting and promoting the traditional cultural values of ethnic minorities, helping to maintain and develop customs, festivals, languages, and ethnic arts. Encouraging cultural exchange is associated with preserving cultural identity in integration with modern society, thereby creating diverse and rich cultural development (Zulu and Richardson, 2013). To improve community capacity and human resources, the government should create educational opportunities, and improve the educational level and skills of ethnic minorities, especially the youth, helping them to participate in the labor market and develop their economy (Hai and Ngan, 2022). Education is an important factor, directly affecting the ability of ethnic minority communities to access development opportunities. In many rural areas, high illiteracy rates and low levels of education make it difficult for people to access the knowledge and skills needed for economic development. Policies need to improve access to education and provide vocational training programs that are appropriate to local conditions (Slater, 2022).

The Policy and Legal factors affecting socio-economic development policies for ethnic minority areas in rural areas are .130. Policy and legal factors act as a legal framework and orientation for development activities, ensuring that development goals can be achieved in a fair, sustainable, and effective manner. The characteristics of ethnic minority areas require development policies to have special support and incentives to overcome socio-economic difficulties (Li and Li, 2022). The government should implement preferential policies on education, exempting tuition fees, building schools, training teachers, and providing scholarships for ethnic minority students as measures to help improve educational levels and develop human resources for these areas. Livelihood and employment support policies: Local authorities should provide agricultural development support programs, vocational training, and job creation for people in ethnic minority areas, helping them escape from dependence on subsistence agriculture and increase their income (Hai et al., 2023).

The Political and security factors affecting socio-economic development policies for ethnic minority areas in rural areas are .152. Political stability is an important foundation for all socio-economic development activities. In ethnic minority areas, with political stability, development policies and programs will be easily implemented and receive support from the people. The State needs to have solutions to minimize social conflicts, improve economic life, and ensure social justice, policies that contribute to minimizing the risks of social conflicts and disagreements in the community, thereby creating a stable and peaceful environment. Ethnic policies of the State and localities have a direct impact on the development of ethnic minority areas (Lukaniszyn-Domaszewska, 2021). Security in ethnic minority areas is often sensitive to issues related to land and cultural conflicts. A good security environment, without conflicts, will encourage investment and promote economic development. Conversely, if there is conflict or security threat, investors and people may hesitate to engage in productive activities, hindering development.

The factor of international cooperation influencing socio-economic development policies for ethnic minority areas in rural areas is .238. International cooperation plays an important role in influencing and supporting socio-economic development policies in ethnic minority areas in rural areas. International cooperation factors not only bring financial resources but also open up opportunities for exchanging knowledge, technology, and management experience (Li et al., 2022). International cooperation is also an opportunity to transfer new technology and knowledge to rural areas and ethnic minorities. Training programs, seminars, and professional exchanges help local people learn advanced production techniques in agriculture, forest product processing, or sustainable green technologies (Jing et al., 2024). This not only increases productivity but also helps protect natural resources and the living environment of the community. International partners can assist in developing sustainable development policy frameworks for ethnic minority areas, including protecting traditional cultures, protecting people's rights, and ensuring their participation in decision-making (Ibragimovna and Isokhjonovna, 2023). They also help monitor and evaluate the effectiveness of development programs, thereby improving policy implementation (Nemes and Tomay, 2022). Partnerships with the United Nations, the World Bank, and international NGOs provide financial and technological resources to help ethnic minority areas in rural areas improve infrastructure such as roads, electricity, water, and schools, reducing poverty. Through international assistance, sustainable agricultural development projects are implemented, including advanced farming techniques, new crop varieties, and smart irrigation systems, helping to increase productivity and income for people. Internationally funded public health and education programs help improve the quality of life and reduce illiteracy and disease (Zhakupov et al., 2023). Overall, international cooperation plays an important role in supporting and promoting socio-economic development policies for ethnic minority areas in rural areas. International resources not only provide financial support but also provide knowledge, experience, and connections to help ethnic minority communities develop more sustainably (Kandpal, 2022).

CONCLUSION

The research model assumes that the factors affecting the socio-economic development policy for ethnic minority areas in rural areas have been tested on the scales, showing the appropriateness of the factors in the research structure. The research results have verified that the model is appropriate. Of these, six factors show the influence on the socioeconomic development policy for ethnic minority areas in rural areas, including Nature and geography; Economy - society; Culture - society; Policy and law; Politics and security; and International cooperation. The results achieved in the research have satisfied the set objectives. The research results discussed have suggested to help policymakers understand the relationship between factors. Political factors, security, international cooperation, socio-cultural factors, resources, and infrastructure, along with environmental factors have been and are deeply affecting the construction and implementation of socio-economic development policies in ethnic minority areas in rural areas. These factors interact with each other, creating challenges and opportunities for improving people's lives while maintaining sustainable development for the region.

Political stability and security are prerequisites for ensuring a sustainable development environment. International cooperation provides important resources, from finance to knowledge and technology, to help promote the development process. The socio-cultural factor requires respect for the identity and rights of ethnic minority communities in the policy implementation process. Resources and infrastructure need to be allocated and used effectively to ensure that all communities have access to basic services such as education, health, and transportation. Climate change and the environment require adaptation and sustainable development policies to minimize damage and protect the livelihoods of ethnic minority communities. In general, socio-economic development policies for ethnic minority areas in rural areas need to be comprehensive and flexible, combining economic development with cultural and environmental protection, along with close cooperation from relevant parties, both domestic and foreign. Research on socio-economic development policies for ethnic minorities in rural areas has used quantitative analysis methods, but there are still some limitations. The data in the research have not been specified for each ethnic group, reducing the detail and ability to accurately reflect the actual situation of each region. The research has not compared the effectiveness of policies over time or between regions, to highlight fluctuations and development trends in each period. The research sample has not been representative enough of the diversity of ethnic minorities in rural areas. Sampling mainly focuses on certain areas, omitting many areas with different socio-economic characteristics, thereby reducing the generalizability of policy conclusions. In addition, the sample size has not been expanded large enough to reflect the fluctuations in living conditions and development levels among ethnic groups.

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