

Original Article

# Institutional Influences on Tenant Farmers' Decision-Making and Productivity: A Descriptive Qualitative Study

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**Abstract.** Agricultural productivity among tenant farmers remains a continuing concern despite many programs meant to support farming livelihoods. Past studies have often measured productivity through output, income, and efficiency, but less attention has been given to how tenant farmers understand productivity and how institutions affect their farming decisions. This descriptive qualitative study examined the institutional influences on tenant farmers' decision-making and productivity in Sta. Marina, Tigatto, Buhangin, Davao City, Philippines. Data were gathered through two focus group discussions with 13 tenant farmers who were members and officers of a farmers' association and beneficiaries of government and non-government programs. The data were analyzed using thematic analysis. The findings showed five major themes. First, formal institutions supported farmers through financial aid, farm inputs, training, infrastructure, and agrarian programs. Second, these forms of support were often limited by delays, irregular delivery, and mismatch with farmers' actual needs. Third, informal institutions, such as traditional farming knowledge and social networks, remained important in farming decisions. Fourth, farmers understood productivity not only as higher income, but also as lower costs, household security, and better well-being. Fifth, limited capital and insecure land tenure continued to restrict productivity. Market demand also influenced crop choice and production decisions. The study concludes that tenant farmers' productivity is shaped by formal and informal institutions, market conditions, and structural barriers. It shows that productivity, from the farmers' view, is mainly a livelihood-centered process focused on household stability and reduced risk. The study recommends timely, needs-based, and market-responsive support, with stronger farmer participation and better access to capital, markets, and secure land tenure.

**Keywords:** *Agricultural decision-making; Agricultural productivity; Institutional Theory; Land tenure security; Tenant farmers.*

Agriculture plays a vital role in ensuring food security, generating rural employment, and supporting economic development. Despite continuing advances in agricultural technologies, extension services, and government support programs, low agricultural productivity remains a persistent challenge among smallholder farmers, particularly in developing countries (Lowder et al., 2021; Jain et al., 2023). Limited access to productive resources, weak institutional support, insecure land tenure, and market uncertainties continue to constrain farmers' ability to improve production and sustain their livelihoods (Kapari et al., 2023; Ibrahim et al.,

2023). These persistent challenges indicate that agricultural productivity cannot be understood solely in terms of technology, inputs, output, or production efficiency; it must also be examined within the institutional, market, and structural conditions in which farmers make production and livelihood decisions.

Recent studies have increasingly demonstrated the importance of institutional conditions in shaping agricultural outcomes. Lowder et al. (2021) reported that although smallholder farms produce a substantial share of the world's food, they frequently operate under resource constraints that limit productivity. Kapari et al. (2023) similarly identified limited access to financial resources, agricultural inputs, extension services, and climate-resilient technologies as continuing barriers to productivity and food security among smallholder farmers. In the Philippine context, Hossain et al. (2025) demonstrated that coordinated support through agricultural training, credit access, and rural infrastructure can strengthen market participation and improve household income among small-scale producers. Together, these studies suggest that agricultural outcomes depend not only on farmers' productive capacity but also on the conditions that shape their access to resources, knowledge, services, and economic opportunities.

The Philippine agricultural sector reflects many of these challenges. Although agriculture remains an important source of employment and food production, its productivity has continued to lag behind that of neighboring countries. Briones (2021) attributed this condition to persistent structural constraints, including fragmented landholdings, weak institutional coordination, limited investment, and inadequate rural infrastructure. These challenges are particularly significant among tenant farmers, who cultivate land they do not own while bearing production costs and responding to market uncertainties. For tenant farmers, decisions about what to plant, how much to invest, whether to adopt new practices, and how to sustain production are therefore made within conditions over which they may have limited control, particularly access to institutional support, markets, financial resources, and secure land tenure.

Douglass North's Institutional Theory (1990) provides a useful framework for understanding these conditions. North explains that formal and informal institutions shape economic behavior. Formal institutions include laws, policies, government programs, and organizational arrangements, whereas informal institutions encompass traditions, shared norms, social relationships, and culturally embedded practices. Applied to tenant farming, the theory provides a basis for examining how formal interventions and informal practices shape farmers' choices while recognizing that these choices are made within broader market and structural conditions.

Previous research has predominantly examined agricultural productivity through quantitative indicators such as crop yield, technical efficiency, technology adoption, farm income, and production performance (Lowder et al., 2021; Bellemare et al., 2021). While these indicators are essential for assessing agricultural outcomes, they provide limited understanding of how tenant farmers themselves experience productivity and make decisions within everyday farming conditions. Studies of agricultural institutions have likewise focused on extension and advisory systems (Somanje et al., 2021), credit, technology adoption, and other individual forms of institutional support. Consequently, less is known about how tenant farmers experience the combined influence of formal and informal institutions, market conditions, and structural constraints in shaping everyday farming decisions.

Despite continuing government and non-government interventions in agriculture, the central research problem remains the limited understanding of how formal and informal institutions influence tenant farmers' day-to-day production decisions and how these influences translate into what farmers themselves consider improved productivity. The availability of institutional support does not necessarily mean that farmers are able to use or benefit from it effectively. Assistance may create opportunities for production, but its value depends on timeliness, accessibility, relevance to farmers' needs, responsiveness to market conditions, and compatibility with farmers' knowledge and resources (Ruzzante et al., 2021; Somanje et al., 2021; Truong, 2022). Institutional support may therefore operate as an enabler while weaknesses in implementation may simultaneously constrain farmers' productive decisions (Antwi-Agyei & Stringer, 2021; Hossain et al., 2025).

This problem also raises a conceptual issue concerning the meaning of agricultural productivity. Conventional approaches commonly emphasize output, yield, technical efficiency, income, and other measurable production outcomes (Abdul et al., 2022; Anang et al., 2022). However, these indicators may not fully capture how resource-constrained tenant farmers understand productive improvement within their farming and household realities. Smallholder outcomes are closely connected to household livelihoods and food security, while access to resources

and land tenure conditions shape farmers' capacity to sustain production and household welfare (Lowder et al., 2021; Ibrahim et al., 2023; Kapari et al., 2023). The present study therefore examines whether tenant farmers understand productivity more broadly in terms of sustaining farming, reducing production costs, responding to viable market opportunities, meeting household needs, and maintaining livelihood security.

Against this research problem, the study aimed to examine institutional influences on tenant farmers' decision-making and agricultural productivity. Specifically, it examined: (1) how formal institutions enable agricultural production and influence farming decisions; (2) the limitations and inconsistencies tenant farmers experience in accessing and utilizing formal institutional support; (3) how informal institutions, particularly traditional knowledge, accumulated farming experience, and community relationships, influence agricultural decision-making; (4) how tenant farmers understand and experience agricultural productivity within their farming and household realities; and (5) how structural conditions, particularly limited financial capital and insecure land tenure, constrain sustainable agricultural productivity.

A qualitative descriptive approach is appropriate for addressing this research gap because understanding institutional influences requires attention to how tenant farmers themselves interpret their farming experiences and productive outcomes. By foregrounding farmers' accounts, the study captures context-specific meanings and decision-making processes that may not be adequately represented by conventional quantitative measures of yield, income, or technical efficiency (Sandelowski, 2000; Colorafi & Evans, 2016; Kim et al., 2017).

By examining these interconnected dimensions, the study contributes to the agricultural productivity literature by situating tenant farmers' decision-making within their institutional and livelihood realities. Rather than assuming that institutional interventions automatically translate into improved agricultural outcomes, the study examines the conditions under which farmers are able—or unable—to convert institutional opportunities into productive gains. It further advances a livelihood-centered understanding of agricultural productivity in which productive improvement is reflected not only in output or income but also in the capacity to sustain farming, strengthen household well-being, respond to market opportunities, and reduce livelihood vulnerability.

Practically, the study may provide government agencies, non-government institutions, farmers' organizations, and agricultural development practitioners with evidence for designing interventions that are timely, farmer-centered, market-responsive, and sensitive to local production conditions. At the policy level, the findings may contribute to interventions that move beyond the provision of agricultural inputs by addressing access to production capital, viable markets, and land tenure security as interconnected conditions for sustainable agricultural productivity and equitable rural livelihoods.

## Methodology

### Research Design

This study employed a qualitative descriptive design to examine institutional influences on tenant farmers' decision-making and agricultural productivity. Qualitative description is appropriate for studies that seek to provide a comprehensive yet straightforward account of participants' experiences while remaining close to their own words, meanings, and interpretations (Sandelowski, 2000; Colorafi & Evans, 2016; Kim et al., 2017). In applying this design, the study focused on participants' accounts of how government programs, traditional practices, community relationships, market conditions, financial limitations, and land tenure arrangements shaped their farming decisions and perceptions of productivity. Guided by Douglass North's Institutional Theory (1990), these experiences were examined in relation to formal and informal institutions and their interaction with market and structural conditions.

### Participants and Sampling Technique

The study involved 13 tenant farmers from Sta. Marina, Tigatto, Buhangin, Davao City, Philippines, selected through purposive sampling because they had direct experience relevant to the study's objectives. All participants were members or officers of a farmers' association and had experience as beneficiaries of programs and assistance provided by government and non-government institutions. Their direct engagement with these institutions provided an appropriate experiential basis for examining how institutional support and constraints influenced farming decisions and productivity.

To be included in the study, participants had to: (1) be tenant farmers; (2) have cultivated farmland under a tenancy arrangement for at least one year; (3) cultivate less than one hectare of farmland; and (4) be active members of the farmers' association. The participants consisted of five men and eight women, with an average age of 45 years and approximately 30 years of farming experience. Their extensive farming experience provided a substantial experiential basis for describing changes in farming practices, institutional interventions, market conditions, and livelihood challenges over time. Farmers who did not meet these inclusion criteria were excluded from participation.

Seven participants joined the first FGD and six participated in the second. The group sizes were consistent with Krueger and Casey (2015), who emphasize relatively small focus groups that provide participants sufficient opportunity to describe and discuss their experiences. Rather than seeking statistical representativeness, the sample was intended to generate information-rich and context-specific accounts from participants with direct experience of the phenomenon under investigation. The adequacy of the sample was further evaluated by considering data saturation. After the first FGD, the researcher reviewed the participants' responses and identified recurring experiences and preliminary patterns related to institutional support, limitations in service delivery, traditional farming practices, community relationships, market considerations, financial constraints, and land tenure. These patterns were compared with the responses generated during the second FGD. The second discussion largely reinforced and elaborated on the patterns identified in the first FGD, with no substantially new themes relevant to the research questions emerging from the data. On this basis, the study considered data saturation reached, and the two FGDs involving 13 information-rich participants adequate for the descriptive qualitative inquiry.

### **Research Instrument**

Data were collected using a researcher-developed semi-structured focus group discussion guide based on the study objectives and informed by North's Institutional Theory (1990). The guide consisted of open-ended questions exploring participants' experiences with formal institutions, informal institutions, farming decision-making, agricultural productivity, market considerations, and structural conditions affecting farming activities. The semi-structured format provided consistency across the two FGDs while allowing the researcher to use follow-up and probing questions when participants raised experiences requiring clarification or elaboration. Before data collection, experts in qualitative research and agricultural studies reviewed the guide to ensure the questions were relevant, clear, and appropriate to the study objectives.

### **Data Gathering Procedure**

Two face-to-face focus group discussions were conducted at a venue agreed upon by the participants. Each FGD lasted approximately 90 minutes. Seven participants attended the first discussion, and six attended the second. Before each FGD, the researcher explained the study's purpose and procedures, obtained written informed consent, and emphasized that participation was voluntary. Participants were informed that they could decline to answer any question or withdraw without consequence. With their permission, the discussions were audio-recorded and supplemented by field notes documenting relevant contextual observations and participant interactions. Recordings were transcribed verbatim in the language used by participants. Relevant statements presented in the manuscript were subsequently translated into English while preserving their intended meaning and context. Original-language quotations were retained alongside their English translations to preserve participants' voices and enhance transparency of interpretation. Data collection proceeded iteratively. After the first FGD, the transcript and field notes were reviewed to identify points requiring clarification or further probing in the second discussion. The second FGD used the same semi-structured guide, with follow-up questions used where necessary to deepen or clarify emerging accounts. Section 2.2 describes the determination of data saturation and sample adequacy.

### **Data Analysis Procedure**

Data were analyzed using Braun and Clarke's (2006) six-phase thematic analysis. The process involved familiarizing oneself with the data through repeated reading of transcripts, generating initial codes, identifying potential themes, reviewing and refining themes, defining and naming themes, and preparing the analytical narrative. Coding was conducted inductively while remaining attentive to the research questions and institutional framework guiding the study. Initial codes were generated from recurring experiences, meanings, and patterns in participants' accounts. Related codes were subsequently grouped into broader themes representing institutional, market, and structural influences on farmers' decision-making and productivity. Representative quotations were

retained to demonstrate the connection between participants' narratives and the interpretations developed from the analysis. Coding was conducted by the researcher; therefore, inter-coder disagreements were not applicable. To strengthen analytical consistency, codes and themes were repeatedly checked against the original transcripts and refined where necessary to ensure internal coherence, clear distinctions among themes, and consistency with the research questions.

Researcher reflexivity was maintained throughout data collection and analysis. Reflexive field notes were used to document observations, emerging interpretations, and potential assumptions. The researcher repeatedly returned to participants' actual statements when developing codes and themes and distinguished participants' accounts from personal interpretations. This process helped the researcher remain attentive to the possible influence of personal assumptions on data interpretation while recognizing the researcher's active role in qualitative inquiry. Trustworthiness was established following Lincoln and Guba's (1985) criteria of credibility, transferability, dependability, and confirmability. Credibility was strengthened through purposive selection of information-rich participants, 90-minute FGDs, iterative review of the two datasets, and verbatim quotations. Transferability was supported by providing contextual information about the research setting and participant characteristics. Dependability was strengthened through systematic documentation of data collection, transcription, coding, and theme development. Confirmability was supported by grounding interpretations in participants' narratives, maintaining reflexive field notes, and repeatedly checking themes against the original transcripts.

### **Ethical Considerations**

Ethical approval was obtained from the Society for Moral Integrity and Legal Ethics (SMILE), the institution's ethics review board, prior to data collection. Participation was voluntary, and all participants provided written informed consent. Participants were informed of the study's purpose, the procedures involved, the voluntary nature of participation, and their right to decline to answer questions or withdraw at any stage without consequence. Confidentiality and anonymity were maintained by using participant codes instead of personal identifiers in transcripts, analysis, and reporting. Audio recordings, transcripts, field notes, and other research materials were stored securely and used exclusively for academic purposes.

## **Results and Discussion**

Analysis of the two focus group discussions revealed that the interaction of institutional opportunities, informal knowledge systems, market considerations, and structural constraints shaped tenant farmers' decision-making and productivity. Five interconnected findings emerged: (1) formal institutions enabled agricultural production through resources, knowledge, infrastructure, and agrarian programs; (2) formal institutions simultaneously created constraints when support was irregular, delayed, or poorly aligned with farmers' needs; (3) informal institutions guided farmers in interpreting and adapting institutional interventions to local conditions; (4) farmers understood productivity primarily as a livelihood-centered process rather than solely as increased output or profit; and (5) limited financial capital and insecure land tenure restricted the translation of institutional opportunities into sustainable productivity.

Taken together, the findings indicate that institutional influence was neither linear nor uniformly beneficial. Formal support expanded farmers' opportunities, but its effects depended on how farmers interpreted and used such support, whether production decisions corresponded with market conditions, and whether structural conditions enabled them to translate institutional opportunities into productive outcomes.

### **Formal Institutions as Enablers of Agricultural Production**

Formal institutions emerged as important enablers of agricultural production by improving tenant farmers' access to financial and material resources, technical knowledge, rural infrastructure, and opportunities associated with land ownership. Across the discussions, participants valued government interventions because they reduced immediate constraints tied to limited household resources. However, different forms of institutional support influenced farmers' decisions through distinct but interconnected pathways.

Financial assistance and farm inputs represented the most immediate form of support. Participants explained that government loans, seeds, fertilizers, and other inputs reduced out-of-pocket production expenses and allowed them to continue farming despite limited capital. One participant shared, "*Okay man ang gobyerno. Pahulam man, nakapalit sa dugang, mga fertilizer ana*" (The government is good. They provide loans, allowing us to buy additional

inputs such as fertilizers.). This account shows how institutional assistance eased immediate financial constraints and provided the resources needed to sustain production. The finding supports Regassa et al. (2023) and Lelisho and Lelisho (2024), who found that agricultural credit facilitates investment by reducing liquidity constraints. However, the present study qualifies these findings by showing that financial assistance primarily enabled continuity of production rather than substantial livelihood transformation. Institutional finance therefore functioned as an enabling resource whose effectiveness remained dependent on farmers' broader financial and structural conditions.

Agricultural training also influenced production decisions by strengthening farmers' knowledge and encouraging more careful consideration of crop suitability and market opportunities. One participant explained, *"Sa una target-target lang, wala gyud klaro, karon nakabalo nako unsa'y maayo itanom kay market diay ni siya"* (Before, it was just guesswork. Now I know what to plant because there is a market for it.), while another summarized the effect by stating, *"Nadungagan among kaalam"* (Our knowledge has increased.). These accounts indicate that training influenced not only technical competence but also farmers' decision-making orientation by increasing attention to the relationship between production and market opportunities. The finding extends Somanje et al. (2021) by indicating that knowledge becomes productive when farmers are able to translate it into contextually appropriate production decisions. However, knowledge alone remains insufficient when farmers lack the financial resources and tenure security necessary to act on what they have learned.

Rural infrastructure, particularly farm-to-market roads, represented another institutional pathway. One participant explained, *"Karon ang sidecar maabot na sa uma, di nako mahago og pas-an"* (Now vehicles can already reach the farm, so I no longer have to carry my harvest on my shoulders). Improved roads reduced transportation burdens and increased farmers' connection to markets. Consistent with Asher and Novosad (2021), infrastructure altered the economic environment within which production decisions were made. However, improved accessibility did not eliminate capital and tenure constraints. Infrastructure therefore improved the conditions for productivity without guaranteeing productive transformation.

Agrarian reform influenced farmers in a more long-term and aspirational manner. Participants associated CARP with the possibility of owning the land they cultivated. One participant stated, *"Kaning among area ihatag nalang ni sa amoa"* (This land should simply be given to us.), while another explained, *"Pwede man ni sir nga ipa-CARP aron maangkon namo"* (This area could be placed under CARP so that we can own it.). However, another participant recalled, *"40 years akong mama, nakatabang gyud ang CARP"* (My mother waited forty years. CARP eventually helped us.). These accounts reveal a distinction between institutional promise and institutional experience. While secure tenure may encourage agricultural investment, the anticipated benefits remain largely prospective when implementation is prolonged. CARP therefore shaped farmers' aspirations for security more immediately than their present productive capacity.

Overall, formal institutions affected farmers through four interconnected mechanisms: resources reduced immediate production constraints; training strengthened decision-making capacity; infrastructure expanded accessibility and market connection; and agrarian reform shaped expectations of long-term security. Their combined influence was important but conditional on farmers' financial, market, and tenure circumstances.

### **Formal Institutions as Persistent Constraints**

A notable finding was that the same formal institutions perceived as sources of support were also experienced as sources of uncertainty. Participants did not reject government interventions but distinguished between the availability of institutional assistance and its practical usefulness.

Participants repeatedly described assistance as reactive or irregular. One farmer remarked, *"Dugay maabot ang ayuda sa gobyerno"* (Government assistance takes a long time to arrive), while another explained, *"Motabang ra man na inig human og baha... dili diay kanunay"* (They only help after floods—not regularly). Because agricultural production follows seasonal cycles, delayed or unpredictable assistance reduced farmers' ability to incorporate institutional support into production planning. The problem was therefore not simply inadequate assistance but institutional unpredictability. This extends Antwi-Agyei and Stringer's (2021) discussion of resource and service-delivery constraints by showing that unpredictability also alters farmers' planning behavior: when support cannot be anticipated, farmers make production decisions as though it may not arrive.

Participants also questioned the relevance of some institutional interventions. One farmer recalled, “*Ang request namo nga sweet corn, ang nakuan kay ampalaya*” (We requested sweet corn, but what we received was bitter gourd), while another observed, “*Tagaan ka og tanom nga dili mahalin*” (You are given crops that cannot be sold). These experiences reveal a tension between institutionally determined assistance and farmers’ market-oriented priorities. Consistent with Ruzzante et al. (2021) and Truong (2022), the finding underscores the importance of context-responsive support. It further shows that farmers exercise selective agency, evaluating assistance according to marketability, local suitability, and expected returns rather than accepting recommendations simply because they originate from formal institutions.

Bureaucratic delays further weakened institutional responsiveness. One participant remarked, “*Maghimo ta’g letter 2026, 2030 pa mogawas, dugay kaayo*” (We submit a request letter in 2026, and it might only be approved in 2030. It takes far too long.). Although expressed humorously, the statement reflects a serious institutional concern: agricultural resources lose much of their usefulness when delivered outside the production cycle in which they are required.

These findings reveal a central contradiction in the role of formal institutions. Government programs were simultaneously necessary and unreliable: farmers valued institutional assistance yet could not consistently organize their farming decisions around it. The findings therefore suggest that quality, timing, relevance, and predictability—not merely access—determine whether institutional support becomes productive.

### **Informal Institutions as Guides for Agricultural Decision-Making**

Informal institutions provided another important layer of influence on farmers’ decisions. Traditional knowledge, accumulated farming experience, and community relationships remained significant even among farmers who had received formal agricultural training.

Traditional knowledge remained particularly evident in planting schedules and crop management. Participants referred to *takdol* and lunar timing as practices inherited across generations. One explained, “*Sa una mag-agad pa sa bulan, takdol*” (Before, we followed the moon and traditional timing), while another stated, “*Motuo pud ko og takdol, dagko ang mais*” (I also believe in traditional timing because the corn grows bigger). These practices functioned as accumulated experiential knowledge developed within local environmental conditions, supporting studies that recognize locally grounded knowledge as an important resource for agricultural adaptation (Bezner Kerr et al., 2022; Brondízio et al., 2021).

Participants, however, did not treat traditional and scientific knowledge as mutually exclusive. One farmer explained, “*Wala jud ko nagsalig sa usa; kombinasyon, siyentipiko og kinaraan*” (I do not rely on only one approach. I combine scientific and traditional methods), while another stated, “*Mag-agad gihapon ko sa takdol... pero isabay nako og calendar guide*” (I still follow traditional timing, but I also use a calendar guide). Rather than confirming a linear modernization model in which scientific agriculture replaces inherited knowledge, the finding is closer to Radcliffe et al. (2021), who emphasize the value of integrating local and scientific knowledge. Farmers in this study actively filtered new recommendations through accumulated experience, demonstrating institutional hybridity rather than passive adoption.

Community relationships also reduced uncertainty and facilitated learning. One participant explained, “*Tinabangay sir, mag storyahanay, unsa imong income, failure ba*” (We help one another. We talk about our income and even our failures.), while another stated, “*Kung unsay wala nila gitanom, itanom nako*” (If they do not plant a particular crop, I will plant it.). Through these exchanges, farmers learned from others’ successes and failures before committing scarce resources. This complements Bakker et al. (2021), while extending farmer-to-farmer learning beyond technical practice to include market judgment, risk sharing, and livelihood coping.

Informal institutions therefore did not merely coexist with formal institutions. They influenced how formal interventions were interpreted, filtered, adapted, and implemented. Farmers emerged as active institutional actors who combined formal knowledge with local experience and social learning rather than simply adopting externally prescribed practices.

### **Reconceptualizing Agricultural Productivity from the Perspective of Tenant Farmers**

One of the most significant findings was the difference between conventional measures of agricultural

productivity and participants' own understanding of productive improvement. Farmers recognized production and income as important, but their accounts consistently situated productivity within the broader objective of sustaining farming and household life.

Participants initially associated productivity with modest economic improvements and reduced production expenses. One farmer stated, *"Nakadungag sa income, nakapalit og fertilizer"* (It added to our income, and we were able to buy fertilizer). For resource-constrained farmers, reducing production costs was itself considered a productive gain because savings could be redirected toward other farming and household needs.

The livelihood dimension became more evident when participants described how farming improvements affected their households. One farmer explained, *"Makahatag lang gud og pamasaha sa mga bata"* (It enables us to provide transportation money for our children), while another stated, *"Wala mi miagi og gutom"* (We no longer experience hunger). A participant captured the limits of these improvements by observing, *"Arang-arang sir, pero wala mi madato"* (Life has improved, but we have not become rich). These accounts distinguish productive improvement from economic transformation. Whereas conventional studies often emphasize measurable efficiency and output (Abdul et al., 2022; Anang et al., 2022), the present findings extend productivity toward household security and livelihood continuity, consistent with the broader livelihood importance of smallholder farming noted by Lowder et al. (2021).

Market forces were central to this livelihood-centered understanding. Participants evaluated crops according to demand, expected prices, production requirements, and local suitability. One explained, *"Sweet corn dali ra, naay market, naa na'y presyo"* (Sweet corn is easy to grow, there is a market for it, and the price is already established). Farmers therefore did not consider producing more inherently productive when crops lacked viable markets. The present study extends conventional productivity literature by positioning decision quality, market responsiveness, household security, and continuity of farming alongside output and income as meaningful dimensions of productivity from the perspective of tenant farmers.

### **Structural Constraints to Sustainable Agricultural Productivity**

The findings also demonstrate why improvements in farming rarely developed into substantial economic transformation. Limited financial capital and insecure land tenure established structural boundaries within which institutional support, knowledge, and market opportunities could operate.

Participants repeatedly emphasized that farming required continuous financial investment. One stated, *"Makautang gihapon pero ginagmay lang"* (We can still borrow, but only in small amounts), while another explained, *"Kung unsa imong itanom, sarili gyud nimo bulsa, di pwede nga magsugod ka nga di mangapital"* (Whatever you plant comes from your own pocket. You cannot begin farming without capital.). Limited capital did more than reduce how much farmers could produce; it shaped which decisions were considered feasible. This extends evidence that credit facilitates technology adoption and investment (Regassa et al., 2023; Lelisho & Lelisho, 2024) by showing that financial constraint operates first as a decision-making boundary before appearing as a productivity outcome.

Land tenure created an even deeper structural limitation. Participants bore much of the cost and risk of cultivation while sharing returns with landowners. One explained, *"Ako pa mogasto tanan, unya ang tag-iya kuha lang sa iyang bahin"* (I shoulder all the production expenses, yet the landowner still receives a share), while another stated, *"Kung gamiton sa tag-iya ang yuta, wala gyud mi mahimo"* (If the landowner decides to use the land, there is nothing we can do).

Tenure insecurity affected productivity through two related mechanisms: income distribution and investment incentives. Farmers retained fewer resources for reinvestment because returns were shared, while uncertainty over future land access reduced the rationale for investments whose benefits would materialize only over time. This finding is consistent with evidence linking tenure conditions to food security and agricultural performance (Galang, 2021; Ibrahim et al., 2023), but it also shows how tenure insecurity moderates the usefulness of other interventions. Training has limited long-term value when farmers cannot invest; infrastructure creates market access but cannot guarantee production expansion; and credit may increase risk when farmers lack secure land rights.

### **Contradictions and Unexpected Findings**

Several apparent contradictions provided additional analytical insight into farmers' institutional experiences. First, participants expressed appreciation for government assistance while simultaneously criticizing its irregularity, delays, and mismatch with their needs. These positions are not mutually exclusive; rather, they demonstrate that farmers distinguish between the value of institutional support in principle and the quality of its implementation in practice. Formal institutions were therefore experienced simultaneously as enablers and constraints. Second, institutional training increased farmers' exposure to scientific agricultural practices but did not eliminate traditional knowledge. Contrary to a linear modernization assumption in which scientific agriculture replaces inherited practices, participants combined both systems. This suggests that institutional learning is filtered through accumulated experience rather than adopted wholesale. Third, improved productivity did not correspond with substantial economic mobility. Participants reported modest increases in income, reduced costs, and improved household well-being while simultaneously emphasizing that they had not become economically secure. This apparent contradiction demonstrates that productivity gains can coexist with persistent livelihood vulnerability. Finally, CARP represented both hope and uncertainty. Participants associated agrarian reform with the possibility of land ownership, yet prolonged implementation meant that its influence was often aspirational rather than immediate. Formal policies may therefore shape farmers' expectations long before they materially transform productive conditions.

These contradictions enrich the findings by demonstrating that institutional influence is not a simple relationship between intervention and outcome. Farmers continuously negotiate institutional benefits and limitations, combine different knowledge systems, and pursue livelihood improvements within structural conditions that restrict the extent of possible change.

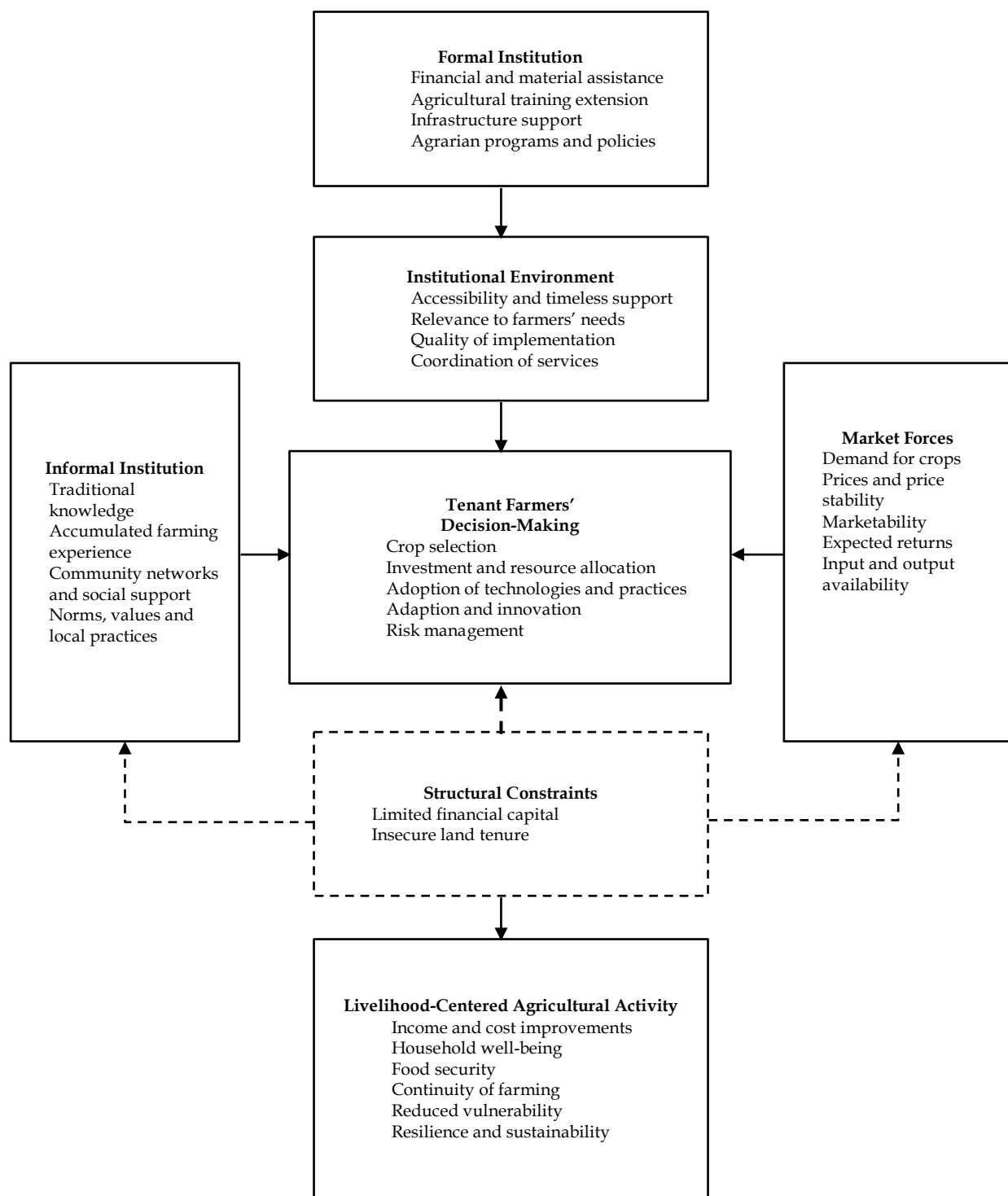
### **Proposed Institutional-Livelihood Framework of Tenant Farmers' Decision-Making and Productivity**

The integrated findings support a proposed Institutional-Livelihood Framework of Tenant Farmers' Decision-Making and Productivity (Figure 1). The framework synthesizes the study's central argument: formal institutions shape an institutional environment of opportunities and implementation conditions; informal institutions provide locally grounded knowledge and social support; market forces signal economically viable production choices; and structural constraints, particularly limited capital and insecure land tenure, bound farmers' capacity to act. Tenant farmers' decision-making mediates these influences and translates them into livelihood-centered productivity outcomes. Rather than presenting these influences as a direct or linear path to productivity, the framework positions tenant farmers as active decision-makers who evaluate, combine, adapt, or reject available options according to local experience, market conditions, resources, and tenure security. Productivity is therefore represented as livelihood-centered, encompassing income and cost improvements, household well-being, food security, continuity of farming, and reduced vulnerability.

Structural constraints operate across the framework by limiting farmers' capacity to translate institutional and market opportunities into productive decisions and sustainable livelihood outcomes. This framework extends North's Institutional Theory by demonstrating that formal and informal institutions do not influence agricultural productivity directly or independently. Their effects are mediated through farmers' decision-making, conditioned by market opportunities, and bounded by structural constraints.

### **Integrative Synthesis**

Taken together, the findings demonstrate that institutional influences on tenant farmers' productivity operate through their decision-making rather than through a direct relationship between institutional support and agricultural outcomes. Farmers actively evaluate formal assistance, combine scientific recommendations with traditional knowledge and accumulated experience, and adjust production choices according to market conditions and available resources. This explains why the same institutional interventions may create opportunities while producing limited or uneven outcomes when assistance is delayed, poorly matched to farmers' needs, or constrained by insufficient capital and insecure land tenure. The findings therefore extend North's Institutional Theory by showing that formal and informal institutions operate within a broader decision-making environment shaped by market and structural conditions. Their influence depends not simply on their presence but on farmers' capacity to interpret and act on the opportunities they provide. This interaction supports the study's livelihood-centered conceptualization of agricultural productivity, in which productive improvement is reflected not only in output or income but also in the ability to sustain farming, meet household needs, respond to viable market opportunities, and reduce livelihood vulnerability.



**Figure 1.** *Proposed Institutional-Livelihood Framework of Tenant Farmers' Decision-Making and Agricultural Productivity*

## Conclusion

This study reconceptualizes agricultural productivity from the perspective of tenant farmers. Rather than defining productivity solely in terms of increased output, technical efficiency, or income, the findings show that productive improvement is also experienced through the ability to sustain farming, reduce production costs, meet household needs, respond to viable market opportunities, and maintain livelihood security. This livelihood-centered perspective represents the study's principal contribution by locating agricultural productivity within the everyday farming and household realities of tenant farmers.

The study concludes that improving productivity among tenant farmers requires institutional interventions that are not only available but timely, relevant, accessible, and responsive to farmers' actual production and market conditions. Agricultural programs should therefore strengthen access to affordable production capital and viable markets, incorporate farmers' traditional knowledge and accumulated experience, and improve the implementation of agrarian programs that contribute to land tenure security. These measures are necessary if institutional assistance is to produce more sustained improvements in farming and household livelihoods.

The findings should nevertheless be interpreted within the study's limitations. The inquiry involved 13 tenant farmers from a single geographical setting—Sta. Marina, Tigatto, Buhangin, Davao City, Philippines. Although participants were purposively selected because of their extensive farming experience and direct engagement with government and non-government institutional programs, the relatively small and context-specific sample limits the transferability of the findings to other agricultural communities. Moreover, the qualitative descriptive design was intended to provide an in-depth understanding of participants' experiences rather than establish statistical relationships or causal effects. The findings should therefore be understood as contextually grounded rather than statistically generalizable.

Future research may examine the proposed Institutional-Livelihood Framework across different farming communities, cropping systems, and land tenure arrangements. Quantitative and mixed-methods studies could further examine the relationships among institutional support, market access, financial capital, land tenure security, farmers' decision-making, and agricultural productivity, while longitudinal research could assess how changes in these conditions affect farming and household livelihoods over time.

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None

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None

## Conflict of Interests

None

## Acknowledgment

None

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