



TRANSLOCAL LIVELIHOODS AND URBAN RESILIENCE: A SYSTEMATIC REVIEW AND RESEARCH POTENTIAL IMPLICATIONS IN VIETNAM

Thi Thuy Dung Vu , Thi Thuc Duyen Nguyen 

Faculty of Sociology and Social Work, Dalat University, Dalat City, Lam Dong Province, Vietnam

Corresponding Author: dungvtt@dlu.edu.vn

Article History:

- Received 23 October 2025
- Accepted 05 May 2026

Abstract: Translocal livelihoods constitute not merely a migration strategy but an effective risk-distribution system for laborers within volatile urban environments. They play a pivotal role in elucidating how the circulation of resources and people shapes sustainable urban development. However, current urban policies tend to focus exclusively on physical infrastructure, often neglecting the significance of informal resource flows across various localities. Furthermore, there remains a deficiency in systematic analyses within scientific discourses concerning the nexus between translocal livelihoods and urban resilience. Employing a systematic review methodology based on the Scopus database, this study reveals that translocal connectivity bolsters the social infrastructure of cities. Households engaging in translocal livelihoods tend to exhibit accelerated recovery following disruptive events. Drawing from these findings, the study proposes policy implications for urban development in Vietnam, emphasizing the integration of migration into adaptive urban planning strategies to optimize social resources. Most importantly, recognizing the legitimacy of translocal livelihoods is identified as a cornerstone for fostering more resilient and inclusive Vietnamese cities in the future.

Keywords: Translocal Livelihoods, Urban Resilience, Systematic review, Vietnam

1. Introduction

Livelihood studies have long served as a cornerstone of development theory, providing a robust lens to elucidate how individuals and households construct their lives by mobilizing asset endowments within specific socio-economic contexts (Chambers & Conway, 1992). Traditionally, research has focused on analyzing resources, opportunities, and constraints within a confined geographic perimeter, employing a "localized" approach systematized by the seminal Sustainable Livelihoods Framework (SLF) (Scoones, 1998). However, in an era of rapid globalization and accelerating urbanization, this static paradigm has increasingly revealed limitations in capturing the dynamic, complex, and profoundly interconnected nature of contemporary livelihoods.

The surging flows of people, capital, and information across multiple spatial scales have catalyzed the emergence of translocal livelihood strategies (Zoomers & Van Westen, 2011). Consequently, households no longer rely solely on localized resources but rather diversify income streams, manage assets, and maintain social networks across multiple sites—spanning

the rural-urban interface and often transcending national borders—thereby weaving a decentralized safety net (Scoones, 2013). In the Vietnamese context, labor migration and remittances have become integral components of the household economic fabric, contributing significantly to the national GDP (World Bank, 2023) and fundamentally transforming rural well-being (Cuong & Linh, 2018).

Despite the growing recognition of translocality, a critical theoretical gap remains: the nexus between these multi-scalar livelihood networks and urban resilience. Current scholarship largely decouples migratory livelihoods from spatial planning strategies and urban risk management. While urbanization is frequently viewed through an infrastructure-centric lens, this article posits that the resilience of urban systems is deeply contingent upon socio-economic dimensions, particularly as Vietnamese cities confront climate change, economic volatility, and long-term planning uncertainties. Understanding how transregional flows bolster the adaptive capacity of urban dwellers has become an urgent imperative.

Against this backdrop, this paper conducts a systematic review aimed at repositioning translocal livelihoods within the



interdisciplinary analytical frameworks of spatial planning and social-ecological systems (SES). We argue that the translocal lens serves not merely as a descriptive tool for migration but as a strategic approach to address the multifaceted challenges of urban resilience and sustainable development in Vietnam.

2. Literature Review

2.1. *Research On Translocal Livelihoods and Urban Resilience*

Translocal livelihoods have become increasingly pivotal to urban resilience. Through social networks, households consolidate opportunities across disparate locations into a "translocal social space," optimizing economic strategies. This has emerged as a vital adaptation mechanism for communities confronting economic and environmental challenges (Benz, 2014; Lohnert & Steinbrink, 2005). For impoverished households, migratory linkages serve as a "safety net," providing financial buffers against precarious conditions. Conversely, affluent households utilize translocal networks as a "springboard" to access expertise and investment capital, facilitating transitions toward market-oriented agriculture (Rockenbach et al., 2019).

Empirical studies confirm that household livelihoods are now spatially dispersed through migration and multi-sited networks. Evidence suggests that remittances are closely correlated with poverty reduction and improved well-being (Adams & Page, 2005), although actual efficacy depends heavily on institutional structures and transaction costs (De Haas, 2010). Conceptually, the translocal framework more accurately captures the simultaneity of multiple locations in livelihood activities, explaining why geographic income diversification is a prevalent strategy in rural households where transport and telecommunications infrastructure are developed (Greiner & Sakdapolrak, 2013). In Vietnam, labor migration has become an organic component shifting household expenditure patterns and welfare (Cuong & Linh, 2018; World Bank, 2023).

In migration studies, the translocal perspective shifts the focus from one-way departures to a circular cycle, where migrants maintain robust economic and social ties with their origins through co-villager networks, job-seeking channels, and digital communication tools. For instance, research on migrant social networks in China highlights the crucial role of extra-familial and trans-spatial relationships in securing employment, adapting to destinations, and sustaining mutual support with origins (Li & Wu, 2010). Concurrently, literature on the migration-environment nexus demonstrates that environmental change influences migration not only directly through disaster risks but also indirectly through socio-economic channels as local livelihoods degrade. Consequently, risk diversification across locations—a hallmark of translocality—becomes a critical adaptive strategy (Black et al., 2011). This necessitates environmental governance policies that evaluate impacts

along development corridors rather than at single intervention sites (Zoomers et al., 2011). Social geography studies emphasize that contemporary livelihoods are structured by multi-level networks and flows, challenging static administrative boundaries (Brickell & Datta, 2011).

In urban communities, resilience opportunities arise from easier access to education and non-traditional employment but face challenges regarding declining community cooperation and ecological threats. Conversely, rural communities possess strong social capital and cooperative spirit but are constrained by limited educational opportunities and a scarcity of alternative livelihood options. These findings reinforce the argument that livelihood resilience depends not only on a household's internal assets but is also heavily governed by geographic space and the degree of urbanization (Wintergalen et al., 2022). Integrating translocal livelihoods into urban resilience and social-ecological systems is an imperative requirement for understanding decentralized recovery mechanisms in the face of market and climate shocks.

The existing body of literature reviewed above suggests that the transition from localized to translocal perspectives is not uniform across time or space. While some regions focus on the safety net function for the poor, others emphasize the springboard effect for market transition. To systematically map these disparities and the overall growth of this field, the first research question is established: (Q1) How has the research landscape regarding the translocal livelihood-urban resilience nexus evolved chronologically and geographically, and what specific thematic priorities have emerged across different regional and socio-economic contexts?

2.2. *Theoretical Perspectives On Translocal Livelihoods and Urban Resilience*

Traditional livelihood theory stems from the Sustainable Livelihoods Framework (SLF), focusing on household capacities to cope with vulnerability (Chambers & Conway, 1992; Scoones, 1998; Tambe, 2022). However, this localized approach reveals blind spots as rural-urban boundaries blur due to globalization and digital connectivity (De Haas, 2010; Ellis, 2000). The surge in human and capital flows has transformed livelihoods into a multi-scalar process, requiring a shift from "flat-map" analysis to social network analysis (Scoones, 2009, 2013, 2015; Zoomers & Van Westen, 2011).

This shift is bolstered by the concept of "social remittances"—the cross-spatial diffusion of knowledge and norms (Levitt, 1998)—and theories of transnationalism (Basch et al., 1994; Portes et al., 1999; Schiller et al., 1992). Migration research has long indicated that household strategies expand through seasonal migration and kinship ties (Massey et al., 1993; Tacoli, 2002). In this context, translocality emerges as a new lens, viewing the household as a multi-sited unit where labor, investment, and care decisions are distributed across network spaces (Datta, 2016; Greiner & Sakdapolrak, 2013). Assessing livelihood capitals (social, human, financial,

physical) now requires a focus on mobility and interregional connectivity rather than solely on localized resources (Greiner & Sakdapolrak, 2013; Solesbury, 2003).

Beyond social-ecological system frameworks, recent studies offer critiques of the "Global Urban Resilience Complex". Urban resilience is often deployed top-down through networks of public-private and non-profit actors. This approach tends to technocratize and bureaucritize resilience through quantitative assessment tools, turning it into a commodity in urban planning. This creates a significant tension with the spontaneous and networked nature of translocal livelihoods, which rely on indigenous knowledge and social flexibility rather than imposed technical standards (Leitner et al., 2018).

Evidence suggests that if limited to formal participation models, urban governance remains inadequate in addressing resilience effectively. The framework connecting Transdisciplinary (TR) and Bottom-up approaches argues that transdisciplinary methods complement bottom-up urban governance by enhancing social resilience, strengthening local communities, and mitigating urban inequality. Rather than imposing management toolkits, fostering collaboration, integrating multi-dimensional perspectives, and engaging communities in decision-making will solve complex urban issues more sustainably (Özdamar & Önay, 2024).

The intersection of Sustainability and Resilience should be viewed as a core analytical framework for understanding contemporary urban dynamics. Rapid urbanization is profoundly altering social-environmental relationships. Crucially, the focus should be on identifying the capacities that urban actors mobilize to enact change. Livelihood resilience in this context extends beyond adapting to shocks; it encompasses the transformative capacity of individuals, communities, and city systems toward a more sustainable relationship with the environment (Romero-Lankao et al., 2016). For the Vietnamese context, this lens reveals that translocal livelihoods are a vital resource contributing to that transformative capacity, helping bridge the gap between technical resilience strategies and local sustainable development practices. To further clarify the conceptual structure of this interdisciplinary field, the second research question focuses on thematic integration: (Q2) What are the dominant thematic clusters and interdisciplinary linkages that define the current research landscape of translocal livelihoods and urban resilience?

2.3. Methodological Approaches In Translocal and Resilience Research

The multi-sited and flow-based nature of translocal livelihoods necessitates research designs that combine qualitative and quantitative methods while extending the spatial and temporal scope of the study. Qualitatively, single and comparative case studies are used to track livelihood trajectories, link origins and destinations, and explain decision-making mechanisms within specific institutional contexts. Seminal

guides on case study research provide frameworks for design, theoretical sampling, and triangulation strategies suited to these questions (Yin, 2017).

Quantitatively, household surveys allow for the measurement of multi-source income structures, migration histories, expenditure patterns, and livelihood capital indices. Deaton's classic micro-analytical framework for household survey data remains the foundation for estimating causal relationships and addressing selection bias (Deaton, 1997). Social Network Analysis (SNA) is particularly suited for quantifying network structures, identifying intermediary nodes, and mapping the flow of information and resources between sites (Wasserman & Faust, 1994).

To identify and visualize spatial dimensions, GIS and Remote Sensing support the tracking of migration routes, multi-sited work and residential spaces, and the nexus between land-use change and livelihood strategies, thereby constructing integrated data layers for multi-level modeling (Longley et al., 2015). Finally, mixed-methods designs provide sequential or convergent integration of data to link "mechanistic narratives" at the household level with statistical models at the aggregate level. Recent mixed-methods guidelines regulate design selection criteria, multi-stage sampling strategies, and reporting standards (Creswell & Plano Clark, 2017). Finally, recognizing the need to bridge global theory with local practice, the third research question seeks to operationalize these findings: (Q3) How do translocal networks function as informal adaptive mechanisms to bolster urban resilience, and what strategic policy implications can be derived for Vietnam's sustainable urban development?

3. Methodology

This study combined systematic literature review with bibliometric analysis to reveal the existing state of knowledge on translocal livelihoods and urban Resilience. The bibliometric analysis is a quantitative type of literature review that relies on the bibliographic data of published studies to visualize intellectual discourse and emerging trends in a particular scientific research topic. This review methodology offers the opportunity, like the meta-analysis approach, to quantitatively visualize the annual production trend, the most productive and influential researchers, journals, countries, institutions, and the areas of research that have dominated scholarly discussions over a particular period. It also provided the opportunity for a systematic review of the content of selected articles under themes towards addressing some of the guiding research questions of this study.

To achieve the research objectives and ensure a comprehensive overview of the existing body of knowledge, this study adopts a Systematic Literature Review (SLR) approach. The process strictly adheres to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. This methodology minimizes subjective bias, enhances transparency, and provides an objective, systematic perspective on

the intersection between translocal livelihood networks and urban resilience. Utilizing this model not only facilitates the identification of current trends but also clarifies the research gaps that necessitate further investigation.

3.1. Data Collection

The initial phase of the study focused on identifying reliable and influential data sources within the academic community. Primary data were retrieved from the Scopus database—one of the most reputable academic repositories today, offering extensive coverage across social sciences, planning, and sustainability.

- **Collection Scope:** The process was restricted to peer-reviewed scientific articles published in English.
- **Data Structure:** A total of 901 documents were identified through two complementary datasets:
 - Records focusing on the theoretical foundations and broad context of translocality ($n = 430$).
 - Records focusing on the specific intersection of resilience, translocality, and the urban context ($n = 471$).
- **Data Processing:** Comprehensive metadata, including Titles, Abstracts, Keywords, and References, were exported in .csv and .bibtex formats to facilitate subsequent bibliometric analysis via specialized software and qualitative content analysis. Systematic data management and standardization from the outset established a robust foundation for quantifying research trends and ensuring analytical accuracy.

3.2. Search Strategy

To optimize precision and searchability, the search strategy was designed with a two-tiered structure to capture foundational theories while drilling down into specific research objectives. Boolean operators (AND, OR) and expert-validated phrase-searching techniques were employed as follows:

Establishing the Foundation of Translocal Livelihoods: TITLE-ABS-KEY ("translocal livelihoods" OR "translocality")

Establishing Interdisciplinary Linkages: Focusing on the interaction between resilience, livelihoods, and urban governance within the 2020–2025 timeframe: (TITLE-ABS-KEY ("resilience" AND "Translocality" AND urban) OR TITLE-ABS-KEY ("resilience" AND "Translocal livelihoods" AND "Urban") OR TITLE-ABS-KEY ("resilience" AND "Translocal" AND "Urban") OR TITLE-ABS-KEY ("resilience" AND "livelihoods" AND "Urban")) AND PUBYEAR > 2019 AND PUBYEAR < 2026 AND (LIMIT-TO (LANGUAGE, "English"))

This stage resulted in a sample size of 901 records, including 430 related to translocal livelihoods and 471 addressing the nexus of resilience, livelihoods, and urban governance. This strategy yielded a comprehensive raw

dataset reflecting the current landscape and spatial dimensions of contemporary migratory livelihoods.

3.3. Data Selection Process via PRISMA Technique

Following the raw data collection, a rigorous four-stage selection process was conducted to eliminate noise and retain studies with the highest empirical value (see Figure 1):

Identification: The initial search on the Scopus database yielded 901 documents. After removing 9 duplicate records, 892 unique documents remained for preliminary screening.

Screening: The research team performed an independent review based on titles and abstracts to assess preliminary eligibility. At this stage, 196 records were excluded for being in irrelevant subject areas, such as strictly technical infrastructure, linguistics, or arts. Following this, 696 reports were sought for retrieval.

Eligibility: From the retrieved reports, 651 documents were excluded because they lacked a direct nexus between translocality and resilience, often focusing solely on isolated aspects like labor migration or disaster management. This narrowed the pool to 45 documents for full-text eligibility assessment.

Included: During the full-text evaluation of the 45 articles, 35 records were excluded due to theoretical saturation, a predominantly descriptive focus, or a failure to clearly operationalize translocal livelihood frameworks. Ultimately, a final cohort of 10 core documents was selected for in-depth Content Analysis. This focused subset was chosen based on its high conceptual relevance and analytical depth to provide a robust theoretical foundation for the study.

While the bibliometric dataset ($n=901$) provides a macro-perspective on global trends, the qualitative depth required to satisfy this study's objectives necessitates a focused analysis. Consequently, we identified 10 core documents that effectively operationalize the translocal-resilience nexus. These studies were selected based on three criteria: (i) conceptual relevance to the "strategic triangle" of mobility, livelihoods, and urban shock-response; (ii) methodological rigor in linking multi-sited data; and (iii) analytical depth in explaining the socio-economic transformations that occur when precarity meets agency.

4. Results and Discussion

4.1. Bibliographic Analysis

Figure 2(a) provides a comprehensive overview of the publication volume over more than two decades (1998–2025). During the first decade, scholarly output remained minimal and inconsistent, frequently falling below 10 articles per year. During this incipient stage, research primarily centered on "translocal livelihoods" and "translocality," suggesting that the concept was initially rooted in anthropological and sociological perspectives regarding how individuals construct and sustain their lives through connective networks across

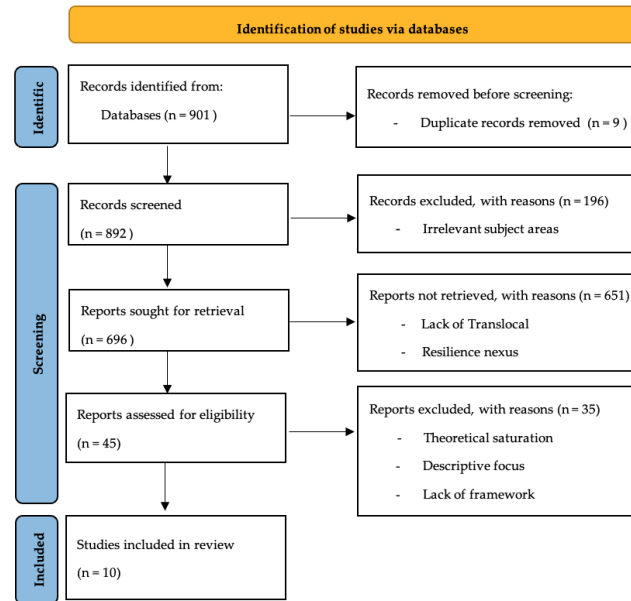


Figure 1: Diagram of data selection process for bibliometric analysis and qualitative literature review

diverse locations. The subsequent decade witnessed a more stable growth trajectory, maintaining an output of between 10 and 20 articles per year. This represented a transitional period as the concept began to gain broader interdisciplinary traction. Since 2016, there has been a significant surge in documentation, with the volume consistently exceeding 20 articles and reaching a peak of nearly 40 publications by 2025.

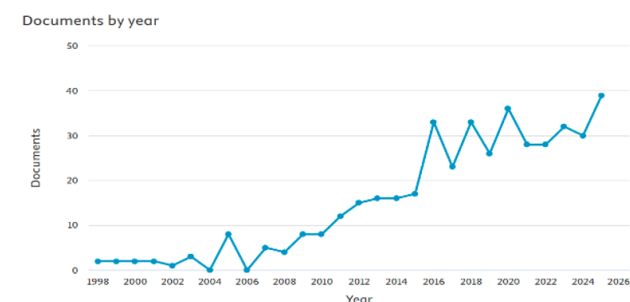
Figure 2(b) focuses on the most recent five-year interval (2020–2025), revealing exponential growth in scholarly attention. During this period, the research scope expanded to encompass critical contemporary keywords: "Resilience," "Translocality," and "Urban." Translocal connectivity has evolved beyond conventional rural or migration narratives to become an indispensable element of modern urban planning and urban life. In the face of climate change and global volatility, investigating how translocal communities adapt and recover has emerged as a new research priority. By 2025, the volume of research had increased approximately 3.5-fold compared to 2020 and by an order of magnitude compared to the pre-2010 era. This evidence confirms that "Translocality" has solidified as a pivotal theoretical framework within modern social sciences. The analytical shift from "livelihoods" toward "urban" and "resilience" demonstrates increasing interest across diverse fields, including human geography, urban planning, environmental studies, and public policy. The vertical trajectory observed in 2025 suggests that this will continue to be an emerging research frontier in the coming years, particularly as global migration and digital connectivity further dissolve traditional geographic boundaries.

The two charts in Figure 3 illustrate the disparities between the broader period (1998–2025) and the recent interval (2020–2025), highlighting emerging scholarly trends in the

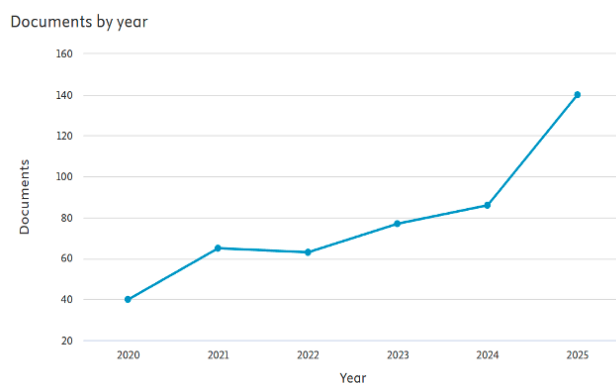
nexus of translocal livelihoods and urban resilience. In the former, research is predominantly situated within the Social Sciences, followed by Arts and Humanities. Conversely, the latter exhibits a significant expansion into both the Social Sciences and Environmental Sciences. This reflects a distinct paradigm shift from purely theoretical, humanistic, and sociological investigations—characteristic of the 1998–2025 era—toward applied, technical, and environmental problem-oriented studies that define the 2020–2025 period. Scholars are increasingly pivoting toward technical and ecological solutions to address pressing challenges within the evolving global context.

Figure 4 illustrates the evolving landscape of research output by country, highlighting a significant shift in geographic focus. During the long-term period (1998–2025), Germany emerged as the dominant leader with over 90 publications, followed by the United Kingdom and the United States, respectively. However, in the more recent interval (2020–2025), the United States ascended to the top position with approximately 75 publications. Conversely, Germany experienced a sharp decline in its ranking, dropping to sixth place with fewer than 30 documents. These data indicate a discernible transition in knowledge production from traditional developed nations in Europe and North America toward emerging economies in recent years.

Figure 5 illustrates the keyword co-occurrence network extracted from Scopus databases using VOSviewer. This visualization delineates the interconnectedness between various research themes, categorized into distinct thematic clusters. Each color represents a group of closely related topics. The red cluster signifies trends in migration and connectivity, centering on translocality, migration, and mobility. This group investigates how individuals navigate and sustain connections



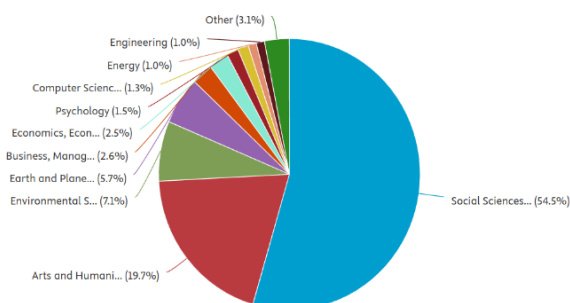
(a) Publication trends for “translocal livelihoods” and “translocality” (1998–2025)



(b) Research trends in the “Resilience,” “Translocality,” and “Urban” nexus (2020–2025)

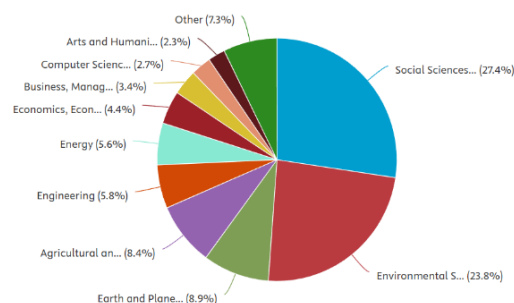
Figure 2: Document by years (Source: Scopus.com, accessed 29 December 2025).

Documents by subject area



(a) Period 1998–2025

Documents by subject area



(b) Period 2020–2025

Figure 3: Documents by subject area (Source: Scopus.com, accessed 29 December 2025).

across diverse geographical spaces. The green cluster focuses on the environment and adaptation, with predominant keywords including climate change, resilience, vulnerability, and adaptation, reflecting a body of research on environmental impacts. The yellow/light blue cluster represents sustainable development trends, highlighted by keywords such as food security and land use. The dark blue cluster centers on urbanization and livelihoods, emphasizing livelihood, urbanization, and the impacts of COVID-19, examining how subsistence is maintained amidst rapid urban growth and pandemics. Finally, the purple cluster covers socio-human themes, featuring keywords such as gender, public health, and the informal economy.

The size of the nodes indicates the frequency and analytical importance of each keyword within the network. Translocality and migration serve as “anchors” for demographic and social studies, while climate change and resilience emerge as core concepts linking environmental science with social policy. Livelihood acts as a crucial nexus connecting economic issues, climate impacts, and human mobility. This network

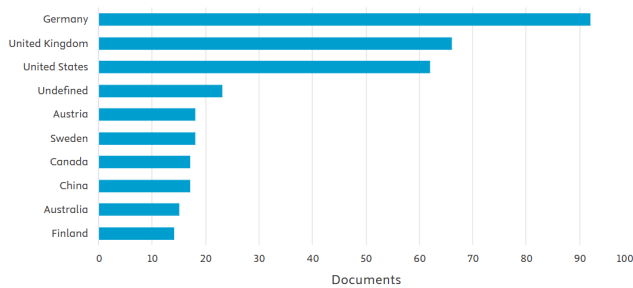
reveals a highly interdisciplinary and transdisciplinary research landscape—a complex ecosystem where nature (climate) and society (migration) are no longer decoupled but viewed as a reciprocal system. The prominence of “Translocality” suggests a paradigm shift from static settlement studies toward the analysis of multi-directional flows of people, capital, and information across regions.

Within this network, these concepts form a “strategic triangle” that elucidates global adaptation strategies. The close proximity between the translocality (red) and livelihood (blue) clusters underscores the essence of translocal livelihoods. This represents a diversification strategy where, rather than relying on a single localized income source, households distribute labor: some members remain in agriculture, while others migrate toward urbanization or seek international migration.

This connectivity facilitates not just the movement of people, but also the flow of resources, including remittances, knowledge, and skills, which flow back to the origin to bolster the household economic foundation. This transition serves as a mechanism for resilience; when local livelihoods

Documents by country or territory

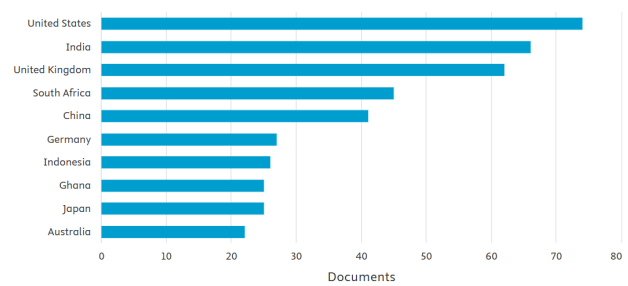
Compare the document counts for up to 15 countries/territories.



(a) Period 1998–2025

Documents by country or territory

Compare the document counts for up to 15 countries/territories.



(b) Period 2020–2025

Figure 4: Documents by country (Source: Scopus.com, accessed 29 December 2025).

are threatened by climate change or flooding, translocality functions as a vital adaptation strategy (Figure 1). Leveraging social networks and multi-sited income streams reduces community vulnerability during natural disasters or economic crises. Resilience, in this context, is defined not as "static endurance" but as "flexibility for survival." Notably, the COVID-19 node is positioned centrally between "Livelihood" and "Resilience," as the pandemic disrupted the essential conduits of translocality (via lockdowns and urban job losses). This has compelled researchers to re-evaluate whether the resilience of the poor can be sustained when mobility is halted, giving rise to livelihood resilience as an emerging research frontier at the bottom of the diagram.

4.2. Content Analysis

The nexus between translocal livelihoods and urban resilience, both globally and within the Vietnamese context, constitutes an interdisciplinary and transdisciplinary domain that reflects the multifaceted nature of the research field and the diversity of participating journals (Table 2). Among the 10 selected publications, five focus on translocality, six investigate livelihood resilience, and three examine the intersection of both translocality and urban resilience. This distribution underscores a robust correlation between urban resilience and translocal livelihood strategies (Table 2).

Based on 10 research papers from the dataset, the core intersection point that all authors address is the reciprocal relationship between cross-local social networks and livelihood resilience. The studies agree that in the context of environmental change and urbanization, livelihoods are no longer confined to a fixed space but are sustained by the movement of resources—including financial, food, information, and emotional—between origin and destination. However, the papers also point to a common reality: inequality in access to these resources. Resilience is not a static value but depends on the social status, assets, gender, and learning capacity of individuals or households. While trust-based networks and self-organization help workers and fishermen overcome precariousness, structural barriers such as poverty or stringent

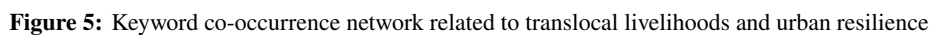
regulations push vulnerable groups into a state of "unsustainable recovery". In short, the general trend of research is to affirm that diversified livelihood strategies (integrating agriculture, non-agriculture, and cross-local connections) are key to improving resilience and mitigating vulnerability to the complex changes of the era.

4.3. Discussion

Based on the systematic review and thematic analysis (comprising five clusters and detailed content analysis), it is evident that the relationship between translocal livelihoods and urban resilience is a multidimensional interaction. In this nexus, spatial connectivity networks function as a "buffer," enabling individuals and communities to navigate and overcome shocks. This synthesis reveals several critical dimensions for further academic inquiry and discourse.

First, translocal networks are informal resilience resources. Translocal livelihoods are not merely physical movement but a complex network connecting places of origin and destination. Translocal connections (with hometowns or other locations) provide crucial financial, material, and emotional support. In urban contexts, these serve as adaptive mechanisms that help migrants access spaces that formal policies often overlook, such as affordable housing or pavement-based employment. Migration is the primary driver of translocal livelihoods. This aligns with the observation of the vital role of trans-spatial relationships in adaptation and mutual support (Gisevius et al., 2024). Translocal livelihoods are often driven by food security needs and coping with shocks like the COVID-19 pandemic. Translocal agrifood sharing both ensures nutrition and serves as a mutual insurance tool (Drake et al., 2022). Women and rural households play a central role in managing resources remotely to enhance resilience. On the other hand, women also bear the burden of social reproduction in their hometowns (Andersson Djurfeldt, 2021).

Second, there is stratification in the resilience capacity of various urban population groups. Groups with better social standing (income, wide networks) often achieve "sustainable gains," while vulnerable groups (the poor, new migrants) easily



Criteria	Cluster 1 (62 keywords)	Cluster 2 (keywords)	Cluster 3 (keywords)	Cluster 4 (32 keywords)	Cluster 5 (keywords)
Main Themes	Migration and Social Identity: Focusing on human mobility and cultural dimensions.	Adaptation and Disaster Risk Management: Focusing on flooding and urban resilience.	Livelihoods and Policy: Focusing on non-farm activities and pandemic impacts.	Resource Management and Planning: Focusing on land use and nature conservation.	Social Structure and Adaptive Capacity: Focusing on vulnerable groups and the informal economy.
Research Subjects	Migrants, laborers, ethnic minorities, and refugees.	Urban communities, governance systems, and local authorities.	Smallholder farmers, women, and rural households.	Ecosystems, forests, agricultural land, and biodiversity.	Urban poor, low-income households, and gender.
Representative Keywords	Globalization, migration, cultural identity, and translocality.	Climate change, floods, disaster risk reduction, and resilience.	Food security, agriculture, COVID-19, and livelihoods.	Land use, GIS, conservation, remote sensing, and biodiversity.	Poverty, informal sector, social capital, adaptive capacity, and drought.
Focused Areas	Germany, the United Kingdom, the United States, the Philippines, Bangladesh, and Cambodia.	India, Ghana, and Sri Lanka.	Africa, particularly Ethiopia, Kenya, Nigeria, and Tanzania; South Africa; Mexico; and Nepal.	Indonesia, Thailand, and Vietnam.	Uganda and Zimbabwe.
Methods & Tools	Ethnography, questionnaire surveys, and theoretical research.	Case studies, machine learning, and spatio-temporal analysis.	Household surveys and policy analysis.	GIS, remote sensing, and demographic statistics.	Qualitative and quantitative analysis, psychology, and social media analysis.

fall into a state of "precarious resilience" due to the difficulty of establishing high-quality translocal connections. Translocal linkages are not simply "capital for the poor"; they may also reflect and reproduce inequality because marginalized groups often lack the financial capital and education required to maintain connections (Bott et al., 2020). Households with higher learning and self-organizing capacities are able to leverage these better (Aboye, 2025; Wintergalen et al., 2022).

Next, translocal livelihoods not only promote urban resilience but also help maintain cultural identity and resilience within the heart of the city. Translocal livelihoods involve not just the movement of people but also the circulation of resources. The sharing of agricultural products or financial support between the place of origin and the destination ensures not only nutrition but is also a form of "mutual insurance," helping to sustain cultural identity and resilience within the city.

Table 2: Representative journal articles on the translocal livelihoods and urban resilience nexus

No.	Title of the publication	Authors and year	Method	Key finding
1	Translocal social resilience dimensions of migration as adaptation to environmental change	(Sakdapolrak, Sterly, et al., 2024)	Mixed-methods research	Resilience is profoundly contingent upon the social positionality of individuals and households, encompassing gender, income, health, and social networks. Groups with more advantageous social standing typically achieve “sustainable gains,” whereas vulnerable groups frequently encounter “precarious resilience” or “translocal insecurity.”
2	Local and translocal social capital in flood adaptation: Evidence from Indonesian coastal communities	(Gisevius et al., 2024)	Household survey (n = 620) and Social Network Analysis (1,169 ties)	Translocal connections provide multifaceted support, including emotional, psychological, financial, and material assistance. The efficacy of such support is predicated on intimacy and trust within robust interpersonal relationships. Consequently, households derive significant benefits from maintaining diversified support networks.
3	Translocal social capital as a resource for community-based responses	(Bott et al., 2020)	Mixed-methods approach involving 950 households in Java, Indonesia	Households with a higher frequency of translocal connections are more inclined to implement proactive adaptation measures. Economic stratification significantly influences network accessibility; impoverished households encounter substantial barriers in establishing translocal linkages, thereby undermining their overall resilience capacity.
4	The place of translocal networks in inclusive city development: A systematic review	(Poku-Boansi et al., 2024)	Systematic review (n = 45 studies)	Translocal networks facilitate migrants’ access to housing, employment opportunities, and social integration. Network efficacy is predicated on trust, shared identity, and commitment to places of origin. These networks function as informal adaptive mechanisms, enabling migrants to navigate urban spaces—such as street pavements and affordable housing—from which they are frequently excluded by formal policies. Given the constructive role of these networks, the study advocates removing prohibitive regulations targeting migrants.
5	Locating the traditional economy in Port Vila, Vanuatu: Disaster relief and agrobiodiversity	(Drake et al., 2022)	Ethnographic research	Traditional economic practices persist robustly within urban environments. Translocal food sharing serves not merely as a nutritional source but as a vital mechanism for mutual insurance, kinship care, and the preservation of regional cultural identity in the city. Urban resilience capacity is underpinned by the translocal distribution of resources and the promotion of urban agrobiodiversity.
6	Translocal livelihoods research and the household in the Global South—A gendered perspective	(Andersson Djurfeldt, 2021)	Systematic review	Translocal livelihoods frequently place a disproportionate burden on women through the responsibilities of social reproduction. Although translocality facilitates the renegotiation of gender roles, such transformations are often constrained by entrenched patriarchal norms. Resilience is predicated upon the synergy of material, social, and emotional infrastructures shared among family members across multiple locations.
7	Integrating resilience and vulnerability components in assessing urbanization impacts on farming household livelihood strategies: Insights from Ethiopia	(Aboye, 2025)	Household survey involving 300 households	The study underscores the importance of integrating resilience and vulnerability indices when evaluating the multifaceted impacts of urbanization. Urbanization has heterogeneous effects on households because of variations in asset endowments, self-organization, learning capacity, sensitivity, exposure, and adaptive capacity. Livelihood strategies integrating agricultural and non-farm activities exhibit higher resilience-vulnerability indices than specialized farm or non-farm strategies.
8	Opportunities and challenges for livelihood resilience in urban and rural Mexican small-scale fisheries	(Wintergalen et al., 2022)	Systematic review (n = 112 studies)	Urban fishers possess more diverse non-fishery employment opportunities but often lack incentives for collective action. Rural fishers demonstrate greater self-organizing capacity but are constrained by limited educational opportunities. Population density, isolation, and vocational diversity are closely associated with livelihood resilience. Major threats in urban communities include limited cooperative motivation and ecosystem-based risks, whereas access to education and supplementary employment can strengthen resilience.
9	Southeast Asian trajectories of labour mobility: Precarity, translocality, and resilience	(Tappe & Nguyen, 2019)	Systematic review	Precarity is a systemic characteristic of migrant labour in Southeast Asia, emerging from the interaction between human agency and structural forces within localized contexts. This dynamic produces stress, anxiety, and ambivalence in migrants’ experiences. Everyday strategies include developing new social networks and relationships. Fictive kinship ties and hometown-based cultural networks help workers navigate economic volatility and transform precarity into resilience.
10	Sustainable development strategy of livelihood resilience of migrant workers in China: A survival rationality approach	(Zhao et al., 2025)	Survey	The resilience of migrant workers is highly contingent upon their ability to adapt to urban environments, where housing, social security, and stable employment are pivotal. The study emphasizes the importance of learning capacity and investment in migrant workers’ human capital. Buffer capacity and self-organizing ability are also identified as essential determinants of livelihood outcomes through their interaction with learning capacity.

Source: Derived from 901 documents indexed in the Scopus database and retrieved on 29 December 2025.

The informal sector and social capital are the foundations of resilience for the urban poor. Translocal livelihoods provide cash flows (remittances) and support that help informal settlements withstand droughts or economic crises. The data shows a holistic picture: translocal livelihoods provide “resources” (social and financial capital), while

urban resilience provides the “structural framework” (policy, infrastructure, risk management). The sustainability of modern cities lies not only in flood walls but also in the flexibility of migration networks and the adaptive capacity of vulnerable social groups.

At the same time, translocal livelihoods pose a challenge regarding the gender burden in resilience. The process of urban resilience through translocal livelihoods often weighs heavily on the shoulders of women, who must carry the responsibility of social reproduction and connecting family members in dual locations.

Finally, to promote translocal livelihoods and urban resilience, attention must be paid to the role of planning and technology. To enhance urban resilience in the context of translocal livelihoods, resource and spatial management are key factors (Sakdapolrak, Borderon, & Sterly, 2024; Sakdapolrak, Sterly, et al., 2024). The use of technologies such as GIS and remote sensing helps planners clearly understand land-use changes caused by the impact of migration and urban development. In Southeast Asian countries like Vietnam or Indonesia, biodiversity conservation and green infrastructure planning are inseparable parts of protecting the livelihoods of migrant workers living in environmentally sensitive urban areas.

In recent years, Vietnam has undergone significant transformations in both its urban landscape and economic standing. Within the last five years, urban resilience in Vietnam has entered a new chapter—moving beyond post-pandemic recovery to focus on proactive adaptation to climate change and global economic volatility. Vietnam's resilience strategy is shifting from a "defensive" to a "creative" posture. This transition marks a move from "static" planning (focusing solely on physical space) to "dynamic" planning (data-driven development governance), enabling cities to respond more swiftly to various risk scenarios. Given the impending challenges of rapid urbanization and severe climate change, the nexus between translocal livelihoods and urban resilience will play a pivotal role in Vietnam's sustainable development. To achieve this, urban development in Vietnam should prioritize the following policy implications":

First, it is necessary to implement network-based urban governance. Policy should shift from management based on rigid administrative boundaries to management based on migration flows. There is a need to formalize and support the informal economy; rather than marginalizing it, the informal sector must be recognized as a vital component of urban resilience. Vietnam should establish flexible social security networks for freelance and migrant workers, helping them maintain income streams to provide feedback support for their rural families. To achieve this, it is essential to build mobility databases: utilizing survey methods and theoretical research to clearly understand translocal migration flows, thereby planning infrastructure and public services (healthcare, education) appropriately at destinations.

Second, as Vietnam's urban infrastructure and social systems become bottlenecks, there is an urgent need to enhance resilience through technology. Vietnam must leverage technical tools to mitigate disaster risks. This includes applying GIS and Remote Sensing to monitor land-use

fluctuations and provide early warnings for urban flooding. This is particularly critical for coastal cities and the Mekong Delta, which are heavily impacted by climate change. Green infrastructure strategies and urban conservation should be prioritized to create buffer spaces, reducing the pressure of natural disasters on citizens' livelihoods.

Third, trans-spatial livelihood and food security must be ensured. Policy needs to guarantee unbroken connectivity between rural and urban areas. Initially, sustainable supply chains can be developed, drawing from the experiences of developed nations to promote links between rural agricultural production and urban consumption, ensuring food security during crises like the COVID-19 pandemic. Additionally, training and financial access programs specifically for women are necessary, as they are often the primary livelihood connectors within translocal households.

Finally, localized adaptive capacity must be built for both urban residents and migrants, with a particular focus on the "social capital" of vulnerable groups, ensuring that the development of translocal livelihoods does not impose gender-based pressures or burdens on women. Simultaneously, the formation of hometown associations and self-managed migrant support networks in cities should be encouraged to increase self-recovery capacity against economic shocks or droughts. Furthermore, living conditions in informal settlements must be improved: instead of total clearance (mass evictions), community-based urban upgrading policies should be implemented, focusing on improving sanitation, clean water, and housing safety for the urban poor.

Above all, the core policy implication for Vietnam is the need to "soften" planning to adapt to human mobility and "technologize" governance to respond to environmental risks. This aims to create a sustainable and inclusive urban ecosystem while also accounting for the preservation of cultural identity in urban centers and their surrounding regions.

5. Conclusions

From the above systematic review, it is evident that the topic of translocal livelihoods and urban resilience is becoming a complex research field, combining social sciences and data science. This trend emphasizes the importance of understanding transboundary connection networks (both material and immaterial) to build sustainable cities with high resilience against global challenges such as climate change and pandemics.

Research on translocal livelihoods and urban resilience is no longer confined to a single field but is divided into five specialized yet closely interrelated clusters. In the social and cultural dimension, the focus is on migration, identity, and globalization. In the technical and governance dimension, the focus is on disaster risk management (flooding) and the application of technology (GIS, Remote sensing, Machine learning).

5.1. Policy Implications For Vietnam

In the economic and policy dimension, the focus is on food security, agriculture, and the impact of major shocks such as the COVID-19 pandemic. In the environmental dimension, the focus is on biodiversity conservation and land-use planning. Resilience is the primary connecting thread in this relationship: resilience against natural disasters through flood risk management and adaptation to climate change; socio-economic resilience through sustainable livelihoods amidst the fluctuations of pandemics and droughts; and adaptive capacity bolstered by social capital and policies for vulnerable groups.

The studies are global in nature but have distinct thematic focuses. Developed countries (Germany, the UK, the US) focus heavily on identity and migration. Southeast Asia (Vietnam, Thailand, Indonesia) is the centerpiece of research on resource management and planning. Africa and South Asia are the primary regions for research on climate change, rural livelihoods, and the adaptive capacity of the urban poor. Modern studies have seamlessly combined traditional methods with new technologies—from using in-depth qualitative methods such as ethnography to understand identity, to applying high-tech tools like machine learning, remote sensing, and GIS for spatial analysis and urban risk forecasting.

From the analysis results, the article has also pointed out policy implications for both the research and practical application of translocal livelihood development and urban resilience in Vietnam. These implications will likely require further holistic solutions with long-term visions and strategic plans to be operationalized in the future.

Funding

This research is funded by the Foundation for Science and Technology Development of Dalat University.

Acknowledgement

We would like to express our sincere thanks to Dalat University for support us to complete this study.

Conflict of Interest

The authors declare no conflict of interest.

Author Contributions

- **Vu Thi Thuy Dung:** Conceptualization, lead research design, data collection, data analysis, results presentation, discussion of findings, development of the theoretical framework, and manuscript writing.
- **Nguyen Thi Thuc Duyen:** Development of the theoretical framework, data analysis, and co-writing of the manuscript.

Disclaimer/Publisher's Note

The statements, opinions, and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of the Journal of Resilient Urbanism & Sustainable Design (JRUSD) and/or its editor(s). JRUSD and/or its editor(s) disclaim responsibility for any injury to individuals or damage to property resulting from any ideas, methods, instructions, or products referred to in the published content.

References

- Aboye, B. H. (2025). Integrating resilience and vulnerability components in assessing urbanization impacts on farming household livelihood strategies: Insights from Ethiopia. *Journal of Urban Management*, 14(1), 65–80. <https://doi.org/10.1016/j.jum.2024.09.005>
- Adams, R. H., Jr., & Page, J. (2005). Do international migration and remittances reduce poverty in developing countries. *World Development*, 33(10), 1645–1669. <https://doi.org/10.1016/j.worlddev.2005.05.004>
- Andersson Djurfeldt, A. (2021). Translocal livelihoods research and the household in the Global South: A gendered perspective. *Journal of Rural Studies*, 86, 16–23. <https://doi.org/10.1016/j.jrurstud.2021.05.018>
- Basch, L., Glick Schiller, N., & Szanton Blanc, C. (1994). *Nations unbound: Transnational projects, postcolonial predicaments, and deterritorialized nation-states*. Gordon; Breach.
- Benz, A. (2014). Mobility, multilocality and translocal development: Changing livelihoods in the Karakoram. *Geographica Helvetica*, 69(4), 259–270. <https://doi.org/10.5194/gh-69-259-2014>
- Black, R., Adger, W. N., Arnell, N. W., Dercon, S., Geddes, A., & Thomas, D. (2011). The effect of environmental change on human migration. *Global Environmental Change*, 21, S3–S11. <https://doi.org/10.1016/j.gloenvcha.2011.10.001>
- Bott, L.-M., Pritchard, B., & Braun, B. (2020). Translocal social capital as a resource for community-based responses to coastal flooding: Evidence from urban and rural areas on Java, Indonesia. *Geoforum*, 117, 1–12. <https://doi.org/10.1016/j.geoforum.2020.08.012>
- Brickell, K., & Datta, A. (2011). *Translocal geographies*. Ashgate.
- Chambers, R., & Conway, G. (1992). *Sustainable rural livelihoods: Practical concepts for the 21st century* (IDS Discussion Paper No. 296). Institute of Development Studies.
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). SAGE.

- Cuong, N. V., & Linh, V. H. (2018). The impact of migration and remittances on household welfare: Evidence from Vietnam. *Journal of International Migration and Integration*, 19(4), 945–963. <https://doi.org/10.1007/s12134-018-0575-3>
- Datta, A. (2016). *Translocal geographies: Spaces, places, connections*. Routledge.
- De Haas, H. (2010). Migration and development: A theoretical perspective. *International Migration Review*, 44(1), 227–264. <https://doi.org/10.1111/j.1747-7379.2009.00804.x>
- Deaton, A. (1997). *The analysis of household surveys: A microeconomic approach to development policy*. World Bank.
- Drake, L., Liunakwalau, H. M., & Hango Hango Community Association, Port Vila. (2022). Locating the traditional economy in Port Vila, Vanuatu: Disaster relief and agrobiodiversity. *Asia Pacific Viewpoint*, 63(1), 80–96. <https://doi.org/10.1111/apv.12333>
- Ellis, F. (2000). *Rural livelihoods and diversity in developing countries*. Oxford University Press.
- Gisevius, K., Niesters, L.-M., Larasati, A., & Braun, B. (2024). Local and translocal social capital in flood adaptation: Evidence from Indonesian coastal communities. *Environmental Hazards*, 1–21. <https://doi.org/10.1080/17477891.2024.2424310>
- Greiner, C., & Sakdapolrak, P. (2013). Translocality: Concepts, applications and emerging research perspectives. *Geography Compass*, 7(5), 373–384. <https://doi.org/10.1111/gec3.12048>
- Leitner, H., Sheppard, E., Webber, S., & Colven, E. (2018). Globalizing urban resilience. *Urban Geography*, 39(8), 1276–1284. <https://doi.org/10.1080/02723638.2018.1446870>
- Levitt, P. (1998). Social remittances: Migration-driven local-level forms of cultural diffusion. *International Migration Review*, 32(4), 926–948. <https://doi.org/10.1111/j.1747-7379.1998.tb00620.x>
- Li, Y., & Wu, S. (2010). Social networks and health among rural–urban migrants in China: A channel or a constraint. *Health Promotion International*, 25(3), 371–380. <https://doi.org/10.1093/heapro/daq024>
- Lohnert, B., & Steinbrink, M. (2005). Rural and urban livelihoods: A translocal perspective in a South African context. *South African Geographical Journal*, 87(2), 95–103. <https://doi.org/10.1080/03736245.2005.9713832>
- Longley, P. A., Goodchild, M. F., Maguire, D. J., & Rhind, D. W. (2015). *Geographic information science and systems* (4th ed.). Wiley.
- Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, J. E. (1993). Theories of international migration: A review and appraisal. *Population and Development Review*, 19(3), 431–466. <https://doi.org/10.2307/2137578>
- Özdamar, E., & Önay, E. (2024). An overview of transdisciplinary and bottom-up approach for urban resilience: The case of Turkey. *Environmental Science and Sustainable Development*. <https://press.ierek.com/index.php/ESSD/article/view/1093>
- Poku-Boansi, M., Blija, D. K., Anin-Yeboah, O. Y. A., Asibey, M. O., & Amponsah, O. (2024). The place of translocal networks in inclusive city development: A systematic review. *Urban Governance*, 4(4), 340–350. <https://doi.org/10.1016/j.ugj.2024.11.002>
- Portes, A., Guarnizo, L. E., & Landolt, P. (1999). The study of transnationalism: Pitfalls and promise of an emergent research field. *Ethnic and Racial Studies*, 22(2), 217–237. <https://doi.org/10.1080/014198799329468>
- Rockenbach, T., Sakdapolrak, P., & Sterly, H. (2019). Beyond the local: Exploring the socio-spatial patterns of translocal network capital and its role in household resilience in Northeast Thailand. *Geoforum*, 107, 154–167. <https://doi.org/10.1016/j.geoforum.2019.09.009>
- Romero-Lankao, P., Gnatz, D. M., Wilhelmi, O., & Hayden, M. (2016). Urban sustainability and resilience: From theory to practice. *Sustainability*, 8(12), Article 1224. <https://doi.org/10.3390/su8121224>
- Sakdapolrak, P., Borderon, M., & Sterly, H. (2024). The limits of migration as adaptation: A conceptual approach towards the role of immobility, disconnectedness and simultaneous exposure in translocal livelihoods systems. *Climate and Development*, 16(2), 87–96. <https://doi.org/10.1080/17565529.2023.2180318>
- Sakdapolrak, P., Sterly, H., Borderon, M., Bunchuay-Peth, S., Naruchaikusol, S., Ober, K., Porst, L., & Rockenbach, T. (2024). Translocal social resilience dimensions of migration as adaptation to environmental change. *Proceedings of the National Academy of Sciences*, 121(3), Article e2206185120. <https://doi.org/10.1073/pnas.2206185120>
- Schiller, N. G., Basch, L., & Blanc-Szanton, C. (1992). Transnationalism: A new analytic framework for understanding migration. *Annals of the New York Academy of Sciences*, 645(1), 1–24. <https://doi.org/10.1111/j.1749-6632.1992.tb33484.x>
- Scoones, I. (1998). *Sustainable rural livelihoods: A framework for analysis* (IDS Working Paper No. 72). Institute of Development Studies.

- Scoones, I. (2009). Livelihoods perspectives and rural development. *The Journal of Peasant Studies*, 36(1), 171–196. <https://doi.org/10.1080/03066150902820503>
- Scoones, I. (2013). Livelihoods perspectives and rural development. In *Critical perspectives in rural development studies* (pp. 159–184). Routledge.
- Scoones, I. (2015). *Sustainable rural livelihoods and rural development*. Fernwood Publishing.
- Solesbury, W. (2003). *Sustainable livelihoods: A case study of the evolution of DFID policy* (Working Paper No. 217). Overseas Development Institute.
- Tacoli, C. (2002). *Changing rural–urban interactions in Sub-Saharan Africa and their impact on livelihoods: A summary* (Working Paper No. 4). International Institute for Environment and Development.
- Tambe, S. (2022). Sustainable livelihoods approach. In *Teaching and learning rural livelihoods: A guide for educators, students, and practitioners* (pp. 45–56). Springer.
- Tappe, O., & Nguyen, M. T. N. (2019). Southeast Asian trajectories of labour mobility: Precarity, translocality, and resilience. *TRaNS: Trans-Regional and -National Studies of Southeast Asia*, 7(1), 1–18. <https://doi.org/10.1017/trn.2019.4>
- Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge University Press.
- Wintergalen, E. W., Oyanedel, R., Villaseñor-Derbez, J. C., Fulton, S., & Molina, R. (2022). Opportunities and challenges for livelihood resilience in urban and rural Mexican small-scale fisheries. *Ecology and Society*, 27(3), Article 46. <https://doi.org/10.5751/ES-13471-270346>
- World Bank. (2023). *Personal remittances, received (% of GDP) – Viet Nam*. World Bank Data. <https://data.worldbank.org/indicator/BX.TRF.PWKR.DT.GD.ZS?locations=VN>
- Yin, R. K. (2017). *Case study research and applications: Design and methods* (6th ed.). SAGE.
- Zhao, Y., Yang, W., & Li, J. (2025). Sustainable development strategy of livelihood resilience of migrant workers in China: A survival rationality approach. *SAGE Open*, 15(3). <https://doi.org/10.1177/21582440251367134>
- Zoomers, A., & Van Westen, G. (2011). Introduction: Translocal development, development corridors and development chains. *International Development Planning Review*, 33(4), 377–388. <https://doi.org/10.3828/idpr.2011.19>
- Zoomers, A., Van Westen, G., & Terlouw, K. (2011). Looking forward: Translocal development in practice. *International Development Planning Review*, 33(4), 491–499. <https://doi.org/10.3828/idpr.2011.25>