

Filipino Out-of-School Youth's Competency Development Needs and Attitude Towards Organic Agriculture Production

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ABSTRACT

Organic agriculture remains relatively unfamiliar and less popular among many households and youth due to lacking awareness and limited opportunities for practical exposure. Thus, this study aims to assess the needs of the identified Filipino out-of-school youth in the community to acquire competencies in organic agriculture production. Specifically, the study aims to describe the awareness, development needs, and attitude of the out-of-school youth toward organic agriculture; describe the commitment of the respondents towards skills training program, and to propose skills training extension program in Organic Agriculture Production. An explanatory sequential mixed-methods research design was utilized in the study with total enumeration of 61 out-of-school youth as respondents. Results revealed that the respondents have low level of awareness on organic agriculture which leads to high level of training needs in all aspects of organic farming specially in plant care management and producing organic concoctions and extracts. In general, most of the respondents have positive attitude towards organic agriculture and willing to participate in organic farming trainings. Findings of the study served as the basis for the development of community-based organic agriculture training program which is specifically designed for out-of-school youth, featuring a needs-responsive, context-based, skills-oriented, and livelihood-focused approach within a participatory and empowering learning environment, grounded in their socio-economic conditions, interests, and capacities to ensure relevant and practical learning activities. The study contributed to the promotion of Organic Agriculture Act of 2010 in the Philippines and the sustainability of community-based program using development needs analysis.

Contribution/Originality: This study contributes to community empowerment and sustainable development by showing how organic agriculture-based competency training can strengthen local capacities, enhance youth participation in productive livelihoods, and promote environmentally sustainable practices, thereby building

resilient communities through human capital development and inclusive, community-centered learning.

1. Introduction

Agricultural education is not so popular nowadays among youth due to the advancement of technology that disrupts the roots of Filipino culture of planting and harvesting from vast farmlands. College students choose other degree programs than career related to agriculture. Educating the decreasing number of youth interested in agriculture is one challenge addressed by the Philippines' agricultural extension services ([Saliot & Tabinas, 2017](#)). In Malaysia, the common claim that agriculture is unattractive to youth is no longer accurate, as many students possess the qualities needed to advance the sector. However, only a small proportion are willing to pursue agriculture as wage earners or entrepreneurs after graduation ([Muhammad et al., 2013](#)).

Likewise, most Filipinos venture to home gardening ([Honculada-Genove, 2020](#); [Antillon et al., 2025](#)) but not actually practicing natural or organic agriculture. [Malkanthi \(2021\)](#) emphasized that organic agriculture is a farming method leading to sustainable agriculture. Organic agriculture has lots of economic and livelihood benefits to offer which include supplementary or primary household income reduction of farming input costs like synthetic fertilizers and pesticides, opportunities for value-added processing like organic produce, preserved foods and self-employment opportunities, especially for the youth and household resilience to economic shocks. Given all these benefits, this study would like to contribute to the welfare of out of school youth through providing relevant training. Out of school youths are vulnerable to use drugs, involve in riots and gangs, and other forms of crimes that they may commit due to absence of work or unemployment that leads them to commit undesirable acts or behavior. Helping them realize the importance of time and energy they are wasting every day, why not give them a source of hope to divert their attention in something beneficial that will contribute to their well-being and economic productivity through organic agriculture.

The present study integrates Human Capital Theory and Competency-Based Education (CBE/CBT) to provide a coherent framework for examining the competency development needs and attitudes of out-of-school Filipino youth toward organic agriculture production. These frameworks are utilized to explain the phenomenon and design community-based program which is contextualized based on the needs of the beneficiaries. Investments in education, training, and skills enhance individuals' productivity, employability, and economic returns ([Becker, 1964](#)) according to Human Capital Theory, making it particularly relevant in understanding how competency development in organic agriculture can improve livelihood opportunities for marginalized youth. The participants acquired competencies from various seminars and training which are viewed as forms of human capital that increase the likelihood of meaningful engagement and employment in organic agriculture. It complements the Competency-Based Education which emphasizes the identification, development, and assessment of clearly defined learning outcomes, focusing on mastery of specific knowledge, skills, and attitudes required for effective performance. By aligning organic agriculture competency standards such as those prescribed by TESDA and DepEd with performance-based assessments, CBE provides a practical mechanism for translating human capital investments into measurable competencies. Together, these theories

support the study's assumption that targeted, competency-based training not only strengthens the human capital of out-of-school youth but also positively influences their attitudes toward organic agriculture, thereby increasing their readiness for productive and sustainable participation in the sector.

The present study will look into the possibility of organizing an extension program as a research output based on the development needs (Arellano et al., 2017) of the out-of-school youth who are willing to be trained in organic agriculture production. This study is important to be conducted first because of the necessity to identify the specific needs, requirements and the commitment of the target beneficiaries before they will be given community extension programs. There are several studies already conducted regarding training on Organic Agriculture for employed beneficiaries (Alsiken-Nanglegan, 2023), implemented an Organic Agriculture Module in developing entrepreneurial competencies among senior high school students (Alcantara & Andal, 2025); challenges encountered by Organic Agriculture Production (OAP) NC II graduates (Godmaling et al., 2024); entrepreneurial culture of farmers (Buena & Whitney, 2017); non-governmental organizations (Chitiyo & Duram, 2019); and government agriculture personnel (Gasmen & Calub, 2022). However, only the study of Saliot and Tabinas (2017) focuses on providing training for OSY in Organic Agriculture with an objective of passing the National Certification and later find employment. But the objective of the current research project is gearing towards training development of community-based organic farming.

One of the major variables to be assessed is the attitude of the out-of-school-youth towards the OA program so that the service providers will be informed on how participants will be encouraged more to pursue higher aspirations beyond the boundaries of their current situation as out-of-school youth (OSY). These OSYs will be asked regarding their knowledge on organic agriculture and the extent of the required competencies they needed to be developed in order to become knowledgeable technically in the program that will be offered to them. Through educating these youth, the community or the consumers need to realize that the shift to organic agriculture is for their own benefit, hence, they need to appreciate, understand, cooperate, patronize and put premium value to organic agriculture products (Mendoza, 2010).

This study directly supports Republic Act 10068 or the Organic Agriculture Act of 2010 which is an act providing for the development and promotion of organic agriculture in the Philippines and for other purposes. This study also supports Sustainable Development Goal 2 which is Zero Hunger by strengthening the competencies and attitudes of out-of-school Filipino youth toward organic agriculture production, thereby contributing to improved food security, nutrition, and sustainable food systems at the household and community levels. It also aligns with Sustainable Development Goal 8 which is Decent Work and Economic Growth by enhancing human capital and employability in organic agriculture, creating pathways for productive livelihoods and inclusive rural development.

Thus, it is important to the community members to acquire knowledge and skills in organic agriculture production to address problems in nutrition, poverty, livelihood, and mental health. People may acquire the needed skills in producing organic vegetables, fertilizers, and concoctions and in raising organic chicken, small ruminants and hogs to make the society informed and educated on how to take good care of the environment and health of the community. This study contributes to the existing body of knowledge on community needs assessment specifically on Organic Agriculture Production as an initial

requirement before conducting any training program to the beneficiaries to make the activities more relevant and impactful.

1.1. Research Objectives

This study aims to assess the needs of the out-of-school youth in the identified community to acquire competencies in organic agriculture production. Specifically, the study aims to describe the awareness, development needs, and attitude of the out-of-school youth toward organic agriculture; describe the commitment of the respondents towards skills training program, and to propose community-based development training program in Organic Agriculture Production.

2. Literature Review

This review of related studies and literature focuses on Organic Agriculture Context and Practices in various ASEAN countries, attitude towards Organic Agriculture among various type of respondents, Youth Competency Development and Education/Training, and Community-Based Development Program. The information gathered from the previous studies supported the present research in discussing the result anchored in the lens of Human Capital Theory and Competency-Based Education

2.1. Organic Agriculture Context and Practices

Organic Agriculture Production is a holistic farming system that emphasizes ecological balance, biodiversity, and sustainable management of natural resources, while avoiding the use of synthetic fertilizers, pesticides, genetically modified organisms (GMOs), and other artificial inputs. It integrates environmental, social, and economic considerations to produce safe, high-quality food, maintain healthy ecosystems, and support sustainable livelihoods, and requires adherence to established standards and certification processes to ensure compliance and authenticity of organic products ([Mohammed et al., 2013](#); [Maghirang et al., 2021](#)).

Sustainability is the major key concept of organic agriculture that promotes conservation of soil fertility and structure, reduction of chemical inputs and pollution, preservation of biodiversity and ecosystems, promotion of environmentally friendly farming practices, and efficient use of natural resources. Organic Agriculture has shown sustained growth even amid global economic challenges, emerging not merely as a niche market but as a viable alternative to conventional chemical-based farming systems ([Maghirang et al., 2021](#)). Beyond its technical practices, organic farming embodies a holistic philosophy that emphasizes ecological balance, social responsibility, and the capacity of individuals to engage meaningfully and effectively in agricultural activities ([Mohammed et al., 2013](#)). In developing countries such as the Philippines, agriculture continues to play a crucial role in economic stability, rural development, and food security, underscoring the importance of sustainable agricultural approaches that support long-term development goals ([Alcantara & Andal, 2025](#)). Similarly, organic agriculture is widely recognized as a sustainable pathway that enhances environmental protection, improves agricultural product quality, and responds to increasing domestic and international market demands. However, experiences in countries such as Vietnam reveal that despite its strong potential, organic agriculture development remains constrained by limited producer awareness, small-scale operations, and inadequate institutional support mechanisms ([Nguyen Hong Son & Ngo Duc Minh, 2025](#)).

Organic agricultural production is governed by established standards and requires certification by recognized bodies to ensure product integrity and consumer trust. Despite growing interest in organic agriculture across Southeast Asia, its development remains uneven. Strong support from private and public partnerships is encouraged to sustain the management and operation of farmers and other enthusiasts to continue producing products from organic farming. In Malaysia, the organic food industry is still relatively small, with more than half of organic products being imported, and domestic production limited by low adoption rates among farmers despite government promotion of sustainable and organic farming to address environmental degradation caused by intensive agricultural practices (Somasundram et al., 2016; Tiraieyari et al., 2014). Similarly, in the Philippines, organic agriculture occupies only a small fraction of total agricultural land, reflecting challenges in translating policy frameworks into effective implementation despite the existence of enabling laws and administrative support (Rola et al., 2015). Considering the country is agricultural land but still people are not implementing properly the Republic Act 10068. Higher Education Agricultural Institutions have the strong capacity to educate farmers and communities which is anchored in corporate social responsibility.

2.2. Attitude Towards Organic Agriculture

Cognitive aspect on knowledge and awareness in Organic Agriculture is the primary objective of any development program. Assessing the level of understanding on the principles and practices of organic farming (Padel, 2001) to determine if the participants are aware of the benefits of organic agriculture for health, environment, and economy (Maghirang et al., 2021) and they recognize the differences between conventional and organic farming methods (Rola et al., 2015) are essential factors that influence the design and the implementation of the activities. Knowing about the existing government programs, policies, and support systems for organic agriculture (Nguyen Hong Son & Ngo Duc Minh, 2025) could also help the service providers on how they can manage the program with the assistance of other agencies most especially the local government units. The behavioral aspect on actions and practices describes the active participation in organic farming activities, such as planting, composting, or pest management (Padel, 2001) and how they share knowledge or encourages peers/household members to practice organic agriculture (Maghirang et al., 2021). They also demonstrate willingness to adopt organic farming techniques in home gardens or community plots (Rola et al., 2015) and engages in responsible agricultural practices, e.g., minimizing chemical use, recycling farm waste (Sujianto & Datta, 2020).

It is important to relate the attitude of the beneficiaries to the future career or livelihood choices in agriculture (Becker, 1964) that reflects the awareness on skills and competencies in organic farming to enhance employability and income (Bach Tan Sinh, 2019). Expressing their intention to continue or expand involvement in organic agriculture (Yadav & Pathak, 2016) is also the end goal of the program to be developed in such a way it will become sustainable. Embedding entrepreneurship into agricultural education, particularly within TVL tracks makes it more valuable in developing the competencies of the learners. Likewise, the insights generated from the study of Alcantara and Andal (2025) are expected to guide educators, curriculum planners, and policymakers in refining organic agriculture programs to promote sustainable, entrepreneurial mindsets among Filipino youth.

Organic agriculture promotes healthier food which also serves as a pathway to well-being. It supports local economies and rural livelihoods and enhances long-term farm productivity which also reduces exposure to harmful chemicals, and fosters a balanced relationship between individuals, communities, and the natural environment. [Aquino \(2022\)](#) mentioned that well-being is one of the most important factors for continuous selection and adoption of organic farming while [Sarker and Itohara \(2010\)](#) noted that significant portion of the respondent smallholders have attained income improvement from organic farming which is significantly contributing in improving their well-being and the study of [Homillano \(2023\)](#) showed that main reasons of the participants if they are to enroll in the program was health or personal well-being. Ultimately, organic farming supports holistic well-being by sustaining environmental health, strengthening community livelihoods, and enhancing the quality of life of present and future generations.

The affective aspect on feelings and interest, is an essential indicator of the participants' motivation those who express interest or curiosity in engaging in organic agriculture activities ([Yadav & Pathak, 2016](#)) would also show positive feelings toward sustainable and eco-friendly farming practices ([Läpple & Van Rensburg, 2011](#)). They also value the contribution of organic farming to household food security and community welfare ([Del Castillo, 2024](#)) and exhibit pride or satisfaction in cultivating or producing organic crops ([Cabalda et al., 2011](#)). Across diverse contexts in Nigeria, Sri Lanka, the Philippines, and other developing regions, research consistently indicates that farmers and agricultural extension workers generally hold positive attitudes toward organic agriculture due to its perceived environmental, health, soil fertility, and well-being benefits ([Oluwasusi, 2014](#); [Adebayo & Oladele, 2013](#); [Malkanthi, 2021](#); [Aquino, 2022](#); [Declaro-Ruedas, 2015](#); [Sani, 2020](#)).

These positive attitudes are influenced by farming experience, education, household size as well as farm size, organizational membership, access to training, and frequency of extension contact which highlight the crucial role of knowledge acquisition and institutional support ([Adebayo & Oladele, 2013](#); [Oluwasusi, 2014](#); [Malkanthi, 2021](#); [Sani, 2020](#)). While awareness of organic agriculture is relatively high in many areas, adoption is often constrained by labor intensiveness, pest and disease pressures, market limitations, practice complexity, and uncertain or lower short-term profits ([Malkanthi, 2021](#); [Naigaga, 2023](#); [Sani, 2020](#)). Workers continue to experience challenges but they still believed on the benefits of organic farming. Notably, some farmers continue to adopt organic practices despite low profitability, driven by values related to well-being, environmental stewardship, and indigenous knowledge, with information sharing occurring primarily through family, peer networks, and extension institutions ([Aquino, 2022](#); [Adebayo & Oladele, 2013](#)). They sought assistance to local government units and academic institutions as strategies on how to sustain their production through attending training workshop and other supports being given to the community. Overall, the literature emphasizes that strengthened training, extension services, market development, and supportive policies are essential to transforming positive attitudes into sustained adoption of organic agriculture for long-term sustainability and rural development ([Oluwasusi, 2014](#); [Malkanthi, 2021](#); [Declaro-Ruedas, 2015](#)).

People recognize environmental and sustainability benefits, and appreciate organic agriculture as a viable livelihood option. Prospective learners demonstrate strong interest in acquiring practical competencies especially in crop and animal production which suggest that positive attitudes are closely linked to perceived relevance and skills

applicability (Homillano, 2023). Among practicing organic farmers, attitudes toward organic agriculture and its cost–benefit aspects are generally positive, influenced by knowledge of organic practices, environmental impacts, and economic considerations, with variations attributable to education and location (Nelson et al., 2019). Educational exposure to agriculture and organic farming concepts, environmental awareness and concern for sustainability and family influence and exposure to farming-related activities are some of the factors shape positive attitudes among farmers and youth. Nevertheless, while farmers strongly recognize health and environmental benefits, social and economic advantages are less clearly perceived, and knowledge gaps and institutional barriers continue to affect sustained adoption (Arga & Labasan, 2025). Overall, although organic agriculture is widely viewed as ecologically sustainable and desirable, challenges related to financial viability, cultural acceptance, and systemic support highlight the need for strengthened education, extension services, and institutional backing to reinforce positive attitudes and convert them into sustained practice (Maghirang et al., 2021).

2.3. Youth, Competency Development, and Education/Training

The competency-based education/training in organic agriculture clearly defines its competency standards (e.g., soil management, composting, organic pest control) as well as the learning outcomes which specify what learners can do, not just what they know. The learning outcomes show the competencies which are aligned with national standards (e.g., TESDA, DA Organic Agriculture Program) with progression from basic to advanced organic agriculture competencies.

The designs of most training programs utilized Learner-Centered and Self-Paced Learning wherein flexible learning pathways are adapted to learners' prior experience (e.g., farmers, out-of-school youth), there is a recognition of prior learning (RPL) in organic farming practices, there are individual learning plans based on assessed competency gaps and there are opportunities for remediation and repeated practice.

Viewed through the lens of Human Capital Theory, the cited studies collectively emphasize education and training as strategic investments that enhance individuals' competencies, productivity, and employability in agriculture and organic agriculture. The positive perception of agricultural graduates' competencies in Malaysia underscores how well-designed university curricula contribute to the accumulation of human capital, while also revealing the need for continuous curricular improvement to address emerging industry demands (Muhammad et al., 2013). Similarly, young people show strong interest in organic agriculture through its recognition as viable long-term career paths with awareness of economic returns from acquiring skills and motivation to invest time and effort in skills development related to farming (Latoza & San Jose, 2025). There are academic institutions would like to offer courses related to organic agriculture as a response to the needs of the community.

Appropriate training design to develop competencies of the youth is necessary to consider towards achieving a successful implementation of the program. Studies show that successful organic farming requires a holistic set of competencies including technical, environmental, and entrepreneurial skills that enable practitioners to align sustainable production practices with livelihood and market opportunities (Magnaye, 2017; Vergara, 2018). Lifelong learning concept is also applied for adult education for those who seek for available training to enhance their knowledge in organic farming. Continuous learning and skills enhancement are evident as farmers actively seek training to improve

productivity, soil fertility, and sustainable land management (Salaisook et al., 2024). However, the effectiveness of competency-based training is constrained by challenges such as misalignment with participants' career goals, limited access to land and inputs, high certification costs, and contextual barriers (Godmaling et al., 2024; Rola et al., 2015), underscoring the need for context-sensitive and demand-driven training designs. Although there are problems and barriers encountered during the implementation, they still stayed positive and develop some strategies on how to overcome these challenges. Evidence from the Philippines further indicates that well-structured Organic Agriculture Production (OAP) programs contribute to multi-level competency gains which enhancing knowledge, attitudes, skills, and socio-economic outcomes which is consistent with competency development frameworks such as Bennett's hierarchy (Nangleman, 2024). Complementing this, education and training initiatives that integrate practical technologies, such as vermicomposting, and experiential learning approaches have been shown to significantly improve productivity, income, employment, and adoption of organic practices, particularly in soil-limited contexts (Aquino, 2018; Alsiken-Nangleman, 2023). These approaches have been beneficial to train people with positive attitude, interest and motivation to start integrating organic farming practices to their system. Overall, the literature affirms that practical, competency-based, and entrepreneurial-oriented education and training are essential for empowering individuals, strengthening livelihoods, and ensuring the long-term sustainability of organic agriculture systems. This provides huge benefits to expose young generation in agricultural practices that will try to preserve and conserve the environment from climate change.

International experiences consistently demonstrate that competency-based, participatory, and institutionally supported education and training are essential for effective youth engagement and community development in organic agriculture. In Indonesia, both rural skills development and urban/peri-urban organic farming initiatives show that hands-on training, coaching, and participatory capacity building strengthen human and social capital, improve economic, health, and environmental outcomes, and encourage youth participation in sustainable practices (Anisah & Muniruddin, 2024; Surono, 2025; Salaisook et al., 2024). Empowering youth to participate in community development programs enhances their chances to promote advocacies for the environment. Through promoting participatory and learner-centered approaches in the curricula, integrating sustainable and environmentally friendly practices in the academic courses and encouraging mentorship and coaching by experienced farmers provide greater opportunity for the youth to be involved in organic farming. For example, Poland emphasizes integrating practical skills and entrepreneurial competencies into academic programs to enhance employability in the organic sector (Rembiałkowska et al., 2017), while Japan demonstrates that sustained institutional commitment, trust-building, and multi-sector partnerships are vital for long-term success in organic agriculture education and promotion (Shimoguchi et al., 2015). Establishing partnerships from government sector and industries strengthen the implementation of the curriculum which remains relevant based on the demands of the society.

2.4. Community-Based Development Program

The reviewed studies based on the perspective of Human Capital Theory highlighted that organic agriculture production is not only a pathway for economic productivity but also a strategic investment in community capacity and human capital. In Malaysia, the motivations for converting to organic farming ranging from health benefits, environmental protection, and food quality to market potential which illustrate the

recognition that skills, knowledge, and competencies in organic practices translate into both individual and community-level benefits (Mohammed et al., 2013). However, challenges such as land tenure, certification, labor constraints, limited marketing channels, and inadequate training underscore the need for capacity building and structured support systems to fully realize these benefits (Tiraieyari et al., 2014; Lucero et al., 2020).

Organic agriculture in the Philippines has potential as a tool for community development and poverty alleviation, yet realizing this potential depends on extending technology transfer, entrepreneurial skills, marketing competencies, and state support to farmers (Del Castillo, 2024). Organic agriculture can serve as a long-term investment in human skills and capabilities and reinforce social capital through cooperative and collective farming activities. The emphasis on integrating traditional farming values with modern technologies and positioning youth, particularly Generation Z, as active participants reflects the importance of investing in human capital across generations to sustain agricultural practices, strengthen community resilience, and enhance food security (Latoza & San Jose, 2025).

Collectively, the reviewed literature underscores organic agriculture as a powerful platform for community development and youth empowerment, particularly for out-of-school youth, through education, training, and social engagement which cultivates their entrepreneurial and innovation-oriented mindsets. Consistent with evidence from Malaysia and the Philippines, capacity-building initiatives, competency-based education, and experiential learning in organic farming enhance participants' technical skills, livelihood readiness, and socio-economic prospects (Mohammed et al., 2013; Del Castillo, 2024; Latoza & San Jose, 2025) with expansion of local labor productivity and self-reliance. In India, initiatives by Agri Biotech Foundation and related programs demonstrate that training, technology transfer, and skill development in organic farming enhance the economic and social well-being of marginal farmers, enabling them to adopt sustainable practices, improve productivity, and access new market opportunities (Shaik & Vardharajula, 2018; Lilly, 2021; Jansirani & Krishnan, 2024). Moreover, promoting organic agriculture not only improves farm income but also aligns with broader community development goals by addressing environmental sustainability, food security, and health outcomes, while fostering entrepreneurial opportunities for both youth and adult farmers (Mendoza, 2010).

Organic agriculture emerges as a multi-dimensional strategy for community development, integrating economic, social, and environmental gains, while enhancing human capital, fostering collective action, and empowering rural and peri-urban communities toward sustainable livelihoods. These studies underscore that community development in agriculture is strengthened when organic farming is integrated with education, capacity-building, and participatory approaches, empowering individuals with skills, knowledge, and networks that enhance livelihoods, resilience, and long-term sustainability. Overall, these studies demonstrate that organic agriculture contributes to human capital accumulation at the community level, by equipping farmers and youth with technical, entrepreneurial, and adaptive skills. When combined with institutional support, education, and intergenerational knowledge transfer, organic agriculture becomes a driver of sustainable community development, improving livelihoods, environmental stewardship, and long-term socio-economic well-being.

3. Research Methods

3.1. Research Design

The explanatory sequential mixed-method research design was utilized in the study to assess the awareness, development needs, attitude and commitment of the identified Filipino out-of-school-youth in acquiring competencies on organic agriculture farming. This research design allows the researcher to first quantify patterns and trends related to the major variables under study and then explain these results in greater depth through qualitative inquiry. The initial quantitative phase provides measurable evidence of levels of awareness, attitudes, and commitment, while the subsequent qualitative phase helps clarify *why* these patterns occur by capturing participants' experiences, motivations, constraints, and contextual realities. This design is particularly suited to community-based and competency-focused research, as it integrates numerical data with rich narrative insights which strengthens the validity of findings through triangulation, and supports the development of a responsive training and development program grounded in both statistical trends and participants' perspectives.

3.2. Setting of the Study

The study was conducted in the community from seven zones of one village in Camarines Sur, Philippines which is under the 4th Class Municipality with 2,556 total population from 2015 Census which is 8.21% of the total population in the municipality. The research setting was selected because this community represents a resource-constrained rural context where out-of-school youth face limited livelihood opportunities, making it an appropriate site for examining the relevance and potential impact of organic agriculture-based community development initiatives. The name of specific village was not disclosed in the study as requested by the head of the community to protect the confidentiality and privacy of the participants. This is also to prevent any potential identification or unintended consequences arising from the publication of the findings of the study.

3.3. Respondents

The study utilized a total population or complete enumeration of 61 out-of-school youth (OSY) in the participating community. The OSYs were chosen as respondents and beneficiaries of this research project because they represent a highly vulnerable yet economically active segment of the population whose limited access to formal education and employment opportunities makes them more dependent on practical, skills-based livelihood options such as organic agriculture. Moreover, focusing on OSY ensures that the benefits of organic agriculture education extend to marginalized youth, empowering them to become productive contributors to sustainable rural development rather than passive recipients of assistance.

The researcher conducted one-on-one semi-structured interviews to gain deeper insights into the quantitative findings of the study. Ten informants were purposively selected from the 61 survey respondents based on their willingness to participate in the interview, level of engagement in organic agriculture-related activities, and ability to provide rich and relevant information aligned with the study objectives. Priority was given to respondents who demonstrated varied experiences and perspectives to ensure meaningful explanation of the quantitative results. Data saturation was achieved by the tenth interview, as no new themes or significant information emerged from subsequent

discussions. This indicates that the number of informants was sufficient to capture the range of perspectives necessary to explain and contextualize the survey results.

3.4. Instrument

The instrument utilized in the study for assessing the Competency Development Needs in Organic Agriculture Production is the actual checklist from the training regulations of organic agriculture production NC II from TESDA, while the questionnaire for assessing the awareness on Organic Agriculture was taken from the concept of [Bisenio et al. \(2025\)](#) and [Piadozo et al. \(2014\)](#) while the attitude towards organic agriculture was adapted from the integrated concepts of [Nelson et al. \(2019\)](#), [Malkanthi \(2021\)](#), [Naigaga \(2023\)](#), [Sani \(2020\)](#), [Declaro-Ruedas \(2019\)](#) and [Adebayo and Oladele \(2013\)](#). The questionnaires were subjected to validation procedure and reliability testing with the corresponding Cronbach's alpha values for the awareness ($\alpha = 0.812$) and attitude ($\alpha = 0.863$) which denote good internal consistency.

3.5. Procedure with Ethical Consideration

This research sought and obtained formal approval from the Research Office of the institution following a thorough evaluation by a panel of reviewers. The approval process in the college level ensured that the study met institutional standards for ethical conduct, methodological rigor, and academic quality through conducting peer-reviews from internal and external evaluators. The researcher sought and obtained approval from the village captain prior to administering the questionnaires to formally secure permission to conduct the study within the community. This step ensured respect for local authority, facilitated community cooperation, and upheld ethical research practices.

After seeking approval from the authorities, the researcher provided the respondents with the survey questionnaires through house-to-house administration for one month with the help of the village official in-charge to agriculture, but only those respondents who are interested and willing to participate in the self-assessment survey were asked to answer the questionnaire for ethical consideration. The participants are fully informed about the purpose, procedures, and voluntary nature of their involvement through obtaining written informed consent from all respondents prior to their participation in the study. They were also assured of confidentiality and their right to withdraw from the study at any time without any consequences.

The qualitative data were collected through face-to-face semi-structured interviews to validate the result of the survey after collecting the quantitative data. Each interview lasts approximately 10–15 minutes. An interview guide was used to ensure the consistency across interviews based on the result of the survey while allowing flexibility for participants to elaborate on their experiences, perceptions, and insights related to the study. The interview setting was also considered in the study where all interviews were conducted in a quiet and comfortable place to facilitate open communication and were audio-recorded with the participants' informed consent to ensure accuracy and completeness of the data. The audio recordings were later transcribed verbatim and systematically reviewed to support in-depth qualitative analysis and the identification of emerging themes which were included in the discussion of findings.

In accordance with the Data Privacy Act of 2012, the researcher is committed to protecting and securing all personal information obtained during the conduct of this

study. The personal and other information provided is processed and used solely for research purposes, stored securely, and accessed only by the researchers, and will not be shared with any external parties without prior written consent. The researcher explained in Tagalog and/or Bicol language the informed consent which was also sought from the respondents. Village officials and committee on agriculture assigned in the barangay were also interviewed regarding the existing programs related to agriculture.

3.6. Data Analysis

Quantitative data were analyzed using frequency count, percentage, weighted mean and standard deviation are the descriptive statistics utilized in describing and presenting the gathered data from the survey. The given scale was used to interpret the result of the survey: 3.51-4.00: *Very Much Needed (VMN)/Very High*; 2.51-3.50: *Much Needed (MN)/High*; 1.51-2.50: *Less Needed (LN)/Low*; 1.00 – 1.50: *Not Needed (NN)/Very Low*. The quantitative data analysis was substantiated with the findings from the qualitative data using sample transcripts from the participants [P] with identifiers.

Thematic analysis of the qualitative data was conducted following a systematic process to identify, analyze, and report patterns within the interview transcripts. First, all audio-recorded interviews were transcribed verbatim and reviewed multiple times to ensure accuracy and familiarity with the data. Initial codes were generated through manual coding by highlighting significant statements, phrases, or ideas related to participants' responses, experiences and perceptions regarding organic agriculture. These codes were then grouped into broader themes based on patterns and relationships across the interviews to ensure the alignment with the research objectives. Finally, the themes were refined, defined, and interpreted to provide meaningful insights into the competencies, motivations, and challenges of out-of-school youth to engage in organic agriculture.

4. Results

Table 1 shows the level of awareness of respondents on Organic Agriculture Production. The respondents are highly aware of the health benefits of consuming organically produced food ($WM=2.63$, $SD=0.80$). They highly aware on this aspect of OAP because of their exposure to information from social media, television, and online platforms discussing healthy and organic food; personal or family experience with health issues that encouraged choosing healthier and chemical-free food options; and influence of health-conscious family members, peers, or community advocates promoting organic food consumption.

However, they have low level of awareness on how organic agriculture helps protect the environment and natural resources ($WM=2.36$, $SD=0.73$), and on what organic agriculture is and how it differs from conventional farming ($WM=2.05$, $SD=0.72$). In addition, they have low awareness on how organic agriculture avoids the use of synthetic chemicals and promotes natural farming practices ($WM=1.93$, $SD=0.73$); and how organic agriculture provides livelihood and income opportunities for youth and communities ($WM=1.98$, $SD=0.77$). These are some of the responses based on the interviews that show low level of awareness in organic agriculture.

Table 1: Awareness on Organic Agriculture

Awareness	WM	SD	Interpretation
I am aware of what organic agriculture is and how it differs from conventional farming.	2.05	0.72	Low
I know that organic agriculture avoids the use of synthetic chemicals and promotes natural farming practices.	1.93	0.73	Low
I am aware of the health benefits of consuming organically produced food.	2.63	0.80	High
I know that organic agriculture helps protect the environment and natural resources.	2.36	0.73	Low
I am aware that organic agriculture can provide livelihood and income opportunities for youth and communities.	1.98	0.77	Low
Composite Mean	2.19	0.80	Low

Scale: 3.51-4.00: Very High; 2.51-3.50: High; 1.51-2.50: Low; 1.00 – 1.50: Very Low

"I am not totally aware of what organic agriculture is all about but I have little knowledge on the benefits of organic food products." [P3]

"I do not know the benefits of practicing organic agriculture to the environment and how it will become a source of income." [P8]

Overall, the composite mean score of 2.19 implies that the respondents have low level of awareness on Organic Agriculture. Empirical evidence also highlights the role of youth and women as emerging contributors to community development, where organic farming provides opportunities for skill acquisition, employment, and social empowerment, as seen in Sikkim, India, and urban-rural training programs in Indonesia ([Abdullah & Parvin, 2024](#); [Saliot & Tabinas, 2017](#)). Moreover, the labor-intensive nature of organic farming contributes to job creation, offering more secure and prolonged employment compared to conventional agriculture ([Finley et al., 2018](#)). Challenges such as high production costs, limited market access, certification barriers, and consumer skepticism remain, suggesting the need for policy support, education, extension services, and infrastructure development to maximize community-level benefits ([Karkee, 2014](#); [Lucero et al., 2020](#)).

This low level of awareness is attributed to the limited access to formal education where agriculture, sustainability, and organic farming concepts are systematically taught. There is lack of exposure to agricultural programs, training, or extension services that specifically target out-of-school youth with minimal representation of organic agriculture topics in mainstream media content that is relevant and appealing to youth. In the study conducted by [Piadozo \(2014\)](#), it was found out that farmers have only low-medium level of awareness on organic agriculture practices and activities. Most of the knowledge that the farmers learned was from private institutions and Non-government Organizations. The farmers also have a very low level of awareness when it comes to the Republic Act 10068 or the Organic Agriculture Act of 2010 and the Philippine National Standards in Organic Agriculture. Results suggest that strengthening the efforts in implementing programs, projects, and activities in capacitating youths and households, and all members of the community about organic farming practices is necessary.

[Table 2](#) presents the percentage distribution and weighted mean on competency development needs in organic agriculture production. The 71.2 percent of the respondents considered performing plant care and management ($WM=3.53$, $SD=0.86$) as

very much needed competency to be developed in organic agriculture production followed by 61 percent response on preparing for the production of various concoctions ($WM=3.51$, $SD=0.070$) as the top 2 very much needed competency. The following responses showed the interest of the prospective participants who will undergo future training.

Table 2: Percentage Distribution and Weighted Mean on Competency Development Needs in Organic Agriculture Production

How much do you need to develop how to...	Percentage (%)				Mean			Rank
	1	2	3	4	WM	SD	VD	
produce organic chicken	0.0	5.1	40.7	54.2	3.49	0.59	MN	4
select healthy stocks and suitable housing	0.0	10.2	30.5	59.3	3.49	0.67	MN	4
set up cage and equipment for chicken	1.7	10.2	39.0	49.2	3.36	0.73	MN	15
feed chicken	5.1	15.3	25.4	54.2	3.29	0.90	MN	17
grow and harvest chicken	1.7	11.9	27.1	59.3	3.44	0.77	MN	8
produce organic vegetables	5.1	8.5	18.6	67.8	3.49	0.85	MN	4
establish nursery	3.4	6.8	32.2	57.6	3.44	0.77	MN	8
plant seedlings	8.5	6.8	16.9	67.8	3.44	0.94	MN	8
perform plant care and management	5.1	8.5	13.6	71.2	3.53	0.86	VMN	1
perform harvest and post-harvest activities	3.4	8.5	35.6	52.5	3.37	0.78	MN	14
produce organic fertilizer	3.4	6.8	32.2	57.6	3.44	0.77	MN	8
prepare composting	5.1	6.8	30.5	57.6	3.41	0.83	MN	12.5
compost and harvest fertilizer	5.1	11.9	28.8	54.2	3.32	0.87	MN	16
produce organic concoctions and extracts	0.0	8.5	42.4	49.2	3.41	0.64	MN	12.5
prepare for the production of various concoctions	1.7	6.8	30.5	61.0	3.51	0.70	VMN	2
process concoctions	3.4	8.5	28.8	59.3	3.44	0.79	MN	8
package concoctions	3.4	6.8	33.9	55.9	3.42	0.76	MN	11

Scale: 3.51-4.00: Very Much Needed (VMN); 2.51-3.50: Much Needed (MN); 1.51-2.50: Less Needed (LN); 1.00 – 1.50: Not Needed (NN)

"I believe that these competencies will help me knowledgeable in organic agriculture and will become useful for my future career." [P2]

"I don't have any idea on what are these activities pertaining to organic agriculture, but these sound interesting to know more about and learn how to do it." [P9]

"Performing plant care and management is what I really interested the most, because I can help my parents in planting vegetables." [P7]

Strengthening local capacities emerged as one of the major themes based on the interviews conducted with the participants. The OSYs expressed their agreement that this project can empower communities to address their own socio-economic needs sustainably while reducing dependence on external assistance and short-term interventions. This will also enable youth to become active contributors to local

development, support long-term livelihood security through skills-based capacity building, and create a foundation for sustainable agriculture and community resilience.

Respondents believed on developing knowledge in plant propagation, soil preparation, fertilization, and pest management is essential for acquiring practical agricultural skills applicable in livelihood and entrepreneurship where they will gain competency in preparing herbal, organic, or value-added products like concoctions as part of skill development and competency building. Likewise, developing understanding of sustainable agriculture and organic practices is another consideration of the respondents that will contribute to biodiversity conservation and eco-friendly farming practices while reducing dependency on chemical fertilizers and pesticides as part of the environmental awareness and stewardship.

They also find much needed to develop competency on how to produce organic chicken ($WM=3.49$, $SD=0.59$) followed by selecting healthy stocks and suitable housing ($WM=3.49$, $SD=0.67$) and producing organic vegetables ($WM=3.49$, $SD=0.85$). The respondents could be able to identify and select healthy, disease-resistant chicken stocks suitable for organic production systems, and design and maintain appropriate housing that ensures animal welfare, biosecurity, ventilation, and natural behavior of organic chickens. They will also learn how to apply organic feeding practices using natural, locally available feed ingredients and farm-grown organic vegetables; and integrate organic vegetable production with poultry farming through waste recycling (e.g., using manure as compost and vegetable residues as feed).

However, the competencies with the least mean scores on the development needs in organic agriculture production but still considered much needed include performing harvest and post-harvest activities ($WM=3.37$; $SD=0.78$); setting up cage and equipment for chicken ($WM=3.36$; $SD=0.73$); composting and harvesting fertilizer ($WM=3.32$; $SD=0.87$); and feeding chicken ($WM=3.29$; $SD=0.90$). The results are attributed to the pressing needs of the community in producing their own vegetables and animal meat for food source. Findings suggests that there is need to educate people on the different types of urban gardening following organic farming practices due to the increasing food prices and economic constraints within the community and the need for household-level food security and self-sufficiency. There is also a rising household demand for affordable and reliable food sources while limited access to commercially produced vegetables and animal meat is also being experienced. Respondents also manifest lack of formal knowledge on urban gardening and organic practices and the need for practical education on sustainable, low-cost food production.

Furthermore, they also expressed the need to develop these competencies in fostering discipline, patience, and responsibility through plant care routines while building confidence and self-efficacy through practical accomplishments and encouraging creativity and innovation in preparing new concoctions as part of their personal growth and responsibility. [Yekinni and Ladigbolu \(2019\)](#) revealed in their study that the people of Southwestern Nigeria need training in all areas of organic agriculture. Although they have a high level of knowledge in organic farming, they still have a high level of training needs in all areas of organic farming because they want to keep updated in organic farming practices. [Salaisook et al. \(2024\)](#) highlight that in Thailand, organic agriculture enhances farmer productivity, emphasizing the need to improve and develop more effective compost, biofertilizers, and biopesticides to meet the growing demand for organic inputs.

Table 3 presents the percentage distribution and weighted mean on attitude towards organic agriculture production. From the perspective of Human Capital Theory, respondents have very positive attitudes of the toward organic agriculture production as indicated by a strong recognition of the long-term value of skill acquisition as an investment in their future productivity and well-being. There is also a high proportion of respondents who believe that acquiring organic agriculture skills will be helpful in the future (78%) which reflects an understanding that knowledge and competencies in sustainable farming enhance employability, income-generating potential, and adaptability to changing economic and environmental conditions. Similarly, the perception that organic agriculture is nice (79.7%) and useful for livelihood activities (66.1%), these suggests that respondents associate organic farming with both intrinsic motivation and practical economic returns. The following responses show the positive attitude of the youth towards organic farming.

Table 3: Percentage Distribution and Weighted Mean on Attitude Towards Organic Agriculture Production

Attitude Towards Organic Agriculture	Percentage (%)				Mean			Rank
	1	2	3	4	WM	SD	VD	
Organic agriculture makes me excited.	5.1	3.4	52.5	39.0	3.25	0.75	High	7
I enjoy planting vegetables using organic fertilizers.	3.4	5.1	35.6	55.9	3.44	0.74	High	4
Organic agriculture makes me nervous.	13.6	30.5	39.0	16.9	2.59	0.92	High	8
Organic agriculture is useful for my improvement as a person.	6.8	6.8	27.1	59.3	3.39	0.88	High	5
Organic agriculture is stressful.	28.8	30.5	27.1	13.6	2.25	1.02	Low	9
I love organic agriculture practices.	1.7	11.9	44.1	42.4	3.27	0.73	High	6
I find organic agriculture useful for livelihood activities.	5.1	1.7	27.1	66.1	3.54	0.77	Very High	3
Preparing materials and tools in organic agriculture makes me mad.	39.0	30.5	16.9	13.6	2.05	1.05	Low	10
Acquired organic agriculture skills will be helpful to me in the future.	5.1	0.0	16.9	78.0	3.68	0.72	Very High	1.5
Organic agriculture is nice.	5.1	1.7	13.6	79.7	3.68	0.75	Very High	1.5
Composite Mean	11.4	12.2	30.0	46.4	3.1	1.01	High	

Scale: 3.51-4.00: Very High; 2.51-3.50: High; 1.51-2.50: Low; 1.00 – 1.50: Very Low

“Practicing organic farming, I believe will become very useful for me and my family, because I see that there is a future in this activity.” [P1]

“I usually help my parents in planting vegetables in the backyard, and introducing this kind of organic practices will surely help us more productive.” [P5]

Result of qualitative analysis revealed that enhancing youth participation in productive livelihoods emerged as one of the themes based on the interviews conducted where this project is considered valuable which can address youth unemployment and

underemployment in rural communities while providing practical alternatives to informal and unstable work. It transforms positive attitudes into sustained economic participation, enhances youth self-efficacy, motivation, and economic independence and contributes to household income and local economic development.

These attitudes demonstrate how positive perceptions can encourage individuals to invest in learning organic agriculture practices, thereby strengthening their human capital and enabling them to contribute more effectively to community development, food security, and sustainable livelihoods. [Nelson et al. \(2019\)](#) reported that Filipino organic farmers generally exhibit positive attitudes toward organic agriculture, particularly in recognizing its usefulness for improving livelihoods and sustaining farm productivity, which aligns with the present finding that respondents view the acquisition of organic agriculture skills as beneficial for their future and livelihood activities.

Meanwhile, 55.9 percent of the respondents enjoyed planting vegetables using organic fertilizers ($WM=3.44$, $SD=0.74$) followed by a high response of the students that organic agriculture is useful for their improvement as person ($WM=3.39$, $SD=0.88$) and they love organic agriculture practices ($WM=3.27$, $SD=0.73$). Furthermore, respondents have low response on the idea that organic agriculture is stressful ($WM=2.25$, $SD=1.02$) and preparing materials and tools in organic agriculture makes them mad ($WM=2.05$, $SD=1.05$). This signifies that they believe on the benefits they can get from this opportunity in organic agriculture. The results suggest that the out-of-school-youth of the community have a very positive attitude towards organic agriculture. Findings reveal that organic farming serves as a platform for experiential learning of Gen Z, fostering critical life skills such as resilience, problem-solving, and innovation ([Latoza & San Jose, 2025](#)). As [Nelson \(2019\)](#) found out that beneficiaries have also positive attitude on the aspect of organic agriculture specially on the cost and benefits of engaging in organic farming. Crafting trainings should be customized based on the needs of the beneficiaries and should take into consideration the evidence-based characteristics, knowledge, attitude and practices of the participants to increase and sustain the practice of organic agriculture in the Philippines ([Nelson et al., 2019](#)). Based from the study of [Njeru \(2017\)](#), youth perception of agriculture influences their participation in agriculture since youth with positive perceptions participated more in agriculture than those with negative perceptions.

The respondents answered that they will grab this training opportunity related to organic farming because it will provide them necessary competency that might be needed for future employment. The findings of the study of [Squire \(2000\)](#) showed similar result which indicates that most out-of-school rural youth in the North-East District of Botswana gravitate toward farm-related trades, with a considerable proportion also favoring building and construction careers, while other training and career options attract relatively limited interest among the youth. The youth identified limited access to educational facilities, unstable employment opportunities, inadequate recreational spaces, insufficient health education, restricted participation in decision-making processes, and lack of access to land as major challenges affecting their well-being in rural areas.

Table 4 presents the percentage distribution on commitment towards Organic Agriculture Production training. It is worthy to note that 100 percent of the respondents are you willing to learn the skills in producing organic chicken, vegetables, fertilizers and concoctions and extracts while 96.6 percent of them are willing to actively participate in

skills training on organic agriculture and 91.5 percent of them are willing to give their time in completing all the activities. The respondents have shown strong commitment to participate in the training.

Table 4: Percentage Distribution on Commitment Towards Organic Agriculture Production Training

Commitment	No	Yes
Are you willing to actively participate in skills training on organic agriculture?	3.4 %	96.6 %
Are you willing to learn the skills in producing organic chicken, vegetables, fertilizers and concoctions & extracts?	0.0 %	100 %
Are you willing to give your time in completing all the activities?	8.5 %	91.5 %

"I am very much willing to participate in the training to be conducted. Hoping that I will become knowledgeable on organic agriculture and will become useful as income generating activity." [P4]

"This is exciting to be part of this group. I will do my best to finish all the hands-on activities. Hoping that I can contribute to the successful implementation of this program." [P10]

Promoting environmentally sustainable practices emerged as one of the major themes from the qualitative analysis. Based on the interviews, the participants believed on the capacity of the project to enhance long-term productivity of land and natural resources, while building environmental awareness and stewardship among out-of-school youth, and supporting climate-resilient and sustainable livelihood options. This also aligns community development initiatives with sustainability goals, and contributes to food safety, public health, and ecological balance.

The respondents expressed their high commitment to attend the training program because they believe the training will equip them with practical skills that can lead to income generation and self-employment opportunities; they see the training as an investment in their skills, confidence, and long-term employability (Buenviaje et al., 2016; Macalalad et al., 2016; Laguador et al., 2020); and they value the program as an accessible opportunity to gain formal competencies and certifications not readily available to them. The training program is designed for OSY in promoting teamwork and cooperation in group activities while sharing knowledge and products with family or community members that will support community development initiatives through agricultural projects.

4.1. Community-Based Development Training Program

This training program is specifically designed for the out-of-school- youth with the following characteristics namely, needs-responsive and context-based, skills-oriented and livelihood-focused, participatory and empowering with inclusive and supportive learning environment. The program is grounded in the actual socio-economic conditions, interests, and capacities of out-of-school youth, ensuring that learning activities (e.g., organic agriculture, livelihood skills) are relevant to their daily realities and immediate needs. It emphasizes practical, competency-based training that equips OSY with employable and entrepreneurial skills, enabling them to generate income, improve self-

reliance, and enhance future employment or self-employment opportunities. Out-of-school youth are actively involved in planning, implementation, and evaluation of activities, fostering ownership, confidence, leadership, and decision-making skills while strengthening their sense of belonging in the community. The program provides flexible, non-formal, and supportive learning approaches that accommodate varied educational backgrounds, reduce barriers to participation, and promote personal growth, social integration, and well-being of OSY.

On the technical aspect of the competency training program, it covers the production of Organic Concoctions and Extracts, Organic Vegetables, Organic Fertilizer and raising Organic Chicken. The researcher who is also the program leader already engage the local government units, training institutions, NGOs, and agriculture practitioners to provide technical support, training facilities, and resource sharing. The program adapts Competency-Based Training Delivery which will implement modular, hands-on training on organic agriculture (e.g., plant care, organic inputs, poultry and vegetable production) aligned with nationally recognized competencies and suited to OSY learning pace.

Experiential and Community-Based Learning will be utilized for demonstration farms, community learning sites, and peer learning activities to ensure practical application of skills within the local context. There will also sessions for values formation and life skills integration on work ethics, environmental stewardship, teamwork, and entrepreneurship to strengthen holistic youth development. There will also be assessment and certification towards the end of the program to determine the acquired competencies through performance-based evaluation and facilitate access to certificates or recognition that can enhance employability or livelihood opportunities. The program will also provide continuous mentoring, progress monitoring, and technical guidance to support skill mastery and sustained participation. Linkages for Livelihood and Sustainability will be provided to establish market, cooperative, or enterprise linkages in helping participants apply their skills for income generation and long-term community development.

The youth of an identified community in Camarines Sur, Philippines are the beneficiaries of this program where they will be provided necessary competency training from producing organic fertilizers to animal raising. People may acquire the needed skills in producing organic vegetables, fertilizers, concoctions and in raising organic animals to make the society informed and educated on how to take good care of the environment and health of the community. This also aims to provide the youth with life options in pursuing their career related to organic farming, for employment, and for entrepreneurial undertakings.

5. Conclusion

The study shed light to the awareness, attitude and competency development needs of the Filipino out-of-school youth towards organic agriculture which served as a basis for designing a community-based development training program. The results of the study showed that most of the youth respondents have low level of awareness on organic agriculture with only high level on its health benefits of consuming organically produced food. They have very high level of competency development needs specifically in performing plant care management and producing organic concoctions while overall mean score shows high level of needs. The attitude of the youth towards organic agriculture training gained a positive response considering its importance in their future. It can also be noted that almost all the youth respondents showed their willingness to

participate in the skills training in organic agriculture. The emerging themes focus on strengthening local capacities, enhancing youth participation in productive livelihoods, and promoting environmentally sustainable practices guide the design of a community-based development program that empowers youth, strengthens economic participation, and ensures sustainability through organic agriculture.

These findings served as basis to design a proposed community-based development training program in organic agriculture production which is highly recommended to be implemented to address the needs of the youth in skills acquisition in organic agriculture production. The Human Capital Theory and Competency-Based Training were utilized as frameworks in developing the training program which is a community-based initiative designed to equip out-of-school youth with practical competencies in organic agriculture, focusing on sustainable production skills that support livelihood generation and personal well-being. It combines hands-on learning, mentorship, and values formation to strengthen human capital and empower participants to contribute meaningfully to community development.

However, the study is limited to out-of-school youth from one specific community in the Philippines which may limit the generalizability of the findings to other contexts or locations. This only assessed the competency development needs as basis for developing community-based training program which focuses on awareness and attitude towards organic agriculture production but future research studies may also examine and develop the entrepreneurial competencies of the beneficiaries. The data relied largely on self-reported responses, which may be subject to response bias, social desirability, or varying levels of comprehension among respondents. The duration of the training and data collection period was relatively short, restricting the assessment of long-term impacts on skills application, livelihood outcomes, and sustained engagement.

Ethics Approval and Consent to Participate

The author sought an institutional approval from the Research Office before conducting the study. This research has no formal institutional ethics approval because the study used anonymized data with no personal identifiers, it involves non-sensitive, non-identifiable survey responses for testing instruments, and the study has minimal risk to participants and does not collect personal or sensitive information. The participants are well informed about the purpose of the study through written consent.

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Conflict of Interest

The author declares no conflict of interest for this work.

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