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Governance in Addressing Agricultural Challenges and Enhancing
Resilience in the Philippines**



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Navigating Constraint: A Review on the Role of Participatory Governance in Addressing Agricultural Challenges and Enhancing Resilience in the Philippines



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Abstract

Purpose: This report seeks to provide a comprehensive examination of participatory governance's specific role, observed impacts, and the persistent barriers to its effective implementation within the unique Philippine agricultural context.

Methodology: This systematic literature review used a content analysis with a thematic synthesis. It examined a wide range of papers from government records, industry analyses, peer-reviewed articles, and research reviews that were pertinent to the particulars of participatory governance in the Philippine agricultural context.

Findings: Participatory governance serves as a critical but underutilized pathway to resilience in Philippine agriculture. Case studies of farmer field schools, irrigation management, seed governance, and organic certification demonstrate how inclusive, farmer-led approaches foster adaptive capacity, sustainability, and equity. However, persistent barriers including institutional rigidity, entrenched power imbalances, weak policy implementation, socio-political disempowerment, and organizational weaknesses at the grassroots level continue to limit its transformative potential despite supportive laws and frameworks.

Unique Contribution to Theory, Practice, and Policy: This report contributes to theory by framing participatory governance as a pathway not only to recovery but also to adaptive and transformative resilience, enriched by indigenous Filipino concepts of collective governance. In practice, it highlights concrete mechanisms and challenges that inform farmer organizations, NGOs, and development actors seeking to operationalize participatory approaches. For policy, it underscores the need to move beyond declarative frameworks toward genuine implementation that strengthens institutional capacity, addresses structural inequities, and embeds accountability, positioning participatory governance as both a political and technical imperative for agricultural transformation.

Keywords: *Participatory Governance, Agricultural Challenges, Resilience, Philippines*

JEL Codes: *Q18, D70, O13, P48*

1. INTRODUCTION

The agricultural sector in the Philippines serves as a critical pillar of the nation's economy, contributing 9.5% to its Gross Domestic Product (GDP) and comprises 29% of the country's labor force, amounting to approximately 11 million agriculture-based jobs, particularly in rural areas (Chiam et al., 2020). Its strategic importance extends beyond economic metrics, underpinning national food security and sustaining the livelihoods of millions of smallholder farmers and fisherfolk across the archipelago.

Despite its foundational role, Philippine agriculture is a landscape of persistent constraints. The sector is acutely vulnerable to environmental shocks, notably the increasing frequency and intensity of super typhoons, droughts, and floods, which lead to significant crop losses and economic devastation. Beyond climate-related vulnerabilities, farmers contend with systemic economic hurdles such as complicated market access, exploitation by intermediaries, and a chronic lack of essential post-harvest facilities and affordable credit. Social challenges, including pervasive rural poverty and the normalization of disaster impacts, further compound these issues (Mayo & Villarta, 2023). Moreover, policy-related issues, such as the enduring complexities of land reform, fragmented agricultural data, and weak implementation of pro-farmer legislation, create an intricate web of interconnected problems that hinder sustainable development (Lubang, 2019).

In response to these multifaceted challenges, participatory governance emerges as a crucial approach. It is posited as a mechanism capable of empowering local communities, integrating diverse knowledge systems, and fostering adaptive capacity. The framing of participatory governance as a "pathway to resilience" implies a proactive and adaptive response to the inherent uncertainties and vulnerabilities in agriculture, moving beyond mere problem-solving to systemic strengthening (Prajapati et al., 2025). Resilience, in this context, is not simply about recovering from shocks; it is about the capacity to adapt and transform in the face of ongoing pressure. Participatory governance, by fostering the "co-creation of context-specific innovations" and emphasizing "flexibility and adaptability" in agricultural practices, inherently support this dynamic process. It enables the building of internal capacity within communities to navigate future shocks, rather than merely addressing past problems (Vidyawati & Jadoun, 2025).

2. LITERATURE REVIEW

2.1. Government, Governance, and Participatory Governance

The terms government, governance, and participatory governance are often used interchangeably, but they represent different approaches to how societies organize power and make decisions. Understanding these distinctions helps clarify how power operates in modern societies and the different ways citizens can engage with political processes.

Government represents the formal institutional structure of authority within a state, operating through official bodies that possess legal and political power. It combines legal, financial, political, formal and institutional processes that operate at a national level with its subdivisions to maintain public order and facilitate collective action. The foundation of government is control and centralization, which have asymmetrical interactions with other policy network elements (Gohari et al., 2020). Thus, it is understood that government is a series of institutions for public policy making, where the traditional model positions that the state is the core entity in policy processes. Government represents the authoritative expression of the state that typically dictates and controls other state bodies (Srikandini et al., 2018).

Governance, on the other hand, represents a fundamental shift from traditional government structures toward more inclusive and collaborative approaches to public decision-making. While government refers to formal institutional structures and authoritative decision-making in the modern state, governance refers to emerging forms of governing that emphasize cooperation of governmental and non-governmental organizations, political states and civil society, and public and private institutions (Makzhoumi & Al-Sabbagh, 2018). Unlike government's reliance on formal authority and formal legal powers, governance refers to activities based on shared goals that may or may not derive from responsibilities and does not necessarily depend on governmental power or authority. This broader concept challenges the traditional policy processes where the state stands as the core entity, instead emphasizing inter-organizational networks that complement markets and hierarchies as governing structures (Jegalus, 2023; Srikandini et al., 2018).

Participatory governance constitutes a distinct form of governance that advances citizen involvement beyond periodic voting by embedding direct participation in decision-making processes (Hao et al., 2022). It is characterized by the inclusion of ordinary citizens and marginalized groups through deliberative engagement, collaboration, and consensus-building with public officials (Deng, 2019). In this model, government assumes a facilitating rather than controlling role, fostering two-way communication and joint problem-solving. Its effectiveness is contingent upon capacity-building and accountability, achieved through enabling spaces, intergroup dialogue, and strategies that redistribute power to local communities (Makzhoumi & Al-Sabbagh, 2018). Table 1 provides a comparative overview of government, governance, and participatory governance in terms of their defining characteristics.

Table 1. Comparison of Government, Governance, and Participatory Governance Characteristics

<i>Category</i>	<i>Government</i>	<i>Governance</i>	<i>Participatory Governance</i>
<i>Nature</i>	Centralized Authority	Decentralized Cooperation	Citizen-driven Collaboration
<i>Power Source</i>	Formal Institutions	Networks of Organizations	Community Participation
<i>Decision-making</i>	Top-down	Multi-stakeholder	Deliberative, co-created
<i>Citizens' Role</i>	Passive recipients	Indirect influence	Active engagement in decision making
<i>Actors</i>	State officials, agencies	State + private + civil society	State + farmers + NGOs + Cooperatives
<i>Processes</i>	Control, regulation	Coordination, facilitation	Dialogue, capacity building, consensus
<i>Outcome Orientation</i>	Compliance	Efficiency, accountability	Empowerment, resilience, inclusivity
<i>Accountability</i>	Legal, hierarchical	Shared, negotiated	Shared, community-monitored
<i>Communication</i>	One-way	Multi-directional	Two-way, trust building

Governance has fundamentally changed as a result of globalization, with policies "re-scaling" across various levels. This process moves in three directions: upwards, as globalization creates more complex and globally integrated systems governed by transnational corporations and international financial actors; downwards, as urbanization and decentralization give cities and sub-national actors more prominence; and outwards, with greater roles for corporate and civil society actors through market-oriented and multi-stakeholder governance. (Baker et al., 2021). Complex global challenges and concerns about democratic inadequacies have offered opportunities for non-state actors to participate more in policy and governance, making participation a vital factor of global governance legitimacy (Canfield et al., 2021).

2.2. Theoretical Foundations of Participatory Governance in Agricultural Development

Participatory governance in agriculture signifies a fundamental departure from traditional, centralized management paradigms. It is defined as a system where a broad spectrum of stakeholders –including farmers, policymakers, researchers, and consumers–actively engage in shaping agricultural policies and practices (Dung et al., 2022). This approach emphasizes collaborative decision-making that integrates local knowledge and addresses specific regional challenges, ultimately aiming to ensure environmental sustainability, economic viability, and social equity. The very definition of participatory agricultural governance highlights a profound

shift from traditional power structures, implying a deliberate move towards decentralization and shared authority in decision-making processes.

Historically, governance models were often centralized and expert-driven, treating citizens as mere beneficiaries of government services. By moving beyond this “top-down management” and emphasizing “collaborative decision-making process that reflect local knowledge”, participatory governance inherently distributes power and recognizes the value of diverse perspectives, especially from those directly affected, such as farmers. This re-calibration of authority and expertise is crucial for addressing complex, context-specific agricultural challenges, as local actors possess unique insights into their environments and livelihoods that central authorities may lack (Kaufman et al., 2020).

2.2.1. Core Principles of Participatory Governance in the Philippine Context

Participatory governance approaches in the Philippine context are deeply rooted in indigenous concepts and practices that place a strong emphasis on teamwork and shared accountability. The concept of "Pagpadalagan" serves as a foundational framework for understanding participatory governance in the Philippines, where local governance requires reciprocity and collaboration between and among actors to move forward effectively as a community. This approach recognizes that participation is essential because actors' actions are interconnected and interdependent, making sustained governance possible only through active participation of all stakeholders (Secillano & Custodio, 2014).

At its core, participatory governance in the Philippines aims to create a "common ground" that actors continuously develop and refine through ongoing dialogue, ensuring that governance approaches are shaped by the needs and lived experiences of all participants (Secillano & Custodio, 2014). The fundamental principle underlying this approach is the dedication to ensuring that diverse public opinions and voices—whether minority or majority groups—are represented in decision-making processes, thereby fostering inclusivity, transparency, and accountability. By giving all actors ownership over the community's needs, goals, and resources, this inclusive framework fosters an atmosphere in which stakeholders can freely express themselves, conduct negotiations, and take part in decisions that directly impact them.

2.3. Primary Agricultural Challenges currently faced by the Philippines

The Philippine agricultural sector operates within a complex and often precarious environment, shaped by a confluence of environmental, economic, social, and policy-related challenges (Table 2). These constraints collectively undermine productivity, perpetuate poverty, and impede the sector's capacity for sustainable growth and resilience.

2.3.1. Environmental Challenges

The Philippines is widely recognized as one of the world's most vulnerable countries to natural disasters. The country experiences an average of 20 typhoons annually, with the agriculture sector bearing the brunt of the devastation, leading to record economic losses and affecting hundreds of thousands of hectares of farmland. Beyond typhoons, farmers face the increased frequency of droughts, floods, and unpredictable shifts in rainfall patterns, making planning difficult and disrupting agricultural cycles. These extreme weather events, exacerbated by broader climate change, contribute to a higher incidence of pests and diseases, stunted crop growth, delayed planting and fruiting, poor quality produce, and overall decreased crop yields (Paz-Alberto et al., 2018).

Furthermore, farming systems themselves have contributed to environmental degradation including significant soil erosions, water pollution, groundwater depletion, loss of natural habitats, and biodiversity loss. Intensive cultivation practices have also led to nutrient depletion in soils. A critical aspect of the Philippine agricultural context is its dual role: it is both a significant contributor to climate change, responsible for 23 percent of the country's greenhouse gas (GHG) emissions, and simultaneously a major victim, accounting for 60 percent of disaster-related damages. This highlights a critical feedback loop where unsustainable agricultural practices exacerbate the very environmental challenges that devastate the sector (Galang & Briones, 2024).

2.3.2. Economic Challenges

The environmental pressures directly translate into severe economic hardships for farmers. Decreased crop yields and quality, coupled with increased farm operation costs (e.g., for pest control, adaptation measures), directly lead to reduced income for farmers (Dilangalen, 2022). Farming in the Philippines is often described as "full of risks, a gamble with no guaranteed returns," a perception that leads farmers to gradually abandon their fields and discourages youth from entering the sector (Lubang, 2019).

Access to markets is yet another major obstacle. The Philippines' archipelagic terrain makes it challenging for farmers to effectively transport and market their produce, which frequently results in a reliance on local markets or small traders who themselves may lack significant capital. Opportunistic middlemen often take advantage of this dependence by purchasing produce at prices below market rates. As a result, poor handling and storage during transportation frequently degrades the quality of agricultural goods that reach markets (Quintana et al., 2021).

A major source of post-harvest losses in the Philippines is the inadequate investment in facilities such as cold storage and drying machines, which compels farmers to sell produce immediately at unfavorable prices (Levi et al., 2020). Limited market access functions not only as an economic inefficiency but also as a social determinant of poverty, debt cycles, and declining generational interest in agriculture. The resulting dependence on intermediaries perpetuates low prices, reduced

incomes, and limited capacity to repay loans, thereby constraining both economic viability and social mobility. This structural disempowerment highlights the interconnectedness of economic and social challenges. Addressing these issues necessitates investment in market infrastructure, stronger collective bargaining mechanisms, and direct farmer-market linkages, which participatory governance can facilitate.

2.3.3. Social Challenges

In the Philippines, poverty is still a major problem for indigenous peoples and small-scale farmers. These vulnerable populations are disproportionately affected by climate-related losses, which impede development progress and increase their economic precariousness, especially in regions that are prone to hazards. By interfering with food production, climate change directly jeopardizes food security, which is a major concern for these communities.

A significant social consequence of chronic vulnerability among Filipino farmers is the “normalization of disasters,” wherein repeated exposure to typhoons and other calamities fosters resignation rather than resistance (de Castro et al., 2019). This outlook is not a result of inadequate foresight but of persistent structural barriers, such as poor rural infrastructure and the dependence on livestock as non-transferable assets. These conditions constrain farmers’ ability to respond effectively to crises, reinforcing a cycle of vulnerability and limited agency. The acceptance of disaster as inevitable reflects deep systemic deficiencies in support mechanisms. Participatory governance seeks to address this resignation by fostering empowerment, collective action, and community resilience.

2.3.4. Policy-related Challenges

The policy landscape in Philippine agriculture has been fraught with complexities. The historical and ongoing failures of land reform, coupled with the expansion of industrial plantations, reveal a persistent power imbalance and a policy landscape that has historically favored large interests over smallholder farmers (Lanzona, 2019). This makes genuine participatory governance a struggle against entrenched structural inequities and resistance from vested interests, requiring active challenge to these power dynamics.

Another significant policy challenge is the lack of access to reliable agricultural data. Fragmented and inaccessible government information complicates planning and operations for farmers, cooperatives, and even large businesses, hindering resilience and investment in the sector (Arcalas & Ordinario, 2019). Despite the existence of laws like the Magna Carta of Small Farmers, there are challenges in their effective implementation, including an ineffective crop insurance system and a general lack of other government aid services and benefits. Furthermore, governments have historically faced accusations of insufficient consultation with affected sectors in policy formation, leading to policies that may not align with the realities on the ground.

Institutional and socio-political barriers continue to impede participatory governance, as policy commitments are often implemented in rigid and mechanistic ways that limit genuine inclusion. Significant power imbalances, restricted access to information, and the weak enforcement of protective laws constrain the participation of marginalized groups. These challenges highlight that the difficulty lies not in the absence of policy but in entrenched resistance to redistributing power and altering bureaucratic culture. As such, participatory governance requires more than new policy pronouncements; it demands comprehensive institutional and behavioral change. This transformation involves sustained advocacy, capacity building, and accountability mechanisms to realign incentives and foster a culture supportive of inclusive participation.

Table 2. Major Agricultural Challenges in the Philippines by Category

<i>Category</i>	<i>Key Challenges</i>
<i>Environmental</i>	Frequent typhoons, droughts, flood, climate-induced pests and diseases
<i>Economic</i>	Market access, post-harvest losses, exploitative middlemen, debt cycles
<i>Social</i>	Rural Poverty, normalization of disasters, disempowerment
<i>Policy</i>	Land reform issues, weak data access, ineffective implementation of laws

3. METHODOLOGY

This paper was created through thematic synthesis approach to make a comprehensive analysis. The main objective of this paper is to comprehensively examine the specific role, observed impacts, and persistent barriers to the effective implementation of participatory governance within the unique Philippine agricultural context. By thoroughly analyzing these dimensions, the report aimed to articulate the critical need for and potential of participatory approaches in fostering a more resilient and equitable agricultural future for the Philippines.

This was conducted through a systematic review, searching all major academic databases, including ScienceDirect, Google Scholar, Scopus, ResearchGate, and PubMed, as well as the pertinent institutional repositories and government publication portals. The search encompassed publications from their inception up to July 2025. The following combinations of keywords and Boolean operators were used for search precision: ("participatory governance" OR "community engagement" OR "farmer empowerment") AND (agriculture OR "agricultural sector") AND Philippines AND (challenges OR constraints OR barriers) AND (resilience OR "adaptive capacity).

Studies were considered if they were peer-reviewed journal articles, dissertations, or government research reports, presented empirical findings (such as quantitative surveys, experimental studies, qualitative research, or case studies) from original data or analysis, and were published in English. Conversely, conference proceedings (unless they were later published as full

peer-reviewed articles), opinion pieces, non-peer-reviewed commentaries, general reviews without empirical findings, duplicate publications (with only the most comprehensive version retained), and non-English publications were not taken into consideration.

4. DISCUSSION

4.1. Case Studies and Initiatives Demonstrating Impact of Participatory Governance in Agriculture

Stakeholder involvement and participatory approach are becoming progressively popular as significant strategies for managing natural resources and promoting sustainable agriculture. It is argued that by stakeholder participation in the management and provision of sources, infrastructure and services, the sustainability and development interventions can be ensured. One of the most significant claims is that participatory processes can foster social learning (Prajapati et al., 2025; Shetunyenga, 2024).

4.1.1. Agricultural Extension and Participatory Learning

Agricultural extension services educate and assist farmers in adopting new technologies that contribute to increased productivity and sustainability (Xu et al., 2023). One of the most efficient ways to deliver extension services is to involve farmers in the demonstrations, field trials, and participative training programs. In Davao Oriental, participatory learning approaches in agricultural extension services have been crucial for technology adoption and sustainable practices. Collaborative efforts between government agencies and local communities, including peer learning networks and cooperatives, have strengthened knowledge sharing and resilience among farmers (Inutan et al., 2025).

Community-based participatory methods have been useful in addressing local issues and promoting technology use. For instance, Farmer Research Committees (FRCs) represent local farmers within the research process to enable that the technologies introduced are tailored to local needs and context. In addition to increasing the acceptance of new technologies, the participatory approach offers more relevant interpretations for farmers that could contribute to the acceleration of their adoption rate. Analysis of training needs has also helped identified the gaps in farmers' knowledge and was used to create specialized training programs. These programs have enabled farms to adopt better practices and increase their productivity.

With both traditional and modern technologies, training centers' direct training programs, collaborations between NGOs and the local demographic, digital tools, precision agriculture technologies, participatory research trends, and farmer and local leader training, Davao Oriental has successfully embraced sustainable agriculture. When taken as a whole, they have improved farmers' capacity to employ new technologies, making them more sustainable and productive in this area of agriculture. (Inutan et al., 2025). It was highlighted in Inutan's paper that institutional partnerships have been crucial in achieving success and change. The cooperation between the

government departments, academic institutions, the non-government organizations (NGOs), and the cooperatives have led to the formation of a multi-stakeholder system for agricultural development.

Farmer Field Schools (FFS), pioneered by the FAO, represent a participatory extension approach that supports both agricultural development and governance-related capacity building (Maulu et al., 2021). In contexts where rural communities face limited access to formal governance processes, FFS serves as a platform for civic engagement and democratic participation. Evidence from the Climate-Smart Farmers' Field School Project in Bicol, Philippines demonstrates its effectiveness, with farmers—predominantly women—reporting gains in climate change knowledge, crop yields, and incomes (Ahmet et al., 2024). The program also recorded a strong return on investment and increased women's participation in decision-making. These outcomes illustrate the potential of participatory extension models to advance both rural livelihoods and inclusive governance.

4.1.2. Community-based Irrigation Management

Through the National Irrigation Administration (NIA), the Philippines is among the first countries to decentralize the design, building, operation and maintenance of public irrigations both large and small. The Irrigators Association (IA), a formal association for water users, oversees national and communal irrigation systems. IAs are crucial organizations for sustainable development and water management. It is well-established that the Philippines' adoption of a participative management style has been successful in terms of cost savings and efficiency-related advantages. Furthermore, NIA and IA operations improved overall because of the inclusion of farmer input in the irrigation development and management process.

In a case study conducted by Allasiw et al. (2023) of a participatory irrigation project in an upland rice farming community in Sagada, Philippines, it was found that the project has facilitated local cooperation, legitimized interventions, and led to successful project implementation. Through the collaboration of the elders of the area and the engineers tasked to rehabilitate the irrigation system, rapport and trust was built. The municipal engineers interviewed for the case study acknowledged that they were able to design the system in a way that was suitable for the local environment thanks to the technical input from the residents, who are more knowledgeable about the history and topography of the area.

Beyond irrigation systems provided by NIA, a community-driven initiative in Santa Marcela, Apayao addressed low rice production due to lack of irrigation water through phronetic leadership that applied knowledge creation models. The project engaged farmers and government stakeholders to construct an environment-friendly dam called Bacut Lake, which irrigated farmlands and doubled to tripled rice production while addressing local poverty. In Gonzales's (2024) paper, it was mentioned that the municipality was able to come up with plans and think through potential tactics for putting their common vision of building a dam to address their water

shortage issue into action through the discussions and meetings in which farmers participated. To make sure their joint efforts were successful, this was combined with collaboration with relevant government agencies.

4.1.3. Commons-Based Seed Governance

Rapid commercialization and intensification of agriculture based on generic high-yield cultivars began in the 1960s, following the green revolution, because of the pressure to meet the nation's expanding requirements. These types are heavily dependent on inputs derived from fossil fuels and were monocultured (Stone & Glover, 2017). As a result, some contemporary high-yield rice varieties that are geographically and culturally disembedded have forcefully supplanted thousands of traditional rice varieties that were tailored to the local environment. A farmer-led Filipino network known as *Magsasaka at Siyentipiko para sa Pag-unlad ng Agrikultura* (MASIPAG), translated to Farmer-Scientist Partnership for Development in English, was established in 1986 with the goal of conserving and enhancing indigenous rice varieties. By encouraging "sustainable use and management of biodiversity through farmers' control of genetic and biological resources, agricultural production, and associated knowledge," the network primarily seeks to protect the livelihoods of resource-poor farmers. (MASIPAG, 2013).

According to the observations of Kliem (2024), building agroecological resilience capacities is facilitated in several ways by the network's commons orientation in breeding and seed production, which includes cooperative resource governance, group accountability for variety development and provision, and polycentric organizational structures. Small-scale farmers become guardians of a constantly evolving collection of varieties when they are given the means to reclaim control over breeding and seed production. The high level of responsiveness and flexibility attained by farmer-led self-organization at the local and national levels strengthens adaptive capacities. By establishing areas for experimentation, farmer-led training and research, and cultivating a culture of shared learning, farmers' abilities to address a variety of challenges are further strengthened.

4.1.4. Participatory Guarantee System

Organic agriculture has been gaining ground in the Philippines now that it is recognized and supported by state policies. The Organic Agriculture Act (Republic Act or RA 10068) contains a state policy "to promote, propagate, develop, and further implement the practice of organic agriculture in the country". Meanwhile, it was amended by RA 11511 which states that "products which are certified and 'guaranteed' by a Third-Party Certification system (TPC) and Participatory Guarantee System (PGS) shall be allowed to be labeled and sold as organic". However, TPC has been criticized for being out of reach for poorer smallholder farmers because of its prohibitively high cost. Furthermore, obtaining a TPC is time-consuming and involves complicated paperwork (Montefrio & Johnson, 2019).

The PGS represents an important application of participatory governance in agriculture, functioning as community-organized, peer-to-peer certification mechanisms for organic products that are locally organized by producer organizations or producer-consumer networks. Self-defined criteria, transparency, trust, and accessibility have made PGS an attractive alternative to external certification in local markets across over 70 countries (Jacobi et al., 2023).

PGS appears to be more inclusive than TPC, according to a case study by Montefrio & Johnson (2019), which assessed two PGS groups in Candaba and Teresa, Pampanga. Smallholder farmers can utilize PGS for a nominal certification cost. PGS has also shown itself to be a ground-up effort thus far. The two PGS groups in study were founded by local organizations and have received assistance from partners that are non-profit. Within PGS, a governing group comprised by elected organic farmers and other local stakeholders makes decisions about standards setting, inspection and monitoring protocols, certificate issuance, and label distribution.

Table 3. Selected Participatory Governance Case Studies and their Impact on Resilience

<i>Case Study</i>	<i>Key Participatory Mechanisms</i>	<i>Primary Agricultural Challenge Addressed</i>	<i>Observed Impact/Outcome on Agricultural Resilience</i>
<i>Agricultural Extension & Participatory Learning (Davao Oriental)</i>	Farmer Committees (FRCs), peer learning networks, cooperatives, participatory training, institutional partnerships (Government, NGOs, academia)	Low technology adoption, gaps in sustainable practices	Increased technology adoption, improved productivity, enhanced sustainability, strengthened multi-stakeholder collaboration
<i>Farmer Field Schools (Bicol)</i>	Participatory field-based training, climate-smart agriculture education, women's participation in governance	Climate change adaptation, low crop yields, limited women's involvement	Higher climate change knowledge, increased yields, boosted income, improved women's participation in decision-making, high return on investment
<i>Community-based Irrigation Management (Sagada)</i>	Irrigators Associations, collaboration between municipal engineers and local elders	Inefficient irrigation design, mismatch between infrastructure and local needs	Improved irrigation suitability, trust-building, successful project implementation
<i>Bacut Lake Dam Project (Santa Marcela, Apayao)</i>	Farmer-government collaboration, participatory planning meetings, phronetic leadership	Water scarcity for rice production, rural poverty	Increased rice yields (2–3x), poverty reduction, sustainable water supply
<i>Commons-based Seed Governance (MASIPAG)</i>	Farmer-led seed breeding and production, cooperative resource governance, polycentric structures	Loss of traditional seed varieties, dependency on commercial seeds	Enhanced agroecological resilience, restored biodiversity, improved farmer autonomy
<i>Participatory Guarantee System (Candaba & Teresa, Pampanga)</i>	Producer–consumer networks, peer-to-peer certification, elected farmer-led governance	High cost and inaccessibility of third-party organic certification	Affordable and accessible organic certification, increased market access, strengthened trust and transparency

4.2. Roles of Key Stakeholders in Participatory Governance

Based on the case studies reviewed in this paper, it is apparent that participatory governance necessitates a clear set of stakeholders and what their roles are in making it successful. Figure 1 shows the key stakeholders in agricultural participatory governance.

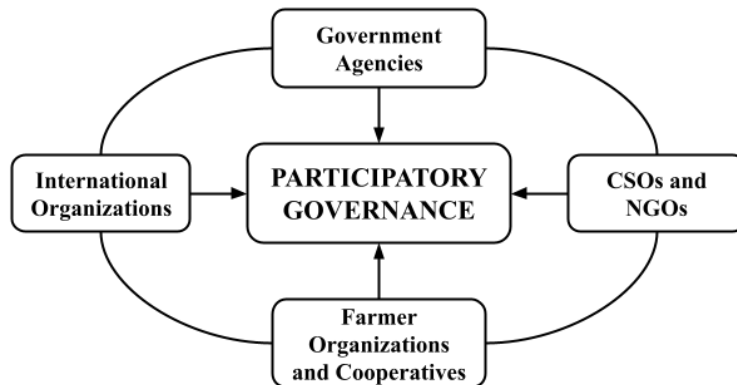


Figure 1. Key stakeholders in Participatory Governance

Farmer Organizations (FOs) and Cooperatives play a fundamental role in participatory governance by serving as democratic, community-based institution that facilitate collective action and multi-stakeholder engagement. Cooperatives are inherently participatory organizations, defined as “autonomous associations of persons united voluntarily to meet their common economic and social goal as well as aspirations through a jointly owned and democratically owned initiative” (Lopez-Sampson et al., 2024). They strengthen the political power of farmers by ensuring their needs and opinions are heard by policymakers and the public. By enabling collective action, FOs allow farmers to shift from being passive price-takers to active market participants, securing fairer returns and building economic resilience (Fru Mbangari et al., 2020).

Government agencies play a central role in shaping the policy and institutional framework for agricultural development through program implementation, technical and financial support, policy enforcement, and resource management. Increasingly, Local Government Units (LGUs) are positioned at the forefront of local development, reflecting broader trends in decentralization. The Philippine government’s policy commitment to participatory governance, enshrined in national development plans and Republic Acts, provides formal recognition of the need for bottom-up engagement and creates an enabling—though often contested—environment for participatory initiatives. This policy support offers a legal and strategic foundation that legitimizes the role of farmers and civil society organizations (CSOs) in governance processes. At the same time, changing fiscal and political realities have prompted government agencies to partially withdraw from certain domains, necessitating a redefinition of their tasks, tools, and strategies (Meer et al., 2018). These shifts underscore the dual challenge of sustaining state support while fostering greater societal self-steering and participatory engagement.

Civil Society Organizations (CSOs) and Non-Governmental Organizations (NGOs) are critical actors in participatory governance, contributing specialized expertise, contextual knowledge, and the ability to amplify stakeholder perspectives. Their roles extend across project implementation, capacity building, policy dialogue, and awareness-raising, making them essential intermediaries between governance institutions and grassroots communities (Akin & Adeola, 2018). By advocating for farmer voices and ensuring accountability, CSOs and NGOs help secure the local relevance of both policies and development initiatives. They also bridge critical information gaps by relaying community concerns to policymakers and translating complex policies into accessible language, particularly important given the historical exclusion and limited access to resources experienced by marginalized groups (Mewhirter et al., 2024). This intermediary role is central to counterbalancing power asymmetries, enabling more equitable farmer participation, and fostering greater accountability within governance processes. In doing so, CSOs strengthen agricultural resilience by grounding governance in lived realities and facilitating inclusive decision-making.

International organizations increasingly facilitate collaboration and mediate disputes across sectors such as commerce, security, and human rights, promoting polycentric governance where authority is distributed among multiple centers rather than centralized (Lozny, 2023). Multi-stakeholder participation has become a key feature of global governance, intended to enhance the democratic legitimacy, effectiveness, and accountability of international institutions (Zanella et al., 2018). These organizations provide critical financial and technical support while acting as catalysts for embedding participatory approaches within institutional frameworks and project requirements. By doing so, they drive broader policy and behavioral shifts that encourage governments and local actors to adopt participatory mechanisms. Agencies such as FAO exemplify this role by ensuring that agricultural cooperatives and community-based organizations are recognized and maintained on the international agenda. Through the promotion of participatory governance as a global best practice, international organizations help foster more inclusive, sustainable development and strengthen the long-term resilience of agricultural systems.

4.3. Policy and Legal Frameworks Supporting Participation

The Philippines has developed a legal and policy framework that increasingly support participatory governance in agriculture, first of which is the Magna Carta of Small Farmers (RA 7607). This foundational law prioritize agricultural development, empowers small farmers and promotes ecological balance in rural areas. It explicitly recognizes farmers' right to organize and be represented in government agencies, ensuring their voice in relevant boards. The Magna Carta of Small Farmers serves as a foundational legal instrument for farmer empowerment, directly linking their right to organize and participate in governance with tangible benefits like market access, credit, and social security. This directly addresses multiple dimensions of rural poverty and vulnerability. The law explicitly connects the right to participate with concrete economic and social benefits, providing farmers with a basis to demand and access resources and services collectively,

which they often cannot do individually. By addressing issues like credit access, market exploitation, and lack of insurance, it directly tackles key vulnerabilities and builds the economic and social resilience of smallholder farmers, making them less susceptible to shocks and more capable of self-development.

The Agriculture and Fisheries Modernization Act of 1997 (RA 8435) declares a policy of “People Empowerment”, enabling citizens through direct participation or their representatives in policy formulation and decision-making. It mandates the strengthening of people's organizations, cooperatives, and NGOs, and integrates consultation with farmers and stakeholders in identifying Strategic Agriculture and Fisheries Development Zones (SAFDZ), formulating the Agriculture & Fisheries Modernization Plan (AFMP), and in research and development (R&D) and extension services. RA 8435's broad mandate for "people empowerment" and its integration of participation across various stages of agricultural planning and implementation indicates a comprehensive legislative intent to embed participatory governance as a foundational principle, moving beyond isolated projects to systemic integration within the agricultural sector. This suggests a recognition at the legislative level that effective modernization and development require broad-based input, ownership, and accountability from all stakeholders, particularly farmers. This systemic approach is crucial for building long-term resilience by ensuring that policies and programs are relevant, responsive, and widely supported.

From 2017, the Philippines have created 6-year period national strategic roadmaps to guide the country's development. These roadmaps consistently integrate participatory governance and agricultural development, emphasizing climate resilience and inclusive growth. The PDP 2017-2022, under its "Enhancing the Social Fabric" pillar, aimed for people-centered governance by promoting participatory governance, public access to information, and feedback mechanisms. Under "Inequality-Reducing Transformation," it sought to expand economic opportunities in agriculture, forestry, and fisheries (AFF), prioritizing farmers and fisherfolk through improved productivity, increased AFF-based enterprises, enhanced access to value chains, innovative financing, technology, and secure land/water resources. The subsequent PDP 2023-2028 continues to deepen participatory governance by ensuring sufficient and functional participatory spaces, broadening public access to information, and improving the quality of participation. It aims to modernize agriculture and agribusiness by enhancing production efficiency, expanding market access, improving the resilience of AFF value chains, and strengthening agricultural institutions. It aims to modernize agriculture and agribusiness by enhancing production efficiency, expanding market access, improving the resilience of AFF value chains, and strengthening agricultural institutions. This suggests a long-term policy trajectory towards inclusive and resilient agricultural transformation. The continuity of these themes across different administrations' development plans signals that participatory governance is not a fleeting policy trend but a recognized and enduring component of the national development strategy, encouraging continued investment and engagement from all stakeholders.

4.4. Barriers and Constraints to Effective Participatory Governance

Despite the theoretical merits and demonstrated successes of participatory governance, its full realization in the Philippine agricultural sector is hindered by significant and interconnected barriers at institutional, socio-political, and organizational levels.

4.4.1 Institutional and Policy Constraints

The institutional rigidity and persistent implementation gaps within government structures are the primary impediments to participatory governance. While policies mandating participatory approaches exist, large institutions often apply them in "rigid, mechanistic and unimaginative ways," failing to translate policy intent into dynamic and flexible engagement. The Philippines meets serious implementation challenges, where good programs fail due to inadequate planning, lack of funding, weak collaboration between agencies, and limited local government competence. (Ticong, 2014; Siy Van et al., 2021; Hutchcroft & Gera, 2022). These gaps between policy design and actual delivery make participatory governance mechanisms ineffective even when they exist on paper.

This bureaucratic inertia can stifle genuine local involvement and reduce participation to a mere formality. An excessively complicated legal system that produces administrative nightmares—including "innumerable laws and letters of instruction, hosts of presidential decrees and executive orders, and constantly revised implementation handbooks for every imaginable situation"—is the root cause of the institutional instability (Ploeg et al., 2016).

Institutional problems have been systematic and pervasive, affecting governance at all levels from national policy-making to local implementation (Abao et al., 2023). The scope of these challenges – including corruption, rigid and excessive rules resulting in red tape, overlapping functions, and lack of coordination – creates an environment where participatory mechanisms cannot function effectively regardless of their design quality. This is further complicated by the historical and ongoing absence of genuine consultation and transparency in the formulation of policy. Governments have been accused of failing to consult with affected sectors, which has resulted in policies that may not be in accordance with the actual circumstances. According to Abid et al.'s (2024) study, countries may have robust policies; however, implementation is a challenge, particularly when resources are scarce and stakeholders are unable to collaborate. Additionally, the effectiveness of policies is frequently compromised by the failure to consider the requirements and inputs of local actors, which is a common occurrence in top-down approaches.

4.4.2. Socio-Political Barriers

Deep-rooted cultural patterns of political disempowerment create substantial barriers to participatory governance. Any attempt to develop meaningful civic participation must face preexisting habits driven and constituted by political disempowerment, requiring the building of

new civic habits while breaking old ones, which necessitates changes in political structure and practices to create spaces for effective political participation (Borja et al., 2024).

We consider the weak implementation of pro-farmer laws. Despite comprehensive legislation like the Comprehensive Agrarian Reform Program and Magna Carta of Small Farmers, its impact on agrarian reform remains limited due to weak government implementation, inherent loopholes in the law, and strong resistance from landowners (Clausen, 2007; Curry, 2013). The persistence of "power imbalances" and "institutional rigidity" despite explicit policy mandates for participation suggests that the challenge is not merely a lack of policy, but a deep-seated resistance to fundamental shifts in power dynamics and bureaucratic culture. This indicates that realizing participatory governance requires confronting and transforming existing power structures, bureaucratic inertia, and potentially corrupt practices. It is a political challenge as much as a technical one, demanding sustained advocacy, capacity building, and accountability mechanisms to shift the underlying culture and incentives within governance.

Communication and knowledge barriers further limit meaningful participation between farmers and government officials or technical experts. The use of technical language and knowledge that might be unfamiliar to participants from historically marginalized groups creates a common barrier to inclusion and may limit active participation. Local participatory processes can also suffer from being viewed as government-led with technocrats from the city affecting local participation in the process, while the question of facilitation and managing the authority and voices of different stakeholders proves arduous.

4.4.3. Organizational and Farmer-Level Constraints

At the grassroots level, many farmer organizations exhibit low organizational maturity. These groups are often formed primarily to access funding rather than to foster sustainable development. They struggle with capital build-up, attracting and retaining members, and are susceptible to mismanagement (Geroso & Maguate, 2023). The dual challenge of farmer organizations' "low organizational maturity" and farmers' "lack of awareness/distrust about cooperatives" creates a significant internal barrier to effective participatory governance, even when external policy support exists. This means that while policies may encourage farmer participation, the internal capacity and willingness to engage effectively are often underdeveloped.

A prevalent issue is the distrust and lack of awareness among farmers regarding the benefits of joining cooperatives. This leads to low interest and participation, further exacerbated by the scarcity of cooperatives in their immediate vicinity. Farmers often prioritize immediate economic factors like access to financial aid over personal growth opportunities when considering cooperative membership. Trust issues and existing power dynamics within communities also undermine participatory processes. Public perceptions of risk and willingness to participate are critically influenced by trust, as some groups may be wary of established institutions based on their

experiences, while meaningful participation should not be taken for granted since existing power relations among participants might reinforce some forms of exclusion (Avila et al., 2025).

Finally, challenges in farmer engagement are evident in the agricultural sector's ageing population, with the average age of Filipino farmers being 56 years old. Concerns about profitability and the high risks associated with farming discourage youth engagement, leading to a declining interest in agriculture among younger generations. Farmers also face practical constraints, such as time limitations in processing financial assistance and a lack of sufficient documentation, which often results in them not receiving crucial aid (Micabalo et al., 2024). These factors collectively dampen the enthusiasm and capacity for broad-based participatory engagement.

5. CONCLUSIONS

The analysis demonstrates that participatory governance offers a potent, albeit complex, pathway to addressing the multifaceted challenges confronting the Philippine agricultural sector and enhancing its resilience. The theoretical foundations of participatory approaches, rooted in principles of empowerment, co-creation of knowledge, and context-specificity, provide a robust framework for action. The case studies reviewed in this paper illustrate how active citizen oversight, decentralized resource management, integration of local and scientific knowledge, and collective action can lead to improved accountability, enhanced adaptive capacities, increase farmer profitability, and more sustainable resource utilization. The roles of various stakeholders – farmer organizations, government agencies, civil society groups, and international organizations – are crucial, each contributing unique strengths to the participatory ecosystem. Furthermore, the existing legal and policy frameworks, including the Organic Agriculture Act, the Agriculture and Fisheries Modernization Act, the Magna Carta of Small Farmers, and successive Philippine Development Plans, signal a national commitment to embedding participatory governance as a foundational principle for agricultural development.

However, the report also highlights significant persistent barriers that impede the full realization of participatory governance's potential. These include deeply entrenched institutional rigidities, power imbalances favoring large interests over smallholders, a historical lack of genuine consultation, and the weak implementation of pro-farmer laws. Socio-political barriers, such as the marginalization of vulnerable groups, undermine the very spirit of participation. At the grassroots level, challenges related to the organizational maturity of farmer groups, distrust, lack of awareness, and the broader disengagement of an aging farming population further complicate efforts. The persistence of these challenges, despite explicit policy mandates for participation, indicates that the issue is not merely a lack of policy but a deep-seated resistance to fundamental shifts in power dynamics and bureaucratic culture.

5.1. Future Directions

Looking ahead, several strategic directions are necessary to ensure that agricultural development in the Philippines becomes more inclusive, resilient, and sustainable.

Strengthen Institutional Capacity and Accountability: Policy reforms must move beyond mere pronouncements to ensure genuine implementation. Building the capacity of government agencies, particularly LGUs, is essential for facilitating and sustaining participatory processes. Institutionalized mechanisms for transparency and accountability should be established nationwide to rebuild public trust and ensure the effective utilization of resources.

Address Power Imbalances and Protect Farmer Rights: Future reforms must confront entrenched structural inequalities that disadvantage smallholder farmers. This includes rigorous enforcement of land reform laws, protection against land grabbing and displacement by industrial interests, and safeguarding the right of farmers to organize and advocate without fear of repression. Legal frameworks must be strengthened to ensure fair market participation and protect farmers from exploitative intermediaries.

Invest in Farmer Organizations and Cooperatives: Recognizing the critical role of farmer-led institutions, policies should prioritize capacity building for cooperatives and organization. Beyond initial funding, this entails sustained support through training in financial management, enterprise development, and strategic networking. Incentives for capital build-up and membership retention are crucial to foster self-sustaining and robust farmer-led institutions.

Integrate Diverse Knowledge Systems and Technologies: Future agricultural development strategies should actively promote the co-creation of knowledge by systematically integrating indigenous and experiential farmer knowledge with scientific expertise. Future technological interventions—such as mechanization, digital tools, and precision agriculture—must be made accessible, affordable, and context-specific to the needs of smallholder farmers.

Enhance Data Accessibility and Utilization: A comprehensive and accessible national agricultural data system is essential for informed decision-making at all levels. Policies should promote centralized, open-access data platforms that enable farmers, businesses, and policymakers to effectively plan, manage risks, and attract investments.

Develop Holistic Resilience Strategies: Agricultural development must adopt integrated resilience frameworks that align climate adaptation and mitigation with economic and social safety nets. Expanding inclusive crop insurance programs, promoting climate-smart and agroecological practices, and diversifying farmer livelihoods are critical pathways to reduce vulnerability to shocks and strengthen long-term resilience.

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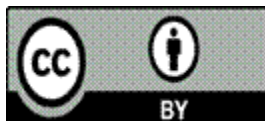
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