MINISTRY OF EDUCATION AND TRAINING
HO CHI MINH NATIONAL ACADEMY OF POLITICS
ACADEMY OF JOURNALISTRY AND COMMUNICATION

PHAM THI TRONG HIEU

PROMOTING FARMERS' AGENCY IN THE DEVELOPMENT OF ECOLOGICAL AGRICULTURE IN THE NORTHWEST REGION TODAY

Field: Philosophy
Code: 9229001

ABSTRACT OF THE DOCTORAL DISSERTATION IN PHILOSOPHY

HANOI - 2025

THE DISSERTATION IS COMPLETED AT
ACADEMY OF JOURNALISM AND COMMUNICATION

Scientific Supervisors:

1. Dr. Vu Van Hau

2. Dr. Nguyen Thi Nhu Hue

***Reviewer 1*: .....**

***Reviewer 2:* .....**

***Reviewer 3*: .....**

The dissertation will be defended before the Academy-level Dissertation Evaluation Council, convened at the Academy of Journalism and Communication at [time], on [day] [month], 2025

The dissertation can be accessed at:

The National Library of Vietnam, Hanoi

The Library of the Academy of Journalism and Communication

LIST OF AUTHOR'S SCIENTIFIC WORKS RELATED TO THE DISSERTATION

1. Pham Thi Trong Hieu (2024), *"Promoting the role of farmers' agency in building ecological agriculture in Vietnam"*, Journal of Political Theory and Communication, special issue No. 1-2024, pp. 62-64.
2. Pham Thi Trong Hieu (2024), *"Building ecological agriculture and promoting the role of farmers' agency in Vietnam today"*, Journal of Theoretical Education, No. 377 (September 2024), pp. 73-78.
3. Pham Thi Trong Hieu (2024), *"Promoting the role of farmers' agency in applying science and technology to agricultural production in the Northwest region"*, Journal of Theoretical Education, No. 382 (December 2024), pp. 65-70.
4. Pham Thi Trong Hieu (2024), "Promoting Farmers' Agency in the Paradigm Shift from Conventional Agriculture to Ecological Agronomy in Northwest Vietnam Today," *Journal of Philosophical Studies*, No. 18 (Jan. 2025), pp. 85–93.
5. Phạm Thị Trọng Hiếu (2025), "Strengthening Farmers' Agency in Adopting Ecological Agricultural Models in Contemporary Northwest Vietnam," *Vietnam Social Sciences Review*, No. 2 (206) 2025, pp. 3–12.

INTRODUCTION

1. Rationale for choosing the topic

The development of ecological agriculture is a major policy initiative of the Communist Party and the State of Vietnam. This initiative aligns with global trends toward increasing added value and ensuring sustainable development, simultaneously addressing economic, cultural, social, and environmental demands. It aims to enhance farmers' quality of life while fostering a modern and civilized rural landscape. Fundamentally, this policy seeks to transform the agricultural model from a traditional, yield-driven system—one reliant on chemical inputs, resource depletion, and environmental degradation—into an ecological agriculture paradigm. This paradigm prioritizes value creation, with ecological and humanistic values at its core. It involves the application of scientific and technological advancements, the implementation of environmental protection measures, climate change adaptation, and the strategic utilization of regional potentials and strengths. The ultimate objective is to enhance the value and competitiveness of agricultural products, thereby contributing to the establishment of a modern agricultural sector and laying a solid material foundation for the industrialization and modernization of agriculture and rural areas. Consequently, the development of ecological agriculture serves as a strategic approach to overcoming the limitations of traditional agricultural development models, ensuring a balanced and sustainable relationship between ecological environmental factors and human development.

Within the implementation of this policy, farmers—as a class—play an indispensable role. As the most fundamental component of the productive forces, they are the key determinant of the policy's effectiveness. This role manifests in several aspects: farmers, with their knowledge, skills, and organizational discipline, constitute the labor force that utilizes production materials to establish a mode of production; they are also directly involved in the organization and management of agricultural production, as well as the distribution and exchange processes within the agricultural production system. Thus, it can be affirmed that farmers are the decisive agents in the successful construction of ecological agriculture and the sustainable development of rural areas.

The Northwestern region of Vietnam holds a particularly strategic position in terms of socio-economic development, national defense, security, and foreign affairs. It serves as the "frontier," the "protective shield," and the "lungs" of the nation. As a region characterized by ethnic diversity and socio-religious complexities, it possesses significant development potential and strategic advantages. Consequently, it has always received special attention from the Party and the State. In this region, efforts to enhance the role of farmers as key agents in the development of ecological agriculture have yielded notable achievements. Farmers have gradually moved away from a mindset of dependency on state investment, taking a more proactive role in planning agricultural activities. They have engaged in land consolidation and reallocation, transitioning toward appropriate crop and livestock structures, adopting scientific and technological advancements, and mechanizing agricultural production. Additionally, they have developed agricultural production models oriented toward commercialization, including farm-based and collective economies. These efforts have led to the formation of specialized farming zones and the emergence of agricultural models based on value chain linkages, organic agriculture, and high-tech farming.

However, despite these achievements, significant challenges remain in promoting farmers' agency in the development of ecological agriculture in the Northwest. The transition to an ecological agricultural model has been slow, and farmers' capacity to adopt scientific and technological innovations remains limited due to a lack of necessary inputs. The region's demographic structure is predominantly composed of ethnic minority communities with relatively low educational levels and limited competencies. Moreover, farmers' participation in the policy-

making process—from planning to implementation—remains weak. These challenges underscore the need for comprehensive research, both theoretical and empirical, to devise effective strategies that enhance the proactive, creative, and dynamic role of farmers in the Northwest's ecological agricultural development.

Thus, to foster a green, sustainable, and holistic development of the Northwest region in the new era—an era of national resurgence—it is imperative to fully recognize and accurately assess the role of farmers as key agents in ecological agriculture. This entails evaluating achievements, identifying limitations, addressing pressing issues, and formulating a comprehensive, systematic, effective, and feasible set of solutions to empower farmers in this endeavor. Given these theoretical and practical considerations, the author has chosen the dissertation topic: ***"Promoting farmers' agency in the development of ecological agriculture in the Northwest region today".***

2. Research Objectives and tasks

2.1. Research Objective

By analyzing the theoretical foundations and the current state of enhancing farmers' role as key agents in the development of ecological agriculture in the Northwestern region, this dissertation aims to propose key perspectives and solutions to effectively promote farmers' agency in ecological agricultural development, thereby ensuring the sustainable development of the Northwestern region in the present context in the years ahead.

2.2. Research tasks

To achieve this objective, the dissertation focuses on addressing the following research tasks:

First, to conduct a comprehensive review of existing studies related to the dissertation's topic in order to inherit the valuable insights of previous research while identifying areas that require further scholarly inquiry.

Second, to systematize the theoretical framework concerning the enhancement of farmers' role as key agents in the development of ecological agriculture in contemporary Vietnam.

Third, to analyze the current state, underlying causes, and emerging challenges related to farmers' role in ecological agricultural development in the Northwestern region today.

Fourth, to propose key perspectives and major solutions to further enhance the agency of farmers in ecological agricultural development in the Northwestern region in the present context in the years ahead.

3. 3. Research Subject and scope

3.1. Research subjects

This dissertation identifies its research subject as the enhancement of farmers' role as key agents in the development of ecological agriculture.

3.2. Research Scope

Content Scope: The promotion of farmers' agency in the development of ecological agriculture is a long-term, strategic policy of the Communist Party, encompassing multiple dimensions and approaches. However, within the scope of this dissertation, the study focuses on analyzing the subjects, content, and mechanisms through which farmers' agency is enhanced. Specifically, it examines:

The transformation of farmers' mindset from agricultural production to an ecological agricultural economy;

Their role in innovation and the application of science and technology in ecological agriculture;

Their involvement in governance concerning social, cultural, environmental, and climate change issues in relation to ecological agriculture;

Their equitable allocation and appropriation of ecological agriculture's value, thereby ensuring both social progress and justice.

Spatial Scope: The Northwest region consists of six provinces: Lai Châu, Điện Biên, Sơn La, Lào Cai, Yên Bái, and Hòa Bình. However, in the scope of this research, the author focuses on studying the promotion of the central role of farmers in the development of ecological agriculture in three provinces: Điện Biên, Sơn La, and Hòa Bình.

Temporal Scope: The research focuses on studying the promotion of the central role of farmers in the development of ecological agriculture in the Northwest from 2020 to the present and proposing solutions for the period up to 2030.

4. Theoretical foundation and research methods

4.1. Theoretical Foundation

This dissertation is grounded in Marxist-Leninist philosophy, Ho Chi Minh's thought, and the ideological tenets of the Communist Party of Vietnam, particularly concerning the enhancement of farmers' agency and the development of ecological agriculture.

4.2. Research method

- *Methodology Framework*: The study employs dialectical materialism and historical materialism, as articulated within the Marxist-Leninist tradition, as its overarching methodological foundation.

- *Specific Research Methods*: The dissertation applies a combination of historical-logical analysis and synthesis, alongside quantitative and qualitative research approaches, to systematically examine both the theoretical underpinnings and the practical dimensions of enhancing farmers' agency in the development of ecological agriculture in the Northwestern region of Vietnam.

5. Theoretical and Practical Significance of the Dissertation

5.1. Theoretical Significance of the Dissertation

This dissertation contributes to further clarifying the theoretical foundations for enhancing farmers' agency in the development of ecological agriculture.

5.2. Practical Significance of the Dissertation

Additionally, it provides both theoretical and practical foundations for Party committees, government authorities, and socio-political organizations to more effectively promote the role of farmers as key agents in the construction of ecological agriculture in the Northwest provinces of Vietnam.

Furthermore, this dissertation may serve as a valuable reference for research and teaching in related fields at universities and academic institutions.

6. Key Contributions of the Dissertation

Systematizes and establishes a theoretical framework for enhancing farmers' agency in the development of ecological agriculture, clarifying foundational concepts, principles, and determinants.

Analyzes and evaluates both the achievements and limitations in empowering farmers as central agents in ecological agriculture in the Northwestern region, while identifying pressing theoretical and practical issues that require further scholarly and policy attention.

Proposes strategic orientations and key solutions to further strengthen farmers' agency in ecological agricultural development, thereby contributing to the rapid, sustainable, and holistic advancement of the Northwestern provinces in the future.

7. Structure of the Dissertation

In addition to the introduction, conclusion, list of scientific works published by the author related to the dissertation, list of references, appendices, the dissertation is structured into four chapters comprising ten sections.

Chapter 1
OVERVIEW OF RESEARCH RELATED TO THE DISSERTATION TOPIC

1. 1. Overview of Research Related to the Dissertation

1.1.1. Studies on Agricultural Development and Ecological Agriculture

C. Francis et al., *Agroecology: The Ecology of Food Systems*, *Journal of Sustainable Agriculture* – an examination of the ecological foundations of food production. Fred Magdoff, *Ecological Agriculture: Principles, Practices, and Constraints*, *Renewable Agriculture and Food Systems* – an analysis of the guiding principles and limitations of ecological farming. Reyes Tirado et al., *Defining Ecological Farming*, FAO – a conceptual framework defining ecological farming practices. FAO, *Agroecology for Food Security and Nutrition: Proceedings of the FAO International Symposium* – discussions on the role of agroecology in food security. FAO, *The 10 Elements of Agroecology: Guiding the Transition to Sustainable Food and Agricultural Systems* – an official guideline for transitioning to sustainable agricultural models. Hatta T. (Ed.), *Economic Challenges Facing Japan's Regional Areas* – an exploration of agricultural and rural economic challenges in Japan. Hwang, J., Park, J., Lee, S., *The Impact of the Comprehensive Rural Village Development Program on Rural Sustainability in Korea* – an empirical study on rural sustainability initiatives in South Korea. FAO, *Agroecology Dialogue Series*: *The Interface Between Agroecology and Territorial Approaches for Food Systems Transformation*; *Agroecology as a Response to Agri-Input Scarcity*, *Outcome Brief No. 3, January 2023*. FAO, *The Impact of Disasters on Agriculture and Food Security: Avoiding and Reducing Losses Through Investment in Resilience* – a study on disaster impacts on agricultural sustainability.

Institute for Development Studies (IDS), *Farmers, Rural Areas, and Agriculture: Emerging Issues* – a comprehensive assessment of contemporary agricultural challenges in Vietnam. Phạm Thị Thanh Bình, *Comparative Study of Agricultural Policies in China, Thailand, Israel and Lessons for Vietnam* – a policy analysis highlighting agricultural development strategies in various countries. Central Steering Committee for the Review of 15 Years of Implementing Resolution 26-NQ/TW (7th Central Conference, 10th Tenure), *Proceedings of the Scientific Workshop on the Review of Resolution 26-NQ/TW on Agriculture, Farmers, and Rural Areas* – a policy review assessing Vietnam's agricultural progress. Phạm Văn Khôi, *Developing Suburban Agriculture in Hanoi Toward an Ecological Model* – a case study on ecological agricultural development in peri-urban Hanoi. Central Theoretical Council, *Building Ecological Agriculture, Modern Rural Areas, and Civilized Farmers* – a theoretical foundation for Vietnam's agricultural transformation. Communist Review, Special Issue No. 4/2022, *Developing Ecological Agriculture, Modern Rural Areas, and Civilized Farmers* – a policy-oriented examination of rural development. Phan Sĩ Mẫn, Hà Huy Ngọc, *Impacts of Climate Change on Agriculture and Rural Areas in Vietnam: Current Situation and Response Strategies* – a study on climate challenges and adaptation strategies. Đào Thế Anh, Lê Thành Ý, Chu Tiến Quang, *Developing Ecological Agriculture in Conjunction with Sustainable Rural Development* – an integration of agroecology with rural sustainability. Lê Minh Hoan, *Developing Ecological Agriculture and Organizing Production According to Value Chains* – a policy discussion on value-chain-driven ecological agriculture. Đào Thế Anh, *Opportunities and Challenges for Farming Households in the Digital Transformation of Agriculture and Rural Areas* – an exploration of digitalization in agriculture. Trần Đức Viên, *Building and Developing Ecological Agriculture: A Vision of the Times, a Development Philosophy from Vietnam's Practice* – a philosophical perspective on ecological agriculture. Nguyễn Thế Kiên, Trần Quý, *Digital Transformation for High-Tech Agriculture Development Toward Multifunctionality and Circular Economy* – an analysis of digital and circular economy applications in agriculture.

1.1.2. Studies on Enhancing Farmers' Agency in the Development of Ecological Agriculture

Trịnh Ân Phú, *The Principles of Marxism and Their Applied Research* – an analysis of Marxist principles and their relevance to contemporary agricultural transformation. Yoshitaka Miyake, Shota Kimoto, Yuta Uchiyama, Ryo Kohsaka, *Income Change and Inter-Farmer Relations through Conservation Agriculture in Ishikawa Prefecture, Japan: Empirical Analysis of Economic and Behavioral Factors* – a study of farmers' economic behavior in conservation agriculture. Nguyễn Duy Tiên and Nguyễn Trọng Tiến, *Marxist-Leninist Perspectives on Farmers and Their Application in Contemporary Vietnam* – an exploration of farmers' agency within Marxist agrarian theory. Thào Xuân Sùng, *Building the Vietnamese Peasant Class in the Contemporary Period Based on Ho Chi Minh's Thought* – a political and ideological perspective on farmers' roles. Nguyễn Cúc and Hoàng Văn Hoan, *State Policies for Farmers in the Context of Vietnam's WTO Commitments* – a policy analysis on trade liberalization and agricultural development. Bùi Thị Vân Anh, *Psychological Factors Influencing Farmers' Transition to Modern Agricultural Production Methods* – an examination of behavioral factors affecting agricultural transformation. Thào Xuân Sùng, *The Vietnam Farmers' Union's Role in Promoting Prosperous Agriculture, Wealthy Farmers, and Civilized Rural Areas* – an institutional study on farmers' participation in agricultural development. Đặng Kim Khôi and Trần Công Thắng, *The Livelihood Landscape of Vietnamese Farmers in the Era of Economic Integration (1990–2018)* – an assessment of economic transitions among farmers. Ministry of Agriculture and Rural Development, *Proceedings of the Workshop on Theory and Practice in New Rural Development in Vietnam – Theme: Promoting Farmers' Role in New Rural Construction* – a policy review of participatory rural development. Huỳnh Thanh Hiếu, *Enhancing Farmers' Agency in New Rural Development in the Mekong Delta Today* – a regional case study on farmer participation. Phạm Huỳnh Minh Hùng, *Empowering Farmers in New Rural Development in the Mekong Delta Today* – an analysis of rural transformation. Nguyễn Xuân Thắng, *Enhancing Farmers' Agency and Resolving the Relationship Between Law and Self-Governance Institutions in New Rural Development* – a study on institutional frameworks for farmers' participation. Nguyễn Trung Kiên and Bùi Minh, *Farmers as Key Agents in the Economic Sector* – an economic analysis of farmers' contributions. Hà Minh, *Innovating Thought to Promote Agricultural Development* – a philosophical discussion on agrarian change. Cao Phúc, *Transforming Agricultural Production Thinking: Transitioning from "Single-Value" to "Multi-Value" Agricultural Development* – an argument for value-added agriculture. Trần Quang Vinh, *Transitioning Agricultural Economic Thought – Farmers as Key Agents* – a discourse on the economic role of farmers. Đoàn Minh Huấn, *Innovating Thought on Agricultural, Rural, and Farmer Development – Perspectives from Party Leadership, the Political System, and Rural Democracy* – a political analysis of agrarian governance. Nguyễn Tiến Cường, *Empowering Farmers in the Contemporary Context* – a discussion on modern challenges and opportunities for farmers. Lê Minh Hoan, *Intellectualizing the Farmer* – an argument for knowledge-based agricultural development.

1.1.3. Studies on Enhancing Farmers' Agency in the Development of Ecological Agriculture in the Northwest Region of Vietnam

Linh Pham, Gerald Shively, *Profitability of Organic Vegetable Production in Northwest Vietnam: Evidence from Tan Lac District, Hoa Binh Province* – an empirical study on organic farming viability. Hoàng Văn Hoan, *Developing New Rural Areas for Ethnic Minority Communities in the Northwest of Vietnam Today* – an analysis of ethnic agricultural development. Center for People and Nature, *Northwest Agriculture: Identifying Challenges and Development Orientations in the Context of Climate Change* – a policy report on climate-adaptive agriculture. Trần Hồng Hạnh, *Climate Change and Livelihoods of Ethnic Minority Groups in the Northwest*

Mountainous Region of Vietnam – a socio-economic study of climate vulnerabilities. Ministry of Information and Communications, *Improving the Efficiency of Agricultural Cooperatives in Ethnic Minority Areas of the Northwest Provinces in the New Rural Development Process* – an institutional assessment of rural cooperatives. Mai Trọng Nhuận, *Science and Technology for Sustainable Development in the Northwest Region* – a technological approach to sustainability. Regional Political Academy I, *Resolving the Agriculture-Farmer-Rural Development Nexus in the Northern Mountainous Provinces Until 2025, with a Vision Toward 2030* – a policy roadmap for rural governance. Nguyễn Thanh Huyên, *Implementation of the Law on Grassroots Democracy in the Northwestern Provinces of Vietnam* – an analysis of legal frameworks for rural participation. Lưu Đức Khải, *Five Challenges Hindering Investment in Northwest Agriculture* – an economic evaluation of investment barriers. Đào Thế Anh, *Restructuring Agriculture in the Northwest: Current Situation and Solutions* – an examination of agricultural policy reforms. Phong Lưu, *Son La's Organic Agricultural Production*: *Part 1: Creating a Sustainable Ecosystem and Safe Food Supply*; *Part 2: The Need for Comprehensive Policy Solutions* – a case study on Son La's ecological farming model.

1.2. The Value of the Reviewed Studies, Emerging Issues, and the Research Direction of the Dissertation

1.2.1. The Value of the Reviewed Studies

A review of both domestic and international studies has provided valuable insights into various aspects of agricultural development and ecological agriculture. The contributions of these works can be categorized as follows:

First, Studies on the Development of Agriculture and Ecological Agriculture: Existing research has contributed to clarifying: (1) The concept of ecological agriculture, its defining characteristics, constituent elements, and its broader significance in both Vietnam and the global context; (2) Perspectives, policies, strategies, and institutional mechanisms governing agricultural development in Vietnam within the contemporary socio-economic and environmental landscape; (3) Evaluations of the current status of ecological agriculture globally and in Vietnam, along with policy recommendations and practical solutions for advancing ecological agriculture in the present era.

These studies have provided a comprehensive foundation for the dissertation, shaping its conceptual framework on ecological agriculture, its development, and the factors constituting a sustainable ecological agricultural system.

Second, Studies on Enhancing Farmers' Agency in the Development of Ecological Agriculture. Research in this domain has shed light on: (1) The role of farmers as active agents in agricultural transformation and the necessity of strengthening their participation in ecological agriculture development, rural economies, and new rural area initiatives; (2) Diverse research perspectives on how farmers' roles have been conceptualized and analyzed in the context of ecological agriculture; (3) Mechanisms for enhancing farmers' agency, including economic, institutional, and technological factors that empower them in the development of sustainable agricultural systems; (4) Key challenges and proposed solutions for promoting farmers' participation in agricultural development, with a particular focus on ecological agriculture.

Third, Studies on Farmers' Agency in the Development of Ecological Agriculture in the Northwestern Region of Vietnam. Research focusing on the Northwestern region has examined*:* The documents have addressed: (1) The current state of ecological agriculture in the Northwest, including its unique opportunities and challenges; (2) Institutional and policy mechanisms aimed at encouraging farmers to take an active role in sustainable agricultural development in the region; (3) Practical solutions to foster the growth of ecological agriculture in the Northwest while simultaneously strengthening farmers' agency in this process.

1.2.2. Key Issues and Research Directions of the Dissertation

While existing studies have made significant contributions to the understanding of ecological agriculture and farmers' agency, several critical gaps remain that necessitate further investigation:

Firstly, Theoretical gaps: Although various perspectives have explored the theoretical foundations of farmers' agency in ecological agriculture, there remains a lack of clarity regarding farmers' role as a distinct socio-economic class and as a fundamental productive force within the framework of socialist democracy.

Secondly, Fragmented analysis of influencing factors: Current research lacks a systematic examination of the factors shaping farmers' agency in the development of ecological agriculture. Existing assessments of farmers' participation in ecological agriculture in the Northwestern region remain disjointed, primarily concentrating on specific agricultural models rather than offering a comprehensive evaluation of the achievements, challenges, and structural barriers in fostering farmers' agency in ecological agricultural development.

Thirdly, Generalised solutions lacking regional specificity: The policy recommendations in existing literature tend to be broad and general, focusing on agriculture, rural areas, and farmers' livelihoods as a whole rather than providing targeted solutions for enhancing farmers' agency in ecological agricultural development in the Northwest within the contemporary socio-economic and environmental context.

To effectively address these gaps, the dissertation aims to clarify and elaborate on the following core issues:

Firstly, Systematizing the theoretical and practical foundations of enhancing farmers' agency in ecological agriculture, specifically: Defining farmers as agents within the context of ecological agriculture; Clarifying the concept, structure, and principles of ecological agriculture; Examining the role of farmers as active agents in ecological agricultural development; Identifying the key subjects, content, and mechanisms for strengthening farmers' agency in ecological agriculture; Analyzing the socio-economic, institutional, and environmental factors that shape farmers' role in the transition to ecological agriculture.

Secondly, Evaluating the achievements, limitations, and underlying causes influencing farmers' agency in ecological agriculture in the region; Analyzing three key dimensions: the agents involved, the content of empowerment, and the mechanisms facilitating farmers' agency; Identifying unresolved challenges in fostering farmers' role in ecological agriculture in the Northwest.

Thirdly, Developing a set of feasible perspectives and policy solutions for enhancing farmers' agency in the development of ecological agriculture in the Northwest, based on both theoretical insights and empirical findings. These solutions aim to ensure the long-term sustainability and resilience of ecological agricultural systems in the region.

Chapter 2
PROMOTING ENHANCING FARMERS' AGENCY IN THE DEVELOPMENT OF ECOLOGICAL AGRICULTURE IN VIETNAM: THEORETICAL PERSPECTIVES

2.1. Fundamental concepts

2.1.1. The Farmer as a Subject

2.1.1.1. Concept of Agents

Building upon the perspectives of previous scholars, this dissertation adopts and refines the concept of agency within its research framework: An agent is a human entity, existing at various levels of social organization (individual, group, class, or institution), endowed with consciousness, cognition, and proactive, creative capacity, engaging in practical activities to transform objects, thereby reshaping them in alignment with their needs.

2.1.1.2. Concept of Farmers as Agents

Synthesizing insights from prior research, within the scope of this dissertation, farmers as agents are understood as rural laborers whose livelihoods are primarily based on agriculture, inextricably linked to land as their principal means of production, and who exercise autonomy over the production process (organization, management, and distribution of products) within the framework of socialist democracy.

2.1.2. Ecological Agriculture Development

2.1.2.1. Concept of Ecological Agriculture

There exist diverse perspectives on ecological agriculture (EA), as reflected in the *Vietnam Encyclopedia*, the works of Reyes Tirado, Pham Van Khoi, and others. Drawing from these definitions, this dissertation conceptualizes ecological agriculture as an agricultural production system that integrates ecological principles with modern production methods, leveraging advancements in science and technology to safeguard the environment, enhance biodiversity, ensure the safety of agricultural products for human health, and uphold the overarching objective of sustainable development.

2.1.2.2. Concept of Ecological Agriculture Development

Ecological agriculture constitutes a holistic approach that foregrounds the interplay among environmental, economic, cultural, and social dimensions in the design and management of food production systems by specialized agencies, farmers, and relevant organizations. This approach entails the synchronized implementation of environmentally sound scientific and technological protocols, the judicious utilization of agricultural inputs, and the efficient stewardship of natural resources to minimize emissions and safeguard human health. By enhancing product quality and market competitiveness, ecological agriculture advances the overarching goal of sustainable development.

2.1.3. Promoting Farmers' Agency in Ecological Agriculture Development

2.1.3.1. Concept of farmers' Agency in Ecological Agriculture Development

Drawing from established theoretical foundations, this dissertation conceptualizes farmers' agency in ecological agriculture development as their position of authority and control over the entire ecological agricultural production process—encompassing production, management, distribution, and benefit-sharing—whereby farmers actively shape and sustain food security while fostering broader societal sustainability.

2.1.3.2. Concept of Promoting Farmers' Agency Ecological Agriculture Development

Informed by previous research, this dissertation defines the enhancement of farmers' agency in ecological agriculture development as a set of intentional and coordinated activities undertaken by farmers, political institutions from central to local levels, and relevant organizations. These activities are directed toward: Stimulating, facilitating, and incentivizing farmers to actively, autonomously, and creatively assert their agency in production, management, and distribution within ecological agricultural systems; Ensuring the creation of value and competitive agricultural products that contribute to the sustainable development of society.

Fundamentally, advancing farmers' agency in the development of ecological agriculture entails catalyzing their proprietorial role in structuring and managing ecological agricultural production, encompassing: (1) Enhancing awareness and engagement (*knowing and discussing*); (2) Strengthening participation in production, consumption, management, monitoring, and evaluation (*organizing production, ensuring market integration, and engaging in governance*); (3) Ensuring fair benefit-sharing mechanisms (*resolving conflicts of interest and ensuring equitable distribution*).

When effectively implemented, these dimensions will serve as the foundation and driving force for farmers to fully assume their role as agents of production, thereby generating benefits not only for themselves but also for society at large.

2.2. Agents, Content, and Methods for Enhancing Farmers' Agency in the Development of Ecological Agriculture in Contemporary Vietnam

2.2.1. Agents Involved in Enhancing Farmers' Agency in the Development of Ecological Agriculture

First, the political system, including the Communist Party, the State, the Vietnam Fatherland Front, and various mass organizations such as the Farmers' Union, Women's Union, Youth Union, Veterans' Association, and the Federation of Labor. These organizations play a critical role in enhancing farmers' agency in ecological agriculture, from policy formulation and strategic planning to implementation and enforcement. Through institutional mechanisms and policy frameworks, these entities promote, support, and encourage farmers to leverage their competencies, creativity, and proactive engagement in agricultural production. This process facilitates the transition to ecological agricultural models, thereby realizing the objective of sustainable agricultural development.

Second, other organizations, including business enterprises, cooperatives, professional associations, scientists, banks, and financial institutions. These entities contribute to enhancing farmers' agency by facilitating their participation in joint ventures, cooperative agricultural production, and value chain integration.

Third, farmers themselves, who are the most crucial agents in realizing the goal of ecological agriculture in Vietnam today. Farmers play an essential role by cultivating and embodying fundamental values such as diligence, resilience, adaptability, creativity, self-reliance, solidarity, and mutual assistance. Their active engagement in understanding and implementing the policies and guidelines of the Communist Party and the State, as well as local development programs related to ecological agriculture and new rural development, is critical to success. By continuously improving their knowledge and technical skills, overcoming fragmented production practices, and reducing dependence on state investment and guidance, farmers contribute to the emergence of a modern, civilized agricultural workforce that drives sustainable agricultural development and social prosperity.

2.2.2. Content of Promoting Farmers' Agency in the Development of Ecological Agriculture

2.2.2.1. Enhancing Farmers' Agency in the Transition from Traditional Agricultural Production to an Ecological Agricultural Economy

The transition from traditional agricultural production to an ecological agricultural economy hinges upon the effective enhancement of farmers' agency. This transformation necessitates: (1) Proactive learning: Farmers must actively acquire knowledge and cultivate an understanding of agricultural economics to effectively integrate these principles into their agricultural practices; (2) Market-oriented production: Farmers should align their production with market demands, product standards, and quality requirements. This includes adjusting production processes, input materials, crop varieties, and livestock breeds to meet consumer preferences for safe and environmentally friendly food products; (3) Cost efficiency: Farmers should constantly explore ways to reduce input costs while maintaining production efficiency; (4) Value creation and diversification: Farmers should enhance product value by incorporating sorting, cleaning, packaging, branding, preliminary processing, deep processing, trademark registration, and product traceability; (5)Market competition and outreach: Farmers must evaluate competitive dynamics, engage in product promotion, and seek customers through diverse distribution channels or collaborate with other stakeholders to ensure stable sales and maximize profitability.

2.2.2.2. Promoting Farmers' Agency in Innovation and the Application of Science and Technology in Ecological Agriculture

First, Empowering Farmers in Selecting and Transitioning to Ecological Agricultural Models. This aspect is essential for strengthening farmers' influence and agency *within*

sustainable agricultural systems. Achieving this requires: (1) Knowledge acquisition: Farmers must develop a thorough understanding of ecological agriculture, its benefits, and its role in sustainable social development; (2) Participation in decision-making: Farmers should be actively involved in the selection of ecological agricultural models and contribute to policymaking processes; (3) Practical implementation: Farmers, with support from relevant institutions, should take initiative in transitioning from inefficient, environmentally harmful agricultural models to more effective and sustainable ecological farming systems.

Secondly, Strengthening Farmers' Engagement in Value Chain Cooperation and Technological Advancement

One of the core reasons why farmers often face disadvantages in the market is their lack of agency and bargaining power. Addressing this requires: (1) Active participation: Farmers must engage in cooperative production, value chain linkages, and the application of science and technology; (2) The role of cooperatives: Agricultural cooperatives must serve as the central force in developing agricultural value chains; (3) The role of enterprises: Businesses should act as drivers of value chain development; (4) Government support: The State must create an enabling environment and provide the necessary institutional and infrastructural support for value chain integration; (5) Scientific contributions: Scientists must actively engage in research, advisory roles, and technological transfer to assist farmers, businesses, and cooperatives.

Third, Expanding Farmers' Participation in International Cooperation, Market Access, and Investment Attraction

International cooperation plays a crucial role in expanding market opportunities, attracting investment, and exposing farmers to innovative agricultural models and practices. To succeed in this domain, farmers must: (1) Improve knowledge and skills: Farmers should actively seek international expertise, enhance their educational background, technical skills, foreign language proficiency, and digital literacy, and embrace technological advancements to elevate their agricultural practices; (2) Comply with global standards: Farmers must transition to clean, environmentally friendly, and climate-resilient agricultural production that meets international certification requirements; (3) Pursue market expansion: Farmers should explore both domestic and international market opportunities, engage in global value chains, and integrate into sustainable supply networks.

2.2.2.3. Enhancing Farmers' Agency in Socio-Cultural, Environmental, and Climate Governance in Ecological Agriculture

First, Social governance: Farmers engaged in ecological agriculture contribute to poverty reduction, job creation, and gender equality.

Second, Cultural governance: Ecological agriculture helps preserve and promote traditional cultural values, as embodied in regional agricultural products and practices.

Third, Environmental and climate governance: By adopting ecological farming methods, farmers play a vital role in environmental protection, pollution reduction, and climate change adaptation, fostering a healthy living environment and sustainable development.

2.2.2.4. Empowering farmers as principal agents in the equitable allocation and appropriation of ecological agriculture's value, thereby ensuring both social progress and justice.

First, Farmers have progressively secured higher shares of income and have realized continuous enhancements in both their material well-being and psychosocial quality of life.

Second, Environmental and health benefits: Farmers gain access to clean living and working environments and safe agricultural products. *Third,* Education and professionalization: Farmers benefit from capacity-building programs, skills training, and policy support, fostering the development of a modern, professional, and informed agricultural workforce.

2.2.3. Methods for Promoting Farmers' Agency in Ecological Agriculture

The methods for strengthening farmers' agency encompass strategies that encourage and

Firstly, Ethnic Diversity and Cultural CohesionThe majority of farmers in the Northwest belong to ethnic minority communities, contributing to the region's cultural richness and diversity. Despite ethnic differences, there exists a strong sense of solidarity, cooperation, and social harmony, which fosters collective action in agricultural development and rural sustainability.

Secondly, Agricultural Practices and Land-Use Patterns The farming practices of Northwest farmers are deeply interwoven with their geographical environment, leading to distinctive agricultural systems adapted to mountainous and highland terrains. These traditional methods, while embedded in local knowledge and cultural heritage, pose both opportunities and challenges for the transition to modern ecological agriculture.

Thirdly, the educational attainment and technical proficiency of farmers in the Northwest region remain limited, and their economic conditions continue to face significant challenges.

3.2. Current State of Promoting Farmers' Agency in the Development of Ecological Agriculture in the Northwest Region and Underlying Causes

3.2.1. The Current State of Enhancing Farmers' Agency in the Development of Ecological Agriculture in the Northwest Region

3.2.1.1. Farmers' Role in the Transition from Traditional Agricultural Production to an Ecological Agricultural Economy – Achievements and Limitations

Firstly, Institutional and Policy Support for Farmers' Transition to an Ecological Agricultural Economy.

The political and administrative systems of the Northwest provinces have actively established institutional frameworks and policy mechanisms to facilitate farmers' transition from traditional agricultural production to an ecological agricultural economy.

Survey findings indicate that local authorities, policymakers, and administrative bodies have

played an active and proactive role in implementing measures to support this transition. These measures include awareness campaigns, training programs, and policy interventions designed to shift farmers' mindset and agricultural practices toward ecological economic principles. Through propaganda, mobilization efforts, and policy implementation, local governments have sought to enhance farmers' cognitive and practical engagement in ecological agriculture.

Secondly, Farmers, Enterprises, and Cooperatives Have Demonstrated Shifts in Perceptions and Practical Engagement with Ecological Agricultural Economy Principles

Empirical survey data reveal a significant transformation in farmers' awareness and participation in ecological agriculture. Key findings include: 89% of farmers independently seek information on ecological agricultural economy principles through public media; 89.6% actively participate in programs, initiatives, and projects led by local governments and organizations promoting ecological agriculture; 88.5% assess market demands to determine product types, standards, and quality requirements for ecological agricultural production; 85.7% focus on enhancing product value, integrating multi-value dimensions into agricultural products and developing brand identity; 85.7% strategically reduce production costs to achieve economic sustainability; 87.9% evaluate competitive dynamics, proactively seeking market opportunities and expanding their consumer base; 86.8% engage in value chain integration, contributing to systematic agricultural production and sustainable supply networks.

Limitations in Enhancing Farmers' Agency in the Transition to an Ecological Agricultural Economy

Despite these achievements, several limitations persist in fully empowering farmers as key agents in this transition:

Firstly, Ineffective Communication and Policy Dissemination

Although local Party committees, government agencies, and professional organizations have taken steps to promote the transformation of agricultural production, the effectiveness of these initiatives remains limited.There are no dedicated programs or strategic plans exclusively focusing on the communication and promotion of ecological agricultural economy principles. Instead, references to these principles are only incorporated within broader resolutions, directives, and agricultural development plans.As a result, awareness and application of ecological agricultural economy concepts remain limited in scale, primarily benefiting farmers who have direct access to information and institutional support. Farmers from ethnic minority groups in remote and economically disadvantaged areas have yet to experience significant cognitive or practical shifts, highlighting a gap in policy accessibility and inclusivity.

Secondly, Farmers' Economic Orientation Still Prioritizes Productivity Over Sustainability

Farmers' current production mindset in the Northwest region largely focuses on maximizing output and yield rather than prioritizing food safety, environmental sustainability, biodiversity conservation, and soil and plant health. Sustainability considerations such as long-term soil fertility, ecosystem balance, and ecological resilience remain secondary concerns in farmers' decision-making processes. Product quality enhancement has not yet become a primary focus, indicating that ecological and value-added agricultural principles are not fully internalized or systematically practiced.

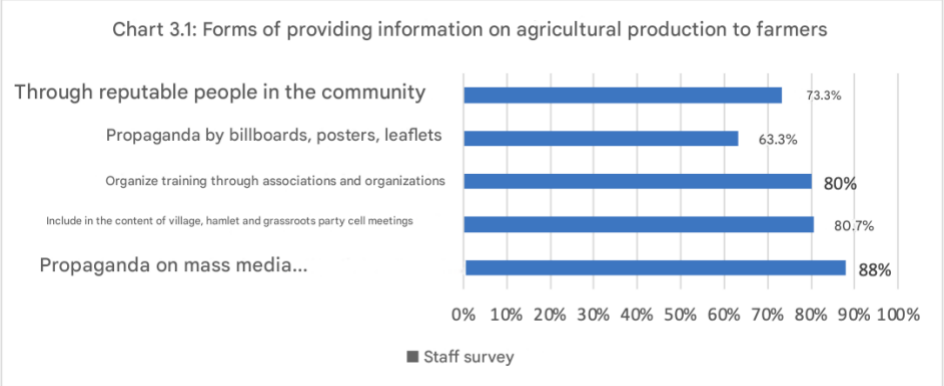
3.2.1.2 Promoting Farmers' Agency in Innovation and the Application of Science and Technology in the Development of Ecological Agriculture – Achievements and Limitations

Firstly, Participation in Selecting and Transitioning Production Models to Realize the Goals of Ecological Agriculture

Institutional and Social Support for Farmers in Selecting and Transitioning to Ecological Agricultural Models

The political system in the Northwest region, along with various social organizations, has actively engaged in awareness campaigns, educational initiatives, and mobilization efforts to encourage farmers to select and transition toward ecological agricultural production models.Empirical data regarding the extent of communication, education, and

dissemination efforts on ecological agriculture by Party committees, local government authorities, and social organizations indicate the following: 62% of farmers and 85% of government officials assessed these efforts as "frequent."; 35% of farmers and 14% of government officials considered them "occasional."; 2% of farmers and 1% of government officials regarded them as "infrequent."; 1% of farmers and 0% of government officials reported "no knowledge" of such initiatives. The modalities through which information is disseminated to farmers are visually represented in Figure 3.1.



Author 's survey in 2024

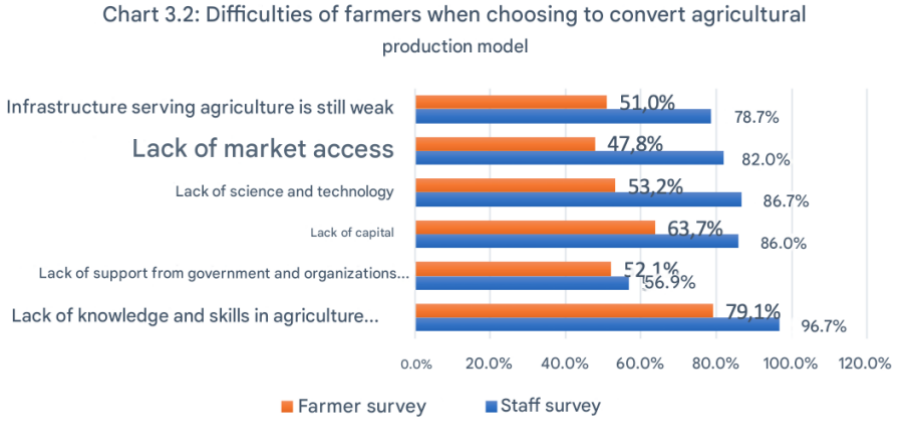
Secondly, farmers have proactively and actively participated in selecting and transforming ecological agricultural production models.

To transition to ecological agriculture, farmers have actively engaged in implementing local policies and strategies for building ecological agriculture, proactively contributing feedback on policies and support programs related to ecological agriculture development in their area based on their practical production activities. This allows them to make informed decisions about choosing the production model that best suits their own conditions.

Along with the achieved results, the promotion of farmers' role as active subjects in selecting and transitioning production models to ecological agriculture still faces certain limitations:

Firstly, many farmers, with a passive and indifferent mindset, accustomed to old farming practices, are reluctant to change, and thus, have not actively participated in selecting or transitioning to ecological agricultural production models.

Secondly, farmers in the Northwest region currently face many challenges when choosing to transition to ecological agriculture. As a result, there are still few models adopting new production methods.



Author 's survey in 2024

Second, regarding the implementation of linking and cooperating in production along the value chain, applying scientific and technological advances to improve product quality and value:

Firstly, the political system in the Northwest provinces actively promotes the linking and cooperation of farmers, businesses, and cooperatives in production along the value chain,

applying scientific and technological advancements in ecological agriculture production.

For instance, Sơn La has focused on reviewing and issuing mechanisms and policies for the development of agriculture, farmers, and rural areas that align with new regulations and the province's actual situation. It has shifted significantly from building "agricultural supply chains" to developing "industry-specific value chains," connecting stakeholders in the chain based on principles of transparency, responsibility, and shared benefits according to each party's contribution. The six-house model (farmer - government - business - bank - scientist - distributor) has been enhanced, with a focus on linking farmers and businesses. The Provincial Party Committee issued Resolution No. 08-NQ/TU on January 21, 2021, on the sustainable, concentrated development of agriculture, forestry, and aquaculture, applying high-tech until 2025 with a vision to 2030. In line with this resolution, the provincial People's Committee has issued 10 plans, six projects, and established a task force to monitor and implement the resolution. It also encourages and attracts businesses, cooperatives, and the community to invest in agricultural and rural development. The Provincial People's Council issued Resolution No. 128/2020/NQ-HĐND to promote investment in agriculture and rural areas in Sơn La. From 2020 to 2023, the province provided 20.5 billion VND to support 336 organizations and businesses in developing brands and expanding markets; 1.4 billion VND to support five cooperatives in building transportation, irrigation, and water-saving systems.

Secondly, professional social organizations, credit institutions, and agricultural research centers have provided significant support in promoting production linkage along the value chain, conducting technical production training, and transferring scientific and technological knowledge to farmers.

In recent years, professional social organizations, credit organizations, and agricultural research centers have promoted, mobilized, and created capital conditions for farmers to implement production linkages; researched and transferred agricultural and high-tech solutions to enterprises, cooperatives, and farmers; and provided advice on environmental protection activities and sustainable agricultural development in rural areas.

Third, farmers, businesses, cooperatives, and production groups have proactively engaged in activities to participate in linking and cooperating in production along the value chain, applying scientific and technological advancements to production.

According to survey results, farmers have actively participated in cooperatives and production groups at a rate of 85.7%; proactively linked with businesses and other organizations at 73.6%; actively participated in local ecological agriculture development programs, plans, and projects at 90.7%; actively joined in business excellence movements and other campaigns initiated by the Farmers' Association and organizations related to ecological agriculture at 86.3%; independently linked with other farmers for sustainable agricultural production at 77.5%; and actively participated in training, capacity-building, scientific and technological transfers, and digital transformation in agriculture at 83%. The high participation rates in these activities demonstrate the determination of farmers to transition from fragmented, outdated, habit-based, and inflexible production methods to modern development driven by scientific and technological advancements and innovation.

Alongside the achievements, the promotion of the active role of farmers in implementing value chain production cooperation and applying scientific and technological advancements in production in the Northwest region has encountered certain limitations:

Firstly, the role of local governments has revealed many shortcomings and limitations in implementing measures to strengthen production cooperation along the value chain and apply scientific and technological advancements to ecological agricultural production. In many areas, local authorities and departments are still confused, lacking timely mechanisms and policies to support stakeholders in cooperative production models, processing, and consumption of agricultural products, resulting in relatively weak cooperation in value chain production in the Northwest, failing to ensure a balanced sharing of benefits among participating stakeholders.

Secondly, the participation of farmers in value chain cooperation, the application of scientific and technological advancements in ecological agricultural production, is still not widespread, with limitations in terms of scale, target groups, as well as the region's potential and advantages.

Thirdly, farmers, businesses, cooperatives, and production groups face challenges in accessing and applying scientific and technological advancements in production, such as a lack of investment capital, insufficient land for production, and low management capacities among farmers, groups, and cooperatives.

Thirdly, regarding international cooperation, market expansion, and attracting investment resources for ecological agricultural production.

Firstly, the political system in the Northwestern provinces has made concerted efforts and actively implemented measures to enhance the role of farmers in international cooperation, market expansion, and attracting investment resources for ecological agricultural production.

In pursuit of international economic integration goals, the Department of Agriculture and Rural Development of Hoa Binh Province has coordinated efforts to guide and support stakeholders, introducing and connecting 147 enterprises/cooperatives to participate in trade fairs, markets, weeks, forums, and online conferences for product consumption connections both domestically and internationally. The department has also provided 2,959,000 product traceability labels for the province's distinctive agricultural products and promoted these products on the electronic traceability platform at the website: https://hb.check.net.vn, with 77 enterprises/cooperatives and 360 products participating. It has assisted enterprises, cooperatives, and production facilities in applying safe production processes certified under VietGAP, GlobalGAP, organic, and ISO standards to meet the technical requirements of international markets for export. Currently, 14 enterprises, cooperatives, and production groups in the province have exported agricultural and forestry products to international markets such as China, South Korea, the United States, Japan, Taiwan, Canada, and the European Union.

In Dien Bien Province, numerous solutions have been implemented to improve the investment and business environment, streamline administrative processes, and proactively serve businesses. For example, the time for issuing business registration certificates has been reduced from 3 days to 1.5 working days. Regular meetings with businesses have been organized to resolve challenges and obstacles, along with various investment attraction activities...

Second, international organizations promote farmers' participation in international cooperation, market expansion, and attracting investment in ecological agricultural production through collaborative research projects and the transfer of scientific and technological knowledge.

To date, numerous international organizations have collaborated through research programs on agricultural development with local authorities and organizations in the Northwestern provinces to build sustainable agricultural systems. A notable example is the Australian Centre for International Agricultural Research (ACIAR), which, since its collaboration began, has invested approximately 32 million AUD (equivalent to 22.7 million USD) through 20 international research cooperation projects in the Northwest region. These projects aim to develop sustainable farming systems on steep land, diversify agricultural products, protect resources and the natural environment, and increase the income of smallholder farmers. To date, 425 small-scale farming households have participated in the project and successfully developed agroforestry systems, which have enhanced income while preserving soil quality and the environment.

Thirdly, farmers proactively implement cooperative projects with both domestic and international organizations to develop sustainable farming systems.

Farmers in the Northwestern provinces have: actively sought to improve their understanding of international integration, shifting their production mindset with a rating of 2.76/5 from farmers and 2.65/5 from officials; proactively enhanced their technical expertise, language skills, computer literacy, and production skills, achieving scores of 2.97/5 and 2.65/5, respectively; transitioned to new production models and strictly adhered to regulations

regarding clean agriculture, environmentally friendly practices, and climate change adaptation, with ratings of 2.95/5 and 2.72/5; actively sought cooperation opportunities, expanded domestic and international markets, and participated in cooperative projects and ecological agriculture research with international organizations, global production and supply chains, and value chains, with scores of 2.88/5 and 2.72/5; and received and transferred scientific and technological advances through agricultural research cooperation with international organizations, with scores of 2.86/5 and 2.75/5.

Despite the achieved results, there are still some limitations in promoting the active role of farmers in international cooperation, expanding markets, and attracting investment for ecological agriculture production in the Northwest region. These include:

Firstly, farmers' proactive and active engagement in acquiring information, knowledge, and skills related to international cooperation, market expansion, and attracting investment for ecological agriculture production is still limited.

Secondly, the mechanisms, policies, and practical implementation of promoting farmers' role in international cooperation, market expansion, and attracting investment for ecological agriculture by local governments and organizations face some shortcomings. For example, in terms of investment attraction mechanisms, the People's Committee of Dien Bien Province has concretized the Government's Decree No. 57 through Decision No. 42/2019/QĐ-UBND dated December 9, 2019, on the promulgation of support norms for each type of project, item, and work for businesses investing in agriculture and rural areas in the province. However, to date, no projects have been able to access or benefit from this policy.

3.2.1.3. Promoting Farmers' Agency in the Governance of Social, Cultural, Environmental, and Climate Change Issues in Relation to Ecological Agriculture – Achievements and Limitations

Firstly, Institutional and Policy Support for Farmers in the Governance of Social, Cultural, Environmental, and Climate Change Issues

In the Northwest region, the political system (HTCT) at the local level has played an active role in mobilizing and enabling farmers to engage in the governance of social, cultural, environmental, and climate-related issues within the framework of ecological agriculture.

To effectively address these challenges, Party committees, local governments, and mass organizations have taken decisive actions, implementing policies that encourage farmers to transition to ecological agriculture while aligning with broader development goals such as poverty reduction, employment generation, gender equality, cultural preservation, environmental protection, and climate adaptation.

Secondly, Farmers, Cooperatives, and Enterprises Have Actively Implemented Local Policies for Social, Cultural, Environmental, and Climate Governance in Ecological Agriculture

Poverty Alleviation and Employment Generation for Farmers

The adoption of ecological agricultural models by farmers in the Northwest provinces has yielded higher economic returns compared to traditional agricultural practices, thereby contributing to poverty reduction and local employment creation.

For instance, in Son La Province, Toan Duyen Agricultural Cooperative (Nam Lanh Commune) and Long Hieu Cooperative (Sop Cop Commune) have pursued a sustainable agricultural development strategy, guiding their members to adhere to safe and responsible farming practices. This approach encompasses: Seed selection, Soil management, Fertilization strategies, Irrigation systems, Crop care and maintenance

By 2023, these cooperatives generated an annual revenue of over 5 billion VND, ensuring stable incomes for cooperative members. Additionally, these organizations have allocated 20–30 million VND annually to charitable funds, supporting disadvantaged households in expanding their agricultural production.

Beyond economic contributions, these cooperatives have provided stable employment opportunities for over 1,200 local workers, with monthly wages ranging from 5 to 8 million VND per person.

The success of ecological agricultural models in these provinces has significantly contributed to a substantial decline in poverty rates over the years.

Table 3.1: Poverty Rate According to Multidimensional Poverty Standards by Region Unit: %

Unit %

	2020	**2021**	**2022**	**Preliminary 2023**
NATIONWIDE	4.80	4.36	4.19	3.37
Northern midlands and mountains	14.38	13.43	12.82	10.71
Dien Bien	36.74	34.52	33.58	29.55
Son La	30.53	28.61	23.88	19.79
Hoa Binh	9.09	8.19	7.94	6.03

Source: General Statistics Office

Regarding gender equality: The implementation of ecological agricultural models in the Northwest region has contributed significantly to advancing gender equality and ensuring women's rights in decision-making processes related to ecological agriculture.

The GREAT Project in Son La, upon the completion of its first phase, has achieved remarkable outcomes: 90% of female farmers improved their income levels; 86% of women beneficiaries reported increased confidence, exceeding the initial target by 6%; 97% of participating women engaged in household decision-making; The proportion of women leading farmer groups surpassed the target by 37%; The number of women-owned or women-led enterprises exceeded the target by 15%.; The total private sector investment mobilized for profitable, sustainable, and inclusive business opportunities reached $6 million, meeting 100% of the projected goal.

Regarding cultural Preservation: In recent years, farmers and local organizations in Son La have actively implemented Resolution No. 41/2022/NQ-HĐND, issued on August 31, 2022, by the Son La Provincial People's Council, which introduced policy measures to support tourism development in conjunction with new rural construction (NTM).

This policy aims to encourage, motivate, and provide practical support to organizations and individuals seeking to invest in the development of ecological and agricultural tourism throughout the province. As part of these efforts, promotional activities have been intensified to raise awareness about the region's tourism resources, potential, advantages, unique cultural identities, and local agricultural products.

Currently, the province hosts approximately 30 agricultural and rural tourism sites, with the majority operating under community-based tourism and eco-farm experience models. These initiatives not only diversify rural livelihoods but also serve as a mechanism for cultural preservation and economic empowerment among ethnic minority communities.

Regarding environmental protection and adaptation to climate change:

In Son La, under the framework of the "Strengthening the Voice and Capacity of Vulnerable Minority Farmers to Cope with Climate Change in the Northwest of Vietnam (VOF)" Project, various sustainable agricultural practices have been introduced to mitigate greenhouse gas emissions and reduce environmental pollution.

For example, in Phé A Hamlet, the introduction of a closed-loop organic farming system has led to significant environmental improvements: Livestock waste no longer emits foul odors, enhancing the overall livability of the area; 80% of straw, which was previously burned, is now either stored dry or composted for livestock feed during the winter months. Furthermore, the System of Rice Intensification (SRI) has been implemented across 16 hectares, involving 56% of households in Phé A Hamlet. Through the integration of sustainable rice cultivation and livestock manure composting, the total reduction in methane (CH_4) and ammonia (NH_3) emissions has exceeded 10 tons. Additionally, in Nà Khái Hamlet, Sập Vạt Commune, the combination of mango cultivation with improved rice intensification techniques has contributed to a substantial reduction in greenhouse gas

emissions from both livestock farming and wet rice cultivation. Estimates indicate that this approach has resulted in a 9.3-ton decrease in total greenhouse gas emissions.

Limitations in Enhancing Farmers' Agency in the Governance of Social, Cultural, Environmental, and Climate Change Issues in Ecological Agriculture in the Northwest Region

Despite the notable achievements, the process of empowering farmers as key agents in the governance of social, cultural, environmental, and climate change issues in ecological agriculture in the Northwest region still faces several limitations, including:

First, Although there have been initial positive transformations, the extent to which farmers actively engage in governance related to social, cultural, environmental, and climate change issues in ecological agriculture remains relatively low. The impact of these efforts has not yet reached a comprehensive or deeply embedded level, limiting the effectiveness and sustainability of farmers' agency in these domains.

Second, While the Northwest region has made significant efforts to encourage experimentation and implementation of environmentally friendly agricultural models—aiming to enhance economic efficiency while simultaneously promoting environmental protection and climate resilience—most of these initiatives have been conducted on a small scale. As a result, their effectiveness and broader impact remain limited, preventing them from achieving widespread adoption and scalability.

Third, The rate of collection and recycling of agricultural byproducts among farmers remains significantly low. This inefficiency hinders the transition toward a circular agricultural economy, where waste reduction and resource optimization are essential for sustainable ecological agriculture.

Fourth, Local government efforts in formulating and implementing climate-resilient agricultural planning continue to face substantial limitations. These challenges stem from deficiencies in institutional capacity, procedural inefficiencies, and inadequacies in implementation strategies. Consequently, the integration of climate adaptation and ecological principles into agricultural development planning remains fragmented and inconsistent.

3.2.1.4. Promoting the Role of Farmers in the Northwest Region in Distribution and benefit-sharing, Ensuring Social Progress and Equity – Achievements and Limitations

First, Institutional Support for Farmers to Benefit from the Values of Ecological Agriculture

Party committees, local government authorities, and mass organizations have actively facilitated the legal and policy frameworks necessary for farmers to distribute and benefit-sharing from the values of ecological agriculture.

In Son La Province, the National Target Program for Sustainable Poverty Reduction (2021–2025) has been implemented with a total budget allocation of 5,619,686 million VND for the period 2022–2024, comprising:

+ 2,355,810 million VND in investment capital,
+ 1,856,006 million VND in non-business funding,
+ 1,351,147 million VND in loan capital, and
+ 56,723 million VND from other sources.

As of the present, the province has disbursed 1,646,690 million VND.

In 2024, the Vietnam Bank for Social Policies provided 14,457 loans totaling 808,759.25 million VND to poor households, near-poor households, and ethnic minority communities to support economic development and income generation. As a result, the poverty rate in Son La decreased from 17.83% in 2023 to 14.17%, equating to 42,147 households, marking a reduction of 3.66% compared to 2022 and exceeding the annual target of 3% poverty reduction per year.

To ensure that farmers benefit from a healthier living and working environment, in Hoa

Binh Province, the Department of Agriculture and Rural Development has intensified efforts to disseminate and enforce the Environmental Protection Law. Additionally, the department has formulated and implemented the Plan for the Collection and Treatment of Used Pesticide Packaging and Plastic Waste in Crop Production (2021–2025). Key achievements include:

The provision of 1,537 pesticide container collection facilities in strategic agricultural zones specializing in key crops.

These initiatives reflect a structured approach to environmental management in ecological agriculture, ensuring that farmers not only enhance productivity but also contribute to sustainable environmental stewardship.

Second, Farmers are progressively accorded their rightful share of, and derive benefits from, the values generated by ecological agriculture, thereby fostering social advancement and equity.

- *Improved Income and Economic Welfare:* The implementation of ecological agricultural models in the Northwest region has resulted in significant reductions in production costs while yielding higher economic returns compared to traditional farming methods. Consequently, farmers' incomes have increased, and their overall quality of life has improved in both material and non-material aspects.

For instance, in Dien Bien Province (2021–2023): 125 production linkage projects have been established; 33 value chain models have been successfully developed, leading to substantial econoic gains compared to traditional production methods.

Specific examples include: Safe vegetable cultivation: Production costs reduced by 10–15%; Yield increased by 15–25%; Profitability increased by 30–35 million VND per hectare.

Rice production under a unified variety model with mechanization: Production costs reduced; Profitability increased by 15–20 million VND per hectare.

These figures underscore the economic advantages of transitioning to ecological agriculture, further reinforcing its viability and long-term sustainability.

- Access to a Healthy and Sustainable Living and Working Environment

In the three Northwestern provinces implementing ecological agricultural models, environmental conditions have shown significant improvements. These enhancements not only contribute to better public health and ecosystem sustainability but also ensure that farmers work in safer and more sustainable agricultural environments.

Table 3.4: Percentage of population using clean water sources by locality and year

Unit %

	2020	2021	2022	Preliminary 2023
NATIONWIDE	96.5	97.5	98.0	98.4
Dien Bien	79.5	73.0	85.2	93.1
Son La	72.0	78.0	87.0	90.8
Hoa Binh	92.4	95.7	98.1	95.5

Source: General Statistics Office

- Access to Policy Benefits for Capacity Building and Skill Development Toward the Model of a Professional and Modern Farmer

In Hòa Bình Province, the Farmers' Union at various levels has actively engaged in awareness campaigns, educational initiatives, and training programs to enhance farmers' knowledge of social and economic dynamics, their ability to apply scientific and technological advancements, and their capacity to access markets and integrate into broader economic systems.

To support skill development and vocational training, the Farmers' Union has:

+ Conducted comprehensive needs assessments to determine farmers' demands for vocational training.

+ Developed strategic training plans tailored to labor market demands.

+ Established partnerships with vocational training institutions both within and beyond the province to organize practical and effective training programs linked to employment generation and income enhancement for farmers.

The Farmers' Support Center has independently organized 67 vocational training classes, benefiting 2,146 members. Additionally, local Farmers' Union branches have coordinated 227 training sessions, engaging 6,314 members. These initiatives have played a crucial role in equipping farmers with essential skills, fostering professionalization, and enhancing economic self-sufficiency.

While efforts to empower farmers as key agents in benefiting from the values of ecological agriculture have yielded notable achievements, certain limitations persist, including:

Firstly, the extent to which farmers in Northwest Vietnam receive and appropriate the values generated by ecological agriculture remains limited.

Secondly, the distribution and appropriation of ecological agriculture's benefits are neither equitably nor sustainably realized.

3.2.2. Causes of achievements and limitations

3.2.2.1. Reasons for achievements

Firstly, there is a system of policies and directives from the Party and the State, along with the attention, leadership, and guidance of political institutions at all levels in encouraging, motivating, and creating conditions for farmers to enhance their roles as the main actors.

Secondly, the awareness, education, and self-consciousness of farmers in building ecological agriculture have been significantly improved.

Thirdly, the support, partnership, and shared efforts from various organizations and individuals towards farmers in establishing ecological agriculture have been crucial.

3.2.2.2. Causes of limitations

Firstly, the causes stem from the lack of a comprehensive and coherent mechanism and policies for the development of ecological agriculture, the effectiveness of policy implementation by the political system, and the quality of local government personnel.

Secondly, the causes arise from the limitations of the farmers themselves.

Thirdly, the causes are linked to the geographical and natural conditions, climate, customs, and rural infrastructure.

3.3. Key Issues Arising from the Current State of Promoting Farmers' Agency in the Development of Ecological Agriculture in the Northwest Region

3.3.1. High Policy Expectations for Enhancing Farmers' Agency but Limited Effectiveness in Policy Implementation by the Local Political System

3.3.2. The Necessity of Strengthening Farmers' Proactive Engagement in Ecological Agriculture Amidst Limited Awareness and Educational Attainment

3.3.3. Discrepancies Between Farmers' Critical Role in Socioeconomic Stability and Development and the Institutional Mechanisms to Empower Them

Chapter 4
KEY PERSPECTIVES AND SOLUTIONS FOR PROMOTING FARMERS' AGENCY IN THE DEVELOPMENT OF ECOLOGICAL AGRICULTURE IN THE NORTHWEST REGION IN THE FUTURE

4.1. Key Perspectives on Promoting Farmers' Agency in the Development of Ecological Agriculture in the Northwest Region in the Future

4.1.1. Strengthening Farmers' Agency in Ecological Agriculture Must Be Aligned with the Effective Implementation of the Communist Party and State's Policies on Socioeconomic Development and the National Master Plan

4.1.2. Promoting Farmers' Agency in Ecological Agriculture Must Align with the Successful Implementation of the "Ecological Agriculture, Modern Rural Areas, and Civilized Farmers" Model While Preserving the Cultural Identity of the Northwest

4.1.3. Strengthening Farmers' Agency in Ecological Agriculture Must Be Closely Linked to the Improvement of Farmers' Material and Spiritual Well-being

4.2. Solutions for Promoting Farmers' Agency in the Development of Ecological Agriculture in the Northwest Region in the Future

4.2.1. Raising Awareness Across Society Regarding Farmers' Agency, Ecological Agriculture, and the Benefits of Strengthening Farmers' Role in Ecological Agriculture Development

The promotion of farmers' agency in ecological agriculture requires a comprehensive transformation in societal awareness, encompassing policymakers, Party members, and the general public. Key solutions include:

First, Fundamentally, transforming communication efforts to enhance awareness among officials, Party members, and citizens regarding: The central role of farmers as agents in ecological agriculture; The necessity of developing ecological agriculture as a sustainable agricultural model; The benefits of strengthening farmers' agency in ecological agricultural development.

Second, Fostering farmers' self-awareness regarding their position and agency in ecological agriculture. Encouraging a proactive, self-determined mindset among farmers is essential for ensuring their active participation in shaping and implementing ecological agricultural practices.

4.2.2. Promoting the Quality of Agricultural Planning, Strengthening the Implementation of Policies for Modern Ecological Agriculture, Climate Adaptation, and Rural Infrastructure Development

Firstly, Reforming and Enhancing Agricultural Planning to Align with Regional Advantages

To effectively develop ecological agriculture, planning efforts must be restructured and enhanced in alignment with regional strengths and socio-environmental conditions. Key aspects include: (1) Focusing on ecological agriculture characterized by safe, organic, green, clean, circular, and climate-resilient production while creating branded specialty products and high-quality One Commune One Product (OCOP) goods; (2) Developing forest-based and under-canopy economies, ensuring that forest conservation, sustainable forestry management, and rural livelihoods are integrated into national security strategies for water resources, energy, and environmental protection; (3) Expanding large-scale livestock farming in suitable locations to optimize productivity while ensuring environmental sustainability; (4) Promoting support services for ecological agriculture, including technical assistance, supply chain facilitation, and sustainable market access mechanisms.

Secondly, Strengthening Policy Frameworks for Climate-Resilient and Environmentally Sustainable Ecological Agriculture: (1) Ensuring the effective and coordinated implementation of existing State policies on ecological agricultural development; (2) Developing support policies for farmers transitioning from traditional agriculture to ecological agriculture, including financial incentives, technical training, and institutional support; (3) Integrating climate change adaptation into local ecological agricultural policies, ensuring that climate resilience is embedded in agricultural planning and implementation strategies.

Thirdly, Strengthening and Developing Rural Infrastructure to Support Ecological Agriculture

4.2.3. Promoting the Quality and Effectiveness of the Political System at All Levels in Implementing and Organizing Efforts to Strengthen Farmers' Agency in the Development of Ecological Agriculture

Firstly, Strengthening the Leadership and Strategic Direction of Party Committees in Promoting Farmers' Agency in Ecological Agriculture. To effectively enhance farmers' agency in ecological agriculture, it is imperative to strengthen the leadership capacity of Party committees at all levels. This requires a systematic and strategic approach to policy implementation, ensuring that Party directives and resolutions are effectively translated into grassroots action in alignment with national agricultural development goals.

Secondly, Improving the Effectiveness and Efficiency of Government Authorities in Implementing Policies to Enhance Farmers' Agency in Ecological Agriculture Across the Northwest Provinces.

The local government system plays a crucial role in facilitating, coordinating, and institutionalizing farmers' participation in ecological agriculture. Key measures include: (1) Building a government that is truly "of the people, by the people, and for the people; (2) Ensuring the flexible and innovative integration of Party directives and resolutions on agriculture, farmers, and rural development with initiatives that empower farmers as active agents in ecological agriculture; (3)Institutionalizing farmers' agency in ecological agriculture as an annual priority in local governance by incorporating it into: The work agendas of government authorities at all levels and The implementation of New Rural Development (NTM) criteria; (4) Enhancing the quality and effectiveness of advisory and regulatory agencies in agriculture and rural development, ensuring evidence-based policy recommendations and effective program execution; (5) Implementing administrative reforms with a focus on efficiency, transparency, and accessibility, particularly at the grassroots level, to ensure seamless policy execution and farmer engagement.

Thirdly, Reforming the Functions and Operational Methods of Political-Social Organizations, Particularly the Farmers' Union at All Levels in the Northwest Region. The Farmers' Union and other political-social organizations serve as key intermediaries in supporting and mobilizing farmers in ecological agriculture. Key reforms include: (1) Expanding service, advisory, and support activities for farmers in agricultural production and business, including; (2) Strengthening farmers' engagement in ecological agriculture through competitions, awareness campaigns, and collective action movements, fostering a culture of innovation and active participation; (3) Enhancing the effectiveness of international cooperation and external relations to facilitate knowledge exchange, capacity building, and investment opportunities in ecological agriculture; (4) Establishing systematic and continuous monitoring and evaluation mechanisms to ensure the effective implementation of Party directives and State policies on ecological agriculture and farmers' empowerment.

Fourthly, Focusing on Developing a Competent, Ethical, and Dedicated Workforce Within the Political System to Support Farmers' Agency in Ecological Agriculture

4.2.4. Promoting Grassroots Democracy and Ensuring the Effective Implementation of the Principle: "People Know, People Discuss, People Decide, People Implement, People Inspect, People Supervise, People Benefit" to Enable Farmers to Truly Become Key Agents in the Development of Ecological Agriculture

Firstly, raise awareness among farmers about their important role in exercising democracy at the local level. At the same time, effectively implement the Law on Democracy at the grassroots level, encouraging farmers to actively participate in discussions, provide feedback, and monitor the implementation of policies related to ecological agricultural development in their areas.

Secondly, create an environment that enables farmers to fully exercise their ownership rights, enhancing their central role and positioning them at the heart of the process of shifting towards sustainable agricultural development. This includes providing complete, accurate, and timely information and organizing various methods for farmers to participate directly or indirectly in the planning and implementation of ecological agricultural policies.

Thirdly, address the difficulties and barriers in the implementation of the Law on Democracy at the grassroots level to ensure that farmers truly play their central role in all areas of social life. This involves solving practical issues related to their material and spiritual well-being in the context of developing ecological agriculture. This aligns with the inevitable trend of narrowing the income gap between agriculture, industry, and services, ensuring that farmers receive the legitimate benefits they are entitled to.

4.2.5. Developing a Modern, Knowledgeable, and Competent Farmer: Proactive and Innovative in Applying Advanced Science and Technology to Agricultural Production

First, Enhancing Farmers' Knowledge, Skills, and Educational Attainment to Enable Them to Assume Their Role as Key Agents in Ecological Agriculture. To ensure that farmers play an active and central role in the development of ecological agriculture, it is imperative to enhance their education, technical knowledge, and problem-solving capacities. Key strategies include: (1) Innovating farmer education and training methods to meet the practical demands of ecological agriculture. Party committees, government agencies, and socio-political organizations in the Northwest region must develop and implement a strategic educational framework tailored to local socio-economic conditions, ensuring that farmer training aligns with the realities of sustainable agricultural production; (2) Expanding training programs and capacity-building initiatives in various formats to equip farmers with up-to-date knowledge on ecological agriculture, science and technology, market dynamics, legal frameworks, and digital transformation; (3)Promoting the vision of the "Five-New Farmer" model, fostering a modern, knowledgeable, and progressive agricultural workforce.

Second, Farmers must not only adopt modern agricultural practices but also actively engage in cooperative and knowledge-sharing networks to drive ecological agriculture forward. This requires: (1) Fostering a culture of cooperation in ecological agricultural production by establishing farmer cooperatives, agricultural production groups, and farmer clubs. These structures facilitate knowledge exchange, experience sharing, and collaborative efforts in developing sustainable farming models; (2) Encouraging farmers to participate in agricultural innovation competitions, production contests, and experimental pilot models, allowing them to test new techniques, refine production methods, and contribute to advancements in ecological farming; (3) Promoting self-reliance, resilience, and continuous learning among farmers by Encouraging autonomous knowledge acquisition in modern cultivation techniques and sustainable farming practices; Advocating for the transition from traditional to ecological agricultural models, ensuring sustainable livelihoods for rural communities, and Recognizing and rewarding farmers who exemplify leadership and innovation in ecological agriculture, thereby setting role models for community-wide transformation.

CONCLUSION

The study on "Promoting Farmers' Agency in the Development of Ecological Agriculture in the Northwest Region Today" holds significant theoretical and practical implications. It constitutes a critical mission for multiple stakeholders, including governmental bodies, local authorities, and socio-political organizations, aiming to fundamentally and comprehensively transform farmers' awareness and actions in transitioning from traditional agriculture to ecological agriculture. This transformation is essential for catalyzing agricultural advancement in the Northwest region, thereby ensuring both the material and spiritual well-being of farmers and fostering the sustainable development of the region.

From the research process, the dissertation has clarified the following key aspects:

1. Building upon previous research, the dissertation has established a theoretical framework for the study. Specifically: (i) Systematizing and constructing key conceptual tools, including agency, farmers as agents, ecological agriculture, the development of ecological agriculture, the agency of farmers in ecological agriculture, and most crucially, the enhancement of farmers' agency in ecological agriculture.

(ii) Identifying the key agents, content, and mechanisms for enhancing farmers' agency, particularly in: The transition from agricultural production to an ecological agricultural economy; Innovation and the application of science and technology in ecological agriculture; The governance of social, cultural, environmental, and climate change issues related to ecological agriculture; Their equitable allocation and appropriation of ecological agriculture's value, thereby ensuring both social progress and justice. (iii) Analyzing the factors influencing the enhancement of farmers' agency in ecological agriculture. These factors present both opportunities and challenges, requiring farmers and other stakeholders to overcome barriers to achieve the goal of building a sustainable ecological agricultural system.

2. Drawing upon field surveys and existing research, the dissertation has conducted an in-depth analysis of the current state of farmers' agency in ecological agriculture in the Northwest region. The findings indicate that significant progress has been made, supported by the coordinated efforts of the political system from the central to local levels and other social organizations. Farmers have increasingly demonstrated their agency by actively participating in policy formulation and implementation in ecological agriculture.

However, several challenges persist, arising from: Objective conditions such as geographic and economic constraints; Inefficiencies in the functioning of the local political system and related organizations; Deficiencies in farmers' awareness, knowledge, and technical expertise. Based on these findings, the dissertation identifies three key issues that require urgent resolution.

3. Effectively enhance farmers' agency in ecological agriculture in the Northwest region in the future, the dissertation proposes three guiding perspectives and a comprehensive system of six solutions, including: (i) Raising awareness across society regarding the agency of farmers, ecological agriculture, and the benefits of enhancing farmers' agency in ecological agriculture. (ii) Improving the quality of agricultural planning and strengthening the implementation of policies for modern ecological agriculture, climate adaptation, and rural infrastructure development. (iii) Enhancing the efficiency and effectiveness of the political system at all levels in implementing and organizing efforts to promote farmers' agency in ecological agriculture. (iv) Promoting grassroots democracy, ensuring the effective implementation of the principle: "People know, people discuss, people decide, people implement, people monitor, people benefit", thereby enabling farmers to truly become key agents in ecological agriculture. (v) Developing a modern, knowledgeable, and competent farmer who is proactive, innovative, and capable of integrating advanced science and technology into agricultural production.

The successful implementation of these strategies will significantly contribute to strengthening farmers' agency in ecological agriculture in the Northwest region, yielding greater effectiveness and long-term sustainability.