

THE ROLE OF PARTICIPATORY COMMUNICATION IN COMMUNITY-BASED FOOD SECURITY PROGRAMS: A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

This study aims to evaluate the strategic role of participatory communication in strengthening community-based food security programs through a systematic literature review. Adopting the PRISMA 2020 protocol, a search was conducted in the Scopus database for the period 2015-2026 using keyword strings related to participatory communication, stakeholders, and food security. Of the 179 documents initially identified, 114 selected journal articles were analyzed in depth using content analysis techniques. This study finds that, unlike prior reviews that examine participatory communication and collaborative governance as separate strands, this synthesis integrates both perspectives and identifies elite dominance and power asymmetry as the dominant communicative barrier across the reviewed studies. The governance paradigm in the grain production sector has shifted from a one-way technocratic model to a collaborative governance model, positioning farmers and indigenous communities as equal partners. Optimal communication mechanisms such as interpersonal dialogue and public deliberation build a sense of community belonging, while social capital and institutional support catalyze this transition. The study's conclusions emphasize that sustainable food sovereignty can only be achieved through the redistribution of power and the integration of local knowledge into formal policies through emancipatory communication spaces. Policymakers are advised to institutionalize binding co-decision mechanisms in local food governance, rather than relying on consultative-only participatory forums that risk legitimizing predetermined decisions. This is an open access article under the CC-BY-SA license.



INTRODUCTION

Food security in the twenty-first century extends beyond calorie sufficiency, increasingly linked to socio-economic resilience, environmental sustainability, and human well-being (Akbar et al., 2025; Sharma, 2024). Efforts toward SDG 2 (Zero Hunger) continue to face challenges from climate change, supply-chain disruption, and market uncertainty (Nie et al., 2025; Tjilen et al., 2026). Contemporary food insecurity is therefore tied not only to availability but also to access, utilization, and long-term system stability at the local level (Akbar et al., 2025; Doustmohammadian et al., 2022), making food policy effectiveness dependent on governments' and stakeholders' capacity to respond to local realities (Tjilen et al., 2024; Ville et al., 2017).

This complexity has encouraged a shift away from top-down, technocratic development toward participatory, community-oriented approaches. Participatory communication has gained prominence for creating dialogue between policymakers and communities in problem identification and decision-making (Purwanto et al., 2025; Subiakto et al., 2026), reframing communication as a social process through which trust, understanding, and local knowledge are negotiated (Aminah et al., 2025; Cardey et al., 2024) — strengthening ownership of development programs through sustained, horizontal dialogue (Ismail & Tenuche, 2025; Tesfaye & Tyali, 2025).

Despite the increasing emphasis on participation, empirical evidence reveals a persistent gap between policy discourse and implementation: many food security programs experience limited sustainability after external funding ends, often because local stakeholders were insufficiently involved from the outset (Gatumi et al., 2022; Lisanza et al., 2023), and decision-making frequently remains dominated by political elites and technical experts rather than smallholder farmers and marginalized groups (Nigussie, 2024; Tesfaye & Tyali, 2025) — so participatory forums often legitimize predetermined decisions rather than enable genuine deliberation.

Although participatory approaches in food security have attracted growing scholarly attention, the literature remains fragmented. Existing studies establish that participatory communication improves ownership and programme sustainability, and that participation matters for policy legitimacy (what is known). However, reviews tend to prioritize technical, agricultural, or nutritional concerns, with limited attention to the communication processes shaping stakeholder interaction; participation is often treated as an administrative mechanism rather than a dynamic process shaped by dialogue and power relations. Participatory communication and collaborative governance are also typically discussed separately, leaving limited understanding of how both interact in community-based food security settings (what remains unknown). Without understanding this interaction, policy recommendations risk reproducing symbolic participation, in which deliberative forums legitimize decisions already made rather than redistributing decision-making power (why it matters). This review addresses that gap by systematically mapping communication practices, stakeholder configurations, and power dynamics across 114 Scopus-indexed studies (2015-2026) using the PRISMA 2020 protocol, integrating participatory communication theory with collaborative governance in community-based food security (contribution).

Responding to these limitations, this study conducts a Systematic Literature Review (SLR) to examine the role of participatory communication in strengthening community-based food security. Using Scopus-indexed literature and guided by the PRISMA framework, the study synthesizes evidence concerning communication practices, stakeholder configurations, enabling and inhibiting factors, and the influence of power relations on food governance. By integrating participatory communication perspectives with collaborative governance, this review seeks to provide a more comprehensive understanding of how communication contributes to sustainable food resilience across different socio-cultural contexts.

This study focuses on participatory communication issues in community-level sustainable food security, guided by the three research questions detailed in the Method section and informed by prior findings from Akbar et al. (2025) and Nazuri et al. (2025). It aims to expand academic understanding of community empowerment through a process combining action and reflection within equal dialogue, offering evidence for policymakers to build a communication ecosystem grounded in transparency, accountability, and community ownership toward equitable and resilient food sovereignty.

METHOD

Procedural rigor in this study was operationalized through three main stages designed to ensure the validity and reliability of the findings, consistent with calls for systematic methods to minimize subjective bias (Sharma, 2024).

Identification of Research Objectives and Questions

This study was designed to answer three questions, informed by Akbar et al.'s (2025) framework on communication's role in farmer empowerment: (1) how does participatory communication support sustainable food security at the community level; (2) how does stakeholder involvement contribute to local food-project sustainability after donor withdrawal (Gatumi et al., 2022; Lisanza et al., 2023); and (3) what factors hinder and support communication effectiveness within these platforms?

Review Protocol Development

This review was guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol, which structures reporting into four phases: identification, screening, eligibility evaluation, and inclusion (Page et al., 2021), ensuring complete and replicable reporting.

Literature Search Strategy

This study carried out a comprehensive literature search on June 8, 2026, using Scopus as the primary data source for its broad, authoritative multidisciplinary coverage, following the rationale used by Doustmohammadian et al. (2022). The search was restricted to 2015–2026 and used the keywords "stakeholder participation", "food security", and "community participation", returning 179 documents. Exclusion criteria followed J. Y. Lee et al. (2025) and Zerafati-Shoae et al. (2020), removing non-article and non-English works, leaving 128 eligible articles.

The final feasibility stage involved full-text screening to assess the substantive relevance of manuscripts to stakeholder interactions in community-based food security. Fourteen documents were excluded for limited relevance, inaccessibility, secondary-review status, or book format, resulting in 114 eligible studies. Scopus alone was considered adequate given its broad multidisciplinary coverage and consistent indexing standards, allowing this review to prioritize in-depth synthesis over exhaustive publication mapping.

Content Analysis and Coding Procedure

The research team completed literature screening per PRISMA guidelines and analyzed the eligible sample through manual qualitative content analysis, using a self-developed structured content-analysis matrix that recorded 8 core dimensions per study (research objectives, food security context, participatory communication practices, among others). This framework offset heterogeneity across samples in research settings and methodological approaches, and the analysis proceeded through three iterative rounds: open coding, axial coding, and thematic classification.

Limitation

Although reliance on Scopus may omit publications indexed elsewhere, this choice was deliberate: it maintained consistent source quality, avoided cross-database duplication, and ensured that all analyzed articles had undergone rigorous international indexing. The final collection of 114 articles, spanning a wide range of countries, disciplines, and contexts, provided sufficient empirical diversity for in-depth conceptual synthesis.

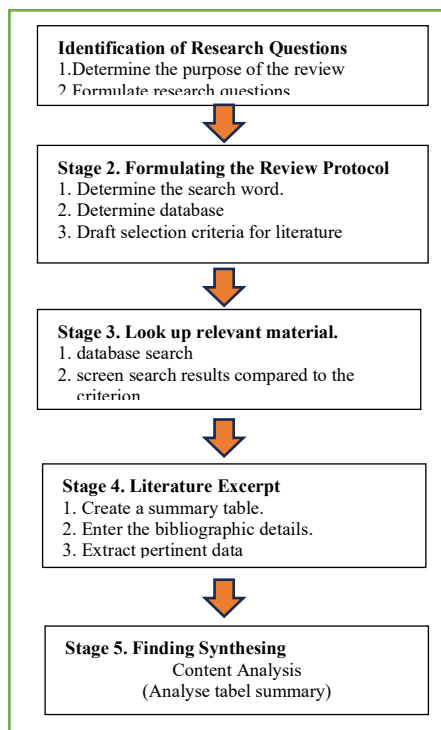


Figure 1. Research stage

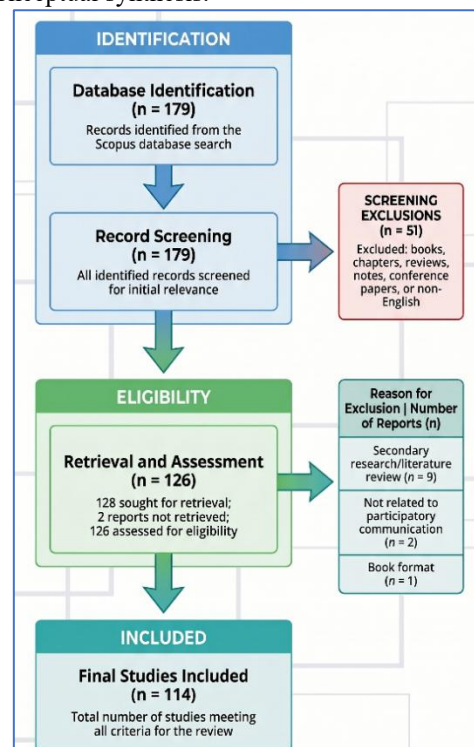


Figure 2. PRISMA Flowchart

RESULTS

This results section maps the scientific landscape regarding the interactions between development actors and communities within the framework of food security. Through a synthesis of 114 selected articles, significant patterns

were identified related to publication quality, temporal dynamics, regional distribution, and the methodological diversity employed by global researchers.

Distribution of Studies

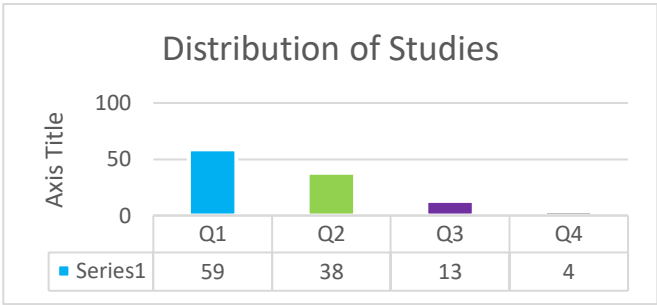


Figure 3. Distribution of studies (Processed by the authors)

This literature review shows that the discourse on participatory communication in food security carries high academic rigor: most studies, per Scopus classification, appear in reputable Q1/Q2 journals such as Sustainable Development, Journal of Cleaner Production, Marine Policy, and Sustainability. This indicates that communication in the food ecosystem is no longer a mere technical support element, but a globally recognized policy determinant, with multidisciplinary journal involvement reflecting convergence among communication science, rural sociology, and natural resource management.

Trends in Publication Years

Temporally, research trends increased sharply between 2020 and 2026, driven largely by the urgency of strengthening local food self-sufficiency after COVID-19 disrupted global supply chains. Recent publications (Handoko et al., 2026; Clack, 2026) demonstrate a shift toward digital technology and community security as part of participatory strategies.

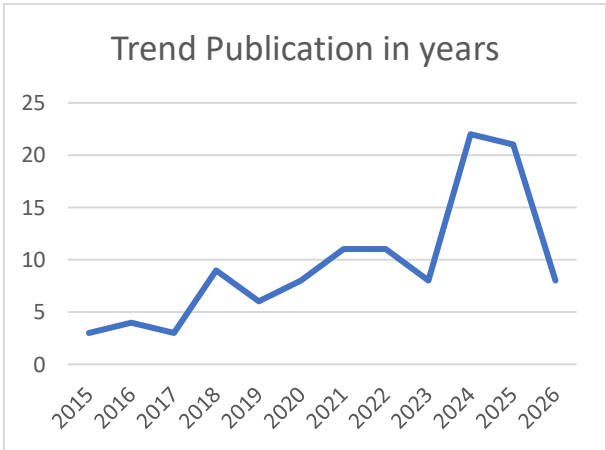


Figure 4. Trend publication in years (Processed by the authors)

Geographic Distribution

The geographic distribution of research reflects a predominance of loci in developing Asian and African countries, alongside strong representation from developed countries. Indonesia and India lead in Asia, focusing on medicinal plant farmers, wetland restoration, and seed sovereignty; African research concentrates in Nigeria, Ethiopia, and Ghana around climate adaptation and artisanal fisheries governance, while U.S. and Canadian studies focus more on urban food security and nutrition policy through citizen science. This spatial dynamic demonstrates that participatory communication is universal yet operationalized uniquely according to local cultural contexts.

Distribution of Methods

Based on the analysis, qualitative paradigms dominate the literature, utilizing case studies, in-depth interviews, and focus group discussions (FGDs). This approach was chosen because it captures the nuances of power relations and dialogic processes that are difficult to quantify. Furthermore, there is a trend toward the use of mixed methods, combining household surveys with spatial modeling or system dynamics. Some emerging innovative methods include:

- Citizen science (Our Voice Method) for digitally documenting residents' experiences.
- Participatory mapping and GIS for identifying urban agricultural locations.
- Group model building (GMB) for mapping the causality of water and food risks.
- Participatory action research (PAR) involving high school students as agents of change.

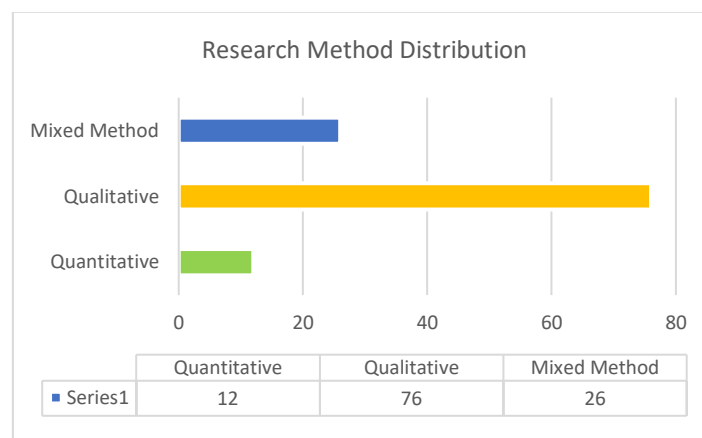


Figure 5. Research method distribution (Processed by the authors)

This dominance of participatory methods confirms that contemporary food security research is increasingly moving away from an information-extractive model and toward an emancipatory process of knowledge co-production. Thus, this methodological diversity provides a strong evidence base for designing more inclusive and sustainable food policies.

Respondent Categories

The table below shows that the current literature primarily focuses on grassroots actors (28.07% of articles analyzed), reflecting global efforts to shift research focus from technocratic models toward empowering local communities as active subjects in food sovereignty. Government authorities and civil society organizations also account for a significant portion, indicating that food security is understood as a multi-stakeholder governance issue requiring inclusive communicative synergy.

Table 1. Respondent category

No	Respondent Category	Number Articles	Percentage
1	Farmers, Fishermen, Indigenous Communities, and Vulnerable Groups (Grassroots)	32	28,07%
2	Government Authorities (Central & Regional) and Policy Making Institutions	28	24,56%
3	Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs)	20	17,54%
4	Academics, Researchers, and Educational Institutions (Research Sector)	18	15,79%
5	Private Sector, Food Industry, & Supply Chain Actors (Corporations)	16	14,04%
Total		114	100%

(Processed by the authors)

Food Security

The content mapping results of 114 selected articles revealed the diversity of operational domains of participatory communication across various scales of the food system. Based on the analysis, thematic categories were grouped to capture the dynamics of stakeholder interactions from the household level to national policy. This concentration in climate-related and public-policy themes (Table 2) suggests that food security scholarship increasingly frames communication as a governance instrument embedded in natural-resource management, rather than a purely agronomic or nutritional concern.

Table 2. Food security articles thematic mapping

No	Food Security Context Category	Number of Articles
1	Climate Resilience & Natural Resource Governance (Watershed, Forestry, & Land)	38
2	Public Policy & Food Assistance Programs (Schools, Elderly, and Poor Groups)	25
3	Agricultural Development & Food Security for Rural Communities	18
4	Urban Food Accessibility & Urban Agricultural Innovation	15
5	Coastal Food Security, Artisanal Fisheries & Aquaculture	10
6	Food Sovereignty of Indigenous Communities and Preservation of Local Knowledge	8
Total		114

(Processed by the authors)

Participatory Forms of Communication

The results of content analysis of 114 selected articles provide a comprehensive picture of the communication typology used in strengthening food security. The role of communication is no longer just a supporting instrument, but is at the core of the democratization process of the local food system. Based on the data, participatory forms of communication are operationalized through various mechanisms that position the community as active subjects. The following is the distribution of categories based on forms of participatory communication found in the literature:

Table 3. Participatory communication form articles thematic mapping

No	Participatory Communication Form Categories	Number of Articles
1	Interpersonal Dialogue, Group Deliberation & Public Deliberation	35
2	Collaborative Governance, Co-design & Co-production of Knowledge	28
3	Digital Technology-Based Communication, Citizen Science & Information Systems	22
4	Educational Communication, Behavior Change and Technical Training	17
5	Social Advocacy, Community Media and Local Culture-Based Communication	12
Total		114

(Processed by the authors)

Stakeholders Involved

The results of a content analysis of 114 selected articles indicate that the effectiveness of food security programs is largely determined by the composition and roles of the actors involved. The analysis reveals a shift from single-actor involvement to multi-stakeholder governance that positions communities not as objects but as equal partners. Based on the analysis, stakeholder categories were grouped into five main clusters. The following table shows the distribution of stakeholder categories involved in the literature:

Table 4. Category of stakeholders involved from articles thematic mapping

No	Categories of Stakeholders Involved	Number of Articles
1	Farmers, Fishermen, Indigenous Communities, and Vulnerable Groups (Grassroots)	32
2	Government Authorities (Central & Regional) and Policy Making Institutions	28
3	Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs)	20
4	Academics, Researchers, and Educational Institutions (Research Sector)	18
5	Private Sector, Food Industry, & Supply Chain Actors (Corporations)	16
Total		114

(Processed by the authors)

Forms of stakeholder involvement

Based on content analysis carried out on 114 documents captured in this systematic literature review, it was found that stakeholder involvement in food security programs manifests across a wide spectrum of operations. This form of engagement is not simply passive participation, but rather a continuum that moves from providing technical input to autonomous decision making at the community level. Through data on, categories of forms of involvement are classified in order to understand the depth of interaction between actors. The following is a table of category distribution based on the form of stakeholder involvement:

Table 5. Stakeholder Engagement Form Categories from articles thematic mapping

No	Stakeholder Engagement Form Categories	Number of Articles
1	Field Implementation, Asset Management and Direct Food Production	30
2	Collective Decision Making, Policy Design & Co-design	28
3	Capacity Building, Technical Training and Knowledge Transfer	22
4	Advocacy, Public Deliberation & Citizen Science Data Collection	20
5	Community-Based Program Monitoring, Evaluation and Supervision	14
Total		114

(Processed by the authors)

Supporting Communication Factors

An analysis of the 114 included literature sources revealed that the success of participatory communication in food security programs does not occur spontaneously. Rather, it is triggered by various enabling factors. The literature findings indicate that the effectiveness of dialogue in the food ecosystem is highly dependent on sociocultural catalysts, structural support, and the integration of technological instruments. Based on the data, these supporting factors are categorized into five main domains (Table 6). The near-even distribution across these domains indicates that no single factor is sufficient on its own; sustainable participatory communication instead depends on the simultaneous alignment of social, institutional, and technological conditions.

Table 6. Communication Supporting Factors Categories of articles thematic mapping

No	Communication Supporting Factors Categories	Number of Articles
1	Social Capital, Mutual Trust and Local Wisdom	28
2	Institutional Support, Legality & Responsive Leadership	24
3	Accessibility of Digital Technology, Software and Information Systems	22
4	Local Language Adaptation, Cultural Narrative & Simple Communication Media	20
5	Collaborative Network Synergy and Transdisciplinary Knowledge Integration	20
Total		114

(Processed by the authors)

Communication Barriers

A review of 114 selected literature reveals that the effectiveness of participatory communication in food security programs often suffers from persistent structural and sociocultural barriers. Program failure is often not caused by poor technical design, but rather by distortions in the dialogue process and power asymmetries between actors. Based on the data, these barriers are classified into five main categories to map communication bottlenecks in the food system (Table 7). The prominence of elite domination as the leading barrier suggests that technical or infrastructural fixes alone are unlikely to succeed unless accompanied by a deliberate redistribution of decision-making power.

Table 7. Categories of Communication Inhibiting Factors of article thematic mapping

No	Categories of Communication Inhibiting Factors	Number of Articles
1	Elite Domination, Power Inequality and Exclusion of Marginalized Groups	28
2	Infrastructure Constraints, Digital Divide and Geographical Barriers	24
3	Structural Barriers, Rigid Bureaucracy & Policy Fragmentation	22

4	Low Literacy, Human Resource Capacity & Participant Burnout	20
5	Financial Dependence, Market Uncertainty and Ecological Pressures	20
Total		114

(Processed by the authors)

Analysis of Findings

The synthesis of the 114 literature sources included in this systematic review provides a comprehensive overview of the achievements and challenges of implementing participatory communication in the global food ecosystem. The literature findings extend beyond technical production successes to address the transformative dimensions of community empowerment and policy restructuring. Based on the analysis, the main findings are grouped into five crucial themes. The following is a description of the analysis of the main findings:

Social Transformation: Increasing "Sense of Ownership" and Program Sustainability

The dominant findings in the literature indicate that participatory communication is a key determinant in building community ownership of local food initiatives (e.g., Handoko et al., 2026; van Vliet et al., 2022; Alajajian et al., 2022; Rahayu et al., 2025). Bottom-up initiatives have been shown to be more resilient to external funding withdrawals because communities have internalized the program's objectives as part of their own livelihoods.

Integrating Local Knowledge into Collaborative Governance

The effectiveness of food policies increases significantly when traditional knowledge is integrated into technocratic models through equal dialogue (e.g., Aminah et al., 2025; Purwanto et al., 2025; Tjilen et al., 2024; Cardey et al., 2024). This collaboration creates policies that are more adaptive and relevant to local agroclimatic and sociocultural conditions.

Digital Acceleration: Information Precision and Evaluation Transparency

The use of digital technology has emerged as a new finding that is revolutionizing the way stakeholder interactions are conducted (e.g., Nie et al., 2025; Afaneh et al., 2022; Sharma, 2024; Zhang et al., 2023). Geographic information systems and mobile applications facilitate the collection of real-time data crucial for food early warning systems.

Social Justice and Accessibility for Marginalized Groups

Participatory communication has been found to be effective in reducing barriers to food access for vulnerable groups through structured advocacy (e.g., Afaneh et al., 2022; Gordon et al., 2024; Alhaffar et al., 2022; J. J. Lee et al., 2025). Inclusion of women's and indigenous peoples' voices has been shown to substantially strengthen family nutritional resilience.

Capacity Building and Collective Behavior Change

Finally, literature findings underscore the importance of dialogic education in transforming traditional agricultural practices toward more sustainable systems (e.g., Ayele et al., 2025; Cudjoe et al., 2025; Doustmohammadian et al., 2022; Ville et al., 2017). Increasing technical literacy through participatory platforms accelerates the adoption of climate-smart innovations at the smallholder farmer level. Overall, these 114 citations confirm that participatory communication is not merely an operational support, but a key pillar in realizing inclusive and sustainable food sovereignty.

DISCUSSION

Dynamics of Participatory Communication in Supporting Sustainable Food Security

Analysis of global literature reveals that the dynamics of participatory communication in food security programs operate through a dialectical continuum connecting the grassroots with macro policy structures. This finding confirms that communication is not merely the transmission of technical messages, but rather an instrument of social change that determines the sustainability of food systems.

Dialogical Dynamics and the Construction of Community Ownership

The main dynamics that emerge are the dominance of Interpersonal Dialogue and Public Deliberation as the primary drivers of a sense of ownership (e.g., Akbar et al., 2025; Handoko et al., 2026; J. J. Lee et al., 2025; Rahayu et al., 2025). Horizontal deliberation allows for the dissolution of psychological barriers between stakeholders, which in turn ensures the sustainability of programs after donor intervention. Through this mechanism, food security is no longer viewed as a quantitative government target, but rather as a collective community asset.

Knowledge Co-production and Policy Relevance

The second dynamic relates to Collaborative Governance and Knowledge Co-production (e.g., Aminah et al., 2025; Purwanto et al., 2025; Tjilen et al., 2024; Cardey et al., 2024). The policy co-design process ensures that contextual

local knowledge is integrated into technocratic models, resulting in more precise adaptation strategies to ecological shocks. These findings demonstrate that the effectiveness of food interventions depends heavily on the extent to which local subjects are recognized as “experts” within their own ecosystems.

Digital Transformation and Information Transparency

Technological disruption has created new dynamics in the form of Digital-Based Communication and Citizen Science (e.g., Nie et al., 2025; Afaneh et al., 2022; Sharma, 2024; Zhang et al., 2023). The use of mobile platforms and geographic information systems has revolutionized the transparency of program evaluation as well as the precision of food insecurity data. Accessibility to real-time data enables communities to self-monitor the distribution of food resources.

The reviewed literature shows a growing shift toward digital-based communication as an instrument for strengthening food security governance, though its forms and impact vary across contexts. In technologically adaptive settings, mobile platforms, geographic information systems, and citizen science tools increase transparency and accelerate decision-making, enabling communities to monitor food distribution, climate risks, and agricultural resources more independently.

However, rural and institutionally constrained contexts reveal a different pattern: digital platforms often operate within limited infrastructural capacity, reducing their effect to basic information dissemination. Technological intervention becomes meaningful only when accompanied by digital literacy and institutional responsiveness; evidence that the effectiveness of digital communication depends less on technology itself than on the surrounding socio-institutional environment.

Emancipatory Education and Social Justice

Finally, communication dynamics are manifested in inclusive Behavior Change Education and Social Advocacy (e.g., Cuéllar-Gálvez et al., 2018; Njura & Kubai, 2026; Adetola et al., 2024; Ismail & Tenuche, 2025). A focus on improving technical literacy and voicing the rights of marginalized groups is key to sustainable food sovereignty. Through the integration of all these communication channels, food security is transformed from merely the availability of commodities to a struggle for access and social justice for all communities.

Taken together, these findings suggest that participatory communication cannot be reduced to a technical instrument for information dissemination; rather, it functions as a social process through which communities negotiate meaning, establish trust, and shape collective priorities. This finding supports Habermas's (1984) theory of communicative action, in which legitimate consensus emerges through undistorted dialogue among participants treated as equals, rather than through unilateral information transfer. Communication in the reviewed studies operates dialogically, with local knowledge exchanged, contested, and reformulated through repeated interaction. This extends Akbar et al.'s (2025) farmer-empowerment framework — which emphasized communication mainly as a driver of individual capacity — toward a more collective account of dialogically negotiated meaning.

The prominence of interpersonal dialogue and deliberative forums indicates that communicative effectiveness emerges less from message delivery than from the quality of interaction itself, aligning with dialogic perspectives in development communication where consensus is built through reciprocal exchange rather than unilateral persuasion. Food security programs become more sustainable when communication allows room for disagreement and contextual adaptation, particularly amid ecological uncertainty — dialogue-rooted practices strengthen collective ownership and institutional legitimacy more effectively than top-down models.

The Influence of Stakeholder Engagement on Food Project Sustainability

A synthesis of the 114 pieces of literature included in this review confirms that stakeholder engagement is not merely an administrative complement. It is also an existential determinant of the sustainability of food programs. Sustainability, in this context, is understood as the community's ability to maintain the functioning of the food system independently after the withdrawal of external assistance.

Grassroots Agency: The Foundation of a "Sense of Ownership"

The most crucial dynamics are found within the grassroots actor group (farmers, fishers, and indigenous communities) (e.g., Handoko et al., 2026; van Vliet et al., 2022; Bekele et al., 2023; Ghosh et al., 2021). Their involvement in field implementation and asset management directly creates a deep sense of ownership, which is a prerequisite for community resilience. The main findings from this cluster indicate that when communities are involved as managing subjects, rather than simply recipients, food projects demonstrate higher levels of success in addressing ecological and economic pressures.

Across the reviewed studies, grassroots participation consistently emerges as a decisive factor for the long-term sustainability of food initiatives, though its form differs by setting. Active involvement in planning, implementation, and

resource management builds collective ownership; communities positioned as co-managers rather than beneficiaries show stronger resilience to environmental or economic disruption.

Nevertheless, participation is uneven: in several institutional settings it remains procedural and concentrated at implementation, while strategic decisions stay controlled by external actors; symbolic participation that often fails to generate lasting local commitment. Sustainability therefore depends less on participation as a formal requirement than on communities' meaningful influence over programme direction and resource governance.

Institutional Synergy: Policy Legitimacy and Sustainability

Sustainability is also significantly influenced by Government Authorities and Policymakers through involvement in policy design and budget facilitation (e.g., Pourghaderi et al., 2022; Adebayo, 2025; Purwanto et al., 2025; Sekar et al., 2024). Without institutional support, local initiatives tend to be sporadic and legally fragile. This synergy ensures that food programs have a regulatory umbrella that allows for the integration of cross-sectoral resources.

NGOs and Advocacy: Bridging Social Inclusivity

The role of NGOs and Civil Society Organizations (CSOs) has emerged as a catalyst for social sustainability by facilitating the participation of marginalized groups (women and youth) through advocacy and public deliberation (e.g., Adetola et al., 2024; Ismail & Tenuche, 2025; Alhaffar et al., 2022; Santos & Santos, 2025). NGOs serve as guardians of participatory ethics, ensuring that the dialogic process remains inclusive and is not dominated by local elites.

Academics and Innovation: Technical Capacity Building

The technical sustainability of projects is driven by the involvement of academics and research institutions in capacity building and the transfer of climate-smart knowledge (e.g., Ayele et al., 2025; Cudjoe et al., 2025; Doustmohammadian et al., 2022; Zhang et al., 2023). Through “knowledge co-production,” the resulting innovations become more adaptive because they align with the empirical needs of farmers.

Private Sector: Supply Chain Efficiency and Economic Sustainability

Finally, private sector integration in the form of market partnerships and logistics efficiency ensures the economic sustainability of projects (e.g., Nie et al., 2025; Cazorla et al., 2025; Gupta et al., 2025; Ouattara et al., 2026). The involvement of market actors reduces the risk of post-harvest losses and ensures income stability for producer communities.

Collectively, these citations demonstrate that sustainable food security results not from a single actor but from the orchestration of participatory communication across all stakeholder levels. Theoretically, sustainability appears closely linked to the distribution of communicative power: stakeholder engagement becomes meaningful when participation exceeds symbolic consultation and evolves into substantive decision-making involvement. This reflects an empowerment-oriented perspective in which communities gradually gain capacity to influence priorities and negotiate institutional support — empowerment as an expansion of agency, not merely technical skill. This extends single-actor models of food governance (e.g., Akbar et al., 2025) toward a multi-actor, power-distribution account, addressing a gap noted by Doustmohammadian et al. (2022) regarding underspecified stakeholder power dynamics.

At the same time, community resilience rarely emerges from isolated grassroots initiatives; successful food governance depends on the interaction between local agency and institutional structures. This finding directly supports Ansell and Gash's (2008) collaborative governance framework, which holds that consensus-oriented, multi-stakeholder deliberation among state institutions, civil society, academia, and communities produces more legitimate and durable outcomes than purely hierarchical or adversarial governance — a pattern especially visible in food-vulnerable contexts where fragmented institutional responses undermine sustainability. Participatory communication thus serves as the connective infrastructure through which collaborative governance becomes operational.

Dialectics of Enabling and Inhibiting Factors in the Effectiveness of Participatory Communication

Discussions on communication effectiveness in food programs reveal a tension between community agency and systemic limitations: success depends heavily on whether enabling factors can neutralize the communication distortions that arise in the field.

Social Capital vs. Elite Dominance: The Battle for Inclusivity

The main enabling factors that consistently emerge in the literature are the utilization of social capital, mutual trust, and local wisdom (e.g., Handoko et al., 2026; Domingo et al., 2024; Bekele et al., 2023; Ximenes, 2025). They argue that when communication uses traditional channels and fosters mutual trust, people are more open to participation.

The literature broadly indicates that social capital, interpersonal trust, and local cultural norms are important enabling conditions for participatory communication. Where communication is embedded within local customs and collective practices, community members appear more willing to participate in deliberative and resource-sharing

processes, with informal spaces and culturally embedded leadership strengthening trust where institutional legitimacy remains limited.

Yet this pattern is not universal: social cohesion alone does not guarantee inclusive participation. Contrary to Putnam's (1993) social capital theory, which assumes that dense networks of trust and reciprocity translate relatively directly into effective collective action, the reviewed evidence shows that in settings with unequal power relations, elite actors frequently dominate decision-making and shape communication according to political or economic interests, so participatory forums may function symbolically while excluding vulnerable groups. Effective participatory communication therefore requires institutional safeguards against communicative domination, not social trust alone. The divergence between contexts of strong social capital and those of persistent elite capture likely reflects differences in the maturity of local accountability mechanisms: where such mechanisms are weak, social capital risks being captured by existing power holders rather than redistributed to marginalized groups.

However, the effectiveness of this social capital is often hampered by elite dominance and power inequality (e.g., Nigussie, 2024; Tesfaye & Tyali, 2025; Aminah et al., 2025; Cardey et al., 2024). In this context, the voices of smallholder farmers and vulnerable groups are often reduced to mere administrative approval due to the dominance of actors with stronger political capital.

Institutional Support vs. Bureaucratic Barriers

Communication effectiveness is also determined by institutional support and responsive leadership (e.g., Adebayo, 2025; Alhaffar et al., 2022; Kenney et al., 2021; Tjilen et al., 2024). The existence of a legal umbrella and budget commitments provide legitimacy to the dialogue process.

On the other hand, Structural Barriers and Rigid Bureaucracy often create information “bottle-necks” (e.g., Abed et al., 2025; Addaney et al., 2021; Ismail & Tenuche, 2025; Lisanza et al., 2023). Sectoral egos and policy fragmentation demonstrate that without bureaucratic reform, participatory communication will only stop at the discourse level without coherent implementation.

Digital Acceleration vs. Infrastructure Gap

The contemporary era places digital technology accessibility as a crucial enabler for data precision and transparency (e.g., Afaneh et al., 2022; Nie et al., 2025; Sharma, 2024; Zhang et al., 2023).

However, this digital optimism is overshadowed by Infrastructure Constraints and the Digital Divide, especially in rural areas (e.g., Akbar et al., 2025; Ayele et al., 2025; Doustmohammadian et al., 2022; Ville et al., 2017). Without equitable physical infrastructure, digital platforms risk widening the information gap between actors.

Cultural Adaptation vs. External Dependence

Finally, communication effectiveness is supported by simple language and media adaptations that can bridge literacy gaps (e.g., van Vliet et al., 2022; Aminah et al., 2025; Rahayu et al., 2025; Zerafati-Shoae et al., 2020). The use of local cultural narratives has proven more effective in changing community behavior than rigid technical instructions. However, all these efforts often falter due to Financial Dependence and Ecological Pressures, which act as barriers to sustainability (e.g., Ateweberhan et al., 2018; Ison et al., 2018; Rivera et al., 2021; Tshimanga et al., 2021).

Overall, these 114 citations confirm that the effectiveness of participatory communication is a dynamic process. Program success depends heavily on the ability of development communicators to strengthen social capital and institutional support while consciously deconstructing elite dominance and bureaucratic barriers that hinder meaningful community engagement.

The coexistence of enabling and inhibiting factors illustrates that participatory communication is inherently shaped by unequal social and institutional conditions. Participation is mediated by access to information, institutional openness, cultural legitimacy, and actors' relative bargaining position; persistent elite domination and bureaucratic rigidity show that participation can remain procedural rather than transformative when communicative spaces are controlled by more powerful actors.

This reinforces the importance of viewing participatory communication as an emancipatory process rather than a managerial technique, extending Freire's (1970) pedagogy of the oppressed and its concept of conscientization from the classroom to food governance settings: communication is effective not because information circulates efficiently, but because marginalized actors can influence decisions affecting their livelihoods. Food programme sustainability is therefore contingent on governance systems' capacity to institutionalize inclusive dialogue while reducing the structural inequalities that restrict meaningful participation.

CONCLUSION

This review contributes theoretically by demonstrating that participatory communication and collaborative governance operate as interlocking, not parallel, mechanisms in sustaining community-based food security, extending single-actor, farmer-empowerment frameworks (e.g., Akbar et al., 2025) toward an integrated, multi-stakeholder account of communicative power. Methodologically, the study demonstrates that an eight-dimension structured content-analysis matrix, applied across 114 PRISMA-screened Scopus articles, offers a replicable template for synthesizing fragmented, cross-disciplinary participatory-development literature.

From a policy perspective, the findings imply that food security programmes should institutionalize binding co-decision mechanisms, rather than consultative-only forums, to prevent elite capture and power asymmetry from undermining participatory intent; policymakers should also prioritize the redistribution of power that enables grassroots communities to shift from recipients of aid to self-managing subjects, integrating social capital and local wisdom as adaptive policy navigation.

For practitioners, the managerial implication is that programme managers and NGO facilitators should design deliberation processes that explicitly redistribute agenda-setting authority to grassroots actors, rather than treating their presence in meetings as sufficient evidence of participation. Although prepared with the rigor of the PRISMA 2020 protocol, this study suffers from its exclusive reliance on Scopus database metadata, which could potentially miss discourses in regional languages or gray literature that has not been indexed globally; there is also a risk of publication bias that tends to favor reporting successful initiatives over procedural failures on the ground.

Future research should pursue longitudinal studies on the resilience of community agency after the withdrawal of external donor interventions, and should examine how digital technologies can mitigate information asymmetry in isolated rural areas without deepening the exclusion of the most marginalized groups in the global food system.

REFERENCE

- Abed, N., Kakolaki, M. B., Ramesh, M. V., Sankarannair, S., Murugan, R., Soundharajan, B. S., & Pushpalatha, R. (2025). Assessing farm-level agricultural sustainability in India: A comparative study using a mixed-method approach. *Agricultural Systems*, 224, 104223. <https://doi.org/10.1016/j.agsy.2024.104223>
- Addaney, M., Asibey, M. O., Cobbinah, P. B., & Akudugu, J. A. (2021). Climate change in rural Ghana: perceptions and adaptive responses. *Local Environment*, 26(12), 1461–1479. <https://doi.org/10.1080/13549839.2021.1978411>
- Adebayo, W. G. (2025). Resilience in the face of ecological challenges: Strategies for integrating environmental considerations into social policy planning in Africa. *Sustainable Development*, 33(1), 203–220. <https://doi.org/10.1002/sd.3113>
- Adetola, A. S., Akintayo, J. B., & Olomojobi, O. (2024). Participatory Communication as Framework for Sustainable Development in National Agricultural Research Institutes (NARIs) in Nigeria. *International Journal of Sub-Saharan African Research (IJSSAR)*, 2(2), 147–159. https://www.ijssar.com/uploads/26378_1719782384.pdf
- Afaneh, H., Fernes, P. K., Lewis, E. C., King, A. C., Banchoff, A., & Sheats, J. L. (2022). Our Voice NOLA: Leveraging a Community Engaged Citizen Science Method to Contextualize the New Orleans Food Environment. *International Journal of Environmental Research and Public Health*, 19(22), 14790. <https://doi.org/10.3390/ijerph192214790>
- Akbar, M. F., Allifiansyah, S., & Pienrasmi, H. (2025). Utilization of participatory communication for sustainable food security in East Lampung district. *Proceedings International Indonesia Conference on Interdisciplinary Studies*, 1. <https://iicis.fisip.unila.ac.id/index.php/web/article/view/38>
- Alajajian, S., Guzman Abril, A., Proaño, G. V., Yakes Jimenez, E., & Rohloff, P. (2022). Mixed-Methods Implementation Study of a Home Garden Intervention in Rural Guatemala Using the RE-AIM Framework. *Journal of the Academy of Nutrition and Dietetics*, 122(7), 1363–1374. <https://doi.org/10.1016/j.jand.2022.03.005>
- Alhaffar, M., Mkhallati, H., Alhiraki, O. A., Marzouk, M., Khanshour, A., Douedari, Y., & Howard, N. (2022). “They cannot afford to feed their children and the advice is to stay home. How?”: A qualitative study of community experiences of COVID-19 response efforts across Syria. *PLoS ONE*, 17(11), e0277215. <https://doi.org/10.1371/journal.pone.0277215>
- Aminah, S., Marhendira, R. A., & Haerul, . (2025). Stakeholder Collaboration in an Effort to Increase Farmer Empowerment in Indonesia. *KnE Social Sciences*, 10(18), 488–516. <https://doi.org/10.18502/kss.v10i18.19479>
- Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18(4), 543–571. <https://doi.org/10.1093/jopart/mum032>

- Ateweberhan, M., Hudson, J., Rougier, A., Jiddawi, N. S., Msuya, F. E., Stead, S. M., & Harris, A. (2018). Community based aquaculture in the western indian ocean: Challenges and opportunities for developing sustainable coastal livelihoods. *Ecology and Society*, 23(4), 17. <https://doi.org/10.5751/ES-10411-230417>
- Ayele, K., Demisew, M., & Gemedie, H. F. (2025). A systematic review of the impact of food and nutrition programs on child nutrition and household food security in Ethiopia. *BMC Nutrition*, 11(1), 214. <https://doi.org/10.1186/s40795-025-01194-z>
- Bekele, Y., Kebede, B., & Kuma, T. (2023). Assessing the role of community participation in integrated watershed management in Dandi Lake watershed Dandi district, West Showa, Oromia, Ethiopia. *Applied Water Science*, 13(11), 207. <https://doi.org/10.1007/s13201-023-02009-x>
- Cardey, S., Eleazar, P. J. M., Ainomugisha, J., Kalowekamo, M., & Vlasenko, Y. (2024). Communication for Development: Conceptualising Changes in Communication and Inclusive Rural Transformation in the Context of Environmental Change. *Social Sciences*, 13(6), 324. <https://doi.org/10.3390/socsci13060324>
- Cazorla, A., Cáceres, A., & Lavalle, C. (2025). Toward a Metauniversity for Sustainable Development: Responsible Agriculture Investment and Food Systems. *Sustainability (Switzerland)*, 17(21), 9698. <https://doi.org/10.3390/su17219698>
- Clack, W. (2026). Community Policing and Evidence-Based Strategies for Livestock Theft Reduction in South Africa. *Social Sciences*, 15(2), 108. <https://doi.org/10.3390/socsci15020108>
- Cudjoe, B. A., Agbalenyo, F., Jonas, K., & Boateng, A. (2025). Climate Change Communication in Ghana: A Systematic Review of a Decade of Research (2013-2023). *American Journal of Humanities and Social Sciences Research*, 9(11), 104–120. <https://www.ajhssr.com/wp-content/uploads/2025/11/L25911104120.pdf>
- Cuéllar-Gálvez, D., Aranda-Camacho, Y., & Mosquera-Vásquez, T. (2018). A model to promote sustainable social change based on the scaling up of a high-impact technical innovation. *Sustainability (Switzerland)*, 10(12), 4532. <https://doi.org/10.3390/su10124532>
- Domingo, A., Yessis, J., Zupko, B., McEachern, L. W., Valaitis, R., Skinner, K., & Hanning, R. M. (2024). Scale up of the learning circles: a participatory action approach to support local food systems in four diverse First Nations school communities within Canada. *BMC Public Health*, 24(1), 2222. <https://doi.org/10.1186/s12889-024-19391-z>
- Doustmohammadian, A., Mohammadi-Nasrabadi, F., Keshavarz-Mohammadi, N., Hajjar, M., Alibeyk, S., & Hajigholam-Saryazdi, M. (2022). Community-based participatory interventions to improve food security: A systematic review. *Frontiers in Nutrition*, 9, 1028394. <https://doi.org/10.3389/fnut.2022.1028394>
- Freire, P. (1970). *Pedagogy of the oppressed*. Continuum.
- Gatumi, N. J., Ngugi, L., & Kinoti, F. (2022). Effects of Stakeholders Involvement on Sustainability of Food Security Projects in Arid Lands, Kenya. *International Journal of Managerial Studies and Research*, 10(6), 19–29. <https://doi.org/10.20431/2349-0349.1006003>
- Ghosh, S., Sen, L. C., Mali, S. K., Islam, M. M., & Bakchi, J. (2021). The role of rural women in household food security and nutrition management in Bangladesh. *Asian Journal of Women's Studies*, 27(3), 441–459. <https://doi.org/10.1080/12259276.2021.1970351>
- Gordon, B., Reader, J., Larsen, B. G., & Cooper, K. (2024). Utilization of Participatory Research Theory and a National Framework to Advance a State Food Security Research Agenda: A Mixed-Methods Study. *International Journal of Environmental Research and Public Health*, 21(12), 1677. <https://doi.org/10.3390/ijerph21121677>
- Gupta, K., Seddighi, M. J., Davies, E. L., Thondre, P. S., & Samangoee, M. (2025). Drivers and Barriers for Edible Streets: A Case Study in Oxford, UK. *Sustainability (Switzerland)*, 17(14), 6538. <https://doi.org/10.3390/su17146538>
- Habermas, J. (1984). *The theory of communicative action, Volume 1: Reason and the rationalization of society*. Beacon Press.
- Handoko, W., Sulaiman, A. I., Prastyanti, S., Sari, L. K., Wijayanti, I. K. E., Windiasih, R., & Rofik, A. (2026). Empowerment of former female migrant workers in rural food security. *Multidisciplinary Science Journal*, 8(9), e2026576. <https://doi.org/10.31893/multiscience.2026576>
- Ismail, F. O., & Tenuche, S. S. (2025). Strategic Communication: Resolving the GMO Paradox in African Food Security and Sustainability. *COVENANT JOURNAL OF COMMUNICATION*, 12(1), 1–6. <https://journals.covenantuniversity.edu.ng/index.php/cjoc/article/view/5156>

- Ison, S., Hills, J., Morris, C., & Stead, S. M. (2018). Sustainable financing of a national Marine Protected Area network in Fiji. *Ocean and Coastal Management*, 163, 352–363. <https://doi.org/10.1016/j.ocecoaman.2018.07.011>
- Kenney, E. L., Dunn, C. G., Mozaffarian, R. S., Dai, J., Wilson, K., West, J., Shen, Y., Fleischhacker, S., & Bleich, S. N. (2021). Feeding children and maintaining food service operations during COVID-19: A mixed methods investigation of implementation and financial challenges. *Nutrients*, 13(8), 2691. <https://doi.org/10.3390/nu13082691>
- Lee, J. J., Nishita, C., & Braun, K. L. (2025). Assessing a Community Partnership Addressing Food Security Among Older Adults During COVID-19. *International Journal of Environmental Research and Public Health*, 22(2), 163. <https://doi.org/10.3390/ijerph22020163>
- Lee, J. Y., Clark, J. K., Schmiesing, R., Kaiser, M. L., Reece, J., & Park, S. (2025). Perspectives of community members on community-based participatory research: A systematic literature review. *Journal of Urban Affairs*, 47(8), 2916–2935. <https://doi.org/10.1080/07352166.2024.2305132>
- Lisanza, N. M., Norvy, P., & Patrick, M. F. (2023). Project Sustainability of the World Food Programme projects in Dadaab Refugee Camp. Kenya. *International Journal of Social and Development Concerns*, 17(9), 118–137. <https://doi.org/10.5281/zenodo.8327752>
- Nazuri, N. S., Rosnon, M. R., Suhaimi, S. S. A., & Salim, S. S. M. (2025). Community participation in urban agriculture (UA): Does stakeholder collaboration enhance empowerment? *Journal of the Malaysian Institute of Planners VOLUME*, 23(1), 446–460.
- Nie, Y., Hicks, B., Nassehi, A., & Valero, M. R. (2025). Aligning sustainable development goals and stakeholders' needs in food supply chains: a comprehensive review and mapping. *International Journal of Production Research*, 1–43. <https://doi.org/10.1080/00207543.2025.2600550>
- Nigussie, H. (2024). Analysing the Effectiveness of Public Meetings For Rural Food Security Communication. *The Journal of Rural and Community Development*, 19(3), 31–51.
- Njura, H. J., & Kubai, I. (2026). Enhancing household food security through the secondary school agriculture student: the stakeholders' perceptions in Kenya. *Cogent Education*, 13(1), 2636234. <https://doi.org/10.1080/2331186X.2026.2636234>
- Ouattara, B., Akita, C., Kikimoto, B., Emikpe, B. O., Asare, D. A., Takyi, P. N., Shaban, S., & Kong, J. D. (2026). Profiling of bushmeat value chain actors in the northern sector of Ghana for targeted interventions to reduce zoonotic disease and public health risks. *Frontiers in Veterinary Science*, 13, 1691095. <https://doi.org/10.3389/fvets.2026.1691095>
- Page, M. J., Moher, D., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... McKenzie, J. E. (2021). PRISMA 2020 explanation and elaboration: Updated guidance and exemplars for reporting systematic reviews. *The BMJ*, 372, 1–36. <https://doi.org/10.1136/bmj.n160>
- Pourghaderi, M., Omidvar, N., Takian, A., Ville, A. Saint, Kangarani, H. M., & Eini-Zinab, H. (2022). Who really counts in Iran's National Food Assistance Program? Lessons from multi-stakeholder processes in the wicked policy area of food security. *Cadernos de Saude Publica*, 38(1), e00341820. <https://doi.org/10.1590/0102-311X00341820>
- Purwanto, E., Shahreza, M., & Rahmah, A. (2025). Development communication for collaborative governance: Empowering women farmers in food independent villages. *International Journal of Innovative Research and Scientific Studies*, 8(7), 1–11. <https://doi.org/10.53894/ijirss.v8i7.10396>
- Putnam, R. D. (1993). The prosperous community: Social capital and public life. *The American Prospect*, 4(13), 35–42.
- Rahayu, T., Yusriadi, Y., Kusumawati, E., Eddi, E., & Pribadi, T. (2025). The role of coastal fisheries infrastructure in enhancing food security: a case study of Mayangan Port. *African Journal of Food, Agriculture, Nutrition and Development*, 25(6), 26879–26899. <https://doi.org/10.18697/ajfand.143.25725>
- Rivera, A., San Martin-Chicas, J., & Myton, J. (2021). Transitioning to co-management in Caribbean reef fisheries: Tela Bay case study. *Sustainability Science*, 16(4), 1233–1250. <https://doi.org/10.1007/s11625-021-00922-1>
- Santos, K. E. S., & Santos, A. R. (2025). Strengthening Agribusiness Sustainability through Civil Service Organizations: Key Factors, Challenges, and a Localized Action Plan. *Research on World Agricultural Economy*, 6(3), 52–65. <https://doi.org/10.36956/rwae.v6i3.1824>

- Sekar, A., Valliammai, A., Nagarajan, M., Sivakumar, S. D., Baskar, M., & Sujitha, E. (2024). Conjunctive use in water resource management: current trends and future directions. *Water Supply*, 24(11), 3881–3904. <https://doi.org/10.2166/ws.2024.215>
- Sharma, V. (2024). Empowering local food security: A systematic review of community grain banks. *Journal of Agriculture, Food Systems, and Community Development*, 14(1), 1–23. <https://doi.org/10.5304/jafscd.2024.141.006>
- Subiakto, V. U., Haryati, S., Virby, S., & Soeryowati, P. L. (2026). Communication Patterns and Social Resilience: Local Food Farmer Strategies in Responding to the Climate Crisis. *International Journal of Innovative Inventions in Social Science and Humanities*, 03(01), 53–64. <https://doi.org/10.58806/ijiissh.2026.v3i1n06>
- Tesfaye, A. M., & Tyali, S. M. (2025). Unpacking power dynamics in participatory communication among agricultural sector stakeholders. *Information Development*, 02666669251314853. <https://doi.org/10.1177/02666669251314853>
- Tjilen, A. P., Tambaip, B., Dharmawan, B., Adrianus, Riyanto, P., & Ohoiwutun, Y. (2024). Engaging stakeholders in policy decision-making for food security governance: Identification, perception, and contribution. *Corporate Governance and Organizational Behavior Review*, 8(1), 144–154. <https://doi.org/10.22495/cgobrv8i1p12>
- Tjilen, A. P., Tambaip, B., Dharmawan, B., Sembiring, J., & Riyanto, P. (2026). Transformation of Public Policy Evaluation: Multi-Stakeholder Approach in Food Security in South Papua. *Journal of Nutrition and Food Security*, 11(1), 66–80. <https://doi.org/10.18502/jnfs.v11i1.20914>
- Tshimanga, R. M., Lutonadio, G. S. K., Kabujenda, N. K., Sondi, C. M., Mihaha, E. T. N., Ngandu, J. F. K., Nkaba, L. N., Sankania, G. M., Beya, J. T., Kombayi, A. M., Bonso, L. M., Likenge, A. L., Nsambi, N. M., Sumbu, P. Z., Bin Yuma, Y., Bisa, M. K., & Lututala, B. M. (2021). An integrated information system of climate-watermigrations-conflicts nexus in the congo basin. *Sustainability (Switzerland)*, 13(16), 9323. <https://doi.org/10.3390/su13169323>
- Ville, A. S. S., Hickey, G. M., & Phillip, L. E. (2017). How do stakeholder interactions influence national food security policy in the Caribbean? The case of Saint Lucia. *Food Policy*, 68, 53–64. <https://doi.org/10.1016/j.foodpol.2017.01.002>
- Ximenes, S. M. (2025). Empowering Communities through School Feeding: Local Participation and Sustainable Nutrition in Timor-Leste. *ASEAN Journal of Community Service and Education*, 4(2), 147–160. <https://ejournal.bumipublikasinusantara.id/index.php/ajcse>
- Zerafati-Shoae, N., Jamshidi, E., Salehi, L., & Taei, F. A. (2020). How to increase community participation capacity in food environment policymaking: Results of a scoping review. *Medical Journal of the Islamic Republic of Iran*, 34(1), 1–11. <https://doi.org/10.34171/mjiri.34.18>
- Zhang, X. X., Li, X. C., Zhang, Q. Y., Liu, J. S., Han, L. F., Lederman, Z., Schurer, J. M., Poeta, P., Rahman, M. T., Li, S. Z., Kassegne, K., Yin, K., Zhu, Y. Z., Xia, S., He, L., Hu, Q. Q., Xiu, L. S., Xue, J. B., Zhao, H. Q., ... Zhou, X. N. (2023). Tackling global health security by building an academic community for One Health action. *Infectious Diseases of Poverty*, 12(1), 70. <https://doi.org/10.1186/s40249-023-01124->