

Evidence-Based Approaches to Improving Rural Livelihood Programs in Vietnam: A Systematic Review

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ABSTRACT: Rural livelihoods in Vietnam have undergone substantial transformation since the Đổi Mới reforms, shaped by livelihood diversification, microfinance expansion, agricultural extension, migration, and targeted poverty-reduction programs for ethnic minority and mountainous communities. Despite extensive empirical literature, a systematic synthesis connecting these intervention domains to livelihood outcomes remains limited. Objective: This systematic review synthesizes peer-reviewed evidence on the effectiveness of livelihood diversification strategies, financial inclusion, agricultural extension, climate adaptation measures, and targeted poverty-reduction programs in improving rural livelihoods in Vietnam. Methods: Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, a structured search of web-based academic sources was conducted. Sixty-three records were identified, of which 22 peer-reviewed journal articles with assigned digital object identifiers met the eligibility criteria and were included in the qualitative synthesis. Results and Discussion: Included studies were concentrated in six thematic categories, with climate vulnerability and adaptation studies the most numerous ($n = 6$), followed by off-farm employment and migration/remittance studies ($n = 4$). The majority of studies reported predominantly positive associations between livelihood diversification, microcredit access, and off-farm participation and household welfare outcomes, although climate-related and ethnic-minority-targeted studies more frequently reported mixed or context-dependent effects. Conclusion: Evidence-based rural livelihood programming in Vietnam should integrate financial inclusion, agricultural extension, and off-farm diversification with context-sensitive, climate-adaptive design, particularly for ethnic minority and mountainous populations where programme effects remain heterogeneous.

KEYWORDS: Rural livelihoods; Vietnam; PRISMA; systematic review; livelihood diversification; poverty reduction

1. Introduction

Since the launch of the Đổi Mới economic reforms in 1986, Vietnam has undergone a profound rural transformation, shifting from a centrally planned agrarian economy toward a market-oriented system characterized by diversified household income portfolios, expanding non-farm

labor markets, and growing rural-urban linkages [1]. Rural livelihoods, once almost exclusively dependent on subsistence rice cultivation, increasingly combine on-farm production with off-farm wage employment, microenterprise activity, migration-based remittances, and, in mountainous and ethnic minority regions, forestry and agroforestry-based income sources [1–3]. This diversification has been a central driver of Vietnam's remarkable poverty reduction trajectory, yet its benefits have been distributed unevenly across regions, ethnic groups, and household asset endowments [4, 5].

The Government of Vietnam has implemented a series of livelihood-oriented rural development programs, including Program 135 and related socio-economic development schemes targeting poor and mountainous communes, alongside an expanding microfinance sector led by the Vietnam Bank for Social Policies, a nationwide agricultural extension system, and, more recently, climate-smart agriculture and digital extension initiatives [4–7]. These interventions operate against a backdrop of mounting climate-related risks, including floods, droughts, and storms, that disproportionately threaten the livelihoods of smallholder and ethnic minority households in the northern uplands and central coastal regions [8,9]. Despite a substantial and growing body of empirical research evaluating individual interventions, the evidence base remains fragmented across disciplinary silos, agricultural economics, development studies, and climate science, with few syntheses that systematically integrate findings across livelihood diversification, financial inclusion, agricultural extension, and climate adaptation domains.

This review therefore applies a systematic, PRISMA-guided methodology to synthesize peer-reviewed evidence on evidence-based approaches to improving rural livelihood programs in Vietnam. Specifically, it aims to (i) characterize the scope and thematic distribution of peer-reviewed studies addressing rural livelihood interventions in Vietnam; (ii) synthesize reported evidence on the effectiveness of livelihood diversification, microcredit and financial inclusion, off-farm employment and migration, agricultural extension, and climate adaptation measures; and (iii) identify patterns in reported outcome heterogeneity to inform evidence-based programme design, particularly for ethnic minority and climate-vulnerable populations.

2. Materials and Methods

2.1. Search Strategy and Information Sources.

This review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 framework [10]. A structured search of web-based academic sources, covering publisher platforms indexed through PubMed/PMC, ScienceDirect, Wiley Online Library, SpringerLink, Taylor & Francis Online, MDPI, Frontiers, PLOS, and SAGE Journals, was conducted between January and June 2026. Search terms combined keywords related to "rural livelihood," "livelihood diversification," "Vietnam," "microcredit," "agricultural extension," "off-farm employment," "climate change adaptation," "ethnic minority poverty," and "Program 135," using Boolean operators (AND/OR) across eight separate search queries targeting each major thematic domain. No restriction was placed on publication date at the outset, though in practice eligible records spanned 1998 to 2025.

2.2. Eligibility Criteria.

Records were eligible for inclusion if they were (i) peer-reviewed journal articles with an assigned digital object identifier (DOI); (ii) published in English; (iii) reporting original empirical research, secondary data analysis, or program evaluation directly relevant to rural livelihoods, livelihood diversification, financial inclusion, agricultural extension, climate adaptation, or poverty-reduction programs in Vietnam. Records were excluded if they were book chapters, working papers, conference proceedings without full peer review, theses, websites, or government/agency reports without an associated journal DOI, or if they addressed countries other than Vietnam, or topics outside the scope of rural livelihoods.

2.3. PRISMA Screening Process and Data Extraction.

Following the search, records were screened in two stages. Titles and abstracts of all identified records were first screened for topical relevance to rural livelihood programs in Vietnam; records addressing unrelated topics, other countries, or non-empirical commentary were excluded. The full texts of remaining records were then assessed against the eligibility criteria above, with exclusions recorded by reason (absence of a journal DOI, insufficient relevance, or duplicate/overlapping datasets). The PRISMA flow diagram summarizing this process is presented in Figure 1. For each of the 22 included studies, data were extracted on geographic setting, study design, sample characteristics, thematic focus, and the principal direction of reported effect (positive, mixed/context-dependent, or negative) on livelihood or welfare outcomes. Extracted studies were classified into six thematic categories—livelihood diversification; microcredit and financial inclusion; off-farm employment, migration, and remittances; agricultural extension and technology adoption; climate vulnerability and adaptation; and poverty-reduction programs targeting ethnic minorities—and synthesized narratively, supplemented by tabulation and visualization of study characteristics.

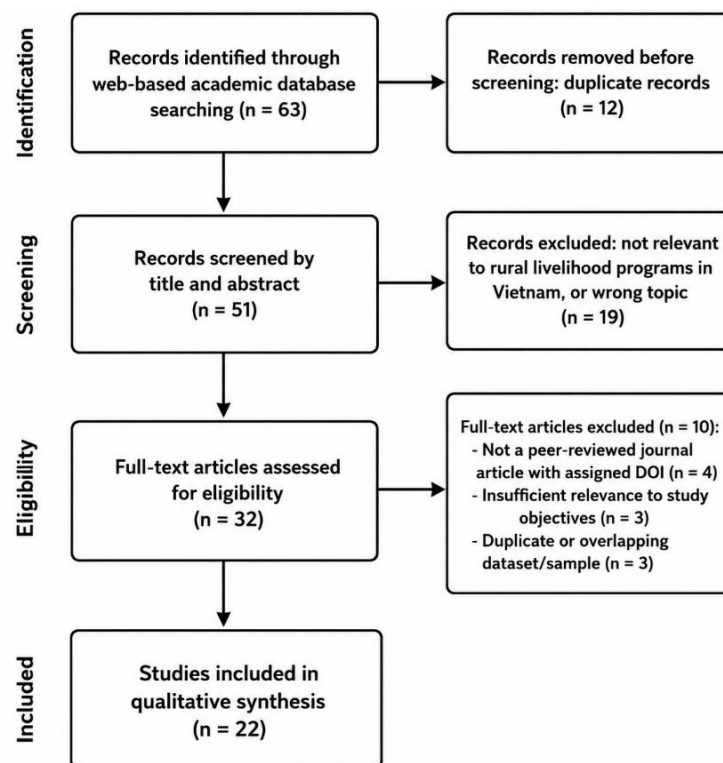


Figure 1. PRISMA Flow Diagram of the Systematic Literature Search and Study Selection Process.

3. Results and Discussion

3.1. Characteristics of Included Studies.

A total of 63 records were initially identified through the database search. After removing 12 duplicate records, 51 unique studies remained for title and abstract screening. This screening process excluded 19 studies that did not meet the inclusion criteria, leaving 32 articles for full-text assessment. Of these, 10 articles were excluded due to methodological or publication-related limitations, including the absence of a peer-reviewed journal DOI ($n = 4$), insufficient relevance to the review objectives ($n = 3$), and the use of overlapping or duplicate datasets ($n = 3$). Consequently, 22 studies were retained for the final qualitative synthesis (Figure 1). The selected studies were published between 1998 and 2025, indicating sustained scholarly interest in rural livelihoods and poverty alleviation in Vietnam over nearly three decades. Geographically, the studies covered a wide range of regions, including the Mekong River Delta, the Red River Delta, the northern mountainous provinces, and the central coastal areas. This broad geographic representation reflects the diversity of Vietnam's socio-economic and environmental conditions, allowing for a more comprehensive understanding of factors influencing rural livelihoods across different contexts.

As shown in Table 1, the largest thematic category was climate vulnerability and adaptation, comprising six studies. This prominence reflects increasing concerns regarding the impacts of climate change on rural households, particularly in vulnerable regions such as the Northwest Highlands, North-Central provinces, and the central coast. These studies commonly employed household surveys, vulnerability assessments, and regression-based analyses to evaluate adaptive capacity and resilience among rural communities. The second-largest category focused on off-farm employment, migration, and remittances (four studies). These studies examined how labor mobility and income transfers contribute to household welfare, poverty reduction, and livelihood diversification. Advanced quantitative methods, including panel data analysis, difference-in-difference approaches, and propensity score matching, were frequently used to assess causal relationships and policy impacts. Three studies investigated livelihood diversification and income strategies, highlighting the importance of combining agricultural and non-agricultural activities to reduce vulnerability and enhance household income stability. Research in this category primarily relied on cross-sectional surveys and regression analyses conducted in the northern mountainous regions, the Mekong Delta, and at the national level.

Table 1. Characteristics of Studies Included in the Systematic Review ($n = 22$).

Thematic Category	No. of Studies	Representative Study Design / Analytical Approach	Geographic Focus
Livelihood diversification and income strategies	3	Cross-sectional and panel surveys; descriptive and regression analyses	Northern mountains, Mekong Delta, and national
Microcredit and financial inclusion	3	Panel data analysis (VHLSS/VARHS); GMM and dynamic panel models	National and rural provinces
Off-farm employment, migration, and remittances	4	Panel data; difference-in-differences; propensity score matching	National and rural–urban migration corridors
Agricultural extension and technology adoption	3	Cross-sectional surveys; regression and Poisson models	Mekong Delta, Quang Binh, and Quang Tri
Climate vulnerability and adaptation	6	Household surveys; vulnerability indices; logistic and OLS regression	Northwest, north-central, and central coast
Poverty-reduction programs and ethnic minorities	3	Policy analysis; systematic review; qualitative case studies	Northern upland region and national

Figure 2 illustrates the thematic distribution of the 22 studies included in this systematic review. The figure reveals a clear concentration of research on climate vulnerability and adaptation, which accounted for the largest proportion of studies ($n = 6$, 27.3%). This finding reflects the growing recognition of climate change as a major challenge to rural livelihoods in Vietnam. Frequent floods, droughts, saline intrusion, extreme weather events, and changing agricultural conditions have increased the vulnerability of rural households, particularly those dependent on natural resources and agricultural production. Consequently, researchers have devoted substantial attention to understanding vulnerability patterns, assessing adaptive capacity, and identifying effective adaptation strategies that can enhance community resilience.

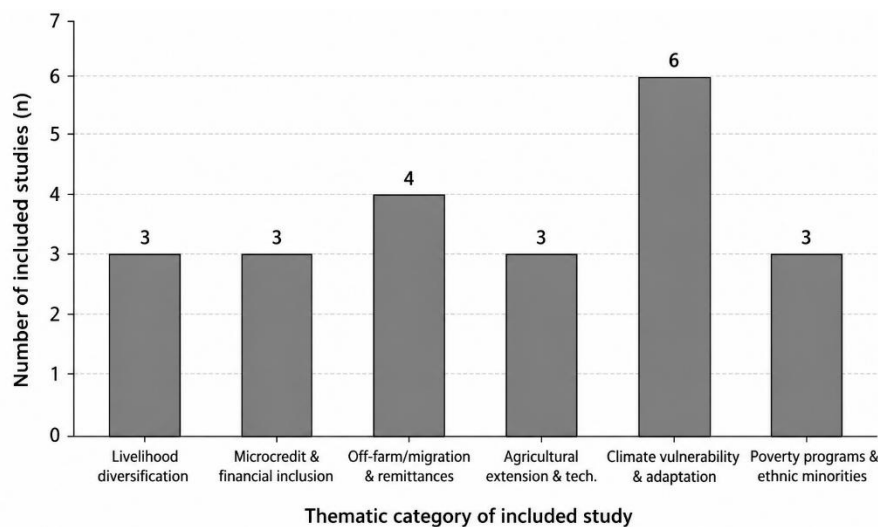


Figure 2. Distribution of Included Studies by Thematic Category.

The second most frequently investigated theme was off-farm employment, migration, and remittances ($n = 4$, 18.2%). The prominence of this category highlights the increasing importance of labor mobility and income diversification in rural development. As agricultural incomes become increasingly uncertain due to market fluctuations and environmental pressures, many households seek alternative income sources through migration and non-farm employment. Studies within this theme consistently examined how remittances and labor migration contribute to household welfare, reduce poverty, and improve resilience against economic and environmental shocks.

Three thematic categories each accounted for three studies (13.6%): livelihood diversification and income strategies, microcredit and financial inclusion, and agricultural extension and technology adoption. The relatively balanced representation of these themes suggests a broad recognition that sustainable rural development requires multiple complementary interventions. Research on livelihood diversification emphasized the role of combining agricultural and non-agricultural activities to reduce dependence on a single income source. Studies on microcredit and financial inclusion focused on improving access to financial services, credit facilities, and investment opportunities for rural households. Meanwhile, research on agricultural extension and technology adoption highlighted the importance of knowledge transfer, farmer training, and technological innovation in enhancing productivity, income generation, and adaptive capacity.

The final category, poverty-reduction programs and ethnic minorities, also comprised three studies (13.6%). Although representing a smaller proportion of the evidence base, this theme remains significant due to the persistent socioeconomic disparities experienced by ethnic minority communities and residents of remote regions. These studies primarily evaluated policy interventions and development programs aimed at addressing structural poverty and promoting inclusive growth. The thematic distribution indicates that recent scholarship on rural livelihoods in Vietnam has increasingly shifted toward understanding how households cope with environmental and economic uncertainties. The dominance of climate adaptation, migration, and livelihood diversification studies suggests that resilience-building has become a central concern within the literature. At the same time, the relatively lower number of studies focusing on poverty-reduction policies and ethnic minority development points to potential research gaps that warrant greater attention in future investigations. Greater integration of these themes may provide a more comprehensive understanding of sustainable rural development pathways in Vietnam.

3.2. *Livelihood Diversification and Income Strategies.*

Livelihood diversification, defined as the process through which rural households construct a varied portfolio of income-generating activities [1], emerged as a foundational theme across the included literature. Household-level analyses using nationally representative panel data found that livelihood capitals, including human, natural, material, and social capital, significantly shape households' choice of diversification strategy, while financial capital alone exerted a comparatively limited direct effect [2, 3]. Climate change was found to influence livelihood transitions both directly and indirectly, with households increasingly shifting toward wage-based and non-agricultural strategies over the 2008–2018 period as agricultural livelihoods became more exposed to climatic stress [3]. These findings collectively suggest that diversification functions simultaneously as a development strategy and a climate-risk-coping mechanism, with implications summarized in Table 2.

Table 2. Summary of Reported Findings on Livelihood Diversification Strategies in Rural Vietnam.

Study Focus	Key Reported Finding	Direction of Effect	Reference
Determinants of livelihood diversification	Household characteristics and access to credit and technology significantly influenced the level of livelihood diversification.	Positive	[2]
Livelihood capitals and strategy choice	Human, natural, material, and social capital significantly influenced livelihood strategy choices, whereas the effect of financial capital was limited.	Mixed	[3]
Climate-driven livelihood transitions (2008–2018)	Wage-based and non-agricultural livelihood strategies became increasingly preferred in response to climate-related stress.	Mixed	[3]
Conceptual framework for diversification	Diversified livelihood portfolios enhanced household resilience and contributed to improved standards of living.	Positive	[1]

3.3. *Financial Inclusion, Microcredit, and Off-Farm/Migration Outcomes.*

Microcredit access, primarily through the Vietnam Bank for Social Policies and related institutions, was consistently associated with improved household welfare, though the magnitude and consistency of effects varied across studies. Using nationally representative panel data from 2008 to 2016, one study found that access to microcredit significantly reduced households' vulnerability to falling into poverty in subsequent periods, beyond simply reducing current poverty status [6]. A dynamic panel-data analysis covering 2002–2008 similarly found that access to microfinance improved per-adult-equivalent income and consumption, although

prior participation alone was not always sufficient to lift households out of poverty, with loan size and complementary rural infrastructure investment identified as important moderating factors [7]. Off-farm employment was found to improve income, food security, and poverty status using difference-in-difference and propensity score matching approaches, with age, education, financial capital, and market access identified as key determinants of participation [8]. Non-farm wage employment was further shown to be highly heterogeneous in quality, with public-sector jobs offering the most favorable livelihood outcomes relative to informal wage labor [9]. Migration and remittances were found to reduce household vulnerability and improve welfare, although the magnitude of benefit depended on whether remittances accompanied migration or migration occurred without sustained remittance flows [10,11]. These patterns are summarized in Table 3.

Table 3. Summary of Reported Findings on Microcredit, Off-Farm Employment, and Migration/Remittances

Intervention/Mechanism	Key Reported Finding	Direction of Effect	Reference
Microcredit access (2008–2016 panel)	Access to microcredit significantly reduced household vulnerability to future poverty.	Positive	[6]
Microfinance participation (2002–2008 panel)	Participation increased per-adult-equivalent income and consumption, but was insufficient on its own to enable households to escape poverty.	Mixed	[7]
Off-farm employment participation	Participation improved household income and food security while reducing the incidence of poverty.	Positive	[8]
Non-farm wage employment segments	Outcomes varied substantially across employment segments, with public-sector employment producing the most favorable outcomes.	Mixed	[9]
Rural–urban migration with remittances	Migration and associated remittances reduced household vulnerability and increased land productivity.	Positive	[10]
Migration and remittances on household welfare	Remittance receipt increased per-capita income and expenditure among recipient households.	Positive	[11]

3.4. Agricultural Extension and Technology Adoption.

Agricultural extension services remain a central pillar of Vietnam's rural livelihood support architecture. A survey of farming households in Quang Binh province found a positive relationship between perceived service quality, particularly assurance, reliability, and responsiveness, and farmer satisfaction with extension services [12]. In the Mekong River Delta, participation in agricultural extension training was associated with measurable improvements in the economic performance of rice farms, leading to recommendations that extension agencies expand training access to all farmer segments rather than a self-selected subset [13]. More recent evidence on digital extension adoption among smallholders in Quang Tri province found that education, farm size, digital experience, and frequency of knowledge exchange positively predicted adoption of digital agricultural tools, suggesting an emerging digital divide that conventional extension strategies will need to address [14]. Table 4 summarizes these findings. It demonstrates that agricultural extension contributes to rural livelihood improvement through interconnected service, training, and technology pathways. High-quality extension services strengthen farmer satisfaction and confidence, while participation in training can translate technical knowledge into improved farm-level economic performance [12, 13]. At the same time, the growing use of digital technologies is reshaping how agricultural information is accessed and exchanged. However, differences in education, farm size, and prior digital experience may create unequal opportunities for technology adoption [14]. These findings highlight the need for extension programs that combine reliable

conventional services with inclusive training and accessible digital support for diverse farmer groups.

Table 4. Summary of Reported Findings on Agricultural Extension and Technology Adoption.

Study Focus	Key Reported Finding	Direction of Effect	Reference
Extension service quality and farmer satisfaction (Quang Binh)	Assurance, reliability, and responsiveness of extension services significantly increased farmer satisfaction.	Positive	[12]
Extension training and rice farm performance (Mekong Delta)	Participation in extension training improved the economic performance of rice farms.	Positive	[13]
Digital technology adoption (Quang Tri)	Higher education, larger farm size, and greater digital experience positively influenced farmers' adoption of digital technologies.	Positive	[14]

3.5. Climate Vulnerability, Adaptation, and Poverty-Reduction Programs.

Climate vulnerability and adaptation constituted the most extensively studied theme among included articles. Survey-based assessments across multiple regions found that farm households generally demonstrate high awareness of climate-related risks and adopt a range of coping strategies, including new technology adoption, adjustment of seasonal calendars, and crop diversification [15]. However, adaptive capacity was found to vary considerably by gender, with female farmers facing disproportionate constraints on land and resource access that limit their adaptive options relative to male farmers [16-18]. Household livelihood vulnerability assessments in the northwest highlands found that livelihood strategies, health, and food security domains were more susceptible to climate stress than social network or water-related domains [17]. Flash floods and landslides were found to elicit differentiated adaptation decisions depending on land tenure security and access to early warning information [19], while land-use planning interventions in central coastal Vietnam were identified as a viable mechanism for reducing agricultural vulnerability to flooding and drought through 2035 [20]. In parallel, government-led poverty-reduction programs targeting ethnic minority and mountainous communities, most notably Program 135, were found to have achieved measurable but uneven success, with infrastructure and basic service access improving more consistently than income-generation outcomes, and persistent horizontal inequality between ethnic minority and majority Kinh populations remaining a structural constraint [4,5]. Resource access constraints, including unexploded ordnance contamination in former conflict zones, were also found to shape household livelihood choices in some upland areas, illustrating the historically contingent nature of livelihood constraints in Vietnam [21]. Tourism-based livelihood diversification in rural destinations offered an additional, geographically specific pathway, improving household income where local tourism infrastructure was present, though benefits were unevenly distributed [22]. These findings are summarized in Table 5 and visualized in Figure 3, which shows that climate-related and ethnic-minority-targeted studies reported a substantially higher proportion of mixed or context-dependent effects relative to other thematic categories. Taken together, these studies indicate that climate vulnerability in rural Vietnam is shaped not only by exposure to environmental hazards but also by underlying socioeconomic and institutional conditions. Adaptation outcomes depend strongly on access to land, financial resources, information, infrastructure, and public support, with disadvantaged households often facing greater barriers to effective responses [16–20]. Although poverty-reduction programs have improved infrastructure and access to essential services, their effects on household income and long-term livelihood resilience remain uneven [4,5]. Moreover,

historical constraints and unequal access to emerging livelihood opportunities reinforce spatial and social disparities [21, 22]. Effective interventions therefore require integrated approaches linking climate adaptation, poverty reduction, resource access, and livelihood diversification.

Table 5. Summary of Reported Findings on Climate Vulnerability, Adaptation, and Targeted Poverty-Reduction Programs.

Study Focus	Key Reported Finding	Direction of Effect	Reference
Farm household climatic risk perception (multi-province)	Farmers showed high awareness of climate risks and adopted coping strategies, particularly technology adoption and livelihood diversification.	Positive	[15]
Gendered adaptation capacity (northwest Vietnam)	Female farmers faced greater constraints in accessing land and other resources, which limited their capacity to adapt to climate-related risks.	Mixed	[16–18]
Livelihood vulnerability index (northwest highlands)	Livelihood, health, and food dimensions showed greater vulnerability than social and water-related dimensions.	Mixed	[17]
Flash flood and landslide adaptation decisions	Adaptation decisions were strongly influenced by land-tenure security and access to early-warning information.	Mixed	[19]
Land-use planning for climate adaptation (central coast)	Land-suitability planning reduced projected vulnerability to floods and droughts through 2035.	Positive	[20]
Program 135 and ethnic minority poverty reduction	Infrastructure and service access improved consistently, although improvements in household income were uneven.	Mixed	[4,5]
Resource-access constraints in UXO-affected areas	Legacy contamination constrained resource access and influenced livelihood choices in some upland communities.	Mixed	[21]
Tourism-based livelihood diversification	Tourism increased household income where supporting infrastructure was available, although benefits were unevenly distributed among households.	Mixed	[22]

Taken together, the reviewed literature reveals considerable variation in the effectiveness and consistency of rural livelihood interventions across thematic categories in Vietnam (Figure 3). Interventions related to financial inclusion, agricultural extension, technology adoption, and off-farm livelihood diversification were associated predominantly with positive outcomes. These interventions generally improved farmers' access to financial resources, technical knowledge, productive technologies, markets, and alternative income-generating opportunities. Their relatively consistent positive effects suggest that strengthening household productive capacity and reducing financial or informational constraints can provide direct and measurable benefits to rural livelihoods. In contrast, studies focusing on climate vulnerability, adaptation, and programs targeting ethnic-minority communities reported a substantially greater proportion of mixed or context-dependent effects (Figure 3). This pattern does not necessarily indicate that these interventions were ineffective. Rather, it suggests that their outcomes were more strongly influenced by local socioeconomic, environmental, and institutional conditions. Climate adaptation, for example, may depend on the severity and type of climatic hazards, household asset ownership, land-tenure security, access to early-warning information, gender-related inequalities, and the availability of infrastructure and institutional support. Similarly, programs targeting ethnic-minority and mountainous communities operate within diverse geographical and socioeconomic settings, where remoteness, limited market connectivity, unequal resource access, and persistent structural inequalities can constrain program effectiveness. The comparison presented in Figure 3 therefore highlights an important distinction between interventions that address relatively specific livelihood constraints and those that respond to multidimensional vulnerability. Credit provision, agricultural extension, technology support, and improved market access can often be delivered through relatively standardized mechanisms because they address identifiable financial, technical, or market

barriers. By contrast, climate adaptation and targeted poverty-reduction programs must respond to interacting environmental, social, cultural, and institutional factors, making their outcomes inherently more heterogeneous across communities.

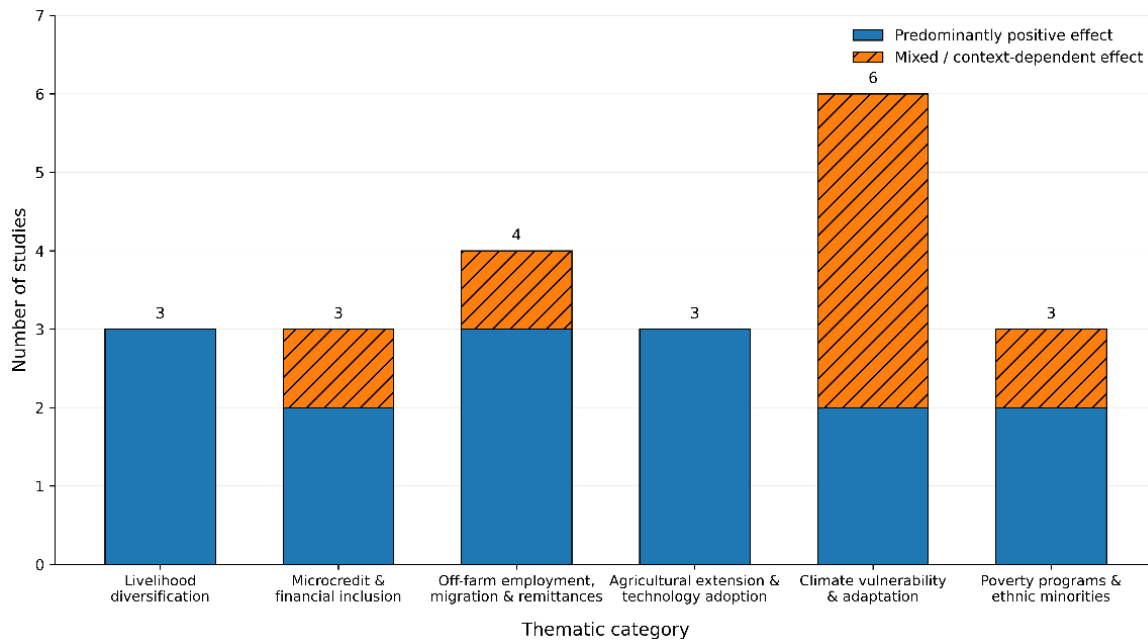


Figure 3. Reported Direction of Effect (Predominantly Positive vs. Mixed/Context-Dependent) by Thematic Category Among Included Studies.

These findings have important implications for future rural development strategies in Vietnam. Standardized livelihood interventions should continue to strengthen access to finance, extension services, technology, skills, and markets, but they should be complemented by locally tailored measures in areas characterized by greater vulnerability. In particular, mountainous, ethnic-minority, and climate-exposed communities may require localized vulnerability assessments, participatory planning, gender-responsive approaches, improved infrastructure, and differentiated forms of livelihood support. Integrating these approaches would allow rural development programs to address both immediate livelihood constraints and the deeper structural factors that determine households' capacity to adapt, diversify, and achieve sustainable long-term livelihood resilience.

4. Conclusion

This systematic review synthesized evidence on major approaches to strengthening rural livelihoods in Vietnam, covering livelihood diversification, financial inclusion, off-farm employment and migration, agricultural extension and technology adoption, climate adaptation, and targeted poverty-reduction programs. Overall, the evidence demonstrates that sustainable livelihood improvement is most effectively achieved through integrated interventions that strengthen households' financial, human, productive, and social capacities rather than through isolated measures. Financial inclusion, agricultural extension, technology adoption, and off-farm employment generally produced positive outcomes by improving income opportunities, agricultural performance, access to knowledge, and household resilience. Microcredit was particularly beneficial when accompanied by adequate loan size,

infrastructure, and opportunities for productive investment, while migration generated stronger welfare benefits when supported by sustained remittance flows. However, the review also reveals substantial heterogeneity in climate adaptation and poverty-reduction outcomes. Climate exposure, land-tenure security, gender inequalities, access to information and resources, geographical isolation, and institutional conditions influenced households' capacity to benefit from interventions. Programs targeting ethnic-minority and mountainous communities improved infrastructure and basic service access, but their effects on income and long-term livelihood resilience remained uneven. Future rural development policies should therefore combine broadly applicable measures, including financial services, extension, technology, skills development, and market access, with locally tailored strategies for vulnerable communities. Participatory planning, gender-responsive interventions, improved infrastructure, digital inclusion, and location-specific vulnerability assessments should be incorporated into program design. Such an integrated and context-sensitive approach can strengthen adaptive capacity, reduce persistent socioeconomic disparities, and support more inclusive and resilient rural livelihoods in Vietnam.

Competing Interests

The authors declare that they have no competing interests, financial or otherwise, related to the content of this review.

Author Contributions

Both authors contributed equally to the conceptualization, literature search, screening, data extraction, analysis, drafting, and critical revision of the manuscript. Both authors read and approved the final version of the manuscript.

Data Availability

All data supporting the findings of this systematic review are available within the published studies cited in this article.

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