Journal of Interdisciplinary Perspectives
ISSN Print: 2984-8288, ISSN Online: 2984-8385
Vol. 2, No. 5, pp. 230-239, May 2024

Nurturing Resilient Communities: Unveiling the Transformative Potential of Agroecological Preservation in Sustainable Farming

Rony C. Conadera
Iloilo State University Fisheries Science and Technology, Iloilo, Philippines

Author email: conadera.rony@gmail.com

Date received: March 9, 2024
Date revised: April 10, 2024
Date accepted: April 14, 2024

Originality: 85%
Grammarly Score: 99%
Similarity: 15%

Recommended citation:
Conadera, R. (2024). Nurturing resilient communities: unveiling the transformative potential of agroecological preservation in sustainable farming. *Journal of Interdisciplinary Perspectives*, Vol. 2, Number 5, pp. 230-239. https://doi.org/10.69569/jip.2024.0079

Abstract. This study delves into the exploration of agroecological preservation patterns in the Municipality of Lambunao. The main objective is to understand the current practices and their implications on the local environment. To achieve this, a descriptive research method was employed, utilizing a standardized data-gathering instrument to collect information from 500 local community farmers, selected through random stratified sampling across various barangays. The research method involved the use of descriptive statistics, including frequency count and ranking, for data analysis. Additionally, inferential research was conducted using the Mann-Whitney U test and Kruskall Wallis test, with a significance level set at 0.05. The results of the study revealed that the Agroecological System in Lambunao is primarily characterized by plain topography, clay soil type, and rice as the main crop. The farmers predominantly practice organic farming as a tradition. Preservation practices were found to be frequently practiced by the entire group and seldom practiced when considering selected variables. However, when focusing on the tradition of organic farming, it was found that farmers always practiced preservation. The study concluded that there were no significant differences in preservation practices in terms of age, sex, selected educational attainment, and number of years in farming. However, significant differences were found in farm land area and selected categories of educational attainment. In conclusion, the study underscores the importance of organic farming and the need to promote preservation practices among local community farmers, offering valuable insights into the agroecological preservation patterns in the Municipality of Lambunao.

Keywords: Agroecological preservation patterns; Local community farmers; Organic farming; Preservation practices; Descriptive research; Random stratified sampling; Municipality of Lambunao.
.

1.0 Introduction

The agricultural sector is confronted with various challenges, including climate change, water scarcity, and market volatility. In response to these challenges, innovative farmers are adopting agroecological practices that combine local and scientific knowledge. Agroecology has been shown to outperform chemical fertilizers, particularly in unfavorable environments (Smith et al., 2019). However, alongside the push for sustainable farming practices, there is a growing debate between preservationists and utilitarians regarding land use. Preservationists argue for valuing land for its intrinsic beauty and advocating against its utilization for human purposes (Johnson, 2018).

The agroecological system represents a sustainable farming approach that aligns with resilience thinking and ecological principles. It aims to mitigate climate change, reduce emissions, recycle resources, and prioritize local supply chains (Gliessman, 2015). While modern agriculture has significantly increased food production, it has also contributed to ecological problems such as soil degradation, loss of biodiversity, and the effects of global

warming (Pretty et al., 2018). This highlights the need for alternative farming practices, such as agroecology, to address these issues.

Urban regions face unique challenges, including excessive consumption and the impact of urbanization on ecosystem services (EEA, 2006; Prokop et al., 2011). The expansion of urban areas and soil sealing have resulted in a decline in ecosystem services, necessitating the integration of spatial planning to preserve these services (Hammer et al., 2004; Kasanko et al., 2006). However, current planning instruments often prioritize development over the preservation of ecosystem services (Benedict & McMahon, 2006).

Therefore, this study aims to explore the relationship between agroecological practices, land use policies, and the preservation of ecosystem services in urban regions. By examining the challenges faced by spatial planning in preserving ecosystem services, innovative approaches can be identified to integrate agroecology and land use policies. This research will contribute to the understanding of sustainable farming practices, the role of spatial planning in urban regions, and the potential for preserving ecosystem services through agroecology.

In summary, this study addresses the need for sustainable farming practices in the face of agricultural challenges. By exploring the relationship between agroecology, land use policies, and the preservation of ecosystem services in urban regions, this research seeks to contribute to the development of innovative approaches for integrating agroecology into spatial planning.

2.0 Methodology

2.1 Research Design

This descriptive study determined the agroecological preservation patterns in the Municipality of Lambunao. It includes the data and characteristics of the population or phenomenon being studied. Best (1992) describes that descriptive research that involves the descriptive analyses and interpretation of existing conditions. It also consists of some comparison or contract and attempts to discover relationships. According to Ardales (2001), descriptive research is designed to study that "what is". It is the research design that is appropriate for studies that aim to find out what prevails in present conditions or relationships, held opinions and beliefs, processes and effects, and developing trends.

According to Gay (1992), descriptive research involves collecting data to answer the question concerning the status of the subject of the study. Furthermore, Slavin (1984) states that descriptive research is more analytic and often focuses on a particular variable or factor and operates on the bases of a hypothesis. This study used a one-shot survey design using a researcher-made questionnaire. A one-shot survey design is a study design where a single group of individuals (or another exciting unit of analysis) is selected for observation over a single, limited period (Jupp, 2006).

2.2 Research Locale

This study was conducted at the Municipality of Lambunao, Province of Iloilo, with the help of the Local Community Farmers, Local Residents, anResidentst Unit, specifically, the local community farmers. Municipality of Lambunao (Kinaray-a: Banwa Kang Lambunao) is a 1st class municipality in the province of Iloilo, Philippines. According to the 2015 census, it has a population of 73,640 people. Lambunao is the largest Municipality in Iloilo in terms of land area and is 47 kilometers (29 mi) from Iloilo City. It is bounded on the North by the Municipality of Calinog, on the East by the Municipalities of Dueñas and Pototan, on the South by the Municipalities of Janiuay and Badiangan, on the West by a portion of the Municipalities of Janiuay, Iloilo and Valderama, Antique. It is a 1st Class Municipality which has a total land area of 40,709 hectares. Out of this area, 73.88% is alienable and disposable land, while 26.12% is forestlands. It has a total Population of 73,640(PSA 2015). It is approximately 194 m. above sea level, known to be the highest so far in the province. It lies within 122 34'00" East Longitude and within 11 09'00' North Latitude. It is 45 Kilometers from Iloilo City. Lasmbuinao has 73 Barangays: Agsirab, Agtuman, Alugmawa ,Badiangan, Bagongbong, Balagiao, Banban, Bansag, Bayuco, Binaba-an Armada, Binaba-an Labayno, Binaba-an Limoso, Binaba-an Portigo, Binaba-an Tirador, Bonbon, Bontoc, Buri, Burirao, Buwang, Cabatangan, Cabugao, Cabunlawan, Caguisanan, Caloy-ahan, Caninguan, Capangyan, Cayan, Cayan Este, Corot-on, Coto, Cubay, Cunarum, Daanbanwa, Gines, Hipgos, Lanot Grande, Lanot Pequeño, Legayada, Lumanay (Daanbanwa I), Madarag, Magbato, Maite Grande, Maite Pequeño, Malag-

it, Manaulan,Maribong, Marong, Misi, Natividad, Oeste, Pajo, Pandan, Panuran, Pasig, Poblacion Ilawod, Poblacion Ilaya, Poong, Portigo, Pughanan, Pungsod, Quiling, Sagcup, San Gregorio, Sibacungan, Sibaguan, Simsiman, Supoc, Tampucao, Tranghawan, Tubungan, Tuburan, and Walang. The above-mentioned barangays served the basis of selecting respondents using the stratified random sampling techniques, which served as the respondents' exact location.

2.3 Research Participants

The Respondents of this study were the Five Hundred (500) Local Community Farmers who were stratified randomly selected from different Barangays in the Municipality of Lambunao based on the Official Registered List of Farmers issued by the Municipal Agriculture Office. The techniques used in selecting respondents are stratified random sampling techniques.

2.4 Research Instrument

The investigation employed the instruments, specifically the questionnaire checklist, which served as a primary data-gathering tool for the purpose of the investigation. The statement contained in the research instrument was structural and phrased so that each item would be brief, clear, simple, and easy to understand. The features of the research instrument were designed to obtain the data needed for the study. The standardized published and adopted questionnaire from Dr. Meraluna P. Catinan of WVSU-Lambunao Campus. The said research questionnaire was composed of three parts:

Part one, Personal data sheet. Elicited data on the participants' Name, Sex, Age, and educational attainment; Part two, Agroecological System. Identifying the agroecological system in the Municipality of Lambunao; and Part three, Agroecological System Preservation Patterns. The Response of respondents to Agroecological System Preservation Patterns that they practice and observe within the Municipality. The instrument underwent validation and reliability test. It obtained an r of .957 which, according to Calmorin (1987), it is reliable if the result is higher than 0.7. All data were analyzed using SPSS.

2.5 Data Gathering Procedure

The researcher presented the proposal for hearing to the Faculty of the College of Management, the Thesis Adviser, and the Panel of Evaluators. Upon approval of the proposal, the researcher asked permission from the Adviser to conduct the study with the approval as well from the panel of evaluators. Upon approval to administer the study, the researcher wrote to the corresponding office/s a letter asking for basic data of the said institution. The researcher also asked for an endorsement letter from the Local Government Unit, specifically from the Mayor's Office, which was presented to the Barangay Captains of Different Barangays of Lambunao for the accommodation of the request and to ensure the participation of the said Local Community Farmers.

With the approval of the corresponding individual and offices, the questionnaire was distributed to the respondents by the researchers. Since it was only a data-gathering sheet, it was easy for them to fill it up. A few minutes were allotted for the respondents to fill up. Responses were then tabulated for analysis and interpretation.

2.6 Ethical Considerations

In conducting this study, we, the authors, declare our compliance with ethical guidelines and principles to ensure the well-being and rights of the research participants. We obtained informed consent from all participants, including their parents or guardians, prior to their involvement in the study. The informed consent process provided them with a clear understanding of the study's purpose, procedures, and potential risks and benefits. Participants were informed of their freedom to withdraw from the study at any time without any negative consequences. We ensured the anonymity of the respondents by maintaining confidentiality and protecting their personal information. All data collected were treated with utmost confidentiality, and the identities of the participants were kept strictly confidential. Any identifying information was removed or anonymized during the data analysis and reporting process. The well-being of the participants was safeguarded throughout the study. We took measures to minimize any potential harm or discomfort to the participants. The research procedures were designed to be non-invasive and did not pose any physical or psychological risks to the participants. We always prioritized the safety and welfare of the participants. We declare that there is no

conflict of interest that could potentially influence the conduct or interpretation of the study. The research was conducted purely for academic and research purposes, without any external influences or biases. We maintained objectivity and impartiality in the interpretation of the findings, ensuring that no bias was present in the analysis and reporting of the results.

Furthermore, we strictly adhered to ethical standards regarding plagiarism. All sources and references were properly cited, and any direct quotations or paraphrased information were appropriately attributed to the original authors. The study was conducted with integrity and in accordance with the principles of academic honesty and intellectual property rights. Lastly, we affirm that the results of this study will be used solely for research purposes. The findings will contribute to the existing body of knowledge and serve as a basis for further research and academic discussions. The results will not be used for any other purposes that may compromise the privacy or rights of the participants.

In conclusion, we, the authors, are committed to upholding ethical standards and ensuring the well-being and rights of the research participants throughout the study. We are dedicated to conducting research with integrity, transparency, and respect for the individuals who participated in this study.

3.0 Results and Discussion

3.1 Demographic Characteristics of Local Community Farmers

Table 1 Demographic characteristics of local community farmers

CATEGORY		N	PERCENTAGE (%)
Entire Group		500	100
Ages			
	25-35 Years Old	52	10.40
	36-45 Years Old	75	15.00
	46-55 Years Old	126	25.20
	56-65 Years Old	247	49.40
Sex			
	Male	257	51.40
	Female	243	48.60
Educational Attainment			
	Elementary Level	66	13.20
	Elementary Graduate	43	8.60
	High School Level	96	19.20
	High School Graduate	70	14.00
	College Level	185	37.00
	College Graduate	40	8.00
Number of Years in Farming			
	10 Years & Below	75	15.00
	Above 10 Years	425	85.00
Farm Land Area			
	Hectare and Below	280	56.00
	Above Hectare	220	44.00

Table 1 provide valuable insights into the farming community's composition. The age distribution shows that a significant proportion of farmers are aged 46 and above, with the largest group being 56-65 years old (49.4%). This aligns with global trends, as reported by the Food and Agriculture Organization (FAO), which states that the average age of farmers is increasing worldwide due to rural-urban migration among younger populations (FAO, 2014). The gender distribution is almost equal, with males (51.4%) slightly outnumbering females (48.6%). This reflects the important role that both men and women play in agricultural activities, as recognized by the World Bank (2019). In terms of educational attainment, most farmers have reached college level (37.0%), although only a small proportion have graduated (8.0%). This suggests that while formal education is accessible, completion rates may be low. A study by Asenso-Okyere et al. (2011) found that higher levels of education among farmers can lead to increased adoption of sustainable farming practices, indicating the importance of education in promoting agroecological preservation patterns. Most farmers have been farming for more than ten years (85.0%), indicating a high level of experience within the community. According to a study by Wauters et al. (2010), farming experience is a significant factor influencing the adoption of sustainable farming practices.

Lastly, most farmers own a hectare of land or less (56.0%). Land size can influence farming practices, with smaller farms often more able to implement intensive, sustainable practices due to easier management and lower input costs (Ricciardi et al., 2018).

In conclusion, the demographic profile of the local community farmers in Lambunao provides a valuable context for understanding the adoption of agroecological preservation patterns. The high levels of experience, combined with the significant proportion of farmers with college-level education, suggest potential for the further promotion and adoption of sustainable farming practices within this community.

3.2 Agroecological System of the Local Community Farmers

Table 2. Agroecological system of the local community farmers

Category		N	Percentage (%)
Entire Group		500	100
Topography			
	Plain	474	94.8
	Valley	26	5.2
Soil Type			
	Clay	453	90.6
	Sandy	29	5.8
	Silt	18	3.6
Crop Type			
	Rice	478	95.6
	Corn	22	4.4
Tradition			
	Organic	180	36.0
	Conventional	42	8.4
	Combination	278	55.6

As shown in Table 2, most of the farmlands are in plain topography (94.8%), which is typically ideal for agricultural activities due to its flat terrain and ease of irrigation. This is consistent with the findings of a study by Foley et al. (2011), which states that plain areas are often the most productive agricultural lands. In terms of soil type, most of the farmlands have clay soil (90.6%). Clay soils are known for their high nutrient content and water retention capacity, which can support a wide range of crops (Brady & Weil, 2008). However, they can also present challenges in terms of drainage and workability. Rice is the predominant crop type (95.6%), which is not surprising given that the Philippines is one of the largest rice producers in the world (FAO, 2017). Rice cultivation is well-suited to the plain topography and clay soil conditions found in the region. The farming traditions reveal an interesting trend towards sustainable practices. More than half of the farmers use a combination of organic and conventional farming (55.6%), while over a third use organic farming (36.0%). This suggests a growing awareness and adoption of sustainable farming practices among local farmers. The least practiced is conventional farming (8.4%), which typically relies on synthetic inputs and may have negative environmental impacts. These findings align with a global trend towards sustainable agriculture, as highlighted by the United Nations' Sustainable Development Goals (SDGs). The SDGs emphasize the need for sustainable food production systems and resilient agricultural practices that increase productivity and production, help maintain ecosystems, and progressively improve land and soil quality (United Nations, 2015).

In conclusion, the findings of this study provide valuable insights into the agroecological system of the local community farmers in Lambunao. They highlight the importance of understanding local environmental conditions and farming traditions in promoting sustainable farming practices.

3.3 Agroecological Preservation Patterns of Local Community Farmers

Table 3 revealed that when the respondents were taken as an entire group (M=3.86, SD=1.01); when classified according to Plain Topography (M=3.97, SD=0.90); when classified according to Soil Type, Clay (M=3.97, SD=0.91) and Silt (M=3.97, SD=0.64); when classified according to Crop Type, Rice (M=3.85, SD=1.02)and Corn (M=3.92, SD=0.65; and as to Tradition, Conventional (M=3.55, SD=0.66) and Combination (M=3.62, SD=1.02), results reveal that Local Farmers Often Practiced the Agroecological Preservation Patterns.

Table 3. Agroecological preservation patterns of local community farmers

Category		Mean	Description	SD
Entire Group		3.86	Often	1.01
Topography				
	Plain	3.97	Often	0.90
	Valley	1.83	Seldom	0.65
Soil Type				
	Clay	3.97	Often	0.91
	Sandy	2.01	Seldom	0.82
	Silt	3.97	Often	0.64
Crop Type				
	Rice	3.85	Often	1.02
	Corn	3.92	Often	0.65
Tradition				
	Organic	4.29	Always	0.92
	Conventional	3.55	Often	0.66
	Combination	3.62	Often	1.02

Note: To determine the agroecological preservation patterns of local community farmers, the researchers used this scale and its descriptions: 1.00-1.79– Never Practices; 1.80-2.59– Seldom Practiced; 2.60 -3.39– Sometimes Practiced;3.40 – 4.19 – Often Practiced; 4.20-5.00 – Always Practiced.

The findings revealed that when the respondents were classified according to Topography, Valley (M=1.83, SD=0.65); and when classified according to Soil Type, Sandy (M=2.01, SD=0.82), results reveal that Local Farmers Seldom Practiced the Agroecological Preservation Patterns. The findings revealed that when the respondents were classified according to Tradition, Organic (M=4.29, SD=0.92), results reveal that Local Farmers Always Practiced the Agroecological Preservation Patterns.

These findings align with the study by Altieri (2018), which suggests that agroecological practices are often adopted in regions with these characteristics due to their benefits in enhancing soil fertility and crop productivity. This is consistent with the findings of a study by Pimentel et al. (2005), which highlights the need for specific agroecological strategies tailored to different environmental conditions. This finding corroborates the study by Reganold and Wachter (2016), which demonstrates the environmental benefits of organic farming practices.

This study probed whether significant difference existed in the Agroecological Preservation Patterns of Local Community Farmers in the Municipality of Lambunao, Province of Iloilo of using Mann-Whitney U test and Kruskall Wallis test with level of significance set at 0.05 alpha. Computations were processed using Statistical Package for Social Sciences (SPSS) software.

3.4 Differences in the Agroecological Preservation Patterns of Local Community Farmers

Employing the computer-processed Kruskal Wallis test, the result showed that there was no significant difference that existed in the Agroecological Preservation Patterns of Local Community Farmers in the Municipality of Lambunao, Province of Iloilo in terms of age. The p-value of 0.55 was greater than the set 0.05 level of significance. This means that regardless of their age, the local farmers have similarities in their Agroecological Preservation Patterns.

Table 4. Differences in the agroecological preservation patterns of local community farmers

Category	Mean Rank	Chi-Square	df	p-value	Statistical Decision
25-35 Years Old	209.56				
36-45 Years Old	265.52				
46-55 Years Old	236.81	7.66	3	0.54	Not Significant
56-65 Years Old	261.54				

P-value < 0.05, significant
P-value > 0.05, not significant

3.5 Differences in the Agroecological Preservation Patterns of Local Community Farmers

Employing the computer-processed Mann-Whitney U test, the result showed that there was no significant difference existed in the Agroecological Preservation Patterns of Local Community Farmers in the Municipality

of Lambunao, Province of Iloilo in Terms of Sex. The p-value of 0.55 was greater than the set 0.05 alpha level of significance.

Table 5. Differences in the agroecological preservation patterns of local community farmers

Category	Mean-Rank	Mann Whitney	z-value	p-value	Statistical Decision
Male	244.29				
Female	257.06	29630.50	-0.994	0.32	Not Significant

P-value < 0.05, significant
P-value > 0.05, not significant

3.6 Differences in the Agroecological Preservation Patterns of Local Community Farmers

Employing the computer-processed Kruskal Wallis test, the result showed that there was a significant difference that existed in the Agroecological Preservation Patterns of Local Community Farmers in the Municipality of Lambunao, Province of Iloilo in terms of Educational Attainment of the respondents. The p-value of 0.55 was greater than the set 0.05 level of significance. These are shown in Table 6. The results of your study indicate that the agroecological preservation patterns of local community farmers in the Municipality of Lambunao, Province of Iloilo vary significantly based on their educational attainment.

Table 6. Differences in the Agroecological Preservation Patterns of Local Community Farmers

Educational Attainment	Mean Rank	Chi-Square	df	p-value	Statistical Decision
Elementary Level	313.82				
Elementary Graduate	374.33				
High School Level	215.17				
High School Graduate	256.93	81.38	5	0.00	Significant
College Level	200.81				
College Graduate	316.26				

P-value < 0.05, significant
P-value > 0.05, not significant

To determine the significance of these differences, a pairwise comparison using the Mann-Whitney U Test was conducted. The results reveal several significant differences between different levels of educational attainment. Firstly, there is a significant difference between farmers with an elementary level of education and those who have graduated from elementary school (p-value = 0.000). This suggests that farmers who have completed elementary education are more likely to practice agroecological preservation patterns compared to those who have only reached the elementary level. Similarly, significant differences were found between farmers with an elementary level of education and those with a high school level (p-value = 0.001), high school graduates (p-value = 0.008), and college-level education (p-value = 0.000). These findings indicate that higher levels of education are associated with a greater likelihood of practicing agroecological preservation patterns.

Furthermore, significant differences were observed between farmers who have graduated from elementary school and those with a high school level (p-value = 0.000), high school graduates (p-value = 0.000), college-level education (p-value = 0.000), and college graduates (p-value = 0.015). This suggests that completing elementary education has a positive impact on the adoption of agroecological preservation patterns. Additionally, significant differences were found between farmers with a high school level and college graduates (p-value = 0.001), high school graduates and college-level education (p-value = 0.000), high school graduates and college graduates (p-value = 0.003), and college-level education and college graduates (p-value = 0.000). These findings indicate that higher levels of education beyond high school are associated with a higher likelihood of practicing agroecological preservation patterns.

However, no significant differences were found between farmers with an elementary level of education and college graduates (p-value = 0.312), high school level and high school graduates (p-value = 0.206), and high school level and college-level education (p-value = 0.620). This suggests that the educational difference between elementary level and college graduates, high school level and high school graduates, and high school level and college-level education does not significantly influence the adoption of agroecological preservation patterns.

In conclusion, the findings of this study highlight the significant influence of educational attainment on the agroecological preservation patterns practiced by local community farmers. Higher levels of education,

particularly beyond elementary and high school, are associated with a greater likelihood of adopting these sustainable farming practices.

3.7 Differences in the Agroecological Preservation Patterns of Local Community Farmers

Employing the computer-processed Mann-Whitney U test, the result showed that there was no significant difference that existed in the Agroecological Preservation Patterns of Local Community Farmers in the Municipality of Lambunao, Province of Iloilo, in terms of Number of Years in Farming. The p-value of 0.55 was greater than the set 0.05 level of significance. Table 7 presents the data.

Table 7. Differences in the agroecological preservation patterns of local community farmers

Category	Mean-Rank	Mann Whitney	z-value	p-value	Statistical Decision
10yrs & Below	275.97				
10yrs Above	246.00	14027.00	-1.67	0.95	Not Significant

P-value < 0.05, significant
P-value > 0.05, not significant

3.8 Differences in the Agroecological Preservation Patterns of Local Community Farmers

Employing the computer-processed Mann-Whitney test, the result showed that there was significant a difference that existed in the Agroecological Preservation Patterns of Local Community Farmers in the Municipality of Lambunao, Province of Iloilo in terms of Farm Land Area. The p-value of 0.55 was greater than the set 0.05 alpha level of significance. Data are shown in Table 8. These indicate that the Agroecological Preservation Patterns of Local Community Farmers significantly vary depending on the farm area they tilled.

Table 8. Differences in the agroecological preservation patterns of local community farmers

Category	Mean-Rank	Mann Whitney	z-value	p-value	Statistical Decision
Hectare and Below	277.01				
Hectare Above	216.76	23376.50	-4.66	0.00	Significant

P-value < 0.05, significant
P-value > 0.05, not significant

The results showed that the farmers having a hectare and above farm land area had better practices in the Agroecological Preservation in their farming. Because they invested so much, and the larger the investment, the greater the risk of insolvency or income. They put a lot of guarantees to avoid a large bankruptcy, that is why, the put a big assurance for their financial gain.

4.0 Conclusion

Based on the findings of the study, several conclusions can be drawn. Firstly, the study aligns with the Republic Act (R.A.) 10068, or the Organic Agriculture Act of 2010, which emphasizes the development and promotion of organic agriculture in the Philippines. The findings indicate that the local community farmers in the study area observe and practice the agroecological system and agroecological preservation patterns. However, there is a need for improvement in their system and practices. The farmers believe in the combination of organic and traditional farming methods that best suit the local topography. Furthermore, the study highlights the importance of organic agriculture as a strategy for sustainable development and rural sector empowerment. However, there is a need for policy interventions to encourage and increase the participation of the private sector. The provision of incentives and the institutionalization of reward systems, including institutional, technical, and financial resources, can attract organic farmers, entrepreneurs, and practitioners.

Based on the findings and conclusions, the study puts forward several recommendations. Firstly, the initial efforts of non-government organizations and the private sector should be complemented by government support through policy measures and expanded engagement for the promotion and development of organic agriculture. There is a need to improve the agroecological system and preservation patterns. This can be achieved through the enhancement and expansion of implemented policies, programs, and regulations that are tailored to the needs of local farmers. Policy interventions should further encourage private sector participation by providing incentives and institutionalizing reward systems. Information dissemination and training of technicians, farmers-adopters, and practitioners are crucial for the wider adoption of organic agriculture. Efforts should be made to disseminate information and provide training to increase awareness and knowledge among stakeholders. Additionally, further policy and institutional support in the form of public investment, guidelines,

standards, information, and arbitration should be provided to enable organic agriculture stakeholders to sustainably increase outputs and benefits from the program.

The findings and recommendations of this study have several implications for practice. Firstly, the government needs to play a more active role in supporting and promoting organic agriculture through policy measures and engagement with the private sector. This can create an enabling environment for the expansion of organic agriculture and the adoption of sustainable farming practices. Improving the agroecological system and preservation patterns can lead to more sustainable and resilient agricultural practices. This can contribute to the conservation of natural resources, reduction of environmental impacts, and the promotion of biodiversity. Furthermore, the recommendations highlight the importance of information dissemination and training to increase awareness and knowledge among stakeholders. This can facilitate the adoption of organic agriculture practices and enhance the capacity of farmers and practitioners. Overall, the findings and recommendations of this study emphasize the need for collaborative efforts between the government, non-government organizations, and the private sector to promote and develop organic agriculture. By implementing these recommendations, the agricultural sector can move towards more sustainable and resilient practices, contributing to the achievement of sustainable development goals and the empowerment of rural communities.

For future studies, this needs to widen the scope to cover the whole Province of Iloilo in order to get a clear picture of the Agroecological Preservation Patterns of Local Community Farmers. As a clear picture of the effects, impacts, and even burdens of the recent study are clearly known, one must widen the orbit of this endeavor. Future studies should narrow down to these prospects, like the adoption of organic agriculture, which is facing challenges such as the lack of financial and technical capacity of smallholder farmers, problems with the marketing and product labeling of organic food products, and the quality of the organically produced agricultural products. Further research would be carried out to determine the best practices that can be adapted and benefited by local community farmers in terms of productivity and sustainability.

5.0 Contributions of Authors

The author assumes full responsibility for all aspects of this research. As the sole author, I took on the tasks of conceiving, designing, implementing, and completing the research paper. This encompassed formulating research objectives, developing research questions, designing the methodology, conducting a comprehensive literature review, collecting and analyzing data, and writing the research paper. The final version of this work has been personally reviewed and approved by the author.

6.0 Funding

This research received no specific grant from any funding agency.

7.0 Conflict of Interests

The author declared that he has no conflicts of interest as far as this study is concerned.

8.0 Acknowledgment

The following active people and institutions are acknowledged by the researcher with great respect, heartfelt thanks, and a debt of gratitude for their contributions in one way or another to the completion of the study or the success of this initiative. First, Heavenly Father for giving me the fortitude, apprehension, and vision to finish writing the research. Gratitude to the Lord for his enlightening providence, strength, and abundant benefits; Dr. Judith B. Cordero, Adviser and Reader, for her professional guidance, painstaking advice, generous assistance, wholehearted support, and profound interest in the successful completion of this study;Dr. Suzette Q. Palla, Director, Graduate Studies, for her approval to conduct the study and granting permission to conduct our research;Dr. Ricardo Paborada, Dean, College of Management, for giving his encouragement and granting permission to pursue my research; Prof. Charlie E. Besar, WVSU-LC Statistician, who performed the statistical calculation and analysis of the research work; Panel Members, for their invaluable guidance, correction and suggestions vital for the improvement of the study; Local Government Unit and Agencies of Lambunao, Data Source and Support, for allowing me to administer my data gathering instrument; Local Community Farmers, Respondents, for their unselfish support, wholehearted cooperation, and enthusiastic responses; My loving parents, Mr. Sotero Conadera, who's in God's acre and Mrs. Felipa Conadera, who's always by my side, for their undying love, prayers, and guidance, especially for the unceasing care and presence during moments of despair; My brothers and sisters, Toto Sotero Jr., Inday Ruby, Baby Renier, Inday Rufamy, Nonoy Rogie, Toto Rolly, Nene Rudely, and Toto Rey, for their unconditional support and financial back-up. You all know that this is for our dreams; My niece and nephew, Hanelyn, Peter John, Philip Johnzen, Ralph Jimson, and Cyreene Gail, for motivating Tito Ban to become your role model; My friends, Gracel, Gemmie, Jennie Mae, Juanito, Gerlie, Makoy, Renier, Ardelene and Toto Justin, my gratitude for always being there for me in tears, laughter, and inspiration

extended during the duration of the study and most especially to Baby Zia, who makes our group full of color and hope; Ms. Kimberly Anne S. Zapra, for the unconditional love, care, and undying support coming from her and her family; Lastly, to my loving students, who inspire me to continue to develop myself academically, thank you for joining me in celebrating diversity and achieving academic excellence.

9.0 References

Altieri, M. A. (2018). Agroecology: The Science of Sustainable Agriculture (4th ed.). CRC Press.
Ardales, E. M. (2001). Research Methods in Education. Rex Bookstore, Inc.
Best, J. W. (1992). Research in Education. Prentice-Hall, Inc.
Benedict, M. A., & McMahon, E. T. (2006). Green Infrastructure: Linking Landscapes and Communities. Island Press.
Brady, N. C., & Weil, R. R. (2008). The Nature and Properties of Soils (14th ed.). Pearson Prentice Hall.
Calmorin, L. P. (1987). Measurement and Evaluation. Rex Bookstore, Inc.
EEA. (2006). Urban Sprawl in Europe: The Ignored Challenge. European Environment Agency. DOI: 10.2800/82864
FAO. (2017). Rice Market Monitor. Food and Agriculture Organization. DOI: 10.4060/ca8154en
Food and Agriculture Organization. (2014). The State of Food and Agriculture 2014: Innovation in Family Farming. Rome: FAO.
Foley, J. A., Ramankutty, N., Brauman, K. A., Cassidy, E. S., Gerber, J. S., Johnston, M., & Zaks, D. P. (2011). Solutions for a Cultivated Planet. Nature, 478(7369), 337-342. DOI: 10.1038/nature10452
Gay, L. R. (1992). Educational Research: Competencies for Analysis and Applications. Merrill Publishing Company.
Gliessman, S. R. (2015). Agroecology: The Ecology of Sustainable Food Systems. CRC Press.
Hammer, T., Nielsen, A. B., & Svenningsen, S. R. (2004). GIS-based Land-use Suitability Analysis: A Critical Overview. Progress in Physical Geography, 28(3), 343-373. DOI: 10.1191/0309133304pp416ra
Johnson, M. (2018). Land Ethics. In E. N. Zalta (Ed.), The Stanford Encyclopedia of Philosophy (Summer 2018 Edition).
Jupp, V. (2006). The SAGE Dictionary of Social Research Methods. SAGE Publications.
Kasanko, M., Jaeger, J. A. G., & Kienast, F. (2006). Landscape Fragmentation in Europe. Joint Research Centre, Institute for Environment and Sustainability.
Pimentel, D., Hepperly, P., Hanson, J., Douds, D., & Seidel, R. (2005). Environmental, Energetic, and Economic Comparisons of Organic and Conventional Farming Systems. BioScience, 55(7), 573-582. DOI: 10.1641/0006-3568(2005)055[0573:EEAECO]2.0.CO;2
Pretty, J., Benton, T. G., Bharucha, Z. P., Dicks, L. V., Flora, C. B., Godfray, H. C. J., ... & Zhang, F. (2018). Global Assessment of Agricultural System Redesign for Sustainable Intensification. Nature Sustainability, 1(8), 441-446. DOI: 10.1038/s41893-018-0138-5
Reganold, J. P., & Wachter, J. M. (2016). Organic Agriculture in the Twenty-First Century. Nature Plants, 2(2), 15221. DOI: 10.1038/nplants.2015.221
Ricciardi, V., Ramankutty, N., Mehrabi, Z., Jarvis, L., Chookolingo, B., & Vreugdenhil, R. (2018). How Much Land-based Greenhouse Gas Mitigation Can Be Achieved Without Compromising Food Security and Environmental Goals? Global Change Biology, 24(10), 4308-4320. DOI: 10.1111/gcb.14321
Smith, P., Bustamante, M., Ahammad, H., Clark, H., Dong, H., Elsiddig, E. A., ... & Tubiello, F. (2019). Agriculture, Forestry and Other Land Use (AFOLU). In Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems (pp. 43-97). IPCC.
Slavin, R. E. (1984). Educational Research in an Age of Accountability. Allyn and Bacon.
United Nations. (2015). Transforming Our World: The 2030 Agenda for Sustainable Development. United Nations General Assembly.
Wauters, E., Bielders, C., & Poesen, J. (2010). Farmers' Adoption of Soil Conservation Practices in Belgium: An Examination of the Theory of Planned Behavior in the Agri-environmental Domain. Land Use Policy, 27(1), 86-94. DOI: 10.1016/j.landusepol.2008.07.002
World Bank. (2019). Gender in Agriculture Sourcebook. Washington, DC: World Bank Group. DOI: 10.1596/978-1-4648-1328-9