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An Assessment of Adaptation and Mitigation Initiative in Agriculture (AMIA) Village Program and Its Economic Impact on Organic Vegetable Farming and Vermicast Fertilizer Production

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ABSTRACT

This study assesses the Adaptation and Mitigation Initiative in Agriculture (AMIA) Village Program and its economic impact on organic vegetable farming and vermicast fertilizer production in Barangay Ambolong and Barangay Palay communities. Using a qualitative research design, the evaluation focuses on learning from farmer-beneficiaries and local implementers on the effectiveness, outcomes, and sustainability of the program. Data were obtained through interviews, field observations, and reviews of documents devoted to program implementation activities, knowledge transfer, production levels, and income generation.

The outcome evaluation has shown that the AMIA Village Program improves awareness, technical capability, and community involvement for moving toward organic practices. The farmers reported improvements in terms of crop yields and fertilizer efficiency production, with vermicast emerging farm input and income source. However, inadequate market linkages, limited extension support, and the need for ongoing training updates were listed among the obstacles to long-term success.

This study holds that although the AMIA Village Program directly translates into an apparent positive economic impact on organic farming systems, enhancement of institutional support, coupled with value chain strengthening, will go a long way in ensuring sustainability and scalability of its benefits. Recommendations are made to address the identified gaps and further reinforce the contributions of the program to climate-resilient and economically viable agriculture.

KEYWORDS: Organic Vegetable Farming, Vermicast Fertilizer, Economic Impact, Program Sustainability, Program Effectiveness

Chapter 1
THE PROBLEM AND ITS BACKGROUND

This chapter serves as a nice primer for the study. It presents the philosophical assumptions and describes the anchoring points, the research questions, and the theoretical lens of the research. Furthermore, it explores the significance of the study, its scope and limitations, and definitions of key terms.

Introduction

Agriculture is among the most vital pillars of economies globally, regarding the supply of food, raw mate-

rials for processing, and employment for billions of people. Food and Agriculture Organization (FAO, 2021): "The agricultural sector has contributed about 4 percent to the world's gross domestic product (GDP), being a powerful force shaping the development of growing countries. "Unfortunately, the rise of industrial farming practices has resulted in environmental issues, soil depletion, and a growing dependence on synthetic inputs (Tilman et al., 2002). These problems have sparked a worldwide movement towards sustainable farming methods, such as organic farming, which focuses on maintaining ecological balance, conserving biodiversity, and minimizing chemical use (Reganold & Wachter, 2016).

Agriculture remains an economic powerhouse in Southeast Asia, with countries like the Philippines still falling short of the expectations of food security and rural jobs from this sector. As per data from the Philippine Statistics Authority (PSA, 2020), the Philippines has a huge part of the population, especially in rural areas, relying on agriculture as the primary livelihood. However, the industry continues to battle challenges such as decreasing soil fertility, overconsumption of chemicals, and vulnerability to climate change (Briones, 2014). While traditional farming methods have been effective, they have also caused environmental damage and financial struggles for smallholder farmers (Pimentel & Pimentel, 2006).

Organic farming has been proposed as a workable answer to these problems by researchers such as Pretty et al. (2005) and Altieri (2009). Altieri (2009) argued that organic farming reduces the dependence on synthetic inputs, naturally enhances soil fertility, and provides everlasting sustainability to the farmers. Edwards and Arancon in 2004 spoke on the usefulness of vermicomposting in organic farming, wherein it enriches the soil and helps in healthy plant growth. This is because the nourishing vermicast is produced naturally, wherein the organic materials fed to earthworms are decomposed and turned into nutrient-rich organic fertilizer.

The Philippine government has rolled out various policies and programs to boost organic agriculture, recognizing how crucial sustainable farming is. The Republic Act No. 10068, which is known as the Organic Agriculture Act of 2010, has made organic farming a formal part of the country's agricultural landscape, offering support like training, financial aid, and research initiatives to help farmers embrace this practice. More recently, with the growing challenges brought by climate change, the Department of Agriculture (DA) launched the Adaptation and Mitigation Initiative in Agriculture (AMIA) program. This program helped develop climate-resilient farming communities by promoting sustainable and adaptive agricultural practices (Department of Agriculture, 2022).

Despite a large and growing number of studies that highlighted the socio-economic and environmental benefits of following organic principles and practices, there is a relative scarcity of studies concerned with vermiculture and smallholder farmers in the Philippines. However, there is insufficient data in the chosen two locations in Batan, Barangay Ambolong and Barangay Palay, regarding the local organic farming initiatives. The changes in transition shift from traditional to organic farming into a bigger picture on the experiences of the smallholder farmers brought out huge opportunities and distinct obstacles that are different in individual local situations.

Philosophical Assumptions

The research work is grounded on the pragmatic worldview that positions knowledge on the outcomes of practical applications and real-world events rather than just theoretical concepts. The study construes that the success or failure of the AMIA Village Program and its economic benefits would also depend on the effectiveness of the implementation of the said program, the effectiveness of the facilitators, and the adaptability of the farmer-beneficiaries.

This paper was based on the assumption that while the AMIA Village Program aimed at the improvement of vegetable and vermicast fertilizer production, its slow progress reflects possible problems in implementation. These issues may stem from the municipal ministry department of agriculture and AMIA Village Regional DA facilitators for policy implementation, technical assistance, or resource allocation. The farmers' challenges may be faced on the part of beneficiaries as well, which might include their low understanding of organic farming, lack of funds, or cultural resistance to change.

From a critical realist viewpoint, the study recognized that, in addition to visible inefficiencies, there may be deeper systemic problems impacting the program's growth, such as bureaucratic delays, insufficient infrastructure, or a disconnect between national agricultural policies and local farming conditions. This could help highlight potential gaps leading to slow progress in the program and then taking a look at the underlying causes of reaction could help provide insights into better-intervening options.

Ultimately, this study was grounded in constructivist ideas, which highlighted that different stakeholders (government facilitators, municipal agricultural officers, and farmers) could have different perceptions about success and challenges. Getting a sense of these takes could be critical for shaping the recommendations for how best to strengthen the program's effectiveness and economic impact.

Theoretical Framework

The theoretical framework has three essential theories for evaluating the sustainability and overall impact of the AMIA Village Program. These theories played a crucial role in assessing how the program was implemented, its effectiveness, and its long-term viability. These theories in question were the Sustainable Livelihoods Framework (SLF), Theory of Change (ToC), and Diffusion of Innovations Theory (DOI).

The **Sustainable Livelihoods Framework (SLF)** as per Scoones in 1998 is a complete framework to understand and improve the livelihoods of poor people, it identifies how factors interact to create sustainable livelihoods SLF relies on five types of capital assets sustained by critical support; each of them seeks to achieve a role in sustaining livelihoods. It includes human capital (knowledge and skills), social capital (social networks and relationships), natural capital (natural resources), physical capital (tangible assets), and financial capital (monetary resources). This is notably relevant in the context of evaluating the AMIA Village Program as it provided an outline to be considered in assessing the impact of the program on every form of capital that supports the livelihood of the target beneficiaries of Barangay Palay and Barangay Ambolong for a wholesome assessment in the overall well-being and sustainability that the program generates in farming communities.

Secondly, the **Theory of Change (ToC)** according to Weiss in 1995 is a methodology put in place to explain and illustrate how change occurs by outlining the pathway by which, and why, something intended is likely occurring in a specific context It incorporates the definition of long-term objectives, back-mapping to determine preconditions, enabling interventions that bring into existence, assumption identification, and indicator definition. The ToC was relevant to assessing the AMIA Village Program because it provided a structured framework to outline the expected outcomes of the program and the pathways through which these outcomes are achieved. The causal link between program activities and the long-term intended impacts on the livelihoods of Barangay Palay and Barangay Ambolong farmers could be visually and systematically analyzed using ToC.

Finally, the **Diffusion of Innovations Theory (DOI) ---** Everett Rogers developed this theory in 2003, which explains how, why, and at what rate new ideas and technologies spread through cultures. This framework helped to look further into the transformation that happened when organic farmers in AMIA

(Asosiasi Masyarakat Lembang Janawi) Village, Biru Are, West Kutai, East Kalimantan, Indonesia, resort to organic farming practices and produce vermicast fertilizer. The DOI theory focuses more on innovation, the power of communication channels and time, and the social system as a whole. By utilizing this theory, the factors influencing the adoption process can be pinpointed, including the characteristics of the innovation, the effectiveness of communication channels, the structure of the social system, and the timeline for adoption. Gaining insight into these elements could aid in crafting strategies to enhance the diffusion and adoption of sustainable agricultural practices among farmers.

Research Purpose Statement

This study sought to evaluate the AMIA Village Program and its socioeconomic effects on organic vegetable farming and vermicast fertilizer production, particularly its impact on the financial well-being of farmers in Barangay Ambolong and Barangay Palay.

Research Questions

In this study, the specific issues explored include:

1. How do participants assess the effectiveness of the AMIA Village Program in terms of engagement, training, resources, and support services?
2. What are the socio-economic impacts of the AMIA Village Program on farmers and the community?
3. What strategies and interventions are needed to enhance the economic sustainability of the AMIA Village Program in organic vegetable farming and vermicast fertilizer production?

Significance of the Study

Developing countries have been trying to overcome the issue through several means; the present study was performed to find out how organic farming initiatives influence the economic conditions of the farmers in the AMIA Village Program. Lalsubodi et al., the results could also provide insights into organic agriculture and vermicast fertilizer, which can increase production, income, and the health of farmers in general. Moreover, the results were thought to benefit the following:

Farmers --- The farmers in Barangay Ambolong and Barangay Palay are at the heart of this study. To boost their livelihoods by identifying effective organic farming techniques and ways to produce vermicast fertilizer. By implementing these strategies, they can increase their agricultural output, earn more, and ultimately enjoy a better quality of life.

Local Government (Municipal Department of Agriculture) --- This helped the local government unit, particularly the municipal Department of Agriculture, to better understand the effectiveness of agricultural programs and interventions. The findings can guide them in implementing sound policy initiatives, directing resources appropriately to aid local farmers, and following good, sustainable agricultural practices in their respective regions.

Non-Governmental Organizations and Development Agencies --- NGOs and development agencies focused on agricultural development and poverty alleviation can use the study's findings to develop more effective programs. With the knowledge that they have gained, they can focus their efforts on aiding farming communities to ensure more extensive and concrete success in promoting sustainable agriculture and rural development.

Policymakers and Agricultural Planners --- Policymakers and agricultural planners can use a study to produce evidence-based policies that promote sustainable agriculture and rural development. This

empirical data can assist them in setting policies that can increase agricultural productivity, protect the environment, and improve the economic welfare of farmers.

Academic Research Institution --- Academic research and educational institutions can extract useful insights and data about how effectively organic farming is being implemented. This study enriches the existing knowledge pool on the role of sustainable agriculture in rural development and economic impact assessment, which will lay the foundation for future research.

General Public and Future Researchers --- The general public and other prospective researchers will understand the merits and problems of organic farming practices. This study could motivate other research activities or steps towards sustainable agricultural practices and improved living standards of the farming community.

Scope and Limitations of the Study

This research investigated the AMIA Village Program's development of economic activities regarding farming in Barangay Ambolong and Barangay Palay. These two adjacent barangays of Batan, Aklan, sought to evaluate the extent to which the program succeeded in augmenting their production of vegetables and vermicast fertilizer and how those changes affected income, cost, and profit. The study also assessed the farmers' level of satisfaction with the support, training, and resources offered by the program to determine what enabled satisfaction or challenges they faced. Furthermore, it examined the impact of the program on the social aspects of the community, the level of community collaboration, and the role of community participation in the success of the program.

The study was conducted exclusively within the stated barangays of Ambolong and Palay. The participants were those actively involved in the implementation and operation of the program. Therefore, the results were specific to Barangay Ambolong and Barangay Palay and may not apply to other areas.

The data for this qualitative study were gathered through semi-structured interviews with farmers, AMIA facilitators, and municipal DA representatives, as well as focus group interactions that delved into shared experiences and challenges. Field observations were carried out to validate responses and evaluate farming practices, while a few document analyses offered additional insights from reports and program records. The data analysis involved thematic analysis of patterns in farmers' narratives for detailed capturing of their experiences. Relevant information from documents was also pulled through content analysis. Multiple sources were involved through cross-verification with data triangulation in the study to ensure accuracy and provide in-depth insights regarding the value estimation of organic farming vis-a-vis the AMIA Village Program.

The semi-structured interviews were initially scheduled to start in January 2025. However, it gradually phased from the last week of February through March 24, 2025, depending on the availability of participants, still at their convenience.

During the semi-structured interviews for this study, the priority was to uphold ethical standards throughout the data collection process. The interviews were done at participants' homes, fieldwork locations, and offices, and were even conducted over chat to accommodate their comfort and availability. Informed consent was ensured and collected before the interview so that participants were aware of the explanation about the study, the voluntary nature of their participation, and their right to withdraw whenever they chose to. Focused on non-disclosure and confidentiality as much as possible, tried to protect their identity in folders and records that did not include details, and used one of the encoded names as an alternative to their real names. Moreover, the respect for the sociocultural personal context of the

participants helped with avoiding a threatening approach and facilitated open expression throughout the discussions.

Definition of Terms

The following words are defined to provide clarity and context in this study:

Organic Vegetable Farming --- Organic vegetable farming is a production and management system that goes according to the natural process of being and growing, as stated by the International Federation of Organic Agriculture Movements (IFOAM, 2014).

In this research, "organic vegetable farming" referred to the initiatives used by farmers in the AMIA Village Program, which focused on increasing vegetable cultivation and production of vermicast fertilizer without using chemical inputs.

Economic Impact --- Economic impact is defined as the outcomes of an event, policy, or program on the economic well-being of a community or region, according to Stimson, Stough, & Roberts (2006).

"Economic impact" in this study referred to the effects on income, cost savings, and financial stability among farmers in AMIA's Program.

Vermicast Fertilizer --- According to Edwards & Bohlen (1996), vermicast fertilizer is a type of organic fertilizer produced from the decomposition process performed by various species of worms, such as red wigglers, white worms, and other earthworms.

"Vermicast fertilizer" in this study referred to the organic compost of vermiculture produced by farmers in Barangay Palay and Barangay Ambolong as part of organic farming practices.

Chapter 2
REVIEW OF RELATED LITERATURE

This chapter explores the existing knowledge surrounding the AMIA Village Program, particularly focusing on the economic effects of vegetable and vermicast fertilizer production on farmers. The literature review is organized thematically, incorporating international and local studies, and synthesizes the findings, providing a thorough understanding of the subject matter. It also allows for linking unrelated research findings, since these stories complement each other, providing an account linking the exploration of various studies and in which to situate the present study.

Program Evaluation: Implementation, Control, Monitoring, and Assessment

Using a framework for evaluation is essential to evaluate agricultural programs like the AMIA Village Program. This involves evaluation, implementation, control, and monitoring. Rossi, Lipsey, and Freeman (2004) pointed out that program evaluation is vital for understanding how effective and efficient development initiatives are, together with the overall impact. Evaluation frameworks can ensure that program goals are in sync with the outcomes we aim for, which helps stakeholders pinpoint areas that need improvement.

Implementation is the key to success for any program. In their discussion, Pressman and Wildavsky (1984) highlighted that "the process of implementation will be most effective when there is a well-ordered execution employed to achieve the desired results." In the context of the AMIA Village Program, this reflects the ability to share organic agriculture practices effectively, diversify resource allocation, and inspire active involvement from farmers.

Tracking progress and collecting feedback are critical controlling mechanisms that help keep the program

on course. Kerzner, in 2017, previously mentioned that agriculture programs can be executed and adjusted accordingly through continuous performance evaluation and prompt action aimed at improving performance and meeting objectives despite dealing with challenges.

On the other hand, consistent monitoring ensures that programs stay in tune with the needs of the people they aim to help. Hatry (2006) pointed out that monitoring offers real-time insights into how effective a program is, enabling quick interventions and necessary policy changes. The AMIA Village Program — the field assessments, feedback from farmers, and study progress inform decisions.

Integrating evaluation with implementation, control, and monitoring can increase the effectiveness of the AMIA Village Program, leading to long-term continuity and impacting the AMIA Village Program within the organic farming communities.

Economic and Social Impacts of Organic Farming

Organic farming has gained worldwide attention for its economic advantages and environmental sustainability. According to Weiss and Buchholtz (2017), organic cultivation can significantly boost farmers' incomes, especially in regions where markets for organic products are well-developed. For example, organic vegetables typically fetch higher prices, which enhances farm profitability. However, initial expenses, such as certification and training, can pose challenges for smallholder farmers (Hass et al., 2019). In the long run, organic farming enhances soil fertility, lowers input costs, and reduces dependence on chemical inputs, all of which contribute to improved farm profitability, as stated by Sunding & Zilberman in 2020. From a social perspective, organic farming fosters community collaboration, skill development, and food security. Such practices as discussed in Groot and Buzine (2018) or Berkes (2015) are certainly able to generate awareness of the environment and empower local communities, which holds much importance in rural areas wherein community cohesion and local empowerment play effective roles.

Vermicompost as Organic Fertilizer: Benefits

The term vermicomposting simply means worm composting. Vermicompost is one of the leading organic fertilizers known in organic farming. According to Bai and others (2017), vermicast is an all-purpose organic fertilizer that enhances plant growth, increases yield, and improves soil structure. It, according to Wang et al. (2019), leads to less reliance on synthetic fertilizers and a cheaper and more sustainable option in agriculture. Most importantly, it is a component of recycling organic waste, and as such, a dual advantage: waste management and soil improvement. The introduction of vermiculture into organic farming practices is one way that farmers reduce input expenditures whilst improving the health of soils, which is crucial for long-term productivity.

Research has proven that Programs in rural communities significantly improve their local economies. "Technical support and linkages with markets translate into great economic benefits," says Lal in 2020. Sharing and cooperatives that give avenues for farmer-to-farmer interaction have proven effective in boosting organic farming by training, resource provision, and collective marketing (Haug et al., 2018). Organic farming actions can lift people to higher income levels and employment opportunities, even though some are set up with impediments such as initial funding and access to markets. Sharma et al. (2017) from India and Sachs et al. (2019) from Uganda dealt with these in their case studies.

The sustainability of organic farming initiatives is highly dependent on the satisfaction of farmers. According to Nicol and Hobbs (2016), farmers who adopt organic methods tend to have a higher

satisfaction level than those practicing conventional farming due to better environmental conditions and higher prices for their produce in the market. However, Miller et al. (2018) state that initial yields tend to be lower with some ongoing problems over certification, which make it difficult to reach optimum satisfaction. To buttress such an argument, Klein et al. (2020) use the metaphor of a journey. Education and support need to continue to ensure that there are no bumps on the way that could detract from satisfaction and overall well-being.

Environmental and Economic Outcomes of Sustainable Agricultural Practices

The benefits of organic farming for the environment have been found. According to Clark et al. (2019), it'll promote biodiversity, improve soil health, and retain more water. It boosts organic matter in the soil, increases the microbial diversity of systems, and ensures that the farming system can be resilient toward pressures from climate change and pests. Also, it is estimated by Gattinger et al. (2012), that organic farming would be able to sequestrate more carbon for the soil to mitigate climate change impacts. This is connected to economic benefits as well, since healthier soils support more sustainable farming practices.

Effectiveness of Organic Farming Programs in Rural Development

A 2018 examination by Berkes et al. showed that these kinds of programs, incorporating training, technical assistance, and access to markets, have been effective in promoting rural sustainable economic growth. The whole value chain from production to marketing is targeted; thus, these programs will ensure a higher chance of success for long-term sustenance in organic farming. Nevertheless, according to Lamb et al. (2020), there still exist obstacles like providing initial investment costs and instilling confidence in farmers on organic practices.

International research offers an all-encompassing view of the benefits and constraints associated with organic farming. Pretty et al. (2005) have argued that resource-conserving agriculture in developing countries was a means for increased yields, suggesting that organic farming could sustain food security and raise the incomes of farmers. Another promising option is given by vermiculture technology for restoring soil fertility and increasing crop yield, as suggested by Edwards and Arancon (2004).

Concerning specific manifestations of organic farming programs in the Philippines, in a local context, it provides an avenue for this understanding. In 2022, climate-resilient farming was introduced by the Department of Agriculture of the Philippines to agricultural communities under AMIA, or Adaptation and Mitigation Initiative in Agriculture. The initiative produced encouraging results in supporting farmers' adoption of sustainable farming practices. The Agricultural Development Program (ADP) in Nigeria, assessed by Fakayode in 2020, provided insights that have found relevance in the context of the Philippines. The findings stressed the need for farmers to be supported, trained, and resourced appropriately since these contribute significantly to satisfaction among farmers and the overall success of organic farming programs.

Farmer Participation and Engagement in Agricultural Programs

However, it should be attempted with real seriousness towards creating a trend in which farmers should be so integrated into the genesis of innovations that they become forms of intervention on which future programs are intended to work. Pretty (2008) argues that there should be no passive participation, wherein farmers are trained in agricultural technology and practice, as they should use active participation through which farmers are able to influence objectives as well as practices of initiatives. The moment farmers co-

decide on issues instead of viewing them as mere recipients of programs is when real ownership and hence, better outcomes and sustainability of programs take place. In the case of AMIA Villages, the level of farmer engagement has implications for the effectiveness of the integration of organic farming practices into their traditional ways of living. One excellent example is the Farmer Field School model that was adopted in Indonesia, with the premise that farmers learn best when they are peer learning. And many farmers thus adopted improved sustainable pest control, leading to significantly reduced expenses on chemicals. The success of these programs shows that increased participation of farmers in AMIA initiatives may even boost adoption rates while sustaining organic practices over time.

Adoption of Organic Farming Technologies and Practices

In adopting organic farming practices, several factors tend to interrelate, including benefits, risk perceptions, market opportunities, and institutional support. Knowler and Bradshaw (2007) pointed out that while many farmers are interested in sustainable agriculture, the transition often depends on factors such as education, availability of resources, and the social context of the community. For instance, in Uttaranchal, India, advanced policies, localized technical support, and ensured access to organic markets operated in conformity with advancing organic farming. Such lessons are critical for the AMIA Village Program since good or bad conditions could make the difference between the viability of a program and its stagnation. Interventions must therefore be designed based on a precise understanding of local challenges and incentives to serve appropriately the needs and capacities of the farmers.

Barriers and Challenges to Organic Agriculture Development

Even though people have started acknowledging the various advantages of organic farming, it still faces major challenges in getting into the mainstream. According to Scialabba and Müller-Lindenlauf (2010), some of these challenges include poor availability of organic inputs, high labor intensity of agro-organic production, and market fluctuations, usually in the developing regions. Many farmers also get stuck in lengthy and expensive certification procedures with inadequate institutional support. Take, for example, Sub-Saharan Africa; many organic projects have failed even to go beyond an initial trial stage due to the unavailability of accessible training and linkage to the market. This is reminiscent of the challenges faced in the AMIA Villages, where even the most meticulously planned schemes could go to waste if they were not well-suited for the local context. Facing all these challenges, we need holistic approaches: integrated policies, cooperative community connections, and practices that leverage local talents are also necessary.

Role of Extension Services and LGUs in Program Implementation

Extension services by LGUs ensure that national agricultural policies indeed get implemented locally. "Effective extension systems, as Anderson and Feder (2007) say, require both technical know-how and meaningful engagement with farming communities." Agricultural extension services are extended by the local government units in a decentralized environment like the Philippines, thus, culturally sensitive and nuanced. For instance, in Vietnam's Agricultural Extension Program, local agents who greatly understood the rice farmers' specific socio-economic contexts were more successful in promoting sustainable practices. In AMIA Villages, the willingness, capabilities, and continuing support of extension workers from LGUs are important factors in adopting and sustaining organic farming and vermicast production.

Policy Support and Institutional Frameworks for Sustainable Agriculture

The achievements in organic farming technology prove that the right government policy and institutional framework have been established. To achieve the agroecological transition, Altieri et al. (2015) argue for harmonious collaboration between public policy, research institutions, market access strategies, and grassroots movements. In places like Brazil, where there's a solid institutional backing for organic agriculture, like the Programa Nacional de Agricultura Orgânica, the outcomes have been nothing short of revolutionary. On the other hand, farmers have received institutionally backed support concerning subsidies, research-and-extension service linkages, and access to markets for sustainably expanding their operations. Bavarian references support and consistency within AMIA Villages; "Because if you're a farmer from AMIA Villages, are you thinking of going organic? Meditate on lessons from Brazil — and similar countries — that emphasize a holistic approach, mindful of the interconnectedness of economic incentives, environmental goals, and human flourishing.

Synthesis

In the published literature, organic farming is typically held as a viable, sustainable approach with tremendous economic, environmental, and social benefits. As noted by IFOAM (2014), organic agriculture reduces synthetic inputs and increases soil, thereby improving crop yield. According to Edwards and Bohlen (1996), vermicast fertilizer plays an important role in the enhancement of soil fertility, productivity, and, to some degree, in farm sustainability.

At an economic level, assistance was given to organic farming programs that were backlogged and stabilizing attempts on rural livelihoods. Stimson et al. Having the government's assistance can also reduce production costs and increase farmers' income (2006), which was verified. Gomez-Limon et al (2012), pointed out that satisfied farmers can influence the extent to which they pursue such long-term initiatives. Rossi et al. (2019) emphasize that effective evaluation, monitoring, and control are vital for ensuring these programs are accountable and continually improving. Concepts that closely tie into the objectives of the AMIA Village Program (DA, 2022) promote climate-resilient agriculture by mobilizing communities.

Also, participatory approaches, institutional support, and policy incentives account for the results realized in sustainable agriculture. Yours Truly (2008), Knowler, and Bradshaw explain that better outcomes would probably be found from these programs were the farmers were trained and included in access to markets and resources. Anderson & Feder (2007) further support the statement that strengthening the LGUs with decentralized extension systems may develop implementations. The same also holds in Brazil and Vietnam when it comes to policy integration in organic farming development (Altieri et al., 2015).

All in all, these studies provide a good basis for evaluating the AMIA Village Program. Not only are results required to judge success, but the participation of the farmers, strategic implementation of the program, institutional capability, and a wider environment all come into play. Each of these needs to be taken into account to maximize the economic benefits, further environmentally sustainable practices, and ensure that this program in rural Philippines becomes viable in the long run.

Chapter 3
METHODOLOGY

This chapter covers, then, research design, locale of the study, participants for the study, instruments used to gather data, the reliability of the study, data collection procedures, data analysis, and ethical considera-

tions in the work.

Research Design

The primary objective of this qualitative study was to document personal experiences, perceptions, and narratives of the participants. A qualitative method was deemed most suitable for this study because it allowed the researchers to explore even deeper how the participants experienced the AMIA Village Program and how these experiences impacted their economic and social situations in life. This approach thus brings out the dynamics of the program and its consequences by deeply exploring the subtle and subjective aspects of the lived experiences of the participants.

In the applied research strategy, the case study method was used. This had a unique applicability to the close examination of the AMIA Village Program, allowing intense scrutiny of the program's effects within the specific contexts of Barangay Ambolong and Barangay Palay. By zooming into the two communities, the study took the parameters the program results were operating under into consideration, thus encapsulating the impact of the program on local farmers.

Sampling, Participants, and Setting

Purposeful sampling was employed in the research to select respondents who could provide valuable firsthand accounts of their experiences with the activities of the AMIA Village Program. All participants were expected to have taken part in the program; this helped to study their stories and experiences with particular attention on the economic and social changes that took place in the life of the farmers and their environment.

The study focused on the key participants of the AMIA Village Program in Barangay Ambolong and Barangay Palay. The two groups involved in this study were the farmer-beneficiaries and the implementers.

There were ten (10) farmers/members, five (5) from each barangay, who were actively participating for at least one year in diversified farming activities, with varied farm sizes and different experience levels.

Three (3) representatives from the Municipal Department of Agriculture (DA) were involved in planning, coordinating, and evaluating. Three (3) facilitators from the AMIA Western Visayas Regional Office in Iloilo City were responsible for training, provision of resources, and guidance on program implementation.

The research study brought together two groups of participants: the implementers of the program and the farmer-beneficiaries. AMIA Village Program farmer-beneficiaries were people engaged in organic vegetables and vermicast fertilizer production. On the flip side, those who undertook the program-like local agricultural officers and AMIA facilitators-shared remarkable experiences and ideas on how it was happening. They educated one concerning their life, challenges encountered, and the effect this project was having on their means of living. They talked about how effective the program is in its objectives and what mechanisms of support are coming forth from it.

Farmer-beneficiary profiles are presented below, including age, experience in farming, and community involvement.

Group 1 – Participants

Participants	Description
Participant 1	A 71-year-old man, who had over ten years of experience in traditional farming, lived in Sitio Culabnog, Barangay Palay.

Participant 2	A 63-year-old female from Sitio Culabnog, Barangay Palay, engaged in traditional farming for over 10 years while serving the Barangay Council.
Participant 3	A 41-year-old female farmer from Sitio Pahuwayan, Barangay Palay, and has been in farming for 3 years; currently acts as Secretary of the Batan AMIA Village Farming Association (BAVFA).
Participant 4	A 75-year-old. Female farmers from Sitio Centro, Barangay Palay, who have more than ten years of farming experience. She had served in the past as a Barangay Committee on Agriculture and is a member of the Palay Barangay Council.
Participant 5	A 54-year-old female who is formerly from Sitio Capul-an, Barangay Palay, with more than 10 years in farming. Currently serving as President of the Batan AMIA Village Farmers Association.
Participant 6	A 56-year-old male rice farmer with over ten years of farming experience and a solid agricultural background from Sitio Bantod, Barangay Ambolong.
Participant 7	A 53-year-old female farmer from Sitio Camili, Barangay Ambolong, who has over a decade of farming experience.
Participant 8	A 53-year-old male farmer from Sitio Camili in Barangay Ambolong who has over ten years of experience. He is coming in to take over from one who was inactive before.
Participant 9	A 68-year-old male farmer from Sitio Camili, Barangay Ambolong, who has over ten years of farming experience.
Participant 10	A 56-year-old male farmer from Sitio Camili, Barangay Ambolong, with more than ten years of farming experience.

(Fig. 1)

Given below is the profile of participants who were implementers that including aspects such as the age of the persons involved, their farming experience, and their roles in the community.

Group 2 – Participants

Participants	**Description**
Participant A	A male representative from the Department of Agriculture (DA) stationed in Barangay Caiyang, Batan, Aklan. He is probably in his 40s and has working experience of above 10 years, during which he has worked more closely with the farmers.
Participant B	A female representative from the agricultural extension office in Ibajay, Aklan. In her 20s, she has about 4 to 6 years of experience working with farmers.
Participant C	A male DA representative from Barangay Lupit, Batan, Aklan. He is around 30 and has abundant years of experience. Currently, he is the municipal agriculturist and heads the DA in the municipality of Batan.
Participant D	A male AMIA regional facilitator from Barangay Amerang, Maasin, Iloilo. He is 20 and has worked as an agricultural facilitator for some 6 years, entering the farming field quite early.

Participant E	A female AMIA facilitator from Barangay Tupol Oeste, Cabatuan, Iloilo. She is also in her 20s and has more than 3 years of experience in the field.
Participant F	A female AMIA facilitator from Barangay Bayunan, San Joaquin, Iloilo (DA-RFO 6). She is in her 20s as well and has over 3 years of experience as an agricultural facilitator.

(Fig. 2)

The site of the study was Batan. It is a municipality in the province of Aklan, Region VI, Western Visayas, Philippines. It particularly focused on two nearby barangays, Ambolong and Palay, where both were quite active participants in the AMIA Village Program. These sites were chosen because of their great opportunities for organic farming and the will of the community to apply sustainable farming practices.
Beginning a project focused on organic vegetable gardening, the AMIA Village Program offers hands-on training and a three-day seminar that teaches farmers basic organic farming techniques. To assist this effort, the Department of Agriculture (DA-AMIA) sent 20 rainwater harvesters along with the necessary accessories to 10 farmers from each barangay.
Making farming easier and more productive for farmers, this program then offered techniques that adopt Odor-Free Piggery (Babuyang Walang Amoy) and Climate Resilient Agriculture (CRA), thereby promoting sustainable and environmentally sound pig farming. Each barangay in this initiative had ten farmers participating in it. Unfortunately, the project saw some hurdles, mainly from the outbreak of African Swine Fever affecting pig production greatly in the Western Visayas.
The third initiative under the program was the Climate Resiliency Field School (CRFS), which trained farmers in rural areas on adaptive farming methods. Among adapted methods were diversified cropping and organic farming. The CRFS provided farmers with skills and approaches that were climate-compatible or mitigation measures, together with access to climate and weather information to help them make informed decisions on their planting calendars. After the completion of the DA-AMIA training, the Batan AMIA Village Farmers Association (BAVFA) was officially organized on June 22, 2021, guided by the farmers' authentic commitment to the adoption and sustainability of organic farming practices in the barangays, Ambolong and Palay.
The AMIA Village Program's real-life impact assessment was significantly aided by the targeting of these communities. The geographic proximity and the similarities in the agricultural conditions of the Ambolong and Palay barangays thus allowed the researcher to draw comparative conclusions that reinforce the findings of the study. The AMIA Village Program's real-world impact assessment was significantly aided by the targeting of these communities. Proximity and similar agricultural conditions across Barangays Ambolong and Palay allowed for a comparative analysis that corroborated the findings of the research.
Besides studying how organic farming also impacted the economy, the researcher investigated in detail how vermicast fertilizer contributed to this. Information garnered from the study brought out the good impact of sustainable agriculture in increasing productivity and the standard of living of the rural farmers.

Data Gathering Instrument

The most appropriate technique for data collection for qualitative research was semi-structured interviews. This was noted by Creswell (2013) and Kvale and Brinkmann (2015). The interview served as the primary instrument for the present study, using an interview guide. For the farmers, it was done at home individually, while some had it at their workplaces. Since these interviews were designed to be conducted

in a friendly conversational style, there was no pressure on the participants. With this approach, the experience, perceptions, and insights of the participants concerning the AMIA Village Program were thoroughly explored. Semi-structured interviews produced flexible structures in which a researcher used a predetermined set of questions to maintain consistency across interviews while encouraging open-ended response types. This ability allowed for expansion in answers and sometimes discussions on topics that possibly may have been outside the expectation of researchers. The semi-structured method ensured the broad subjects of interest were captured with scope to allow unrestrictive flow of the interview discussion, unearthing deep and informative perceptions concerning the influences of the program on farmers' lives, yields from production, and inter-personal engagements. Additionally, semi-structured interviews ensured relaxation for the study participants, verbalizing their actual and elaborate encounters.

In this research, data collection utilized interview guide questionnaires specifically designed for different participant categories, such as AMIA facilitators, representatives from the municipal Department of Agriculture (DA), and farmers who benefit from the program. The survey guide, which integrated the municipal DA officials and AMIA facilitators, contained 20 questions that covered a variety of themes: 6 demographic inquiries, 4 questions regarding the AMIA Village Program, 3 questions on the impacts of vegetable and vermicast fertilizer production, 2 queries related to economic effects, 2 questions focusing on socio-economic benefits, and 3 inquiries regarding sustainability and future projects. The guide for the interview of farmers contained a total of 24 questions. The division had 6 questions on demographic information, 6 on the AMIA Village Program, 4 that questioned the impact of making vegetable and vermicast fertilizers, 3 on economic impacts, 2 on socio-economic advantages, and lastly, 3 questions on sustainability and future interventions.

Furthermore, the valuable suggestions of the three groups were noted and presented. This is to help policymakers or implementers improve the program's effectiveness. This structured method ensured a thorough understanding of the program's impact and potential areas for improvement.

Data Gathering Procedures

Before the actual interviews took place, several important steps were taken. First was securing permissions to conduct the study from authorized individuals, the ACC Dean of Faculty of Business Management Education - Master in Business Administration, the BAVFA President, the office of Municipal Agriculturist, and the Regional AMIA Facilitator. This had to be adhered to achieve proper coordination and ethical adherence. After the approval, the participants were approached for the schedule of interview that was most convenient for them, and individual informed consent was sought. The interviews were done in a relaxed, amicable conversational tone to allow for open and honest disclosure. Rather than using audio recordings, the researcher made detailed notes during the interviews, focusing on significant responses and observations. Observations on non-verbal cues and the interview setting were also noted to enrich the contextual understanding of the data. Semi-structured interviews, a casual focus group, and individual discussions. To make them feel comfortable, interviews happened while they were busy with work. Field observation was conducted to get closer to how farmers act, and some internal documents with greater emphasis on their structure rather than the content itself. Interviews were arranged according to when participants were available, meeting them in different locations such as their homes, farms, offices, and even online. Informal discussions assisted in obtaining information in a relaxed environment, while the observations in the field enabled us to validate their answers and assess their agricultural practices.

Data Analysis

Data analysis for this qualitative research was conducted systematically to ensure that results were credible and meaningful (Yin, 2018). First, all semi-structured interviews with farmers, Municipal Department of Agriculture officers, and AMIA Regional Office facilitators were transcribed verbatim, and detailed field notes from observations were taken.

Thematic analysis, as cited by Saldana (2016), was utilized to code the transcriptions in a systematic way so that it was possible to identify persistent patterns and themes describing the influence of the program. Open coding, where the first codes were established, came before axial coding, linking these codes and detecting relationships between them. Selective coding came later to filter and merge the codes that most clearly represented the information.

Trustworthiness

Transferability was achieved through exhaustive descriptions of the research context, participants, and findings. The comprehensive exploration of the study site: Barangay Ambolong and Barangay Palay and the attributes of the AMIA Village Program, according to Lincoln and Guba (1985), has provided grounds for others to make a sound judgment as to how the findings could fit similar contexts.

Dependability in research can be achieved by keeping a complete trail of the research process where all activities, decisions, and changes in the research design are recorded. The consistency of data coding and analysis was further ensured by inter-coder reliability checks for cases involving several researchers (Yin, 2018; Saldana, 2016).

Confirmability was also achieved by subjecting the research outcomes to the influence of the participants' perceptions, experiences, and not by the biases of the researcher. Reflexivity was also maintained through a reflexive diary where the researcher records influences, assumptions, and biases that would affect the research. This exercise has somewhat increased objectivity and neutrality in this research (Patton, 2015; Silverman, 2019).

Using these techniques should legitimize, validate, and authenticate the context of the AMIA Village Program and the economic impacts attributed to it through vegetable and vermicast fertilizer production.

Ethical Considerations

With a sharp focus on ethics per se, this qualitative study attempted to honor and protect the security and rights of the participants throughout the entire course of the research. In the conduct of this research, several ethical guidelines of ethical practice were observed, as prescribed by Creswell (2013) and Kvale and Brinkmann (2015).

Informed consent was obtained from all participants before the beginning of the research. In detail, the participants were provided with detailed information about the study, including its purpose, procedures, potential risks and benefits, and whether or not the participant would like to opt out of the study at any time without any given consequences.

Kvale and Brinkmann's (2015) observations were strictly observed for confidentiality. Participants' information was anonymized, and pseudonyms were adopted in all data and the final report. Restrictions were placed on data storage so that access was solely provided to the research team, thereby ensuring that participants' identities were kept confidential.

The study was registered and ethically approved beforehand by a proper ethics board of reviewers with a particular focus on ensuring that the ethical norms and principles were followed. The process of this

clearance will have, for certain, been raised and discussed with an emphasis on the ethical issues and the study methodology, from the Flick point of view in 2018.

Respect for participants was laid down as a guiding principle of the research process. The participants were treated kindly and respectfully during the process, and their views were respected. Respectful and accurate representation of views has been maintained in accordance with the study of Silverman in 2019. The principles of Beneficence and Non-Maleficence were adhered to by maximizing some profit for the participants and minimizing the harm to their interests, with special attention to the possible gain of offering valuable input to policymakers and program implementers. Creswell (2013) stated that discomforts or risks were well reduced and managed.

Ethics principles were followed in every aspect in this research, striving towards uncompromised ethical behavior and the safeguarding and respect of all involved participants.

Chapter 4
FINDINGS AND DISCUSSION

This section of the document reviews and interprets the findings gathered from the data. The major themes and patterns reflect the most significant insights derived from the analysis. This section discusses testimonies from participants and explanations supporting the main themes while comparing these to the relevant literature to situate the findings within a wider academic and practical context. Through the learned theories along with the findings and results, the general overview of the effectiveness, efficiency, and viability of the AMIA Village Program is given in this part.

Cultivating Commitment: Engagement and Empowerment in the AMIA Village Program

The other methods include direct observation and face-to-face interviews that permitted a better grasp and insight into participants' experiences on the effects of the AMIA Village Organic Farming Program. These qualitative methodologies allowed a much broader and contextualized understanding of how participation, training, and resource assistance led to the community members effectively implementing the program. The selection was based on distance to the project sites, whether agricultural activities were being engaged in, or the willingness to embrace organic activities, rendering the program community-based and sustainable in the eyes of the Department of Agriculture (DA-AMIA 2018). By engaging farmers in training workshops and resource provision, skills development was emphasized, with a focused community involvement that fostered accountability and partnership among these farmers. The findings reaffirm the central tenets of participatory development, which state that when all stakeholders from the given community are actively involved, the results are successful and sustainable (Pretty 1995; Chambers 1997). Uphoff (1992) further elaborated that “Empowered participation” enabled beneficiaries to become co-owners of the program, making the case for common interest in sustainable agriculture.

The first theme that came to the foreground during the evaluations of the program implementations and effectiveness was **Selection Criteria and Engagement of Members**. Farmers and implementers pointed out that the selection criteria primarily considered were residence, active participation in farming, and readiness to embrace organic practices. The findings accord with Cernea's (1991) research, which stressed the necessity of strategies geared to social integration in rural development programs. Those engaged in and observing the project implementation stated that the utmost priority should be provided to the aspirants and resource-poor farmers to develop their adaptive capacity with climate change, in consonance with Anderson et al. (2019), who stated that building resilience has to be targeted at the most vulnerable. Others have observed a great social tie and community advice during the participation, further supporting Adato

and Meinzen-Dick's (2002) proposition that informal social capital was important for the success of community-driven initiatives.

"Ako ro president it Palay Farmers Association ag isaea man nga hapili sa project it AMIA nga babuyang walang amoy. Kato ambi bag-o ka maqualify nga recipient sa AMIA program hay dapat membro ka it isaeang farmers association."

("I was the president of the Palay Farmers Association and also one of the recipients of the AMIA project, 'Babuyang Walang Amoy.' Previously, one of the qualifications to become a recipient was that you had to be a member of a farmers' association.") (P1, L11-13)

Since joining the AMIA Village Program required certain prerequisites, P1 through P10 shared similar sentiments, highlighting how crucial these criteria were for their participation.

Interestingly, one farmer initially showed curiosity and a readiness to embrace organic practices.

"Ganito yan, nang nabalitaan ko na magkakaroon ng seminar ang DA, ako ay umattend pero hindi ko pa alam kung para saan yong seminar. And then, sinabi na sa amin na meron daw study about sa farming. Sinabihan kami lahat na umattend kung sino and willing at interesado dahil kailangan nila ng 30 members. So, ayon isa ako sa naging member dahil ako ay nagkainterest sa pag aaral at pagtatanim sa organic farming."

("When I heard about a seminar at the Municipal Department of Agriculture, I attended without initially knowing what it was about. They explained that it was a study on farming. The attendees were asked who was interested and willing to join, as they needed 30 members. I became interested in learning about organic farming, which led me to become one of the members.") (P3, 268-272)

Meanwhile, other replacement participants for those inactive members, like P5, P6, P7, P8, P9, and P10, were motivated and guided by local authorities to deepen their understanding and encouraged to engage in organic farming through special projects launched by NGOs.

"Replacement man ako sa mga nagbaeak-out ngato nga haunang hapili. Ginkumbinse ako it among dating presidente asosasyon ro Samahan ng mga Magsasaka ng Barangay Ambolong. May background akong sangkiri sa organic farming ay naka-attend man ako it seminar/training nga *ginconduct it NGO nga R1. Duyon naka-join ako sa AMIA Village Program."*

("I was a replacement for the members who had dropped out from the initial selection. I was convinced by our former president of the Samahan ng mga Magsasaka ng Barangay Ambolong. I have a background in organic farming and had attended a seminar/training conducted by the NGO R1. This led to my joining the AMIA Village Program.") (P10, 992-996)

Program implementers were also given a set of recruitment criteria for selecting the beneficiaries for the AMIA program. The pioneer candidates were pre-identified by a screening committee in cooperation with the local government unit.

"Ang mga AMIA farmer beneficiaries were identified through the guidelines set by the Program gaya ng: Must be registered member of Registry System for Basic Sectors in Agriculture (RSBSA); At least a member of identified Farmers Association of the Program based on the results of Climate Risk Vulnerability Assessment (CRVA) as one of the Vulnerable Barangays in the Municipality of Batan, Aklan; With an area covered by AMIA geotagging (out of 100ha geotagged areas results); Active member of the association; and, Actively participates in every training, workshops and meetings of the Association."

("The AMIA farmer beneficiaries were identified through the guidelines set by the program, which include the following: being a registered member of the Registry System for Basic Sectors in Agriculture (RSBSA); being at least a member of a Farmers' Association identified by the program based on the results

of the Climate Risk Vulnerability Assessment (CRVA) as one of the vulnerable barangays in the Municipality of Batan, Aklan; having an area covered by AMIA geotagging, based on the results of the 100-hectare geotagged areas; being an active member of the association; and actively participating in every training, workshop, and meeting of the association.") (PD, 1419-1426)

"First, the farmers must be a residence of either Barangay Ambolong and Barangay Palay. And definitely the farmer must be a practitioner of organic farming."

("First, farmers must reside in either Barangay Ambolong or Barangay Palay. Additionally, they must actively practice organic farming.") (PA, L1096-1097)

Emphasizing the importance of various elements in choosing participants, PB, PC, PE, and PF expressed similar views regarding the candidate selection process.

Acknowledging the expectations set for participants highlights their responsibility, commitment to the success of the program, and willingness to engage beyond their personal interests.

Participants exhibit a solid sense of personal accountability and apply their understanding, highlighting their dedication to achieving the program's goals. Some individuals actively share their knowledge and interact with others, showing their desire to foster community. Conversely, some demonstrate a customer-oriented mindset, reflecting a strong commitment to helping others and supporting the program.

"Ro akong experience ag mga hatun-an sa bag-ong technolohiya sa pagpanguma hay gamiton ko man sa kamaeayran it akong panguma ag sa pag-succeed man it dayang programa. Sa minatuod, pilang bilog man lang kami nga perming ga-attend sa schedule it among duty sa farm. Ro iba hay papetiks petiks man lang sa andang obligasyon."

("I will use the knowledge and experience I gained about new technological trends in farming for the betterment of my farming practices and for the success of the program's objectives. The truth is, only a few of us attend the scheduled work on the farm. Others don't take their obligations seriously.") (P1, L36-40)

"Kung ano man ang aking natutunan mula sa seminars at actual experiences sa programang ito ay malugod kong ibabahagi kung sino man ang gusto ring matuto sa ganito uri ng pagpa-farming. Ako rin ay committed sa aking responsibilidad bilang isang membro at opisyal ng asosasyon."

("Whatever I have learned from the seminars and my actual experience in this program, I am wholeheartedly willing to share with those eager to learn about this type of farming. I am also committed to my responsibilities as a member and officer of the association.") (P3, L290-293)

"Bilang dating membro ng konseho sa barangay sanay na po akong nagsilbi sa nga tao. Yung taos pusong pagtrabaho ng mga nakaassign sa akin at pagtupad sa mga obligation bilang membro ng asosasyon, yan ang maeoffer ko pabalik."

("As a former member of the barangay council, I am accustomed to serving the people. I can give back by wholeheartedly fulfilling my assigned tasks and responsibilities as a member.") (P4, L398-400)

The implementer participants agreed that when farmers joined the AMIA Village Program, they were not just signing up for a program—they were committing to actively engage, adopt climate-resilient agricultural practices, share their knowledge, and help create strong, sustainable farming communities...

"The DA-AMIA program aims to empower Filipino farmers and fisherfolks by equipping them with the knowledge and resources to adapt to and mitigate the effects of climate change. In return for their participation in the program, farmers are expected to actively engage in the program activities, attending training sessions and workshops, implement the recommended climate-smart agricultural practices

learned during the program. Contribute to building Climate-resilient villages, embrace sustainable and organic farming practices and contribute to data collection and program evaluation."

("The DA-AMIA program aims to empower Filipino farmers and fisherfolk by equipping them with the knowledge and resources to adapt to and mitigate the effects of climate change. In return for their participation, farmers are expected to actively engage in program activities by attending training sessions and workshops and implementing the recommended climate-smart agricultural practices they have learned. Beyond their individual farms, they are also encouraged to contribute to building climate-resilient villages by embracing sustainable and organic farming methods. Additionally, they play a role in data collection and program evaluation, helping assess the effectiveness of the initiatives and ensuring continuous improvement in the program's implementation.") (PC, 1337–1343)

Cultivating Commitment analyzed the effectiveness of program implementation through an inclusive approach.

Another theme that emerged, the **Training Programs and Resources Allocation**. The AMIA Village Program stands out for providing outstanding, hands-on training and supplying sustainable resources. The participatory approach highlights methodical recruitment, inclusive decision-making, and structured capacity building. This method corresponds with research that emphasized the importance of participatory development in agriculture. Active participation by stakeholders often led to outcomes that were more sustainable and centered around the community (Pretty, 1995; Chambers, 1997). Both farmers and implementers acknowledged the importance of having clear guidelines for choosing beneficiaries, the significance of orientation and training in increasing awareness, and the necessity of fostering community cooperation. This process embodied what Uphoff (1992) calls "empowered participation," where stakeholders transition from being passive participants to actively sharing in decision-making and taking on responsibilities.

This showed just how much they appreciated the hands-on training in organic farming and monitoring techniques.

"Abo ang gin-attenand nga seminars/training: tag sa organic vegetable gardening para sa project it rainwater harvester, babuyang walang amoy, bokashi making, vermicomposting ag sa fermentation ag pag-obra it concoction fertilizers ag pesticides."

("I have attended seminars and training sessions on organic vegetable gardening for their rainwater harvester project, 'Babuyang Walang Amoy,' Bokashi making, vermicomposting, fermentation, and the preparation of concoction-based fertilizers and pesticides.") (P2, L150-153)

"Binigyan nila kami ng mga seeds, at nakahiram din ako ng mga hand gardening tools na na-eprovide nila para sa communal garden. Dahil ako ay additional member, naitransfer din sa akin yung set ng rainwater harvester mula sa inactive ng member na naunang mag-join sa AMIA."

("We were given seeds, and I borrowed hand gardening tools provided for use in the communal garden. Since I was added to the rainwater harvester project, a set of drums and fittings from an inactive member was transferred to me.") (P3, L285-288)

The implementers made sure that the training included Climate Resilient Agriculture (CRA) practices, such as organic vegetable production, record-keeping, and vermicomposting. They placed a strong emphasis on using Participatory Rural Appraisal (PRA) to understand the farmers' needs before crafting the training sessions. Additionally, they worked closely with experts to deliver high-quality, hands-on training that was specifically tailored to what the farmers required.

This underscored the implementers' commitment to ensuring that the training is both relevant and practical.

"The trainings provided to AMIA beneficiary is aligned and focused based on their specific needs and the program design for AMIA village. The program ensures and encourage beneficiary to participate in training and planning to make sure their needs are addressed. Hands-on training practical application of skills and knowledge. Also, retention of information and skill is best through hands-on activities. Trainings provided by trainers with relevant expertise and knowledge about the subject matter, with collaboration and partnership with others to provide relevant training and support."

("The training provided to AMIA beneficiaries is aligned with and focused on their specific needs, as well as the overall program design for the AMIA Village. The program ensures and encourages beneficiaries to actively participate in training and planning to address their needs effectively. Hands-on training allows for the practical application of skills and knowledge, ensuring better retention of information. Additionally, training sessions are conducted by trainers with relevant expertise and knowledge of the subject matter. Collaboration and partnerships with other organizations further enhance the training and support provided to beneficiaries.") (PB, L1187-1194)

Even though the speakers in both groups saw the value of the training, it was highlighted by some farmers that a couple of participants were inadequately involved, causing a scattered distribution of the knowledge. Conversely, the implementers' position was that the training had been customized to the farmers' needs, yet it was only through full participant participation.

However, while the implementers were confident enough that their engagement strategies were good ones, still there were group of farmers who might be unwilling to learn from the training.

"Sa minatuod, pilang bilog man lang kami nga perming ga-attend sa schedule it among duty sa farm. Ro iba hay papetiks petiks man lang sa andang obligasyon."

("The truth is, only a few of us attend the scheduled work on the farm. Others do not take their obligations seriously.") (P1, L44-46)

"To ensure that the training is relevant and of high quality through a multi-pronged approach: Needs Assessment: DA-AMIA Western Visayas begin by understanding the specific needs and challenges of the participants; Experience Trainers: They select highly qualified and experienced trainers with a deep understanding of organic farming principles and practices; and Interactive Learning: They employ variety of interactive learning methods to engage participants and promote active participation. This include group discussions, demonstration and practical exercises."

("To ensure that the training is relevant and of high quality, DA-AMIA Western Visayas takes a comprehensive approach. It all starts with a need assessment, where they carefully identify the specific challenges and requirements of the farmers. This helps in designing training sessions that are truly responsive to their needs. Equally important is the selection of experienced trainers who have a deep understanding of organic farming principles and hands-on expertise in the field. These trainers not only share technical knowledge but also practical insights that farmers can apply in their own farming practices. Moreover, the training sessions emphasize interactive learning to keep participants engaged and encourage active participation. Farmers take part in group discussions, hands-on demonstrations, and practical exercises, ensuring that they not only understand the concepts but also gain the confidence to implement them in their farms.") (PC, L1329-1335)

They expressed some grievances about the quality of the seeds, which they said were of an older stock and thus poor in germination. They had also already experienced additional challenges in accessing tools from the shared system. They did, however, appreciate that these offered resources were essential, but

were also concerned with the distribution pattern of these supplies. This highlighted their concern about the quality of the resources given and accessibility.

"Hay, nagta-o man sanda kato it vegetable seeds pero, old stocks siguro ay ro iba owa nagtubo. May mga basic manual tools man nga ginta-o para sa gardening ag imaw man sa vermicast fertilizer production. Ag syimpre ro daywang vermicomposting houses nga may 6 beds ag may storage, ag ro sambilog hay may daywang beds. Lately hay may nag-abot man nga shredder pero owa pa ginagamita ay kinahangean pa nga magtraining ro ga-operate."

("They gave us seeds before, but I believe they were old stock because some did not germinate. Basic manual tools for vegetable gardening and vermicast fertilizer production were also provided. Additionally, two vermicomposting houses were given—one with 8 vermi beds and storage, and another with 2 vermi beds. Recently, they provided shredder machine, but they are not yet in use because the operators still need to attend a short training orientation on how to operate them.") (P1, L35-40)

The Implementers gave out seeds, organic composting materials such as EM and molasses, farming tools, rainwater harvesting equipment, and vermicomposting facility kits. It was presumed that farmers would use the resources properly for higher productivity and sustainability. Further, it was pointed out that these resources were fairly distributed in line with the training programs provided. This liberated the implementers from the burden of dependency, instead aiming to **contribute to long-term sustainability**.

"To adopt the Climate Resilient Agriculture (CRA) technologies to achieve economic stability, food security, and sustainable market access, thereby building their resilience."

("To adopt Climate Resilient Agriculture (CRA) technologies to achieve economic stability, food security, and sustainable market access, thereby building farmers' resilience.") (PF, L1654 - 1656)

Some farmers felt that the quality of the seeds they received and the availability of shared tools could use some improvement. On the other hand, implementers expected farmers to fully utilize the resources provided. This pointed to a shared concern about the quality of the seeds and highlighted that implementers wanted farmers to take charge of making the most of what they received.

"Nabigyan din ako ng kaunting seeds pero di tumubo yung iba, di ko alam kung bakit."

("They provided me with some seeds, though not all successfully germinated.") (P4, L393)

"As a program implementor, we are only expecting to our participants or farmer beneficiaries to practice and apply the technology."

("As program implementer, our primary expectation from the participants and farmer beneficiaries is their commitment to practicing and applying the technologies introduced to them.") (PD, L1443-1446)

From each side, farmers and implementers shared ideas on the importance of training, yet the difference arose in the participation of the engaged. Farmers appreciated the resources they had received in support, but raised pertinent observations about quality and resource distribution. In contrast, implementers based their stresses on the sustainable and proper utilization of those resources. Along these lines, the gaps should be closed in better monitoring attendance for training, enhancing quality control for seeds, and a more coherent means of distributing and managing resources.

Another theme that emerged, fostering strong relationships among farmers and the people in the community, is the Participant Responsibilities and Community Contribution. One key theme that stood out was the participants' sense of responsibility and the meaningful contributions they made to their communities. Beyond just applying what they learned from the AMIA training, farmers took it upon themselves to share their knowledge with others, building strong relationships and a spirit of collaboration. This kind of peer-to-peer learning and community involvement is what Pretty (1995) called "social capital

in action," where shared knowledge and teamwork boost collective resilience and innovation. Indeed, Chambers (1997) underscores the importance assigned to local actors for sustaining development programs. True participation indeed empowers individuals to become actors of change in the community. Farmers as well as implementers also shared this conviction: giving something back to programs and the bigger community, be it through those who would be able to share their technical skills or through taking up leadership roles in community projects, and so on-all manifestations of the kind of participative development perspective that Uphoff (1992) kept talking about where sustainable impact rested upon local initiative and belongingness. These were not obligations, but rather a mutual commitment towards the objectives and continued viability of the AMIA Village Program. By this, Adato and Meinzen-Dick (2002) would surely agree that trust, reciprocity, and informal networks together played a central role in ensuring the success of agricultural and rural programs.

Farmer participants played a key role by putting into practice what they have learned from the program, sharing their experiences with others, and staying actively engaged in farming activities. Some step up to take on leadership positions within the association, while others have shown their support for the program through their unwavering commitment and dedication.

"Kung ano man ang aking natutunan mula sa seminars at actual experiences sa programang ito ay malugod kong ibabahagi kung sino man ang gusto ring matuto sa ganitong uri ng pagfa-farming. Ako rin ay committed sa aking responsibilidad bilang isang miyembro at opisyal ng asosasyon."

("Whatever I have learned from the seminars and my actual experience in this program, I am wholeheartedly willing to share with those eager to learn about this type of farming. I am also committed to my responsibilities as a member and officer of the association.") (P3, L290 - 193)

"Ro akong pagtupad ko akong mga obligasyon bilang presidente it asosasyon maskin may iba pa akong mga ueobrahon sa akong panimaeay hay ginataw-an ko gid it oras ro mga lakad, schedules it meeting ag pag-ubra sa communal garden, ag sa vermicast fertilizer production facilities."

("The fulfillment of my obligations as the president of the association. Even though I have other responsibilities at home, I make time for activities, meeting schedules, work in the communal garden, and the vermicast fertilizer production facilities.") (P5, L500-503)

"Cimpre bilang kasama sa rainwater harvester project, ga-share back man ako it 10% ko ang kita sa ang sariling vegetable garden. Bilang Vice President it asosasyon, hay ro akong maitao pabalik hay akong dedication sa pagperform ko akong mga responsibility ag loyalty sa asosasyon."

("Of course, as part of the rainwater harvester project, I give back 10% of my earnings from my own vegetable garden to the association. As Vice President of the association, I am also expected to demonstrate dedication in fulfilling my responsibilities and loyalty to the organization.") (P7, L713-716)

The most common expectations and inputs from program implementers included expecting that the farmers would not only use the technologies that they have learned, but also actively participate in the program to contribute to data collection and sustainability projects. However, they were interested in resilience, sustainability, and, of course, community-based knowledge-sharing for the long haul.

"As AMIA program aims for farmers' resiliency and sustainability, we also aim and hope for farmers' active participation, adoption of climate-resilient agricultural practices and technologies learned from the program, provide data and reports like yields and problems faced by the farmer, sharing of knowledge, skills, and technologies to other farmers, and to create good relationships to others and create sustainable livelihood income."

("As the AMIA program aims to enhance farmers' resilience and sustainability, we also strive to encourage and ensure their active participation. We hope for the adoption of climate-resilient agricultural practices and technologies learned from the program. Additionally, we emphasize the importance of providing data and reports, such as yield outcomes and challenges faced by farmers, as well as sharing knowledge, skills, and technologies with fellow farmers. Ultimately, the program seeks to foster strong relationships among farmers and promote the creation of sustainable livelihood opportunities.") (PB, L1196-1201)

"The DA-AMIA program aims to empower Filipino farmers and fisherfolks by equipping them with the knowledge and resources to adapt to and mitigate the effects of climate change. In return for their participation in the program, farmers are expected to actively engage in the program activities, attending training sessions and workshops, implementing the recommended climate-smart agricultural practices learned during the program. Contribute to building climate-resilient villages, embrace sustainable and organic farming practices, and contribute to data collection and program evaluation."

("The DA-AMIA program aims to empower Filipino farmers and fisherfolk by equipping them with the knowledge and resources to adapt to and mitigate the effects of climate change. In return for their participation, farmers are expected to actively engage in program activities by attending training sessions and workshops and implementing the recommended climate-smart agricultural practices they have learned. Beyond their individual farms, they are also encouraged to contribute to building climate-resilient villages by embracing sustainable and organic farming methods. Additionally, they play a role in data collection and program evaluation, helping assess the effectiveness of the initiatives and ensuring continuous improvement in the program's implementation.") (PC, L1337-1344)

Both farmers and implementers embarked on the outlook of learning and participating. It is just that implementers emphasized much on the reporting of the data and efforts towards sustainability, while farmers preferred to focus more on their internal and external contributions. Farmer participants were stepping up with financial contributions and taking leadership positions because of the continuum of their commitment, well beyond simply learning and applying new skills. It responded well to sustainability at the level of the AMIA Village Program, allowing resilience and knowledge transfer within the farming community.

Harvesting Prosperity: Socio-Economic and Community Resilience in the AMIA Village Experience

The AMIA Village Program is a socio-economic-community development program that aims to enhance lives through organic farming and eco-agriculture vermicast (a natural fertilizer) production, and help clear out poverty. The utilization of semi-structured interviews and site observations indicated gains in agricultural productivity, product quality, and household earnings, which have increased financial advancement and market access for smallholder farmers. Such results could be compared with those of the findings by Lampkin and Padel in 1994, which claimed that organic farming proved profitable, but only under effective technical assistance and availability of market access. In fact, beyond economic gains, the program encouraged social integration and knowledge sharing, as well as climate resilience, all of which were recognized by Altieri and Koohafkan (2008), who went on to say that agroecological practices improved productivity and built adaptive capacity for the rural world. The AMIA initiative inspired collective action; its success speaks to Pretty's assertion (2003) that "farmer-led innovations and collaboration [are] a nag carrier for development long term." In general, the impact of this program goes beyond individual benefits, fostering a more cohesive and resilient agricultural community.

The first of the themes of socio-economic impact is **Agricultural Productivity and Product Quality**. The AMIA Village Program has turned the tide for farmers, not only by significantly increasing

agricultural productivity and enhancing the quality of their products. Using organic farming and producing vermicast fertilizer as their main focus, the program has not only been able to increase the vegetable amounts, but also has been able to live in symbiosis with nature. This method has also been referred to by Lampkin and Padel (1994), who said that organic conversion, when managed carefully, can yield competitive results as well as provide purchasing clients with high-quality products. Vermicompost production has emerged, particularly as a strategy providing soil with organic matter and activating the soil microorganisms to improve it, leading to an increase in soil fertility and a human-driven increase in crop production. From the account of the growers and those who have realized the program, the section encapsulates the views from the two groups -- the farmers and the implementers of the program. Also, it presents their findings on the impact on the quantity and quality of agricultural output, and the efficiency of the vermicast fertilizer production process.

The AMIA Village Program has greatly increased the productivity of the farmers who were directly involved in the initiative. This mostly comes from the change to organic farming methods and the utilization of vermicast fertilizer, which are mentioned. Farmers effectively described how it can work, not only to the disaster-affected but also for the people coordinating the program. With the help of vermicast, many people are now into better and richer harvests through soil aeration, water retention, and nutrient supply. Many farmers have shared their success stories, noting the **remarkable enhancements in their harvests.** But still, in addition, the participating farmers are interviewed, who tell about the situation with the program, demonstrating how the productivity and profitability of the process were at the beginning stage of the program. These insights shed light on how the program is **boosting agricultural productivity and helping farmers effectively market their organic produce**.

"*Sa paggamit ng organic na abono gumanda ang mga pananim ko at tumaas ang ani ko ng mga gulay.*" ("With the use of organic fertilizers, my plants have become healthier, and my vegetable yield has increased.") (P3, L299-300)

"When it comes to their harvest, they have higher yields than before. In fact, we have assisted them to have Kadiwa Market at the side of the municipal hall once a week to display and sell their produce incurring lesser cost of production."

("Their harvest yields are higher than before. In fact, we have assisted them in establishing a Kadiwa Market beside the municipal hall once a week, allowing them to display and sell their produce while incurring lower production costs.") (PA, L1109-1111)

The program has rolled out **organic farming practices** that have made a difference in the quality of vegetables produced by the farmers involved. Many of these farmers have noticed healthier plants, brighter colors, and a **stronger overall resilience** in their crops. At the same time, those running the program were eager to point out the advantages of using organic inputs and fostering sustainable farming systems. These insights aligned with what Pimentel et al. (2005) found, showing that organic farming can boost crop quality by enhancing soil health and avoiding chemical residues. However, challenges like pest control and climate change still played a role in the results, highlighting the importance of flexible strategies in organic farming

"Yes, gumanda ang kalidad ng aking ani sa aking paggamit ng vermi compost, dahil tumaba ang aking mga tanim, gumanda ang kulay na dati ay naninilaw at sakitin."

("Yes, the quality of my harvest has improved with my use of vermicompost. My plants have grown healthier, their color has improved—where before they were yellowing and prone to disease.") (P5, L513-514)

"When it comes to quality, we can say that the produce is organic because of the use of organic fertilizers and concoctions provided through the program's training. As for the yields, we can say there's been a slight increase in production, though not significantly large. However, this has still greatly helped improve their income."

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The organic method has enhanced vegetable quality to a more healthful status and greatly improved marketability. In addition, it stressed the need for continual support and training to fully realize these benefits.

About this efficacious vermicast fertilizer developed through the AMIA Village Program, reactions have been mixed between enthusiasm and hurdles. Farmers appeared to be aware of the advantages of vermicomposting, but they were voicing legitimate concerns about labor input, time for decomposition of vermicompost, and the availability of vermicomposting materials. In contrast, the program runners were emphasizing the need to maintain the right conditions, source raw materials sustainably, and apply technology to optimize efficiency. This corroborates Edwards and Arancon's (2004) findings, which revealed that while vermicomposting does foster sustainable practices and enhance soil fertility, it requires the adequate management of environmental factors such as moisture, temperature, and the availability of feedstock to optimize efficiency.

"Almost 90% na ang efficiency ng vermicast fertilizer production dahil sa aming natutunan sa mga seminars at guidance sa proceso ng paggawa neto."

("The efficiency of vermicast fertilizer production is almost 90% due to the knowledge we gained from seminars and the guidance on its production process.") (P5, L516-517)

"There are several factors to consider for the efficient production of vermicast which also is the availability of substrate, its ratio; and to maintain suitable conditions for vermi including moisture level, temperature and aeration and lack of maintenance. But so far, they are working with it with the goal of success for production and support of shredder make it easier for them and less labor and they can shorten the time of decomposition for production."

("Several factors influence the efficient production of vermicast, including the availability of substrates, proper substrate ratio, and maintaining suitable conditions for the vermi, such as moisture levels, temperature, and aeration. Additionally, a lack of maintenance can hinder production. However, farmers are actively working towards successful vermicast production. The recent introduction of a shredder has significantly eased their workload, reduced labor requirements, and shortened the decomposition time, making the process more efficient.") (PB, L1213-1218)

These insights showed that while farmers have made great strides in boosting their vermicast production efficiency through training, having access to technology and managing raw materials effectively were still crucial for optimizing the process.

Farmers and participants in the AMIA Village Program's vermicast fertilizer production have encountered various challenges. These mainly revolved around sourcing raw materials, keeping optimal composting conditions, and ensuring all members were actively involved. To address these challenges, recommendations to boost strategies for sourcing raw materials, such as exploring alternative substrate options, enhancing training and monitoring for improved substrate layering and moisture control, and

fostering greater collaboration among team members, should be taken. In addition, it would be important to increase marketing efforts to create more opportunities for sales.

Even though these challenges manifested themselves, the program is moving gradually, thanks to technology aiding community work and gradually rising awareness of organic farming practices. They found that although farmers as a group have increased awareness in the production of vermicast as an effective process, they were limited by the labor intensity of the work, availability of substrate, and efficiency in moisture management. The crop quality and yield have improved, even though problems persisted in the area of input sourcing and maintaining consistent participation as a group. Currently, the implementer of the program should focus on the sustainability of the program with an emphasis on adequate raw materials supply, market access, and low input costs for economic advantage above just-yield-oriented immediate gains. These findings were similar to those of Edwards (2004), which stated that vermicomposting has apparent benefits for agronomy and the environment, but successful implementation of these benefits would depend on sound resource management, ongoing training, and an enabling institutional framework.

Farmers usually faced the biggest challenge in finding the right substrates, especially when it comes to sourcing animal manure and other organic materials, but this could be particularly hard during the rainy season. Green leafy substrates were only available for certain periods in a year, which therefore made it relatively hard to keep such a steady supply.

"Challenge git-a ro pag usoy it supply it animal manure nga igahalo sa ibang substrates. Pati man ro ibang substrates hay tigo man depende sa panahon ag binuean.

("The first challenge is securing a supply of animal manure to mix with other substrates. Additionally, some substrates become scarce depending on the weather, season, and time of year.") (P1, L68-69)

"Seasonal ambi ro ibang substrates, tigo ro manure kung tag-uean, ro ibang green hay tigo man kung tag-init."

("Some substrates are seasonal—manure is scarce during the rainy season, while green materials are limited during the dry season.") (P7, L733-737)

Keeping the moisture levels just right is essential for the survival of the worms. If there's too much or too little water, it could impact the quality of the compost and how quickly it breaks down.

"Marami pa rin mga hamon ang aming hinarap sa production ng vermicast. Una, yung full cooperation ng ibang members especially yung mga nakaduty sa pagdilig ng tubig sa layer ng mixture it substrates. Dapat namomonitor yung moisture, kasi dito nakasalalay yung quality ng vermicast at gaano katagal yung decomposition. Too much and less water ay di maganda sa lalo na kung matutuyuan kasi namamatay yung vermi worms."

("We still face many challenges in vermicast production. First is ensuring the full cooperation of other members, especially those assigned to watering the layers of the substrate mixture. Moisture levels must be properly monitored because they determine the quality of the vermicast and how long decomposition takes. Too much or too little water is not good—especially if it dries out—because the vermi worms could die.") (P5, L520-525)

Some members of the community were not fully participating in the group work, which could cause production delays. Frequent meetings were deemed necessary to keep everyone updated and tackle production problems when they arise.

"Ang isa sa mga challenge na naencounter namin sa paggawa ng vermicast maliban sa sourcing ng materials na gagamitin ay ang unity ng mga members sa paggawa sa scheduled na araw. Kakaunti lang

talaga ang uma-attend."
("Apart from sourcing materials, one of the challenges we face in vermicast production is ensuring that members adhere to the work schedule. Only a few consistently attend their assigned shifts.") (P4, L419-421)
"Dapat gameeting permi agud matun-an ro status it project, masolve kung may mga problema ag maplano ro mga masunod nga ueobrahon para smooth ro daeagan it programa. Kinahangean man nga full force ro manpower ag magcooperate ro mga members."
("There should be regular meetings to assess the project's status, solve any problems, and plan the next steps to ensure the smooth operation of the program. It is also necessary to have full manpower and cooperation from all members.") (P9, L933-936)
Farmers were keen on chopping the substrates manually at first, but in the long run, this proved to be a very slow process. Their troubles were reduced when the shedder was finally brought in, making the whole thing even faster, although everyone had to start coming to terms with it.
"Manami ah kunta dayang vermicast fertilizer production, galing kato hay kabuhay ah bag-o maharvest ay manual ambi ro pagchop-chop it substrates kaya mabuhay ro decomposition sa pagkaon it mga vermi worms. Mayad eani nag-abot eon ro shredder hay madasig eon kara ro proceso ag mapanami man ro kalidad it produkto."
("Vermicast fertilizer production is going well, but previously, harvesting took time because the substrates had to be manually chopped for feeding the vermi worms, which slowed down decomposition. Fortunately, the arrival of shredding machines will speed up the process and improve the quality of the product.") (P2, L186-189)
Then there was that initial worry that there would not be a market for vermicast. Examination with NGOs and organic farming support brought the sales to already opening.
"Shredder also is just newly granted and delivered. It takes their time to produce and harvest in a shorter time before."
("Additionally, the shredder was only recently granted and delivered, so while it helps reduce labor and production time, farmers are still adjusting to its use.") (PB, L1223-1226)
"And now our partner NGO the Rice Action Network collab to procure their produced (vermi)."
("Their commitment to organic farming has since gained support from the Rice Action Network, which now collaborates with them to procure their vermicast, helping expand their market and sustain their efforts.") (PD, L1468-1469)
Yet another interesting theme that emerged to look into is the **Financial Implications: Income and Cost Dynamics** on a larger scope, covering Socio-Economic Impact of the financial side of vermicast production and organic farming under the AMIA Village Program. Whether they were financially viable would depend on how much income could be maximized against costs. Organic practices were helping farmers to some extent with their input costs, however, there were challenges in terms of high initial costs for labor, raw materials, and maintaining consistent access to markets, all of which considerably affect profitability. Notwithstanding the above, the program undertakers were stressing long-term economic gains, indicating that some sustainable practices may lower production costs and create opportunities in niche markets. This view is supported by Pimentel et al. (2005) since organic systems were reported as demanding more labor but oftentimes resulted in lower input costs and better returns over time. Molyneux and Rushton (2003) found that organic farming gives a healthy financial picture of the farm, and once products are directed to specialized markets, they could improve the income of rural people.

Understanding these income and cost dynamics was a prerequisite for measuring the level of financial sustainability and its effects on livelihoods for this program

Farmers' incomes were improved by this program's direct feature of inducing them towards organic farming, giving them essential resources in the market where they can fetch their earnings. Many farmers have claimed a hike in their income on account of lower production costs and higher crop yields. This class of farmers must have observed that these benefits were far greater than just having resource provision and market access, because they participate in the program above.

"Nag-increase gid mat-a ro ang kita, pero depende man don sa imong efforts nga gintao. Kung abu ing amot nga substrate sa vermi or permi kang gaubra sa communal garden, hay abu man ing parte sa sharing. Imaw man sa imong sariling garden kung maeapad mat-a ing garden, abu man ing ani, pero hambae ko eani kimo, maisot man lang ang garden kaabuan sa sako ag plastic bottles man lang ag ginasue-ob eani it tubi dagat. Makapiyan-piyan man kesa magbinakae ka."

("There is an increase in earnings, but it still depends on the effort exerted. If you contribute a significant volume of substrates or are consistently present and working in the communal garden, you will receive a larger share. The same principle applies to personal gardens—if your garden is large, you can expect a good harvest. However, as I mentioned, my garden is small, with most plants grown in sacks and empty plastic bottles since the area is prone to be reached and submerged by salt water.") (P1, L74-79)

The program indeed brought about great benefits to the farmers by significantly bringing down their costs through organic farming and using resources at hand. Many farmers say they have saved much money by making their organic fertilizers and pesticides and therefore need not depend on costly synthetic ones. Therefore, this change meant not only good business for them but also helped the environment. Farmers have found out how to prepare organic fertilizers using materials found within their vicinity, thus reducing their dependence on synthetic inputs. One farmer mentioned how this approach has helped their bottom line.

"Nakatipid pa ako at di na bumibili ng synthetic fertilizer sapagkat ang mga natural na abono ay nakukuha ko lang aking paligid."

("I was able to save money because I no longer need to buy synthetic fertilizers, as I can produce natural fertilizers from resources available in my surroundings.") (P3, L322-323)

Those involved in the program have noticed that moving towards organic farming through the AMIA Village Program has significantly **lowered production costs for farmers**. With free access to vegetable seeds and the ability to create organic fertilizers from local resources, farmers were seeing their expenses drop. Plus, this shift to organic methods has not only improved soil health but also made their produce taste better. One implementer pointed out how impactful these changes have been.

"Farmers have improved crop productivity and better marker prices and access. One example for this is the Kadiwa Pop Up Store where they can sell their produce directly to consumers without the intervention of middlemen, so they can increase their farmgate price. Lower their cost production by free access of vegetable seeds, they are capable of creating organic fertilizer thru scraps and raw materials that are available in the surroundings and the transition to organic practice lower the production cost, improved soil quality and higher quality and taste of farm product compared to the one using synthetic."

("Farmers have experienced improved crop productivity, better market prices, and greater access to direct-selling opportunities. One example is the Kadiwa Pop-Up Store, where they can sell their produce directly to consumers without middlemen, allowing them to secure higher farmgate prices. Additionally, their production costs have decreased due to free access to vegetable seeds and the ability to create organic

fertilizer from readily available scraps and raw materials. The transition to organic practices has further reduced expenses, improved soil quality, and enhanced the taste and overall quality of farm products compared to those grown using synthetic inputs.") (PB, L1235-1242)

The way this program has been rolled out has made a difference for farmers, boosting their profitability, as both the farmers and the folks running the program have noticed.

Farmers were seeing a real uptick in their profits thanks to the program. For instance, a farmer said that they had a 25% boost in their earnings.

"Sa overall profitability, ro increase it akong profit hay mga 25%."

("Overall, my profit has increased by approximately 25%.") (P6, L639)

Another farmer said that there had been a 30% increase, which helped with their expenses.

"*Mabahoe ro anang epekto sa overall nga kitaan. May iba-ibang paagi nga kumita maskin maisot man basta sige man ro saka kwarta. Ro mga 30% nga pagtaas it kita hay mabahoe nga bulig ron sa mga gaeastuson."*

("My extra income has increased through the farming activities in this program. The increase is around 30%, which is a significant improvement compared to having no additional source of income at all.") (P8, L845-847)

Another implementer indicated that organic farming has opened the doors for farmers to charge higher prices, particularly from health-conscious buyers.

"Our farmer beneficiaries have proven that using organic methods reduces expenses, increases production value, and allows them to command higher prices, especially among health-conscious consumers."

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These views expressed by farmers and implementers pointed out how the initiative is positively affecting farmers' profitability by increasing their incomes, reducing costs, and enhancing market access.

Another vital theme of Socioeconomic impact is **Community Development and Social Cohesion**. A community faced impacts on socioeconomics like Community Development and Social Cohesion, namely, boosting agricultural productivity and resilience, and so much more, making the bonds strong in the community. Here, it is discussed how farmers and other stakeholders experienced a sense of community, unified goals, and support as a result of the program. They promoted teamwork, developed and shared skills, as well as drew the active participation of stakeholders towards sustainable farming practices. The program could thus create stronger social ties and empower local communities. Understanding these dynamics is crucial in relating them to the broader socio-economic and financial impacts of the program on community development and social cohesion.

This would bring lower transport costs and greater savings as they have better access to fresh, affordable organic vegetables, in addition to better coordination of their groups among themselves. Increased incomes, better income security for many, women's empowerment, and the building of collaborative structures like associations, as well as increased access to local amenities and services, were some of the changes experienced by implementers.

"Okey ah kakon dayang programa, una hay may available eon nga mga preska ag organic nga mga tinuea sa Kadiwa Market ag may mga sarili man nga garden ro mga members. May available man nga supply it

organic nga abono. May mga bag-ong technolohiya ang hatun-an sa farming nga pwedeng man ishare sa mga intresado nga pamueoyo."
("This program is beneficial for me. First, fresh organic vegetables are available at the Kadiwa market, and members also have their gardens. Organic fertilizer is readily accessible, and new farming technologies can be learned and shared with interested members of the community.") (P1, L90-94)
"Kahit sa maliit na paraan lang, yung effort ko sa pagtatanim ay nakakapagbigay ng supply ng organic na gulay sa kumunidad na malapit lang sa kanila. Diyan ko lang inilalatag sa table sa harap ng bahay sa gilid ng daan, pwede na silang bumili at di na pupunta sa bayan at mamasahe pa."
("Through my small efforts in planting, I can supply organic vegetables to my community, making them easily accessible. I simply display them on a table in front of my house by the roadside, allowing people to buy without the need to spend on transportation to town.") (P4, L436-439)
"Natuto akong makibagay at makisama sa aking mga members tungo sa isang layunin, ang magiging organized at maayos ang aming production at magiging successful ang mga projects. Kung maganda ang resulta ng mga projects, maganda din ang harvest at naebebenta eto ng mas mura para sa mga pangangailangan ng mga tao sa kumunidad."
("I have learned to cooperate and work well with my fellow members toward a common goal—to keep our production organized and ensure the success of our projects. When the projects yield good results, we also have better harvests, which we can sell at lower prices to meet the needs of the community.") (P5, L542-546)
"Bangud sa organic farming, hay kumita eon ro mga farmers maskin pasangkiri-kiri eang hay mabahoe nga bulig ron sa naga kalisud nga pamilya. Isaea pa hay nakakabulig ka man sa ibang owa it mga tanum nga makabakae it barato ag healthy pa nga mga tinuea nga iya mismo sa maeapit nga indi eon sanda mag adto pa sa ibang lugar."
("Because of organic farming, farmers are now earning even a little by little, which is a big help for struggling families. Another benefit is that it helps those who do not have their crops by providing them with affordable and healthy produce that is locally available, eliminating the need to travel to other places to buy food.") (P8, L850-853)
The AMIA Village Organic Farming Program was universally recognized as a socioeconomic change agent by both farmers and implementers. In this regard, farmers P1, P4, and P5 said improved access to cheap and healthy produce and collective organic farming have improved their economic status and social ties in the community. Their stories highlighted how the program was instrumental in helping them move away from expensive synthetic inputs and transportation costs while nurturing mutual support and a sense of common purpose.
"Increase income due to improved crop production and better market prices, Empowered farmers especially women by providing them trainings and encouraging them to various activities and access to resources. I also noticed that thru this program, it fostered work together for the same goal. They are able to create an association and aside from that they are able to access program projects that are topped up thru AMIA. Aside from that they established storage facility, meeting area and vermicomposting facilities." (PB, 1248-1254)
("The diversified income sources, because the AMIA program encourages farmers to explore alternative livelihood options, such as livestock farming, or organic vegetable production. This helps diversify their income streams, reducing their dependence on a single crop and increasing their overall economic resilience.") (PC, L1372-1375)

"It was observed nga nag improved nag amat-amat man improved ang ila nga standard of living due sana introduced namon ang program sa ila. Kay since ang mga practices kag technologies nga ginpahangtag namon dako ang nabulig sa ila kay na ga-reduce ang cost, increase and income kag ga-improve financial stability."

("It was observed that their standard of living gradually improved because we introduced the program to them. The practices and technologies we provided have greatly helped them by reducing costs, increasing income, and improving financial stability.") (PE, L1591- 1594)

All the implementation partners (PB, PC, and PE) were interested in medium- and long-term impact areas like enhanced financial resilience, diversification of income sources, and social external organizations through associations and cooperatives. These changes work together in enhancing economic viability and social integration in the communities served by the programs.

Farmers have seen improvements in their lives thanks to sharing knowledge, adopting eco-friendly practices, earning extra income, and inspiring those around them. While the changes may seem gradual, they were making a difference. Those involved have noticed better living standards, more diverse income streams, and greater access to services, all thanks to empowering farmers and fostering community support.

"Haimpluwensyahan gid it mabahoe ro kalidad it akong pangabuhi nga di kita magsalig gid sa mga dati natong nakasanayan nga paagi it panguma gamit ro mga synthetic chemicals ay sayud man kita nga maeain dun sa atong eawas. Ro pinakanagamit ko hay ro pag-obra it concoctions para sa abuno ag pesticides / fungicides. Daya ro pinaka-convenient kakon ay kung ano eang ro readily available hay duyon ang gina-obra. Ag isaea pa, ham-an magastos pa kita kung pede man natong gamiton ro mga libreng bagay sa atong palibot. Dayang tanan hay pedeng ko ma-eshare sa iba pang mga mangunguma nga handa magbaton it dayang mga bagay para man sa andang kamaeayran."

9"My quality of life has greatly improved because I no longer rely on the traditional ways of farming that use synthetic chemicals, which we all know can be harmful to our health. What I use the most is making concoctions for fertilizers, pesticides, and fungicides. This is the most convenient for me because I simply utilize whatever is readily available. Besides, why should we spend more when we can use the free resources around us? All of this, I can share with other farmers who are willing to embrace these practices for their benefit.") (P2, L218-226)

"Di lang kami nagpa-farm ng sarilinan, ang bawat membro ay nagseshare ng bawat kaunting nalalaman para mapataba ang lupa. Sa simpleng pagkocompost ng mga gamit na makikita sa ating kapaligiran na mayaman sa nutrient at nakakatulong sa bawat isa. Ang mga taong curious sa organic farming ay na-eenganyo ding magtanim. Yung ibang walang interest, sa pagtatangkilik ng organic na gulay na ibenebenta ko ay naibabahagi ko rin ang kahalagahan ng organic food sa kalusugan."

("We don't just farm individually; each member shares even a little knowledge to enrich the soil. Through simple composting using materials found in our surroundings that are rich in nutrients, we can help one another. People who are curious about organic farming are encouraged to start planting as well. Even those who have no interest, by purchasing the organic vegetables I sell, also get to learn about the importance of organic food for health.") (P4, L442-447)

"Ang programa ang nagturo at nagbigay sa amin na gumawa ng extrang pagkakakitaan at matustusan din ang pangangailangan aming mga pamilya. Ang maganda resulta ng aming mga ginagawa sa programa ay nakakainfluencia din sa iba pang farmers..."

("The program has taught and provided us with opportunities to earn extra income and support our families' needs. The positive results of our efforts in the program have also influenced other farmers to join or adopt our practices.") (P5, L549-552)

"Maskin paalin hay nakapiyan-piyan mat-a sa pang adlaw-adlaw nga gaeastuson, mas okay kesa dati mapi-ot ag mabudlay ro pangabuhi... hakita man nanda ro kamaeayran ko dayang programa bukon eang it sa kitaan kundi sa environment man."

("Even though it is not a huge amount, it still helps ease daily expenses. It's much better than before when life was more difficult and income was tight. Some people have also liked and been convinced to adopt organic farming after seeing the benefits of this program, not just in terms of income but also in its positive impact on the environment.") (P8, L856-859)

"Nakainfluwensya man it mabahoe sa kalidad it pangabuhi it mga farmers ro dayang programa kapin pa ay halin ko epidemya nabudlayan gid kaming kamausoy it extrang pagkakakitaan. Ro ibang nakasaksi it manami nga epekto it organic farming hay nagtuead man agud maskin paano makabulig man sa andang pangabuhian."

("The program has positively influenced the quality of life for farmers, especially after the pandemic, when we struggled with additional sources of income. Those who witnessed the positive effects of organic farming have been encouraged to try it as well, helping improve their livelihoods, even if just a little.") (P10, L1052-1055)

Participants P2, P4, and P5 indicated that the program did impart skills on organic farming- they made their concoctions inspired them to act otherwise to influence their neighbors and promote healthy living. The changes are yet to come, but as P1 said, there is already an increase in awareness concerning community and economy, and Mother Earth affairs.

The development of good living standards, diversified sources of income, and better access to services was noted by the implementers to be the outcome of farmer empowerment and community support systems.

"The farmer beneficiaries have reached a medium level of living and can access program services due to our out-scaling strategies..."

("Our farmer-beneficiaries have reached a medium level of living and can access program services due to our out-scaling strategies, which bring technology and interventions directly to them.") (PF, L1673-1675)

The observations made by P2, P4, and P5 were confirmed by implementers like PB, PC, and PE, who further noted that such associations and community support strategies would contribute to improved living standards, a wider range of income sources, and better access to services. The changes resulting from the program significantly impacted individual lives and group transformation, which is a hopeful prospect towards sustainable rural development.

Rooting Resilience: Strategic Pathways for Sustainable Growth in the AMIA Village Program

Therefore, given all circumstances, the primary strategies for increasing the economic viability of the AMIA VILLAGE PROGRAM would be to consolidate the institutional support, ensure continuous technical backstopping, and increase market access. Regular training would be advocated by farmers for improved organic practices, together with better infrastructure and facilities, such as composting facilities and irrigation systems. Strengthening market linkages and branding of organic produce was also seen as essential to boost income and minimize dependence on intermediaries.

Sustainability is now focused on the ongoing work of the program. Both participants emphasized sustained support, proper policy arrangements, and firm institutional support so that the program would grow in the

long term. Some of the central elements, such as **reliable technical assistance, better access to markets, robust infrastructure, and participative involvement of stakeholders**, are critical in order to achieve a sustained impact.

For access and ownership to the land, women and youth were seen to participate inclusively as a core enabling a sustained commitment to ownership. Also emphasized were the climate-resilient practices diversified by agriculture for building resilience against uncertain economic conditions or the environment. This was consistent with resilience models as represented by Ellis (2000) and Pretty (2008), where sustainable growth was dependent on technical assistance, community participation, and adaptive capacity. These provide a pragmatic way within which to build up viability and impact into the program.

First, under this theme, **Measures for Long-term Program Sustainability** included the required **strategic planning**, ongoing **capacity development**, and r**obust institutional support** to guarantee the long-term sustainability of the AMIA Village Program. The major interventions included **regular technical support and management enhancement in market linkages, strengthened farmer organizations, and inclusive and climate-resilient policies**. These thus promote self-reliance and community growth through the years. Sustainable agriculture thrives, according to Pretty (2008), through integrated planning and technical support as well as local institutional capacity. The importance of cooperation and governance in sustaining the resources of a collective was brought to light by Ostrom (2007). For the program to succeed, grassroots experiences must be coupled with institutional approaches that have been put in place based on a shared value of partnership, access, and continued support.

Farmers assert that community cohesion and active involvement were critical in bringing about **unity and participation**-mainly for keeping the program alive.

"Ro unity ro llave para napadayon ro dayang programa."
("Unity is the key to sustaining this program.") (P6, L652)

"Pinaka-importante hay dapat git-a nga may unity ro mga members ag may dedikasyon sa trabaho."
("The most important factor is the unity of the members and their dedication to their farming endeavors.") (P1, L105-106)

"It is not only the interventions needed but rather than the sustainability and retention of members with common goals."
("It is not just about identifying the necessary interventions but rather ensuring the sustainability and retention of members who share common goals.") (P2, L1265-1266)

Participants insisted on ongoing upgrading, timely orientations with assistance on the introduction of new technologies for the optimal improvement of the farming methods, as well as continuous **capacity building** and **technical assistance** provision.

"Dapat hay continuous gid ro mga orientation ag implementation it mga bag-ong pamaagi sa farming
("There should be a continuous orientation and implementation of new technological farming trends to support the development of the agricultural sector.") (P2, L230-231)

"Kailangan ro monitoring it mga project ganun din sa mga members it asosasyon."
("Ensure proper monitoring of the projects as well as the participation of association members.") (P7, L765-766)

"The continued funding and resources allocation for research, training, infrastructure development, and technology transfer."
("Sustaining the program in the long term requires continued funding and resource allocation for research, training, infrastructure development, and technology transfer.") (PC, L1381-1382)

"The intervention to be given not align to that like provide training in vermicomposting production, management and marketing."
("This includes providing training on vermicomposting production, management, and marketing.") (PB, L1269-1270)
There is an unbroken **call for institutional support and transparency**. The farmers demand specific project management, and the reason for total trust in the program implementers.
"Dapat ay may transparency para mawala ang mga pagdududa sa mga transactions."
("There should also be transparency in all projects to eliminate doubts about transactions.") (P5, L556-557)
"Assessing their needs is the best way to decide what interventions will be needed to sustain the program. Support market access, ensure sustainable sources of organic waste such as crop residues, manure, etc.
("Assessing their needs is the best approach to determine which interventions are essential for sustaining the program. Additionally, there should be support for market access, ensuring a sustainable supply of organic waste such as crop residues and manure.") (PB, L1266-1267, L1270-1271)
Both the farmers and the implementers shared the view that the sustainability of the program was pegged on **participative planning**, **regular follow-ups**, and a **systems-based approach** on the end-to-end integrative aspect of the areas under focus: **unity, capacity enhancement, securing markets, building infrastructure, and ensuring transparency**-these all together set a strategic base for resilient and self-sustaining communities.
Enhancement of Support System and Resources is the second theme, which underlined the growing necessity for developing support systems and maximizing resource consumption to ensure the long-term sustainability of the AMIA Village Program. The program implementers argued for applicable **market opportunities and better infrastructure** while stressing regular technical support from the farmers and stricter enforcement of participatory regulations. This is consistent with the views presented in FAO (2020), which stressed the balance between farmer discipline and institutional support in sustainable organic programs. Van der Ploeg et al. (2019) also mentioned the contribution of cooperatives to local markets to improve the economic viability. According to Lobo et al. (2020), training can improve two parameters: resilience and productivity. Furthermore, Zhang et al. (2021) considered that digital tools and aggressive market strategies increased resource efficiencies. Taken together, these proved the point that strong networks well tied would undoubtedly help perpetuate an increasing effort such as the AMIA Village Program.
It is market access, which both groups deemed to be important, as **linkages in the market and in price stabilization**. The farmers were more concerned with the gate price stability of their produce and the market for the sale of their organic products.
"Kinahangean gid namon ro market para mapadayong it mayad ro programa."
("We need a market to sustain the success of the program.") (P8, L865-866)
"Yung mamaintain at mastabilize ang farm product price."
("Farm product prices should be maintained and stabilized.") (P3, L344)
"The additional linkage for marketing, specifically on organic products, must be done to help the farmers sell their produce to increase their income to be able to sustain their needs."
("Establishing additional market linkages, particularly for organic products, is essential to help farmers sell their produce, increase their income, and sustain their needs.") (PA, L1133-1135)

"We then conduct market matching and collaborations."
("Next, we facilitate market matching and collaborations to ensure stable demand.") (PD, L1499-1500)
They also recognize the necessity for better infrastructure and enterprise development, which would provide improved tools and processes to achieve greater results.
"Kinahangean mag-improve ro implementasyon it programa pati ro proceso it pag-obra it produkto agud manami ro maging resulta"
("There is a need to improve the program's implementation and the process of producing outputs to achieve better results and higher earnings.") (P9, L962-963)
"We proposed, Market, Product Depot, Storage Facility, Production Facility, Center even Machineries and Equipment as long it is justifiable and worth to proposed."
("We propose the establishment of market hubs, product depots, storage and production facilities, and even machinery and equipment, ensuring that each proposal is justified and beneficial to the farmers.") (PD, 1501-1503)
"Establishing necessary facilities and equipment, such as market depots and production centers, to support stable and sustainable production."
("Establishing necessary facilities and equipment, such as market depots and production centers, to support stable and sustainable production.") (PF, 1695-1697)
Another of the most important themes was **Policy Recommendations and Future Directions**, which has recently been identified as critical for sustainable strategy development. Significantly, the research has pointed out that policy and institutional backing would be critical for the sustainability of the AMIA Village Program. According to the people who implemented the program and those who cultivated, policies that were well defined and coordinated in themselves were able to assure the adoption of practices that showed **resilience in climate change**, **enhanced access to markets**, and provided continued **technical and financial support**. While organic farming projects required an individual to strive, the success of such projects would also depend greatly on available support frameworks within which such projects were galvanized, preserved, and maintained.
The Food and Agriculture Organization (FAO, 2020) pointed out that favorable policy conditions were needed to favor the organic agriculture transition and help overcome hindrances such as increased production costs and lack of infrastructure. Van der Ploeg et al. (2019) have similarly pointed out the need for institutions such as **extension services, funding instruments, and community outreach** in scaling up the programs. Wilson et al. (2018) also contend that policies supporting ecological land management complement other climate and sustainability objectives.
These views bring the necessity for harmonized actions at local, national, and global levels to facilitate farmers' access to the extensive support they need to be sustainably productive over the long term. Should enhance institutions, supportive incentive mechanisms, as well as context-responsive, holistic climate-smart agriculture approaches, worthy of responding to the changing needs of organic farming communities.
Both factions concurred that **stronger policy support** in the realm of funding, **organic certification**, and **market access** was vital. Implementers discussed recommendations for policy matters, while farmers argued for immediate financial assistance.
"Continuous support ng Local Government Unit. Proper implementation at monitoring ng bawat program or project, kasi sila yung immediate respondent na magreresolve sa mga problemang darating sa mga farmers.

("Continuous support from the Local Government Unit, proper implementation, and monitoring of each program or project, as they are the immediate respondents who will address any problems that may arise for the farmers.") (P5, L573-575)

("Allocate sufficient funds to support the program implementation, strengthening extension services and technical support, and promote market access for farmers. Foster good partnerships among different agencies for support and widen or open engagement and participation of those who are really willing to engage and support the program.

("Allocate sufficient funds to support the program implementation, strengthen extension services and technical support, and promote market access for farmers. Foster good partnerships among different agencies for support and broaden engagement and participation for those who are genuinely willing to engage and support the program.") (PB, L1298-1301)

Studies by Gliessman (2015) and Willer and Lernoud (2019) supported the claim that organic farming policies must integrate financial incentives and technical assistance to sustain farmer participation. Research on sustainable food systems also underscored the necessity of formal certification programs and streamlined market access (Reganold and Wachter, 2016).

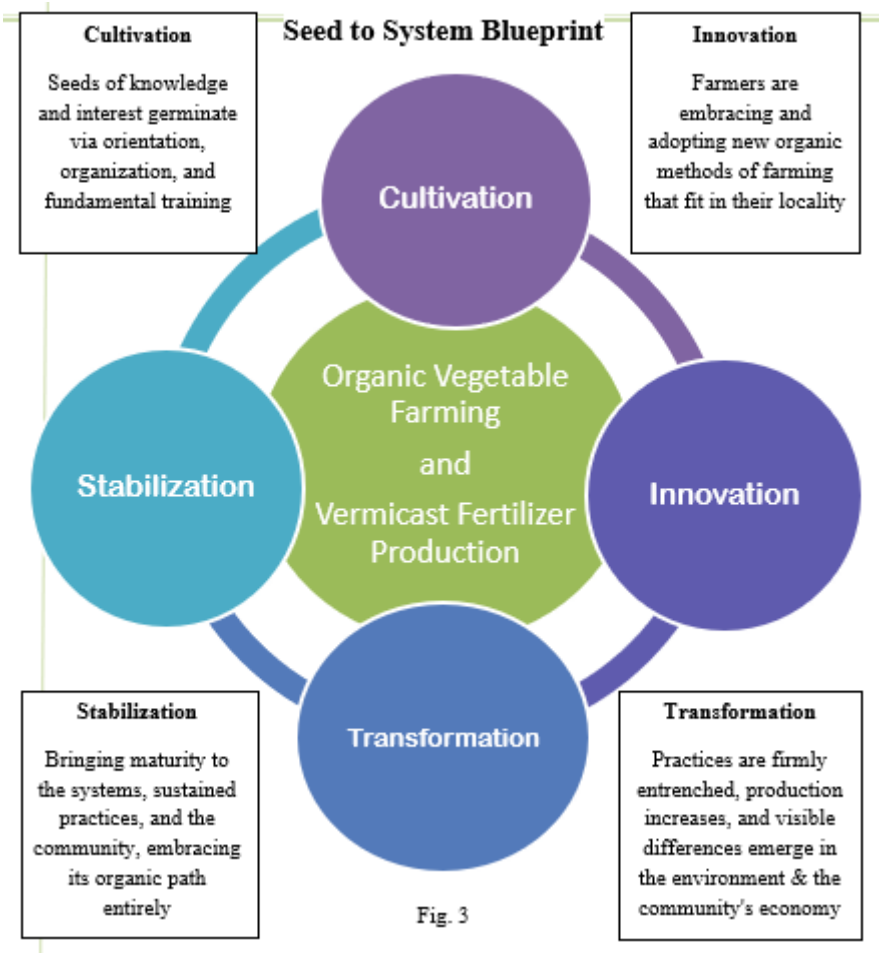

Fig. 3

A Simulacrum Journey of Organic Farming Empowerment

This is a spokesman for the whole organic-vegetable farming and vermicast fertilizer production program, the heart of the AMIA Village Program. At the core are interrelated phases: Cultivation,

Innovation, Transformation, and Stabilization, indicative of continuous community participatory learning, adjustment, and sustainability processes.

Chapter 5
SUMMARY, CONCLUSION, AND RECOMMENDATIONS

This chapter is a brief presentation of the main findings of the research and the conclusions drawn from the analysis. The recommendations are towards making organic farming in AMIA Village better and sustainable.

Summary of Findings

These findings were indeed probes into the administration of the AMIA village program, its socio-economic impact, future sustainability potential from the angle of the farmers involved, and running the program.

Cultivating Commitment: Engagement and Empowerment

This program has thrived after carefully examining the participants being selected into the program and having no exclusion methods at the level of participation, making it open and therefore relevant to local communities.

Selection Criteria and Participant Engagement, both farmers and program implementers recognized how crucial it was to have a fair and communicated selection process.

Training Programs and Resource Allocation highlighted the importance of experiential, high-quality training, as well as the availability of sustainable farming inputs and technical assistance.

Participant Responsibilities and Community Contributions pointed out that the farmers not only apply their new knowledge but also offer to share it with others, thereby encouraging collaboration and sustaining the program's community focus.

Harvesting Prosperity: Socio-Economic Growth and Community Resilience

The study uncovered improvements in agricultural output, product standards, and family earnings, which have contributed to increased financial progress and market opportunities for smallholder farmers

Agricultural Productivity and Product Quality, its initiative significantly improved vegetable production and quality through the use of organic techniques and vermicast.

Financial Implications: Income and Cost Dynamics, the dynamics of income and costs demonstrated that profitability rose due to lower input costs and access to new markets.

The Community Development and Social Cohesion highlighted how the program enhanced social bonds, encouraged collaborative efforts, and built resilience within the farming community.

Rooting Resilience: Strategic Pathways for Sustainable Growth

The economic sustainability of the AMIA Village Program was enhanced, and the key strategies consolidated institutional backing, ensured continuous technical support, and improved access to markets.

Long-term Program Sustainability Measures specified the importance of some continuing technical assistance, strong market ties, and a firm institutional commitment.

Enhancement of Support Systems and Resources, on the other hand, identified an improvement in infrastructure, clearer enforcement of participation, and lesser resource availability as some requirements

in this regard.

Finally, these recommendations under **Policy Recommendations and Future Directions** would build a foundation policy framework and offer institutional support necessary for promoting climate-smart agriculture and securing program sustainability over time.

The results were evidence of the differential effects of the AMIA Village Program and provided critical insights into its potential for strengthening and future sustainability.

Conclusion

Indeed, this is a transformational program, moving beyond the confines of normal farming. This has geared up for empowering farmers; it is about socio-economic empowerment and sustainability through organic vegetable production and vermicast fertilizer production. The program results indicated that this success has been embedded within and among the participation and inclusive pro-poor approaches that encompass thoughtful selection of beneficiaries, hands-on training, and wise resource allocation. It has been a massive inclusion in true engagement and felt responsibility by farmers with their much-needed overall community development interventions, sharing knowledge.

From both the economic and social perspectives, this initiative has made tangible shifts that are now translating into better vegetable yields, better quality products, higher household incomes, and decreasing dependence on expensive synthetic inputs. This spirit has also fostered a culture of collaboration and resilience among communities and created stronger social bonds, with the chance to adapt more easily to environmental challenges in the future. To make these gains sustainable, strategic support systems must be enhanced.

The study brings to the forefront a great deal more that focuses on continuous skill development, heavy institutional support, availability of market opportunities, and flexible policy frameworks. These underpin the sustainability not just of current benefits, but also the upscaling of benefits to other farming communities.

Recommendations

This would be based on the findings and conclusions. The following recommendations were hereby endorsed:

Recommendations for Farmers - Farmers are the center of the organic agriculture revolution, and their continuous development and involvement are key to sustaining the AMIA Village Organic Agriculture Program in the long term. It is therefore advisable that:

- Ongoing Capacity Building and Training: For facilitation of ongoing participation in capacity-building workshops. Re-strengthen organic farming techniques through refreshing training.
- Peer Sharing and Practice: To implement learned practices on their farms regularly. Share best practices with peers.
- Community Mentorship: To accept the dual role of practitioner and mentor. Motivate and help other community people in organic farming.
- Knowledge-Sharing and Group Cohesion: To maintain regular meetings or discussions to ensure strong group bonds. Foster unity and cooperation among members.
- Overcoming Production Challenges: To work together to address labor, resource, and moisture problems in vermicast production. Welcome innovative solutions and technologies for adoption.

Recommendations for Program Implementers - From the implementers' side, the growing need for reliable technical support and on-site coaching has become a priority. To tackle this, it is advised that:

- Sustained Technical Support: To conduct periodic follow-up training and on-site mentorship. To rectify technical shortcomings, particularly in climatic fluctuations and pest control.
- Provision of Required Inputs: For providing the necessary organic matter, infrastructure, and machinery at the right time. Ensure efficient and productive organic farming systems.
- Monitoring and Evaluation: To enhance data on farmers' performance and progress. Document success stories to tune program strategies.

Institutional Partners (Academe, NGOs, Support Agencies) - Institutional organizations like schools and colleges, NGOs, and support agencies are significant promoters of organic farming activities. For enhancing their impact, it is advisable that:

- Contextual Collaborative Research: To become involved in research that involves local knowledge and farmers' observations. Create vegetable cultivation and vermicomposting design innovations grounded in real needs.
- Market Linkages: For facilitating farmers to access the market via cooperatives, retail connections, or direct sales. Enhance the economic viability of organic farming.
- Organizational Support: To support in organizing and developing the farmer group's capacities. Assist farmers to access financing and negotiate on their behalf.

For Policymakers and Government Agencies - At a policy level, codifying the ideas and best practices of the AMIA Village Program into universal agricultural policies will be required for its widespread impact. The following recommended actions are:

- Institutionalizing the AMIA Model: The AMIA Village process across general agricultural policy and introducing incentives for organic mode farming.
- Climate-Smart Land-Use Policies and Financing: For better access to finance programs that are climate change adaptation-friendly. Green land-use practices should be promoted.
- Program Scaling and Localization: To scale up the AMIA model to other at-risk areas, emphasize community-led and participatory strategies.
- Integration with Rural Development Objectives: This harmonizes AMIA programs with climate resilience and rural development frameworks, and ensures comprehensive and sustainable development results.

These recommendations are designed to build and strengthen the AMIA Village Program, tackle its ongoing challenges, and steer its growth toward a more resilient, inclusive, and sustainable agricultural development model.

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