



To cite this article: Amabella Grace N. Siaton, Judy Ann O. Ferrater-Gimena, Erik T. Legaspi and Marvin S. Naraja (2023). THE UNDERLYING CONCERNS DEFYING ORGANIC FARMERS IN THE PHILIPPINES, International Journal of Research in Commerce and Management Studies (IJRCMS) 5 (1): 47-103

THE UNDERLYING CONCERNS DEFYING ORGANIC FARMERS IN THE PHILIPPINES

Amabella Grace N. Siaton, Judy Ann O. Ferrater-Gimena, Erik T. Legaspi and Marvin S. Naraja

University of Cebu, Cebu City, Philippines

DOI: <http://dx.doi.org/10.38193/IJRCMS.2023.5105>

ABSTRACT

The shifting trend in the consumption of health and environmentally-friendly products in the market prompted the government and selected farming entities to shift to organic agriculture from conventional farming methods. Hence, the Philippine government conducted programs motivating the local farmers to shift to organic farming, given its potential in the market. Moreover, this study explores the underlying challenges defying the farmers in adopting organic farming and the action taken to counter the issues. The investigation adopted the case study research design, using the validated researcher-made interview guide in data gathering. Using the purposive sampling technique, ten (10) farmers from the selected accredited organic farms in Bohol and Negros Occidental willingly and voluntarily participated in the one-one-interview with the researchers and field investigators. For data analysis, thematic analysis was used. The themes developed from the challenges experienced by the farmers in adopting organic farming in the aspect of production and marketing are Nature's Devastating Effect to the Crops, Pests, and Insects: Farmers Worst Enemies, Competition in the Market Share of Organic Produce Versus the Non-Organic Products, Ensuring the Health of the Soil, Long Period of Working and Waiting, Cyclical Nature of Farming Challenges. So, to remedy these problems, they realized that Challenges in Organic Farming are Inevitable and needed to Widened their Learning Horizon Through Trainings and Seminars. Further, the challenges they experience in their quest of adopting organic farming in the provision of supporting infrastructure are: Absence of Supporting Infrastructure Needs Self Help, Selective Provision of Government Assistance, No Support Since Time Immemorial. To survive, the actions taken were: Farmers' Self Reliance Leads to Survival and Financiers Provide Capital to the Farmers. The organic farmer in the Cebu and Negros Occidental, Philippines, has been confronted with various challenging situations that affected their sustainability amid competing with the producers of vegetables, fruits, and livestock using conventional farming methods. The most significant problem the organic farmers face is the reality of the Philippines' vulnerability to strong typhoons and other calamities that would destroy the crops. Also, because organic farming does not apply commercial chemicals, there were instances that insects and pests would destroy their plants. Also, organic agriculture requires more time to restore the health of the soil that was destroyed after long years of applying harmful pesticides and fertilizers. Hence,



the yield that would compensate the farmers' efforts and capital outlay cannot be recovered immediately after each cropping season.

KEYWORDS: Agriculture economics, organic farming, concerns, case study, Cebu, Negros Occidental, Philippines

1. INTRODUCTION

More people depend on agriculture in developing countries than in the industrialized countries of Europe, North America, and parts of Asia-Pacific. Subsistence is often the priority, after which goods for the market can be bartered or sold for cash (Kristiansen & Reganold n.d.). Also, crop production has been one of Filipinos' primary sources of income even before (Yang, 2022). Based on the records, 47% of the country's 30 million land area is suitable for agriculture (Food Fertilizer Technology Center, 2019).

Yang (2022) further opined that agricultural production has improved even before the pandemic, but Filipino remains poor. Most of them remain poor, and many earn lower than the minimum wage. Moreover, the National Anti-Poverty Commission [NAPC] (2019) revealed that the farmers remain as one of the poorest sectors in the country with the highest poverty incidence in 2015 at 34.3 percent, per records of the Philippine Statistics Authority [PSA]. This is driven by their perennial concern on high farming costs and low yield. NAPC believes that there should be an agricultural shift in the country to organic farming from chemical-based farming due to the high cost of production in chemical-based farming resulting in low farm net income, health hazards on the part of the producers and the consumers, and environmental reasons like deterioration of social and agro-ecological balances.

Hence, the country has been empowering organic farming and has seen the potential of organic farming. The government has mandated the Department of Agriculture to allow at least PHP1 billion in 2012 to exclusively promote the organic agriculture programs in the country (Far Eastern Agriculture, 2012).

In addition, the country also has formal legislation that supports organic farming, which is the Republic Act No. 10068 or also known as Organic Agriculture Act of 2010 that helps support and promotes the practice of organic agriculture in the country and provides the establishment of a comprehensive organic agricultural program (Department of Agriculture, 2011).

Far Eastern Agriculture (2012) posits that organic agriculture is the way of the future to address hunger and sustain health and the environment. According to the local organic group Organic Producers Trade



Association [OPTA], the risk of consuming non-organic food is becoming more perilous to human health as high-yielding agri-produce or the so-called green revolution crops developed in the province of Los Banos, one of the country's central agricultural research hub, have been identified as one of the causes of brain damage mainly resulting to impaired intellect to people in poor or third world countries.

In this scenario, organic agriculture, or parts of it, maybe a helpful development tool. Just as integrated teaching methods suit organic farming courses, the emphasis on integration and multidisciplinary in organic farming readily complements participatory approaches to development, and indigenous intellectual and material resources are often compatible with organic farming (Kristiansen & Reganold n.d.).

Further, a bill was approved by the Senate in the Philippines recognizing the Participatory Guarantee Systems, which amended the current legal framework of organic agriculture. Participatory Guarantee Systems are locally focused quality assurance systems that certify producers based on the active participation of stakeholders and are built on a foundation of trust, social networks, and knowledge exchange. It plays a vital role in rural development and farmer empowerment through the active engagement of farmers in the whole process of verification, decision-making, and marketing. Organic farmers will get training and certification for their products without incurring high costs with its recognition by law. This will undoubtedly positively impact biodiversity and the livelihoods of organic farmers in the Philippines (Buena, 2020).

Despite the market opportunity of organic farming and the passage of formal legislation to support the organic farming industry, farmers are still hesitant to shift entirely to organic farming practices. Most of the farmers in Iloilo, Negros Occidental, Cebu, and Bukidnon were considered late adopters of this legislative enactment, and only 46.2% of the farmers in Cebu adopted organic farmers. However, there is a gradual conversion of the farmers to organic farming, where a portion of their farms is organic agriculture while continuing conventional farming in other farm portions. Organic farmers experienced lower income due to decreased yield during their first year in conversion to organic agriculture (Nelson et al., 2019).

The main problem was that the local farming community had not embraced organic farming. The tedious task of producing organic crops and its high production costs have discouraged farmers from shifting into organic farming. While the use of chemical inputs in farming guarantees sure harvests, there is not much economic inducement for farmers to organic. According to Agriculture Secretary Proceso Alcala, while organically-grown food commodities are making a sweep in more developed countries, these are yet to catch on Filipinos as the cost is one factor as organic food items are more



expensive than those grown with commercial chemically formulated fertilizers. The only way to lower production costs is for farmers to learn to process their organic fertilizers. An organic farmer admitted that the change from traditional to non-chemical farming was complicated as what was once his 15 kilos of okra had been significantly reduced to 7 kilos each scheduled harvest. Not to mention the invasion of insects that began to swarm on his farm when he stopped using pesticides. Eco-Philippines revealed that going organic will involve considerable investment and time. The soil must first be analyzed for rehabilitation to determine the exact nutrients needed and other recommendations for the soil. Second, land preparation should eliminate herbicides instead of using the grass cutter or manual pruning to plow and pulverize the soil and prevent grass from growing (Far Eastern Agriculture, 2012).

Also, there are some unique challenges regarding the cost and logistics of moving locally or regionally produced organic food to the market. The small and medium-sized farm production is of little interest to mainstream grocery chain stores since the yield is limited to a few hundred tons. Another problem is that essential economies of scale sustain large-scale farming while small-scale farming leads to higher prices. This covers the extra costs of not using fertilizers and antibiotics. As a result, various product classifications depend on the production methods and the operations' size. In turn, this gives rise to two (2) distinct distribution systems, such as long channels, like the retail chains, that add value through price and high distribution intensity and short channels direct from producers that add value through their production methods sustainable practices. The discrepancies between market realities, the value chain, and the value delivery system also posed more challenges for the organic food sector (Hamzaoui-Essoussi & Zahaf, 2012).

According to Tsvetkov et al. (2018), a significant barrier for broad application and future development of organic farming is the existing diversity of national and international policy instruments in this sector. Special attention is paid to up-to-date research techniques that could help solve a number of the problems typically faced in organic plant farming. It is argued that organic farming is still not productive enough to be considered fully sustainable. This underlines the necessity of solid support for more effective implementation of scientific research innovations and improving networking between all stakeholders – organic producers, scientists, and corresponding policymakers at the national and international level.

The Philippine government acknowledges the inadequacy of the database, apart from the minimal and fragmented research and development efforts on organic farming and organic vegetable production. Hence, the government embarked on packaging a national research and development (R & R&D) program to ensure the development of a progressive and sustainable organic vegetable industry through effective interventions and future technology promotion strategies (Villegas & Custodio, 2014).



These myriad economic, societal, and environmental issues and challenges confronting the organic farmers call for more extensive scientific action through formal research. Maghirang et al. (n.d.) explained that there had been issues for and against it, and we want to clarify these issues to shed light on the controversy. Hence, this investigation aims to unveil the underlying concerns of the farmers adopting the organic farming method. Also, looking at the issue of lack of adequate knowledge about this method of agriculture paved towards promulgating policies that aim to improve the lives of the poor and small-scale farmers considering the country already has the geographical advantage in agriculture.

2. LITERATURE REVIEW

2.1. Sustainable Agriculture and Organic Movement

Overall, today's agriculture is being challenged to operate in an environmentally responsible fashion while at the same time continuing to produce abundant supplies of food and fiber both economically and profitably. The scientific community is responding positively and assertively to the challenge. There is increasing interest in the development and adoption of sustainable land-use systems for two fundamental reasons: (1) a need to bring about fundamental improvements in the global environment, and (2) an ever-expanding need to provide economically produced food and fiber for a growing world population (National Academies of Sciences, Engineering, and Medicine, 1991).

Sustainable agriculture frequently encompasses various production practices, including conventional and organic. A regionally integrated system of plant and animal production practices are designed to produce long-term results such as the production of sufficient human food, feed, fiber, and fuel to meet the needs of a sharply rising population; protection of the environment, and expansion of the natural resources supply; and sustainment of the economic viability of agriculture systems (United States Department of Agriculture National Institute of Food and Agriculture, n.d.).

The goal of sustainable agriculture is to meet society's food and textile needs in the present without compromising the ability of future generations to meet their own needs. Practitioners of sustainable agriculture seek to integrate three main objectives into their work: a healthy environment, economic profitability, and social and economic equity. Every person involved in the food system—growers, food processors, distributors, retailers, consumers, and waste managers—can play a role in ensuring a sustainable agricultural system (Sustainable Agriculture Research & Education Program, n.d.).

Organic agriculture has continued to grow substantially despite the world economic crisis. It is now being viewed as an additional option to conventional or 'chemical' agriculture and not just for the niche market. However, uncertainties remain that it can be an alternative option to feed the world (Maghirang et al., n.d.).



Built on practices that increase soil health, such as composting, crop rotation, and grazing animals as pasture organic agriculture has grown into a global industry worth over \$200 billion today. Nevertheless, these holistic practices and their impact on our food have a long history that predates the contemporary "organic" movement. The founder, J.I. Rodale, coined the term "organic." But throughout the years, many passionate individuals, cultures, and communities laid the groundwork for what has become an agricultural revolution. Moreover, though these leaders have contributed their knowledge and skills to the organic movement, they are often left out of mainstream history (Rodale Institute, 2021).

The organic movement began after 1920 as a reaction by individual agricultural scientists and farmers against industrialized agriculture. Three important movements have been received within the first half of the twentieth century: biodynamic, organic, and biological agriculture (Šrůtek & Urban, 2008).

The work of FAO in organic agriculture started in the late 1990s. This work was inspired by and is in keeping with FAO's mandate of ensuring food security for all. Collaboration was initiated with organizations like the International Federation for Organic Agriculture Movement (IFOAM) and UNCTAD. Internally, there have been several initiatives to enhance the knowledge-base, including through the Inter-Departmental Working Group on Organic Agriculture, which was created to facilitate cross-departmental linkages and sharing experiences (Morgera et al. 2012).

The organic movement may have gained a place in the spotlight of the mainstream media now, but it has not been like that for long. Since the 1950s, organic farmers operating at a grassroots level have devised, tested, and shared production methods. They have codified a set of ideas into a pioneering best practice agricultural management system that addresses multiple community values. Niche markets have gradually been created, commonly based on trust and goodwill (formal certification did not begin until the 1960s and 1970s), often using novel direct marketing strategies such as box schemes and community-supported agriculture. After many years of consumers having to hunt around for their organic produce from several suppliers, perhaps directly from the farmer, the task is now a lot easier with specialist food shops and organic shelf space in supermarkets, in the industrialized world at least. Global links have been forged in all continents as organic agriculture has been an effective rural development option (Kristiansen & Reganold, n.d.).

2.2. Organic Agriculture/Farming

As early as the 1930s, organic agriculture (OA) was conceptualized as "an agricultural production system that avoids or largely excludes the use of synthetically compounded fertilizers, growth regulators, pesticides, livestock feed additives, and genetically engineered products" (IFOAM, 2009).



Organic refers to the particular farming and processing system described in the standards and not the classical chemical sense. The term organic is synonymous in other languages with "biological" or ecological." It is also a labeling term that denotes organic products based on the Philippine National Standards for organic agriculture (Department of Agriculture Regional Field Office III, n.d.).

Additionally, IFOAM Organics International (2008) continued to expound that organic agriculture is a production system that sustains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions rather than inputs with adverse effects. Organic agriculture combines tradition, innovation, and science to benefit the shared environment and promote fair relationships and good quality of life for all involved.

Likewise, organic farming (OF) is a farming system that uses environmentally-friendly weed, pest, and disease control methods. The principles and practices of OF have been expressed in the International Federation of Organic Agriculture Movements (IFOAM) standards as the principle of health, ecology, fairness, and care. In 1998, IFOAM adopted basic standards for OF and processing. Organic production methods are those where at least 95% of the ingredients of agricultural origin are organic. Organic content less than 70% in products may not refer to organic production methods (Šrútek, & Urban, 2008).

Maghirang (n.d.) discussed that the philosophy of organic food production systems maintains certain principles such as biodiversity, ecological balance, sustainability, natural plant fertilization, natural pest management, and soil integrity. Organic farming excludes or strictly limits manufactured fertilizers, pesticides, herbicides, insecticides and fungicides, plant growth regulators.

Organic farming is a high-input farming practice that uses synthetic fertilizers. It is based on the idea that the soil is a living system, so these synthetic products are primarily excluded from organic farms. Organic crops are often of higher value than conventional ones, and the volume of organic crops shows a continually increasing production trend. The sale of crops labeled as organic or biological is highly regulated in most advanced markets. The environmental impact of organic farming is low and can be seen as a way of cleaning up and improving degraded agricultural land (Litterick & Watson, 2017).

The Ministry of Agriculture, Food and Rural Affairs (n.d.) explained that organic farming is a crop and livestock production method that involves much more than choosing not to use pesticides, fertilizers, genetically modified organisms, antibiotics, and growth hormones. Organic production is a holistic system designed to optimize the productivity and fitness of diverse communities within the agro-ecosystem, including soil organisms, plants, livestock, and people. The principal goal of organic production is to develop sustainable and harmonious enterprises with the environment.



Non-chemical use of farm inputs in organic farming can help alleviate problems of soil infertility as well as pollution in water and air. Organic farming, although sustainable, may not be an attractive alternative to conventional farming because of its low yield in the earlier years of adoption despite its being relatively laborious. Knowing organic farmers' characteristics, knowledge, attitudes, and practices are necessary to promote the Philippines' organic farming (Nelson et al., 2019).

The environmental benefits of organic agriculture are sustainability over the long term, water, air, climate change, biodiversity, genetically-modified organisms, and ecological services. In terms of sustainability over the long term, many changes observed in the environment are long-term, occurring slowly over time. Organic agriculture considers agricultural interventions' medium- and long-term effects on the agro-ecosystem. Soil building practices such as crop rotations, inter-cropping, symbiotic associations, cover crops, organic fertilizers, and minimum tillage are central to organic practices. These encourage soil fauna and flora, improving soil formation and structure and creating more stable systems. In turn, nutrient and energy cycling is increased, and the retentive abilities of the soil for nutrients and water are enhanced, compensating for the non-use of mineral fertilizers. Such management techniques also play an essential role in soil erosion control. The length of time the soil is exposed to erosive forces is decreased, soil biodiversity is increased, and nutrient losses are reduced, helping to maintain and enhance soil productivity. Farm-derived renewable resources usually compensate for crop export of nutrients, but it is sometimes necessary to supplement organic soils with potassium, phosphate, calcium, magnesium, and trace elements from external sources.

In many agriculture areas, the pollution of groundwater courses with synthetic fertilizers and pesticides is a major problem. As the use of these is prohibited in organic agriculture, they are replaced by organic fertilizers (e.g., compost, animal manure, green manure) and more extraordinary biodiversity (in terms of species cultivated and permanent vegetation), enhancing soil structure and water infiltration. Well-managed organic systems with better nutrient retentive abilities significantly reduce the risk of groundwater pollution. In some areas where pollution is a real problem, conversion to organic agriculture is highly encouraged as a restorative measure (e.g., by the Governments of France and Germany). Organic agriculture reduces non-renewable energy use by decreasing agrochemical needs (these require high quantities of fossil fuel to be produced). Organic agriculture contributes to mitigating the greenhouse effect and global warming through its ability to sequester carbon in the soil. There are many management practices used by organic agriculture like minimum tillage, returning crop residues to the soil, the use of cover crops and rotations, and the greater integration of nitrogen-fixing legumes) increase (Food and Agriculture Organization [FAO] of the United Nations, 2022).



Organic agriculture will continue to challenge its critics as increasing numbers of successful enterprises are established in various countries (Kristiansen & Reganold n.d.).

2.3. Organic Farming Initiatives in the Philippines

Organic Agriculture (OA), as defined in the Philippine Organic Agriculture Act of 2010 or RA 100668, includes all agricultural systems that promote the ecologically sound, socially acceptable, economically viable, and technically feasible production of food fibers. It dramatically reduces external inputs by refraining from chemical fertilizer, pesticides, and pharmaceuticals (Department of Agriculture Regional Field Office III, n.d.).

The Republic Act 100668 was enacted last April 6, 2010, to promote and implement organic agriculture practices in the country that will enrich the fertility of the soil to increase farm productivity, reduce pollution and destruction of the environment, and prevent the depletion of natural resources. Organic Agriculture paves the way for opportunities to ensure food security nationwide (National Anti-Poverty Commission, 2019).

Under Section 5 of RA10068 is the National Organic Agriculture Program where is with this established a comprehensive organic agricultural program through the promotion and commercialization of organic farming practices, cultivation, and adoption of production and processing methods that have already been developed, or to be developed, continuing research and upgrading thereof, the capacity building of farmers and the education of consumers thereon, the extension of assistance to local government units (LGUs), peoples' organization (Pos), nongovernment organizations (NGOs) and other stakeholders including individuals and groups who are willing to do other pertinent activities, and documentation and evaluation of the program (Department of Agriculture Bureau of Agricultural Research, 2021).

Nelson et al. (2019) said that by 2016, organic farming is envisioned to be practiced in at least 5% (483,550 ha) of the total agricultural farm areas in the Philippines (NOAP 2012-2016), but only 107, 911 ha was converted to OA. It is apparent from the data that the land area devoted to organic farming is relatively small, but the number of farmers who converted to organic farming has increased by 400% between 2011 and 2015. The statistics from the Philippine Information Agency (2016) have shown that in 2015, there were 43,000 organic farmers as compared to only 9,000 organic practitioners in 2011.

The Philippines' organic production area reported in 2009 is 52,546 ha, employing around 70,000 producers/farmers scattered all over the country. The organic industry has been primarily in the private sector, non-governmental organizations (NGOs), and people organizations or cooperatives. Organic



crops grown for domestic use are rice, maize, vegetables, fruits, and root crops. These are generally produced by small-scale farmers under more diversified farming systems and are integrated with a few heads of livestock (pigs, goats, carabaos, cows, chickens, or ducks). Organic farming inputs such as fertilizers, foliar sprays, and microbial soil preparations are sourced and made from local indigenous materials. Organic products are sold in particular outlets in Metro Manila and major urban centers such as Rustans', Shoe Mart, Landmark, Shopwise, and others. On the other hand, the organic crops produced for export are bananas (Bungulan and Cavendish), banana chips, fresh pineapple, muscovado sugar, coconut palm sugar, virgin coconut oil, coconut vinegar, coffee, asparagus, yellow corn for feeds, Banaba leaves and various herbs. These are produced mainly through grower arrangements among community-based organizations, agricultural cooperatives, and development NGOs or private corporations. Producers usually employ single crop cultivation in the case of sugarcane, asparagus, and pineapple but more diversified in the other crops. Inputs are usually produced by the cooperative or company, including initial.

In the Philippines, vegetables as part of Filipino subsistence, be it food or a source of livelihood, cannot be undermined. The government and private sector involved in the organic value chain aggressively attempted to promote organic vegetable production throughout the country. The interest among producers and consumers of organic products, particularly vegetables, increased over the years due to health and environmental concerns. The ecological implications of organic vegetable production are in accord with the government's policy of advancing the right to a balanced and healthful ecology in concurrence with the rhythm and harmony of nature (Villegas & Custodio, 2014).

The provincial government of Ilocos Norte is encouraging more farmers to adopt organic farming as it implements its sustainable agriculture program. Provincial agriculturist Norma Lagmay said a particular incentive program is provided to those applying organically-based farming practices. Lagmay said that with funding support from the Ilocos Norte government and other national government line agencies, organic farmers are given subsidized materials input and farm machinery assistance. Also, she added that they had intensified the establishment of organic farming demonstration sites to inspire more farmers to adopt better farm practices, particularly in this time of climate change. She said they hope to cover at least 5 percent of around 49,312 hectares of agricultural land for about 55,000 farmers in the province who can participate in the organic agriculture program. Aside from reducing the cost of farm inputs and producing healthier food, organic farming is envisioned to contribute to the country's overall agricultural growth and development in terms of sustainability, competitiveness, and food security (Adriano, 2021).

Nearly 270 farmers in Ginatilan, a mountainous area in Cebu, adopted organic farming technology to expand their market and raise their income. With help from a Japanese volunteer dispatched under the



Japan Overseas Cooperation Volunteers (JOCV) Program Mikio Miyazoe, local farmers begin to practice soil-conditioning techniques as farms transition from conventional to organic, sustainable practices. Some farmers are unaware that they can grow premium vegetables better (e.g., leafy lettuce, broccoli) by planting cover crops first, such as cowpea or red sorghum, to nourish the soil. Prior to his dispatch in the Philippines, Miyazoe was a part of the faculty of the Oregon State University. He also shares farm practices from Japan and the United States with farmers, including the integrated pest management and techniques in plant propagation and nursery system. Farmers in Barangay Anao, Ginatilan, have so far held two field trials to test the soil conditioning technique's effectiveness. Based on trials, the yield of one ton per hectare of processed corn could double to as much as 2.5 tons per hectare. With help from organic farming practices, local farmers will be able to produce safe, healthy, and nutritious farm produce without compromising the ability of future generations to meet their own needs (Japan International Cooperation Agency, 2017)

2.4. Challenges in Organic Farming

A recent review of organic farming listed several challenges facing organic agriculture (Halberg et al., 2005), including ecological justice; animal welfare; fair trade; supply chain development; productivity limitations, regional adaptation, and global harmonization for standards (Kristiansen & Reganold n.d.).

The Organic Agricultural Act of 2010 introduced these provisions: nationwide educational and awareness campaign on the benefits of consuming organic products, adoption of the Participatory Guarantee System (PGS) as a community of group-based certification process, other than third party certification of organic products, protection of organic resources against contamination by genetically engineered organisms including crops, livestock and poultry, and marine products, and access to marketing by organic producers to ensure reasonable prices which would ensure organic ventures are profitable and sustainable. While these measures are most welcome, a critical gap exists between the amended law and its implementing rules and regulations (IRR). They do not adequately address the fundamental question of how to wean away 97 to 98 percent of producers, mostly small, from chemical-laced farming to natural, organic, and ecological agriculture. Philippine laws and the International Federation of Organic Agriculture Movements (IFOAM) provide that “organic conversion” starts when a farmer stops using chemicals and concludes with certification of his farm to be 100 percent organic, or chemical-free, after a rigorous process. IFOAM and Asian Regional Organic Standards (AROS) for market-mandated certification require about three years of zero chemical use. In short, the Philippines needs an organic agriculture program that allows and promotes a gradual, calibrated reduction of chemical inputs and progressively transitions to a more robust or fully organic regime. There is currently no straightforward program and funding for the transition to organic agriculture. Transition is necessary because if all farmers suddenly adopt zero chemical use,



yields may drop to 50 to 60 percent. As a result, the food supply could be at risk unless the country imports 5 to 6 million tons of well-milled rice, which would cost P175 billion to P210 billion at P35 per kilo of rice (Montemayor et al., 2021).

Despite our optimistic prognosis for organic agriculture, it is recognized that the transition to and practice of organic agriculture contain numerous challenges —agronomically, economically, politically, and educationally. The practice of organic agriculture on a large scale requires support from research institutions dedicated to agro-ecological methods of fertility and pest management, a substantial extension system, strong political support, and a committed public (Maghirang et al., n.d.).

Kristiansen and Reganold (n.d.) further discoursed that organic proponents will also be challenged as new ethical questions emerge and the task of reviewing and improving organic farming methods is tackled. The organic movement has grown beyond its roots of farmers, growers groups, and loyal consumers to a global niche industry. With new stakeholders and different stakes, the organic movement can now form more beneficial relationships and interact more directly with all key players in agricultural development.

Organic farming also necessitates critical timing. The main difference between organic from conventional farming is using fewer chemicals throughout food production. Nevertheless, organic products are generally more susceptible to decay for various reasons despite the apparent health benefits. Organic products need to be consumed sooner from temperature fluctuations during transportation and generally less forgiving shelf life to ensure food safety and appeal. Pests infestations are also the problem and challenges faced by most organic farmers. Pests such as rodents or insects, if not controlled, are responsible for the destruction of crops. For that reason, humans have been using chemicals known as pesticides to deal with them effectively for a long time now. However, as many of those chemicals are not natural and toxic to the environment, they are not allowed in organic farming. It is also harder to organic market products. For this reason, organic farmers need to find local channels of distributing their products that may not always be possible. Alternatively, farmers should invest in top-quality climate control vehicles to allow more extended transportation (Bouronikos, 2020).

3. PROBLEM DESCRIPTION

Fast-paced life, stress, the consumption of products exposed to harmful chemicals causes humanity to contact with life-threatening diseases. Thereby, this myriad of health-threatening issues around the globe prompted the producers to offer healthy and environmentally-safety products. Green farming has gained popularity among health-conscious consumers globally and in the Philippines. This study explores the underlying challenges defying the farmers in adopting organic farming and the action



taken to counter the issues that confront them.

4. METHODOLOGY

4.1. Research Design

The study utilized the case study method using a researcher-made interview guide as the principal tool in collecting data. The case study approach allows in-depth, multi-faceted explorations of complex issues in their real-life settings. The value of the case study approach is well recognized in business, law, and policy, but somewhat less so in health services research (Crowe et al., 2011). Yin added that case studies could be used to explain, describe or explore events or phenomena in the everyday contexts in which they occur.

4.2. Research Environment

The research was conducted at the selected, certified organic farms in the Cebu and Negros Occidental, Philippines. The Department of Agriculture- Bureau of Agriculture and Fisheries Standards certified these selected organic farms. The farms in Negros Occidental were located in San Carlos City, La Carlota City, Talisay City, and Bago City in Negros Occidental, while in Cebu, the organic farms covered were situated in Barili and Dalaguete.

4.3. Research Participants

Ten (10) participants signified their willingness and consent to participate in the investigation, wherein two (2) from Andoy Farm, one (1) from BPI-National Crop Research and Development, two (2) from Buro- Buro Springs Black Pepper, Flowers & Vermi Farm, another two (2) from Negros Island Organic Producers Association (NIOPA). These seven (7) farms were located in Negros Occidental. In Cebu, one (1) from God's Grace Farm and two (2) from Highlander Farm.

4.4. Research Instrument

The main instrument used in gathering the data was the researcher interview guide that was subjected to content validation by an expert in the field of research and agricultural economics. This procedure aims to test the validity of the interview guide. There were a series of revisions done based on the comments and suggestions of the validator before the interview to ensure that the questions asked to the target participants fitted the topic and target research participants.

4.5. Research Procedure and Data Collection

In order to acquire the data needed for the study, the researcher requested an official list of certified organic operators in the Philippines from the Department of Agriculture-Bureau of Agriculture and Fisheries Standards. Also, the protocol was submitted for review by the University of Cebu Academic



Research Ethics Committee (UCAREC). The moment that the certificate of approval was obtained, the researcher asked permission from the owner of the organic farmers and obtained the list of the farmers who were members of their farming organization. Before the interview, the field investigators conducted a short orientation about the study's objectives. Only those who gave their consent were asked to sign the informed consent form before the interview was conducted.

4.6. Data Analysis

Thematic analysis was applied to analyze the responses of the organic farmers on challenges that confronted them in adopting the organic farming method.

Thematic analysis strives to identify patterns of themes in the interview data. One of the advantages of thematic analysis is that it is a flexible method, which the research can use both for explorative studies, where the researcher does not have a clear idea of what patterns he or she is searching for, as well for deductive mode studies, where the researcher know precisely what he or she is interested in (Mortensen, 2020).

A thematic analysis aims to identify themes, i.e., patterns in the data that are important or interesting, and use these themes to address the research or say something about an issue. This is much more than simply summarising the data; an excellent thematic analysis interprets and makes sense of it. A common pitfall is to use the main interview questions as the themes (Clarke & Braun, 2013).

4.7. Ethical Considerations

The research strictly followed the ethical principles of beneficence, non-maleficence, and justice. In the context of beneficence, the research provided benefit to the farmers and other stakeholders in knowing the challenges that confronted them as organic farmers, which can be utilized as the basis for policy initiatives towards improving organic farming practices and uplifting their livelihood. Likewise, the research procedures were done without harming the reputation and rights of the research participants. The study's primary concern is to protect them from possible harm by keeping all the information gathered with confidentiality and destroying all the files after the data were analyzed and recorded. Lastly, in the principle of justice in ethics, all the research participants were treated fairly and equally. The researcher ensured that choosing the participants was equitable and with no bias. The researcher did not take advantage of the vulnerability of the research respondents and participants.

Before the interview, the researcher informed the respondents of the benefits they could obtain from the study. There was the emphasis on their rights to withdraw from the research without any cost that well is asked against them. Also, those research participants who signified their permission to participate in the survey affixed their signature in the informed consent. All the information gathered



in the study was withheld confidential and used only for the research.

5. RESULTS AND DISCUSSIONS

5.1. Concerns Defying Organic Farmers in Adopting Organic Farming in the Aspect of Production and Marketing

There are many explanations and definitions for organic agriculture, but all converge to state that it is a system that relies on ecosystem management rather than external agricultural inputs. It is a system that begins to consider potential environmental and social impacts by eliminating the use of synthetic inputs, such as synthetic fertilizers and pesticides, veterinary drugs, genetically-modified seeds and breeds, preservatives, additives, and irradiation. These are replaced with site-specific management practices that maintain and increase long-term soil fertility and prevent pests and diseases (Food and Agriculture Organization [FAO] of the United Nations, 2022).

Although only a small percentage of farmers are expected to become organic producers, consumer demand for organically produced food and fiber products provides new market opportunities for farmers and businesses worldwide. It also presents new challenges for FAO. For many years, and with great success, the private sector has developed the concepts and markets for organic products. However, the surge in consumer interest has created new interest from the public sector, and developing countries need good information. Member countries are requesting FAO assistance as they seek to determine the potential of such markets in specific areas. Governments need to know the potential of organic agriculture to contribute to sustainability to direct research and extension efforts. Countries also seek FAO's assistance in deciphering the multitude of rules various traders expect to be followed; increasing international trade in organic products has placed FAO at the forefront of efforts to achieve greater harmony in organic standards (Food and Agriculture Organization, 1999).

The research participants disclosed that the challenges they experienced in their organic farming activity in terms of production and marketing are, to wit: 1) nature's devastating effect on the crops; 2) pests and insects are the farmers' worst enemies; 3) competition in the market share of organic produce versus the non-organic products; 4) ensuring the health of the soil; 5) long period of working and waiting for the harvest, and 6) cyclical nature of farming challenges. Extreme weather conditions are considered one of the significant challenges in organic farming since they are also unpredictable. The Philippines is prone to tropical cyclones due to its geographical location near the Pacific Ocean, where most of the typhoons are formed. The country's climate is also tropical, meaning it has a relatively high temperature, high humidity, and abundant rainfall. This situation is considered one of the hindrances in farming since too much rain, strong typhoon, and drought are harmful to the crops' growth.



It is also evident that the greatest challenge of the organic farmers is the occurrence of intense climatic conditions in the country, especially in their farm because too much rainfall, strong wind, and intense heat of the sun during El Niño will definitely damage their crops, especially if there are not prepared nor possess any technology to counter the adverse effect of the vagaries of the weather. So, when their crops are damaged, they will have nothing to sell to market to the consumers, which means no income, and they can no longer recover their capital.

Typhoons in the Philippines have an impact on production, especially in farming. It has damaged rice production and other farm products in the country. Typhoons substantially reduced local provincial production in the quarter of the strike. It has caused losses of up to 12.5 million since 2001. It is estimated to have caused losses of around 260,000 tons for 13 years (Blanc & Strobl, 2016).

Moreover, the organic farmers considered the existence of pests and insects as their mortal enemy as well. These undesirable bugs and larvae, and insects usually eat the plants before the farmers do. When the plant has parasites like the larvae, the leaves, fruits, and other parts will be consumed.

The pests and insects being parasites of the crops were the greatest challenge of the farmers since if they failed to control them, all of the plants would be damaged because they would be consumed as food for these animals. That is why the farmers hated these creatures the most since it will be very hard for them since they shifted to organic farming since they cannot use chemical-based insecticides. Hence, it will affect their business since they might have nothing to sell in the market, or their products will be lessened.

Insects, pests, and larvae are major limiting factors in farm production. Minor insect damage lowers the crop's value because the market demands clean, unblemished produce. It also produces diseases that limit plant growth. Farmers need to quickly recognize insect problems and practice early control to prevent a buildup and keep insect pests from getting out of control. Insects injure plants by chewing leaves, stems, and roots, sucking juices, egg-laying, or transmitting diseases (Robinson, 2019).

Another challenge faced by organic farmers is the competition in the market share since they have significant competitors, the non-organic farmers. The differences in the prices are the primary factor why organic farmers have difficulty dominating the market since they need to compete with the prices of the produce of non-organic farming. Further, another concern is the marketability of organic produce compared to non-organic produce since many buyers would look for cheaper vegetables and fruits.



In the actual market situation, the sellers of organic products had to contend with the competition in the prices of the products produced using conventional farming. Often they are more expensive compared to the latter. So they have to look for buyers who have higher buying capacity and can afford to buy this kind of agricultural products or else it would be hard for them to survive considering that in the production, this method of farming produces low yield harvest compared to the standard farming method that uses chemical fertilizers and insecticides.

There is a high cost involved in organic farming. The availability of biofertilizers is lesser in the market than chemical fertilizers, which leads to significant production issues that affect the marketing of organic produce. The number of customers interested in consuming organic products is lesser than the inorganic products. Most consumers who prefer organic products are occasional buyers (SriRithi et al., 2018).

Additionally, the farm soil is crucial in farming using the organic method since it is the major element needed in producing excellent quality organic harvest, considering that this farming mechanism does not apply chemical fertilizers and insecticides. Ensuring that the soil is healthy and maintaining its nutrient dense is another challenge since it takes at least three years to rehabilitate the soil in organic farming. So, the farmers incur opportunities lost to earn in that span of time.

In organic farming, the farmers must take care of the health of the soil since it is imperative to produce healthy produce. Maintaining the health of the soil in the farm is an arduous task due to varying factors that are even out of the farmers' control, like acid rain. If they can produce a good harvest, they have the bargaining power to price their products higher than the others.

Leakey (2017) opined that soil fertility depletion causes decreased production of farm products. It is recognized as the fundamental biophysical limiting factor responsible for declining the production of organic products. The depletion of soil nutrient capital is caused by crop harvest removals, leaching, and soil erosion. Farmers do not sufficiently compensate these losses by returning the nutrients to the soil by crop residues, manures, and organic fertilizers. The consequences of this soil nutrient depletion can include significant economic, social, and environmental externalities.

Further, in farming, the fruits of labor cannot be enjoyed instantly since it will take a long time to endure the challenges in production and in marketing the produce from the start of their activity like the changing weather and when the pests the insect would attach their plants, which diminish their supposed harvest including their capital outlay being invested. Hence, it can be inferred that engaging in organic farming is difficult because many hindrances need to be hurdled to survive amidst competition.



Syngenta Global (2020) posits that farmers must meet the changing needs of the planet and the expectations of regulators, consumers, and other stakeholders. There are increasing pressures from climate change, soil erosion, biodiversity loss, and consumers' changing tastes in food and concerns about how it is produced. These are the challenges faced by the farmers for such a long time. While modern agriculture provides many solutions, the outcome is not always the same because each farm is unique. These all challenges are faced farmers ever since they started farming.

There is cyclical nature of farming challenges which means that in organic farming, it is constantly occurring and already were part and parcel of being a farmer. Hence, they should always know how to counter the climatic disturbances to the farms and the time when the pest will attack the plants. It is like organic farming is a contract. Anyone who will engage in farming, especially the organic method of growing crops, will always encounter different problems, especially typhoons, strong monsoon winds, and attacks of the pests and insects on vegetables and fruits. It would even be harder since organic farmers do not apply chemicals to kill insects and pests since it has adverse health effects.

Working on the farm is not as easy as it seems. It is always challenging. Risks and problems always occur, and most of these are unpredictable. Farmers today are having increasing difficulties making a living because of the low prices of their products. Many farmers are giving up on their farms. The remaining farms try to expand and work more efficiently to keep profitable. It is always problematic to grow only three different years after year. More pathogens develop in the soil with such restricted variability, which means more pesticides must be applied (Plentiful Lands, 2020).

5.2. Possible remedy to address the challenges faced in organic farming in the aspect of production and marketing

Organic farming is a holistic system harnessing agro-ecosystems and completing cycles to sustain plants and animals in a harmonious environment. The farmer takes responsibility for the environment, animals, and plants as well the consumers in various ways, including protecting the soil through minimum disruption through tillage, minimum soil degradation, and erosion, decreasing pollution, optimizing biological productivity, and promoting a sound state of soil health and sustainable soil fertility by optimizing conditions for biological activity. Then completing cycles like recycling the materials and resources to the greatest extent possible within the enterprise: water cycle, carbon cycle, gaseous cycle, micronutrient cycle, and essential nutrients in a balanced host predator relationship and relying on renewable resources in locally organized agricultural systems (Guide Leisure Farm, 2020).

Khapayi and Celliers (2016) disclosed that organic farmers have factors that contribute to their difficulty avoiding and even giving remedies to the challenges they have experienced in farming.



These limiting factors involve lack of transportation to the markets from the farms, lack of marketing skills and information, inadequate market infrastructure, high transaction costs, insufficient land availability to expand production, lack of agricultural implements to better production, reduced production and farm management skills, as well as low education levels which results in an inability to interpret market information to be used in production planning and marketing.

The research participants disclosed that to address the challenges faced in organic farming in production and marketing, they have to widen their learning horizon through training and seminars. Organic farming is very different from conventional farming. This is why organic farming is also considered more challenging than the latter. Attending trainings and seminars is one of the best means to prepare for the cyclical occurrence of the challenges in order for the farmers to be updated in the latest practices, methodologies, and strategies in organic farming.

Taking care of the plants and acquiring knowledge through training is very important. The farmer should be updated on the new organic farming approaches through enhancing one's knowledge.

Since the organic farming method is different from conventional farming, the farmers should need to be trained on the new strategies and techniques through training, seminars, and workshops to transfer hands-on knowledge. In this way, the farmers' knowledge will be developed, and they will learn a better way to handle the various challenges that they will encounter from time to time.

Chinchmalatpure and Tayade (2016) posit that trainings and seminars helped the farmers in developing knowledge and awareness about the use of the new strategies in organic farming and its mass multiplication on agriculture wastage, which will result in the use of household wastes, vegetable waste, and other waste for mass multiplication. It also increases the farmers' awareness about the use of enriched culture for different crops to manage diseases and increases crop yields. Thus, an appropriate strategy has to be made to extend the benefit of the transfer of technology process to the farmers.

5.3. Challenges confronting the farmers in adopting organic farming in the aspect of supporting infrastructure

It is time for the organic and non-GMO industry to invest in infrastructure to straighten the current "crooked" supply chain, said Eric Jackson, chief executive of Pipeline Foods. Pipeline estimates there are less than 200 facilities that are certified for organic grain and oilseeds. Only about 50% of those are on rail, and only 50% are commercial. According to Jackson, the entire industry is supported by 50 or less relevant facilities in the country. That speaks to the opportunity, but it also speaks to the issue," Jackson said, adding that many of those relevant facilities are challenged to meet the new Food



Safety Modernization Act requirements for food and feed. With so few facilities, truckloads are being bought and sold, and margins are being extracted without added value. There are many trade strings between the farm and the consumer company, Jackson said, and everybody will make their dollar – sometimes literally – per bushel (Reidy, 2018).

During the interview, the research participants revealed that their challenges in adopting organic farming in the aspect of supporting infrastructure were the following: 1) absence of supporting infrastructure that needs self-help; 2) selective provision of government assistance; and 3) no support since time immemorial.

Supporting infrastructure is vital for the farmers, especially the small-scale farmers who experienced difficulty in production and marketing without the help of the supporting infrastructures from the government. The absence of the provision of supporting infrastructure for the farmers entails them using their resources to support their farming needs. They usually use their capital for their farm. There was also no support from the government for their farm.

The agricultural sector in the country is one of the most vulnerable sectors, yet they were not given much attention and support by the government and other authorities despite its importance for human survival, being the producer of food for all. In the rural areas where there are limited sources of income, the people could only turn to farms as means of livelihood given the abundance of farmland and prolonged exposure to technical know-how. Supposedly, they should be provided with various governmental support so that they will be more productive and the prices of the agricultural products will be stabilized in the market and for the benefit of the general consumers.

Ordoñez (2017) expounds that agriculture productivity increase depends on the good supporting infrastructure. The absence and inadequacy of supporting infrastructure in the Philippines have been cited as the primary reason for its slow agricultural productivity. Supporting infrastructure is a very crucial factor in organic farming. The country has the budget for this supporting infrastructure. What is needed is the manner of execution and implementation of these programs.

The common problem faced by the farmers in dealing with the government is the selective means of giving support to them. Fortunately, non-governmental organizations or NGOs fill in this gap to a certain extent since not all farmers have the ability and the qualification to avail and receive such support. Only the registered farmers can receive support from the government, especially in financial terms.

In addition, the government has limited support and is more focused on the support of conventional



farming through the purchase of chemicals. The government and other institutions also offer seminars and training, but there is difficulty in availing this kind of service due to limited slots and other logistical problems.

Ison (2019) disclosed that the agriculture sector remains crucial to the Philippine economy. According to the Department of Agriculture (DA), there is limited diversification, and low production output is the most critical challenge that constrains agricultural transformation in the country, according to the Department of Agriculture (DA). Long-standing challenges that hamper productivity includes limited access to credit and agricultural insurance, low farm mechanization, inadequate post-harvest facilities, inadequate irrigation, and minimal support to research and development. There is also limited connectivity between production areas and markets, thus, resulting in overproduction in some areas.

Further, it has been a long time that the farmers experienced difficulty or even worse than some did not receive any support. In reality, the government's supporting infrastructure program and other non-profit organizations would benefit the farmers. Some farmers could not receive support because the dissemination of information did not reach their areas, especially those farms located in remote areas. However, only those farmworkers from big farms were able to receive assistance from the government. Some of those farmers who received assistance are those relatives of the government officials

The organic farmers in Negros Occidental were not able to receive any form of assistance from the government for a very long period of time, while they even expanded thirty years ago since they started farming. The inefficiency caused this problem in disseminating the information about any government program for the farmers and corruptive practices in choosing the beneficiaries of the support.

Nakpil (2016) revealed many challenges that the farmers had experienced. Unfortunately, it takes quite some time to receive assistance and support. Climate change, low prioritization from the government, and land reform are just some of the many problems farmers in the country have been experiencing, according to the farming sector representatives. The latter participated in the 2016 Asian Development Bank Food Security Forum. These farming challenges were already a challenge to the farmers and, up to now is, still unanswered challenge.

5.4. Possible remedy to address the challenges faced in organic farming in the provision of supporting infrastructure

Recent literature indicates the significant role of rural infrastructure in improving agricultural productivity in developing economies. While the availability and quality of rural infrastructure are never substitutes for efficient macroeconomic and agriculture-specific policies and the effective



implementation of such policies, inadequate infrastructure can significantly constrain growth and productivity. Like other public investments, rural infrastructure raises agricultural productivity, which in turn induces growth in the rural areas, bringing about higher agricultural wages and improved opportunities for non-farm labor. The rise in agricultural productivity, which reduces food prices, benefits both urban and rural inhabitants who are net food buyers. Thus, agricultural productivity has significant poverty reduction effects (Llanto, 2012).

Agricultural infrastructure plays a significant role in improving the lives of the farmers, mainly the small-scale. However, this kind of support is hardly provided by the government or large agro-industrial entities.

During the interview, the research participants disclosed that the actions that they take to remedy their problems on the shortage or lack of infrastructures that support their organic farming activity are: 1) farmers' self-reliance leads to survival; 2) the financiers provide capital to the farmers; 3)

To survive in the aftermath of typhoons and plant disease outbreaks, the farmers used their resources to support themselves, and they would not just seek help from the government so that they would not be dismayed in the end. Also, they use their initiatives to support their needs in farming. They only planted a few crops based on their capability since they depended on their limited financial resources.

It was further disclosed that they could not receive any external assistance because they lacked follow-ups at the appropriate office. So they just look for any means to find capital for their farming activity. This means that the farmers provided their capital out of their savings to plant on time and harvest when there was demand in the market. Hence, the farmers strived hard to provide for their infrastructural needs and did not depend on the government since minimal support.

On many occasions, even after a big calamity hit the organic farms, the farmers were just self-reliant in finding solutions to the infrastructures needed in their farming in reviving their farm to its original state. More often, they depended on their capacity to find ways to provide the needed inputs and supporting infrastructures for their crops to grow and sell good harvest in the market for those health-conscious consumers.

According to McGinnis (2018), the major problem is that some farmers use up their financial capital. When that happens, there is no money to operate on. For the past two crop seasons, better yields have kept many farmers' financial capital above water, but there was not an improvement in that financial capital. It is also essential that farmers embrace any egotism issues related to financial stress. It is also crucial for the farmers to know the actual costs of operation, the living expenses, the cost of



production, and the cost of running a farm. A farmer needs a suitable lender who will analyze the reality of farming and what needs to be done to get out of debt. For the farmer, it is essential to set aside personal desires.

Aside from using their resources to finance the costs of running the farm, they also welcome investors who are willing to provide the financial needs for every cropping cycle, and the profits will be divided according to their agreement. Even though the financiers would get more of the share of the profits, this is a good remedy for the farmers to increase the amount of their yield. Some investors and financiers are willing to be capitalist partners with the farmers who serve as the industrial partners on a loss arrangement or the absence of a legal entity of the farming business.

Thereby, the best remedy for the shortage of finance is to purchase the farming inputs and build infrastructure for the farm like irrigation, post-harvest facility, access roads, lightings and many more ways for the farmers to accept other parties who will provide the financial resources under the agreement of dividing the profits for the outputs. This is the best remedy for the farmers who do not have access to the government's supporting infrastructure to survive and continue their farm operations. This arrangement had been favorable for the organic farmers since they experienced problems getting infrastructural support from the government and even borrowing from financial institutions that required too many documents to qualify for any loan. What is readily available for them are the loans from the loan sharks that charge exorbitant interests rates and other fees and leave the farmers under the bondage of borrowings and poverty.

Private financial sector investment in agriculture is a small but rapidly growing phenomenon. As the farming industry's market expands over time, especially in the organic farming sector, many private financial sectors have drawn interest in financing such type of industry. It involves large-scale financial institutions, hedge funds, real estate investment trusts, and private and public companies pursuing farm ownership and management strategies. This sector has been increasingly attracted to agriculture primarily because of current prospects for income generation, capital appreciation, and uncorrelated returns with equity markets and as a hedge against inflation. Most of these financial institutions provide capital to mobilize the farm operation of small farmers. Little information has been available concerning the profile and role of private investment groups in this asset class or their impact on the communities where they operate (OECD Food, 2020).

CONCLUSIONS

The organic farmer in the Cebu and Negros Occidental, Philippines, have been confronted with various types of challenging situations that affected their sustainability amid competing with the producers' vegetables, fruits, and livestock using conventional farming methods. The most extraordinary problem



the organic farmers face is the reality of the Philippines' vulnerability to strong typhoons and other calamities that would destroy the crops. Also, because organic farming does not apply commercial chemicals, there were instances that insects and pests would destroy their plants. Also, organic agriculture requires more time to restore the health of the soil that was destroyed after long years of applying harmful pesticides and fertilizers. Hence, the yield that would compensate the farmers' efforts and capital outlay cannot be recovered immediately after each cropping season.

However, despite the Philippine government's effort to convince the farmers to shift to organic farming, the support given to the farmers was insufficient, especially in terms of infrastructure and finances. Also, the

Moreover, to address these cyclical nature of organic farming challenges, the farmers were not faint-hearted by they rely of their capabilities to source capital from their savings and through loans since they would wait for the government to provide and extend assistance so that they can go on with their farming activity, they would just be annoyed and demotivated.

LITERATURES CITED

- Adriano, L. (2021). More Ilocos farmers urged to adopt organic farming. *Philippine News Agency*. Retrieved from <https://www.pna.gov.ph/articles/1139727>.
- Blanc, E. & Strobl, E. (2016). Assessing the impact of typhoons on rice production in the Philippines. *Journal of Applied Meteorology and Climatology*, 55(4), 993-1007. doi:10.1175/jamc-d-15-0214.1.
- Bouronikos, V. (2020). *Four challenges of organic farming that you should know*. Retrieved from <https://bit.ly/3sMZHft>.
- Buena, M.R. (2020). *How PGS changed the law on organic agriculture in the Philippines*. Retrieved from <https://bit.ly/3GNmnkx>.
- Chinchmalatpure, U. R., & Tayade, A. M. (2016). Impact of training on knowledge level of farmers about use of bio-pesticide and its mass multiplication on agriculture wastage. *Agricultural Science Digest - A Research Journal*. doi:10.18805/asd.v0i.11294.
- Clarke, V. & Braun, V. (2013) Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26(2), 120-123.



Department of Agriculture. (2011). *Organic agriculture act of 2010 and its implementing rules and regulations*. Republic Act No. 10068. Retrieved from http://ati.da.gov.ph/rtc8/sites/default/files/RA10068_IRR.pdf .

Department of Agriculture Bureau of Agricultural Research. (2021). *Organic agriculture program*. Retrieved from <https://bit.ly/3p8MoVK>.

Department of Agriculture Regional Field Office III. (n.d.). *Organic agriculture program in Central Luzon*. Retrieved from <https://bit.ly/3Igc7Da>.

Far Eastern Agriculture. (2012). *Organic farming: The future of the Philippine agriculture*. Retrieved from <https://bit.ly/3gQeY9C>.

Food and Agriculture Organization [FAO]. (1999). *Organic agriculture*. Committee on Agriculture, 15th session, Rome, 25-29 January 1999, Red Bloom. Item 8 of the Provisional agenda. Retrieved from https://www.fao.org/3/X0075e/X0075e.htm#P81_1359.

Food and Fertilizer Technology Center.(2019). *Agriculture in the Philippines*. Retrieved from <https://bit.ly/2QeLAXK>.

Food and Agriculture Organization [FAO] of the United Nations. (2022). *Organic agriculture*. Retrieved from <https://bit.ly/3vepsbw>.

Guide Leisure Farm. (2020). *Introduction to organic farming*. Organic farming solutions. Retrieved from <https://gudieleisurefarm.org/products/organic-farming-solutions/>.

Halberg, N., Alrøe, H.F., & Kristensen, E.S. (2005). Synthesis: Perspectives for organic agriculture in a global context. In: Halberg, N., Alrøe, H.F., Knudsen, M.T. and Kristensen, E.S. (eds) *Global development of organic agriculture: Challenges and promises*. CAB International, Wallingford. pp. 344–368.

Hamzaoui-Essoussi, L., & Zahaf, M. (2012). *Production and distribution of organic foods: Assessing the added values*. Retrieved from <https://bit.ly/2NLAAWQ>.

IFOAM Organics International (2008). *Definition of organic agriculture*. Retrieved from <https://bit.ly/3vtDZAf>.

IFOAM. (2009). *IFOAM I definition of organic agriculture*. Retrieved from <http://www.ifoam.bio/en/organiclandmarks/definition-organic-agriculture>.



- Ison, L. (2019). *Government boost support services to far mers, fisherfolk*. Retrieved from <https://bit.ly/3dn8yeV>.
- Japan International Cooperation Agency. (2017). Local farmers in Cebu go into organic, sustainable farming. Press Release. Retrieved from <https://www.jica.go.jp/philippine/english/office/topics/news/170731.html>.
- Khapayi, M. & Celliers, P. R. (2016). Factors limiting and preventing emerging farmers to progress to commercial agricultural farming in the King William's town area of the eastern cape province, south Africa. *South African Journal of Agricultural Extension (SAJAE)*, 44(1). doi:10.17159/2413-3221/2016/v44n1a374.
- Kristiansen, P., & Reganold, J. (n.d.). *Organic agriculture: Opportunities and challenges*. Retrieved from <https://orgprints.org/id/eprint/14042/13/14042.pdf>.
- Leakey, R. (2017). *Multifunctional agriculture*. London, United Kingdom: Elsevier Incorporated.
- Litterick, A. M., & Watson, C. A. (2017). Organic farming. *Encyclopedia of Applied Plant Sciences*, 311–317. <https://doi.org/10.1016/b978-0-12-394807-6.00004-6>.
- Llanto, G.M.(2012). *The impact of infrastructure on agricultural productivity*. Discussion Paper Series No. 2012-12. Philippine Institute of Development Studies. Retrieved from <https://dirp4.pids.gov.ph/ris/dps/pidsdps1212.pdf>.
- Maghirang, R.G., De La Cruz, R., & Villareal, R.L. (n.d.). How sustainable is organic agriculture in the Philippines? *Trans. Nat. Acad. Sci. & Tech. (Philippines)*, 33 (2). Retrieved from <https://bit.ly/3M06knx>.
- McGinnis, M. (2018). *How farmers cope with less cash*. Retrieved from <https://bit.ly/2TXylSc>
- Ministry of Agriculture, Food and Rural Affairs (n.d.). *Introduction to organic farming*. Ontario, Canada. Retrieved from <http://www.omafra.gov.on.ca/english/crops/facts/09-077.htm#farm>.
- Montemayor, L., Villegas, P., & Mendoza, T. (2021, May). Organic agriculture in PH: No funding, no plans. *Inquirer*. Retrieved from <https://bit.ly/3ItCVzC>.
- Morgera, E., Caro, C.B., & Duran, G.M. (2012). *Organic agriculture and the law*. Development Law Service FAO Legal Office. Food And Agriculture Organization Of The United Nations, Rome. Retrieved from <https://www.fao.org/3/i2718e/i2718e.pdf>.



- Mortensen, D. H. (2020). *How to do a thematic analysis of user interviews*. Retrieved from <https://bit.ly/3H7Beq9>.
- Nakpil, D. (2016). *A farmer's plea: Support us, love us*. Retrieved from <https://bit.ly/2XkVwc1>.
- National Academies of Sciences, Engineering, and Medicine. (1991). *Sustainable agriculture research and education in the field*. A Proceedings. Washington, DC: The National Academies Press. <https://doi.org/10.17226/1854>.
- National Anti-Poverty Commission. (2019). *Organic farming is the sustainable solution to uplift the lives of the farmers*. Republic of the Philippines. Retrieved from <https://bit.ly/3sebOTS>.
- Nelson, G. L. M., Abrigo, G. N.A., De Guzman, R. P., Ocampo, J. A., & De Guzman, L. E. P. (2019). Organic farmers in the Philippines: Characteristics, knowledge, attitude and practices. *Journal of Nature Studies*, 18(2), 26-43. Retrieved from <https://bit.ly/3LZUrh6>.
- OECD Food. (2020). Private financial sector investment in farmland and agricultural infrastructure. *OECD Food, Agriculture and Fisheries Papers*, (1), 1–28. doi: 10.1787/18156797.
- Ordoñez, E. (2017). *Infrastructure and agriculture*. Retrieved June 1, 2020 from <https://bit.ly/2TYwnlA>.
- Plentiful Lands. (2020). *Challenges of modern-day farming*. Retrieved from <https://bit.ly/3eH7zGJ>.
- Reidy, S. (2018). *Organic industry sees infrastructure challenges*. World-Grain. Sosland Publishing Company. Retrieved from <https://bit.ly/3ImBvqM>.
- Robinson, L., Segal, J., & Segal, R. (2019). *Organic foods: What you need to know*. Retrieved from <https://bit.ly/32HXrHj>.
- Rodale Institute. (2021). *The leaders who founded the organic movement*. Retrieved from <https://bit.ly/33LwWao>.
- Syngenta Global. (2020). *Modern agriculture has many complex challenges*. Retrieved June 1, 2020 from <https://bit.ly/2Aqu18c>.
- SriRithi, K., Subarna, N., Latha, P., & Balaji, M. (2018). *Challenges and issues faced in buying and selling organic products: Perspectives of consumers and entrepreneurs*. Retrieved from <https://bit.ly/2ArW9aM>.



Šrůtek, M., & Urban, J. (2008). *Organic farming*. Encyclopedia of Ecology. Retrieved from <https://bit.ly/3M9oWBF>.

Sustainable Agriculture Research & Education Program. (n.d.) *What is sustainable agriculture*. A program of UC Agriculture & Natural Resources. Retrieved from <https://sarep.ucdavis.edu/sustainable-ag>.

Tsvetkov, I., Atanassov, A., Vlahova, M., Carlier, L., Christov, N., Lefort, F., Rusanov, K., Badjanov, I., Dinheva, I., Tchamitchian, M., Rakleova, G., Georgieva, L., Tamm, L., Iantcheva, A., Herforth-Rahme, J., Paplomatas, E., & Atanassov, I. (2018). Plant organic farming reearch-current status and opportunities for future development. *Biotechnology & Biotechnological Equipment*, 32(2). <https://doi.org/10.1080/13102818.2018.1427509>.

United States Department of Agriculture National Institute of Food and Agriculture, (n.d.). *Sustainable agriculture*. Retrieved from <https://nifa.usda.gov/topic/sustainable-agriculture>.

Villegas, P.M., & Custodio, H.M. (2014). *Socio-economics and policy support towards enhancing the organic vegetables industry in the Philippines*. Retrieved from <https://orgprints.org/id/eprint/24187/3/24187.pdf>.

Yang, A. (2021). *Empowering Filipino farmers through organic agriculture*. Retrieved <https://bit.ly/3oSyOWe>.



**APPENDIX A
TRANSMITTAL LETTER**

April 4, 2020

Highlander Farm
Baybayon, Dumalan,
Dalaguete, Cebu

Dear Sir/Ma'am,

Greetings of Peace!

We are currently doing a study entitled "*The Underlying Concerns Defying Organic Farmers in the Philippines*". With the increase of public interest for organic products, it came to our interest to focus our study about organic farming. The increase of public interest for organic products also presents a good market opportunity for organic farming industry. It gave us a drive to focus on this study in order to develop know the different concerns in organic farming that will help organic farms and organic farmers obtain and achieve competitive advantage in business arena. We have also realized that organic farming industry has a lot of opportunities as well as challenges in the market and in order to achieve sustainability of its market position, it must be studied well.

In line with this, we are asking you to allow us gather data about organic farming. The data collection involves organic farmers to be interviewed about the challenges faced by them in organic farming. These data are needed in order to make the study possible.

Your approval is very vital for the completion of the study. The results of the study can be shared if you wish to. Should you have any clarifications, you can contact me thru email: amabellagracesiaton@gmail.com or thru mobile number 0922-604-5515. Hoping to allow me gain this information. This study will be a great help to the organic farms and organic farmers. Rest assured that all information will be held confidential and will be only used for the study.

Thank you and more power.

Respectfully Yours,

Amabella Grace N. Siaton
Researcher

Judy Ann F. Gimena, DBA
Researcher



APPENDIX B
RESEARCH INSTRUMENT

INTERVIEW GUIDE

Dear Informant,
Minahal nga Manunubag,

We are currently conducting a study about organic farming. In line with this, I am requesting you to spare a few minutes of your time to answer the following questions honestly. Rest assured that all the answers will be treated with utmost confidentiality.

Thank you very much.

Nagdumala kami karon ug usa ka pagtuon kabahin sa organikong panguma. Pinahiuyon niini, naghango ako kanimo sa paggahin og pipila ka oras aron matubag ang mga musunod nga mga pangutana bahin sa akong gidumalang pagtuon. Akong ipasalig nga ang tanang impormasyon nga makuha gikan kanimo ampingan sa hataas nga matang sa pagtago.

Daghang Salamat.

Respectfully Yours,

(Kanimong Matinahuron)

[Handwritten signature]

Amabella Grace N. Siaton
Researcher
(Nagtuon)

Concerns and Challenges on Organic Farming

1.1 What are the concerns and challenges that you experienced in adopting organic farming in the aspect of production and marketing?

(Unsa ang mga nagkada-iyang mga hagit nga imong nasinati sa organikong pagpanguma sa aspeto sa produksyon ug pagpamaligya? Palihug ko ug saysay.)

[Blank lines for handwritten response]



1.2 How long have you faced these concerns and challenges in organic farming?
(Dugay naba ni nimong giatubang nga mga hagit sa organikong pagpanguma?)

1.3 What do you think is the best possible remedy to address these problems?
(Unsa sa imong huna-huna ang labing maayong solusyon aron matubag kini nga mga hagit?)

2.1. What are the concerns and challenges you experienced in adopting organic farming in the aspect of supporting infrastructure?
(Unsa ang mga nagkada-iyang mga hagit nga imong nasinati sa organikong pagpanguma sa aspeto sa mga suporta alang sa mga organikong mag-uuma? Palihug ko ug saysay.)

2.2. How long have you faced these issue in organic farming?
(Dugay naba ni nimong giatubang nga mga hagit sa organikong pagpanguma?)



2.3. What do you think is the best possible action to be taken to address these challenges?
(Unsa sa imong huna-huna ang labing maayong solusyon aron matubag kini nga mga hagit?)

**APPENDIX C
 CERTIFICATE OF CONTENT VALIDATION**

February 29, 2020

TO WHOM IT MAY CONCERN:

This is to certify that I have reviewed and validated the interview guide prepared by **MS. AMABELLA GRACE N. SIATON** from University of Cebu in relation to her study about underlying concerns defying organic farmers in the Philippines.

This certification is issued upon the request of Ms. Siaton for whatever legal purpose it may serve her.

DR. MARIA VICTORIA U. SY
 Validator



**APPENDIX D
INFORMED CONSENT**

[Informed Consent form for organic farming in Visayas]

[Name of Principal Investigator: Amabella Grace N. Siaton]

[Name of Organization: University of Cebu Graduate School]

[Name of Proposal: The Underlying Concerns Defying Organic Farmers in the Philippines]

This Informed Consent Form has two parts:

(Kini nga Informed Consent adunay duha ka bahin):

- **Information Sheet (to share information about the research with you)**
(Panid sa Impormasyon – aron sa pagpaambit nimo kabahin sa pagtuon)
- **Certificate of Consent (for signatures if you agree to take part in this activity)**
(Sertipiko sa Pagtugot – alang sa mga pirma kung mo-uyon ka nga muapil ani nga kalihukan)

You will be given a copy of the full Informed Consent Form

(Tagaan ka ug tibook nga kopya sa Informed Consent)

PART I: Information Sheet (Panid sa Impormasyon)

Introduction (Pasi-una)

We are currently conducting a study entitled: “The Underlying Concerns Defying Organic Farmers in the Philippines”. In connection with this, we are requesting you to take part of this undertaking as one of my participants in the study. Rest assured that if there are certain questions that you do not feel comfortable in giving your answers, you are free to ignore it. Should you wish not to continue with the interview, you have the rights to withdraw from the research. If there are questions that you do not understand and or find it ambiguous, feel free to ask the researcher. Rest assured that all your responses will be treated with utmost confidentiality.

(Nagdumala kami karon ug usa ka pagtuon nga adunay ulohan nga: “The Underlying Concerns in Organic Farming in the Philippines”. Pinahi-uyon niini, gihangyo ko ikaw nga moapil sa kini nga buluhaton ingon usa sa akong mga partisipante sa pagtuon. Akong pasalig nga kung adunay pipila ka mga pangutana nga dili ka komportable sa paghatag sa imong mga tubag, gawason ka nga dili nimo tagdon. Kung gusto nimo nga dili magpadayon sa pakigsulti, ikaw adunay mga katungod nga mu-atras gikan sa pagtuon. Kung adunay mga pangutana nga wala nimo masabti ug nakita nga kini dili klaro, pwede ka nga mangutana sa nagtuon. Ako nagpasalig nga ang tanan nimo nga mga tubag pagahatagan og labing hataas nga matang sa pagtago.)

Purpose of the research (Katuyo-an sa Pagtuon)

Organic farming has been deemed as an environmentally friendly farming practice in response to the growing concern over the environmental risks associated with modern agriculture. This paper examines the challenges that organic farmers encounter in employing this method.

(Ang organikong pag-uma giisip nga usa ka pamaagi sa pag-uma nga dili makadaot sa kina-iyahan agig tubag sa nagkadako nga kabalaka sa mga peligro sa kalikopan nga may kalabutan sa modernong agrikultura. Gisusi niini nga pagtuon ang mga hagit nga gi-atubang sa mga mag-uuma sa paggamit ug organiko nga pamaagi sa pag-uma.)

Type of Data Collection Method (Pamaagi sa pagkuha sa mga datos)

This research will utilize a face to face interview.

(Kini nga paguon mogamit ug atubang nga pagpangutana sa mga muapil sa pagtuon).

Participant selection (Pagpili sa mga partisipante)

The participants are the organic farmers in Visayas.



(Ang mga miapil mao ang mga organikong mag-uuma o sa organikong umahan sa Kabisay-an.)

Voluntary Participation (*Boluntaryong pag-apil*)

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. Whatever is your decision, it does not affect in any way your reputation as an organic farmer. Should you choose not to continue with the interview, your refusal will not be taken against your person.

(Ang imong pag-apil sa kini nga pagtuon kay bug-os nga boluntaryo. Aduna kay kapilian kon moapil ba o dili. Bisan unsa man ang imong desisyon, dili kini maka-apekto sa imong dungog isip usa ka organikong mag-uuma. Kung gusto nimo nga dili magpadayon sa pakigsulti, ang imong pagdumili dili makaapekto sa imong pagkatawong-dungog).

Procedures and Protocol (*Mga pamaagi ug protocol*)

In this study, there will be a personal interview to be conducted by the researcher with you. The questions contained in the interview guide will be asked by the researcher personally and should you refuse to answer some of the queries, feel free to inform the researcher that you do not wish to respond to the question. The information will be treated with utmost confidentiality. No other person will have access for all the data that will be collected in the course of the conduct of the interview. The proceedings of the interview will be audio recorded to ensure that no vital information given by the respondents will be missed by the researcher.

To ensure that you will be able to have a full grasp on the purpose of the study, the proponent will first explain the objectives of the study and the benefits that will accrue to the key informants.

(Sa kini nga pagtuon, adunay usa ka personal nga interbyu nga himuon sa nagtuon uban kanimo. Ang mga pangutana nga naa sa giya sa interbyu ipangutana mismo sa nagtuon ug kung dili ka ganahan nga motubag sa pipila ka pangutana, aduna kay katungod ipahibalo sa nagtuon nga dili nimo gusto nga matubag ang pangutana. Ang mga kay itago sa pinakahataas nga matang sa pagtago. Wala'y lain nga tawo nga adunay access alang sa tanan nga mga datos nga makolekta sa dagan sa pagpahigayon sa interbyu. Ang mga panghinabi sa interbyu mahimong irekord sa audio aron masiguro nga wala'y hinungdanon nga kasayuran nga gihatag sa mga respondents nga dili mawala sa nagtuon.)

Duration (*Gidugayon sa survey ug interbyu*)

The interview will last from 30 – 45 minutes. The time and the place of the survey and interview will be conducted at your preferred schedule and venue.

(Ang pakigsulti molungtad gikan sa 30- 45 minuto. Ang oras ug lugar sa survey ug pakigsulti himuon sa imong gusto nga iskedyul ug lugar).

Risks (*Mga risgo*)

I would like to request that you give your honest and sincere opinions regarding on the challenges you encounter in relation to this method used.

(Hangyuon ko ikaw nga ihatag nimo ang imong matinud-anon ug sinsero nga mga opinyon bahin mga hagit nga imong nahibal-an may kalabotan sa organikong pamaagi sa panguma).

Benefits (*Mga benepisyo*)

This research is conducted to know the underlying challenges in organic farming which may be a basis for the formulation of policy initiatives intended to improve the quality of life of the farmers.

(Kini nga pagtuon gihimo aron mahibaw-an ang mga nagkada-iyang hagit nga gi-atubang sa mga mag-uuma sa paggamit ug organikong pamaagi sa pagpanguma isip basehan alang sa paghimo sa mga inisyatibo sa palisiya nga aron mapauswag ang kalidad sa pagpanginabuhi sa mga mag-uuma.)

Reimbursements (*Bayad*)

You will not be provided with any form of payment should you decide to take part in the survey and



interview.

(Dili ka hatagan sa bisan unsang porma sa pagbayad kung ikaw ang mohukom nga moapil sa pakigsulti.)

Confidentiality (Matang sa pagtago sa mga datos)

The data that will be collected from the study are reflective of the personal experiences of the organic farmers in Visayas. In observance of the Data Privacy Act, all the information collected in the course of the undertaking will be treated with utmost confidentiality to protect the privacy of all the participants in this study. Hence, rest assured that no information will be shared with other parties. The presentation of the findings will be done in a general manner and will be coded to protect the identities and privacy of the respondents. Only the proponents will have access to the collected information.

(Ang mga datos nga makolekta gikan sa pagtuon ang nagpakita sa personal nga kasinatian sa mga organikong mag-uuma sa Kabisay-an. Sa pag-obserbar sa Data Privacy Act, ang tanan nga kasayuran nga nakolekta sa dagan sa pag-asikaso pagaisipon nga labi ka kompidensiyal aron mapanalipdan ang pagkapribado sa tanan nga mga partisipante sa kini nga pagtuon. Busa, akong gisuguro nga wala'y kasayuran nga maipanghatag sa ubang mga partido. Ang pagpresentar sa mga nahibal-an himuon sa usa ka kinatibuk-an nga paagi ug pag-code aron mapanalipdan ang mga identity ug privacy sa mga respondents. Ang mga nagtuon lamang ang adunay access sa nakolekta nga kasayuran.)

Sharing the Results (Pagpaambit sa mga resulta)

The findings of the study will be shared with other sectors who will find the study relevant or useful to them. The results will be presented in a general summary without in any way mentioning any specific name of the participant/s in any part of the report. This is to ensure the confidentiality of the information provided by the key informants of the study. Though the findings will be shared by other sectors through publications and research, the names of the participants will not be mentioned nor any specific data attributable to any respondent be ever mentioned.

(Ang mga nahibal-an sa pagtuon ipaambit sa ubang mga sektor nga makit-an ang pagtuon nga may kalabutan o mapuslanon alang kanila. Ang mga sangputanan ipresentar sa usa ka kinatibuk-ang buod nga wala'y bisan unsang paagiha nga naghigot sa bisan unsang piho nga ngalan sa partisipante / s sa bisan unsang bahin sa report. Kini aron masiguro ang pagkapribado sa kasayuran nga gihatag sa mga nag-unang impormasyon sa pagtuon. Bisan kung ang mga nahibal-an ibahinbahin sa ubang mga sektor pinaagi sa mga publikasyon ug pagtuon, ang mga ngalan sa mga partisipante dili hisgutan ni bisan unsang piho nga datos nga gihatag sa bisan kinsa nga respondent nga nahisgutan.)

Right to Refuse or Withdraw (Katungod sa sa dili pag-apil o muhunong sa pag-apil sa pagtuon)

You may opt not to take part or discontinue your participation in the study. Choosing to participate or not will not affect in any way an organic farmer in Visayas.

(Mahimo nimong pilion nga dili moapil o hunongon ang imong pag-apil sa pagtuon. Ang pagpili nga moapil o dili makaapekto sa bisan unsang paagi ang usa ka organikong mag-uuma sa Kabisay-an.)

Whom to Contact (Kinsa ang kontakon)

If you have any questions, you can ask anytime, even if the study has started. If you wish to ask questions later, you may contact the following:

Ms. Amabella Grace N. Siaton – (0922) 604 5515

This dissertation study has been reviewed and approved by the University of Cebu, a committee whose task is to make sure that researchers have properly conducted the study. If you have any questions for my panel, please contact the University of Cebu Graduate School at 032-255777 local 127.

(Kung adunay mga pangutana, mahimo ka nga mokontak bisan unsang oras, bisan kung nagsugod na ang pagtuon. Kung gusto nimo nga mangutana, mahimo nimong kontakon ang mosunod:



Ms. Amabella Grace N. Siaton – (0922) 604 5515

Kini nga pagtuon gisusi ug gi-aprubahan sa University of Cebu Graduate School, usa ka komite nga ang tahas mao ang pagsiguro nga ang mga pagtuon kay tukma nga nagpahigayon sa nagtuon. Kung adunay mga pangutana alang sa akong panel, palihug kontaka ang University of Cebu Graduate School sa 032-255777 local 127.)

PART II: Certificate of Consent (Sertipiko sa Pagtugot)

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.

(Nabasa na nako ang nahauna nga kasayuran, o kini nabasa ngari kanako. Adunay higayon nga ako makapangutana bahin niini ug bisan unsang mga pangutana nga akong gipangutana natubag sa akong katagbawan. Gitugotan ko nga boluntaryo nga moapil ingon usa ka partisipante sa kini nga pagtuon.)

Print Name of Participant (Ngalan sa partisipante) _____

Signature of Participant (Pirma sa partisipante) _____

Date (Petsa) _____
Day/month/year

If illiterate (Kung walay nahibal-an)

A literate witness must sign (if possible, this person should be selected by the participant and should have no connection to the research team). Participants who are illiterate should include their thumb-print as well.

(Ang usa ka magsusulat nga saksi kinahanglan mopirma (kung mahimo, kini nga tawo kinahanglan mapili sa partisipante ug kinahanglan walay koneksyon sa pangkat sa panukiduki). Ang mga partisipante nga dili basehanan kinahanglan maglakip usab sa ilang thumb-print ingon man.)

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

(Nasaksihan ko ang tukma nga pagbasa sa porma sa pagtugot sa potensyal nga partisipante, ug ang indibidwal adunay higayon nga makapangutana. Gikumpirma ko nga ang indibidwal naghatag libre nga pagtugot.)

Print name of witness _____
(Ngalan sa saksi)

and

Thumb print of participant
(Tamla sa partisipante)

Signature of witness _____
(Pirma sa saksi)



Date (Petsa) _____
Day/month/year

Statement by the researcher/person taking consent
(Pahayag sa pagtuon / tawo nga nag-uyon)

I have explained the information sheet to the potential participant, and to the best of my ability



made sure that the participant understands that the following will be done:

(Gipasabut nako ang kasayuran sa kasayuran sa potensyal nga partisipante, ug kutob sa akong mahimo nga nakasiguro nga ang partisipante nakasabut nga ang mosunud buhaton:)

1. The participant will answer the survey questionnaire that contains questions on farm management strategies, sustainability issues, and as well as the profile of the participant.

(1. Ang partisipante magtubag sa pangutana sa survey nga adunay mga pangutana bahin sa mga pamaagi sa pagdumala sa umahan, mga isyu sa pagpadayon, ug ingon man ang profile sa partisipante.)

2. The participant will be interviewed about their challenges faced by the organic farmers.

(2. Ang partisipante pagahisgutan bahin sa ilang mga hagit nga giatubang sa organikong pag-uma.)

3. The responses from the survey and interview will be used solely for the study.

(3. Ang mga tubag gikan sa survey ug pakigsulti gamiton lamang alang sa pagtuon.)

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered satisfactorily to the best of my ability. I confirm that the individual has not been coerced into giving consent, and that the consent was given freely and voluntarily.

(Gikumpirma ko nga ang partisipante gihatagan ug oportunidad sa pagpangutana bahin sa pagtuon, ug ang tanan nga mga pangutana nga gipangutana sa partisipante gitubag.. Gikumpirma ko nga ang indibidwal wala mapugos sa paghatag pagtugot, ug nga ang pagtugot gihatag nga gawasnon ug boluntaryo.)

A copy of this ICF has been provided to the participant.

(Gitagaan ug kompleto nga kopya sa ICF ang partisipante.)

Print Name of Researcher/person taking the consent _____

(Ngalan sa nagtuon/tao nga nagpapirma sa pagtugot)

Signature of Researcher /person taking the consent _____

(Pirma sa nagtuon/tao nga nagpapirma sa pagtugot)

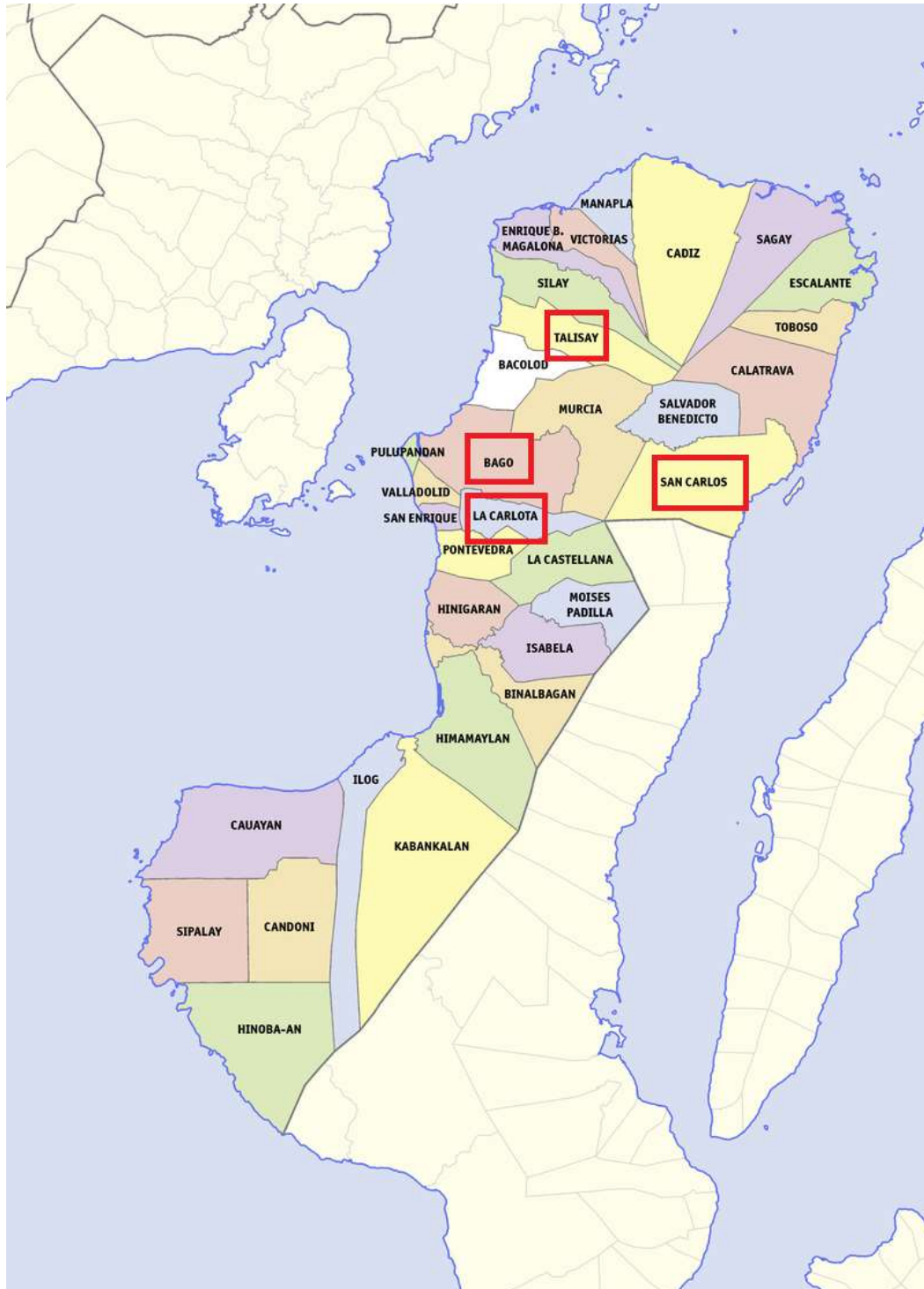
Date (Petsa) _____

Day/month/year

APPENDIX E

LOCATION MAP

Negros Occidental- Location Map



Cebu- Location Map



**APPENDIX F
CODE BOOK**

	Participants	Significant Statements
The challenges experienced in adopting organic farming in the aspect of production and marketing.		
1.1. The challenges confronting the farmers in adopting organic farming in the aspect of production and marketing.	<i>Informant 1:</i>	<i>Hmm. Corn. For our consumption. I get worried if there is typhoon, especially when the corn is not yet fully-grown, it will die and will be damaged.</i>
	<i>Informant 2:</i>	<i>Like typhoon and windy season like that. That monsoon, that's one. That is harmful to plants.</i>
	<i>Informant 3:</i>	<i>Typhoon because that is unpredictable. We cannot predict the typhoon because the moment that you already planted you plants, then caught by the typhoon, you cannot save it. Another problem is drought.</i>
	<i>Informant 4:</i>	<i>The problem with farming is the knowledge of the farmer to know the salability of the produce.</i>
	<i>Informant 5:</i>	<i>Our problem is the larvae in the plant. These will kill your plant.</i>
	<i>Informant 6:</i>	<i>My problem is when there is typhoon, Typhoon is one of the reason why sometimes I have no harvest. Also the marketability of my harvest compared with conventional farming.</i>
	<i>Informant 7:</i>	<i>The larvae in my plant,that is really my problem.</i>

	<p><i>Informant 8:</i></p>	<p><i>In organic farming, you need to make sure that the soil is healthy. The soil must be nutrient dense. The problem is when it is not nutrient dense. Also, you need also to compete with prices of other produce in the market.</i></p>
	<p><i>Informant 9:</i></p>	<p><i>In production, you need to spend at least 3 years in order the rehabilitate the soil. Aside from that, pests and diseases is another problem. Since in production there are already challenges, the prices of organic produce is also more expensive compared with the produce in conventional farming.</i></p>
	<p><i>Informant 10:</i></p>	<p><i>The challenge is for the first 3 years because there was no one to teach us. In selling, is the situation when he buyers always compare our prices with other produce from conventional farming. They also compare the value of our produce from conventional farming. We have small market here in organic farming.</i></p>
<p>1.2. The duration of time that organic farmers have experienced production and marketing challenges in organic farming.</p>	<p><i>Informant 1:</i></p>	<p><i>It has been a long time since then.</i></p>
	<p><i>Informant 2:</i></p>	<p><i>It is like that because we cannot avoid it (typhoon).</i></p>
	<p><i>Informant 3:</i></p>	<p><i>Always. You can experience it as a farmer. Typhoon is unpredictable. Also, when there is drought, especially during lent season. It is advisable not to plant during the month of February, because if you plant your crops, it will grow just enough to reach March and April, and these months are in rainy season.</i></p>

	<i>Informant 4:</i>	<i>We have been through it a long time. It is when you have to work in your farm, like 2 or 4 hectares, you cannot work it in on time because of these weather challenges.</i>
	<i>Informant 5:</i>	<i>This problem always occurs. I always encounter problem like larvae in the plant.</i>
	<i>Informant 6:</i>	<i>That is not always the situation, but there are times like this (typhoon) and pests since then.</i>
	<i>Informant 7:</i>	<i>Since I started farming, this is really a problem.</i>
	<i>Informant 8:</i>	<i>Since 1997.</i>
	<i>Informant 9:</i>	<i>Every 3 years period.</i>
	<i>Informant 10:</i>	<i>Since before.</i>
1.3. The best possible remedy to address the challenges in production and marketing.	<i>Informant 1:</i>	<i>We cannot avoid it because there are times that when you about to harvest your produce but were caught in the storm.</i>
	<i>Informant 2:</i>	<i>Nothing. It is unpredictable.</i>
	<i>Informant 3:</i>	<i>We can do nothing about it.</i>
	<i>Informant 4:</i>	<i>It has never been solved; it is indeed our farming problem. All you need to do is to take care of your crops.</i>
	<i>Informant 5:</i>	<i>The solution of some farmers is that they use pumps and chemicals and that they are no longer organic. But for us organic farmers, this problem is very hard to solve.</i>
	<i>Informant 6:</i>	<i>When you encounter these situations (typhoon and pests), you can do nothing about it and you have to bear with it.</i>

	<i>Informant 7:</i>	<i>All you need to do is to take care of you plants so that the larvae cannot penetrate your crops and also you need training.</i>
	<i>Informant 8:</i>	<i>Training, demonstration, monitoring and consultation. It also important to create seed banking and contract farming to produce more. Otherwise, you cannot produce if you do not have seeds.</i>
	<i>Informant 9:</i>	<i>You need really to equip yourself with proper knowledge.</i>
	<i>Informant 10:</i>	<i>Equip yourself with training so that you'll know the latest and updated strategies in organic farming.</i>

The challenges experienced in adopting organic farming in the aspect of supporting infrastructure.

2.1. The challenges confronting the farmers in adopting organic farming in the aspect of supporting infrastructure.	<i>Informant 1:</i>	<i>Nothing. We just use our own resources.</i>
	<i>Informant 2:</i>	<i>Nothing. Usually, we do not have it.</i>
	<i>Informant 3:</i>	<i>Nothing.</i>
	<i>Informant 4:</i>	<i>Nothing. We just use our own money to finance our farming. We did not ask for support and never received any.</i>
	<i>Informant 5:</i>	<i>They only help once you are registered with the government but if you are not registered by the government, you cannot receive any support. We are not registered therefore; we cannot receive any support and assistance.</i>
	<i>Informant 6:</i>	<i>That is the problem because we did not receive any support.</i>
	<i>Informant 7:</i>	<i>So far we did not received any support.</i>

	<i>Informant 8:</i>	<i>The government has little support. This COVID 19 pandemic crisis, the government only supported the conventional farmers by buying their produce.</i>
	<i>Informant 9:</i>	<i>We need seminars and training and the government offers that kind of support but the challenge is we have difficulty in availing such services.</i>
	<i>Informant 10:</i>	<i>There are support but the problem is that not all can avail the support.</i>
2.2. The duration that organic farmers have experienced supporting infrastructure challenges in organic farming.	<i>Informant 1:</i>	<i>Even before, nothing</i>
	<i>Informant 2:</i>	<i>Nothing, even before</i>
	<i>Informant 3:</i>	<i>We have never received any support or assistance.</i>
	<i>Informant 4:</i>	<i>It has been a while. We also never heard of it. Maybe in other areas, but here in our place, we have never experienced it.</i>
	<i>Informant 5:</i>	<i>It's been a long time since we are not registered. Those big farms, farmworkers receive assistance from the government and other NGOs.</i>
	<i>Informant 6:</i>	<i>I have experienced that problem even before. That support was not able to reach here in our area.</i>
	<i>Informant 7:</i>	<i>It has been our problem since then. Those who receive support are those chosen farmers and sometimes are those who are relatives by the government official.</i>
	<i>Informant 8:</i>	<i>Since 1997.</i>

	<i>Informant 9:</i>	<i>3 years period.</i>
	<i>Informant 10:</i>	<i>Since 1990s.</i>
2.3. The best possible remedy to address the challenges in supporting infrastructure.	<i>Informant 1:</i>	<i>We only planted few because we lack support. We can't harvest much, unless you have a large farm. We use our own pocket just to survive.</i>
	<i>Informant 2:</i>	<i>We only use our own resources. We also didn't have any follow-ups.</i>
	<i>Informant 3:</i>	<i>Nothing. Since we are farmers, it is never as if we ask for support because if we have the money we can buy and plant so that we can harvest the crop in a timely manner, without the support. We just provide capital for ourselves.</i>
	<i>Informant 4:</i>	<i>Until now we do not have any solutions and maybe there is no solution that is why we support ourselves.</i>
	<i>Informant 5:</i>	<i>The residents here considered farming as their bread and butter. Even me and my mom. Once the price of the produce increases, we also gain more. There are also some people who offer themselves as financiers. The arrangement is that the financier will provide all the finances and the profit will be shared- 70% will go to the financier and 30% will go to the farmer.</i>
	<i>Informant 6:</i>	<i>I only use my own money to support my farm.</i>
	<i>Informant 7:</i>	<i>We use our own money for capitalization and to finance our farm. We use our own money and effort.</i>

	<i>Informant 8:</i>	<i>We do not depend on the support, we support ourselves.</i>
	<i>Informant 9:</i>	<i>There is no shortcut. Every farmer must experience this challenge but there are also investors who are ready to invest your farm.</i>
	<i>Informant 10:</i>	<i>As a farmer, you need to strive harder in order to survive amidst the lack of supporting infrastructure.</i>

APPENDIX G
INTERVIEW REFLECTIVE JOURNAL

Date/ Time	Venue	Notes
May 28, 2020 7:30 AM	Codcod, San Carlos City, Negros Occidental	<p>Informant 1 He is a farmer since he was 11 years old. His parents are both farmers. Their family owned a small farm in San Carlos City. He has an experience working as a construction worker for 2 years in Cebu City but decided to go back to Negros Occidental to pursue farming. He has been into organic farming for almost 10 years. He is also working as one of the farmers in one of the organic farms in San Carlos City, Negros Occidental.</p> <p>Observational Notes There was difficulty in terms of accessibility of the location and time since the farmer is located in a remote area in San Carlos City. The liaison officer also had a difficulty of reaching the area because of the travel restriction form one municipality to other municipality due to COVID – 19 pandemic. The liaison officer was accommodated right away after he has reached the area.</p> <p>Methodological Notes First, I contacted a liaison officer to conduct an interview in Negros Occidental, since I cannot travel because of the travel restrictions implemented by the different local government units due to COVID-19 pandemic. After I have oriented my liaison officer on the things needed to be done in the interview, he then contacted the president of the farmer’s cooperative in the area to make an appointment. I also provided my</p>



		<p>liaison officer the supporting letter of intent and authorization letter to conduct the interview. After the appointment was set, the liaison officer then explained the purpose of the interview and then let him signed the informed consent form. The proceeding interview was audio recorded with the participant’s consent.</p> <p>Personal Notes</p> <p>There were a lot of challenges I encountered to obtain the interview. First, the location of the participant is not very accessible due to the travel restrictions. Second is the availability of the participant’s time given that he is also busy in his farm. Last is the struggle experienced by my liaison officer in contacting me whenever he has questions and clarifications because of the inconsistency of the signal connection in San Carlos City. The interview went well and the participant is very accommodating in answering the interview questions.</p>
--	--	---

Date/ Time	Venue	Notes
May 28, 2020 9:45 AM	Codcod, San Carlos City, Negros Occidental	<p>Informant 2</p> <p>He is a farm worker in one of the organic farm in San Carlos City. He has been into farming for almost 20 years. His family owns a small farm but he chooses to work as a farm worker in one of the huge farm because of the benefits and it is less risky compared in maintaining his own farm. He also works as a part-time farmer in other farms whenever the owners of those farms demand farm demand for an additional manpower, most especially during harvesting period.</p> <p>Observational Notes</p> <p>The participant is very accommodating and is very expressive in answering all the questions in the interview. He even emphasized and even give a demonstration to my liaison officer on the different ways in determining the best type of plant cultivar to grow in a specific type of soil. Even if there is difficulty in the signal connection experienced by my liaison officer in contacting me, the participant made his own initiative in asking my contact number and contacted me right after the interview to give additional responses and elaborate properly the challenges he had confronted in organic farming practice.</p>

		<p>Methodological Notes</p> <p>First, I contacted a liaison officer to conduct an interview in Negros Occidental, since I cannot travel because of the travel restrictions implemented by the different local government units due to COVID-19 pandemic. After I have oriented my liaison officer on the things needed to be done in the interview, he then contacted the president of the farmer’s cooperative in the area to make an appointment. I also provided my liaison officer the supporting letter of intent and authorization letter to conduct the interview. After the appointment was set, the liaison officer then explained the purpose of the interview and then let him signed the informed consent form. The proceeding interview was audio recorded with the participant’s consent.</p> <p>Personal Notes</p> <p>There were a lot of things I have learned by the participant. Aside from the audio recording that was sent to me as his answers to the interview questions, the fact that he contacted me was very helpful in the completion of the study. I have a little difficulty in recording our voice call because of the poor signal connection in his place, but overall, the interview went well.</p>
--	--	--

Date/ Time	Venue	Notes
May 28, 2020 1:00 PM	Brgy. La Granja, La Carlota, Negros Occidental	<p>Informant 3</p> <p>He is a farmer and at the same time he owns a small farm. He is a farmer since he was 9 years old and up to now that he is 67 years old, he still works at his own farm. He has been a farmer-member in BPI- National Crop Research and Development Center in La Granja as one of the organic farming for several years. He is an experienced farming since he devoted his whole life into farming.</p> <p>Observational Notes</p> <p>The farmer is very hesitant at first but as the interview went on, he then became at ease. He also asked the liaison officer to repeat the interview questions and keeps on repeating his answers because he wanted to made it sure that his answers are in Cebuano language knowing that the researcher is a Cebuano. Whenever there are times that he speaks in Hiligaynon, he always restate his answers and translate</p>

		<p>it in Cebuano. He is also very lenient in his answers and explains everything in a step-by-step manner.</p> <p>Methodological Notes</p> <p>First, I contacted a liaison officer to conduct an interview in Negros Occidental, since I cannot travel because of the travel restrictions implemented by the different local government units due to COVID-19 pandemic. After I have oriented my liaison officer on the things needed to be done in the interview, he then contacted the president of the farmer’s cooperative in the area to make an appointment. I also provided my liaison officer the supporting letter of intent and authorization letter to conduct the interview. After the appointment was set, the liaison officer then explained the purpose of the interview and then let him signed the informed consent form. The proceeding interview was audio recorded with the participant’s consent.</p> <p>Personal Notes</p> <p>I find it very helpful everytime the participant speaks in Hiligaynon then translate his own answers in Cebuano. It helps me so much in understanding and learning Hiligaynon at the same time. I also learned so much from the interview since he explain his answers in a step-by-step manner.</p>
--	--	--

Date/ Time	Venue	Notes
<p>May 28, 2020 9:45 AM</p>	<p>Skina Banawa, Cebu City</p>	<p>Informant 4</p> <p>He is a farmer in Barili, Cebu. He has an experience in conventional farming and decided to shift into organic farming. He also sells his own harvest in the market and supplies it to organic market firms selling organic produce in Cebu City and Cebu Province. He has been into organic farming for almost 15 years now and slowly expanding its organic farm.</p> <p>Observational Notes</p> <p>At first, he finds it funny to record his answers in audio recorder. He was shy at first since other people can hear his answers, but as the interview went on, he just got used with the recording. He is also very experienced in vegetable plants. Most of his answers are based on vegetable produce. He also had properly discussed the challenges he has confronted and relate</p>

		<p>these challenges into the financial impact to the farmers. He also asked me to send a file of the audio recording of his answers because he wanted to hear how well he responded to the interview questions.</p> <p>Methodological Notes</p> <p>First, I contacted the participant via text message. I got the participant’s number from a common friend. After he responded to my text message, I asked him about his available time and place in order to conduct the interview. He then responded to conduct the interview at the market in Banawa, Cebu City since he sells vegetables at the said location. After the appointment was set, I then explained the purpose of the interview and then let him signed the informed consent form. The proceeding interview was audio recorded with the participant’s consent.</p> <p>Personal Notes</p> <p>I have difficulty during the interview since the place where we conducted the interview is in the public market. There are a lot of interruptions during the interview since he was also selling while answering my interview questions. Aside from the noise, the interviewee also is hesitant at first because he is not used with the audio recorder and the other vendors present in the market often teased him. I even helped him sell his vegetables during the interview. I learned a lot and had fun during the interview because aside from the interview answers that I got from him, I also learned the trending prices of the organic produce in the market and saw first-hand reactions from the buyers when they found out that organic vegetables are more expensive than the other vegetables.</p>
--	--	--

Date/ Time	Venue	Notes
May 29, 2020 9:00 AM	Banilad Town Center	<p>Informant 5</p> <p>He was a small farm owner in Barili, Cebu. He has been into organic farming since 2002. He also delivers and supplies organic produce to one of the organic farm producers and organic firms in Cebu. He also extended his organic produce in different mobile markets in Cebu since the COVID-19 pandemic crisis in order to supply additional vegetables to his fellow Cebuanos.</p>



		<p>Observational Notes</p> <p>The participant is very accommodating and at the same time very serious. He always make sure that his responses directly answers the interview questions. He also asked me to give him a copy of the interview guide questions prior to our meeting in order for him to read and prepare supplemental answers to the questions. He also gives additional input on how to confront these challenges he has experienced in organic farming. He also showed me some pictures and videos he took in his farm in order to show me how the challenges in organic farming is being a problem and at the same time being a struggle to them as organic farmers.</p> <p>Methodological Notes</p> <p>First, I contacted the participant via Facebook Messenger. I asked him about his available time and place in order to conduct the interview. I also send him a letter of intent, the objectives of the study, the soft copy of the informed consent form, and the coy of the interview guide for he has requested it. He then responded to conduct the interview at the Banilad Town Center for he has some delivery on the same date. After the appointment was set, I then explained the purpose of the interview and then let him signed the informed consent form. The proceeding interview was audio recorded with the participant’s consent.</p> <p>Personal Notes</p> <p>I was really amazed by how the participant took an initiative to sell his organic produce and offer it in a marked-down price in order to help his fellow Cebuanos. He even offered it to deliver to different mobile markets in order to make sure that people has access to healthy and organic vegetables. I find it hard to set an appointment with him since he only deliver his produce in the city once a week, but I am still very thankful because he still extended his time and even adjusted his delivery date in order to meet with me. He even gave me vegetables as a token. He also gave me a <i>bod-bod kabog</i> and fresh cow’s milk from Barili, Cebu.</p>
--	--	--



Date/ Time	Venue	Notes
May 29, 2020 1:00 PM	Carbon Market, Cebu City	<p>Informant 6</p> <p>He is a farmer and his family owns a small farm in Dalaguete, Cebu. He and his family also supplies different kinds of organic vegetables in different organic markets. He also works as a farm worker at Highlander Farm in Baybayon, Dumalan, Dalaguete, Cebu.</p> <p>Observational Notes</p> <p>He is very accommodating and even prepared the venue for our interview. He also assigned and brought someone to attend to his customers to make sure that no one will interrupt us during the interview. He answers the interview very leniently and make sure that his answers are well-recorded. He also discussed every item properly and even gave me a list of different he has encountered aside from his answers during the interview.</p> <p>Methodological Notes</p> <p>First, I contacted the participant via Facebook Messenger. I asked him about his available time and place in order to conduct the interview. I also send him a letter of intent, the objectives of the study, the soft copy of the informed consent form, and the coy of the interview guide for he has requested it. He then responded to conduct the interview at the Carbon Market. After the appointment was set, I then explained the purpose of the interview and then let him signed the informed consent form. The proceeding interview was audio recorded with the participant’s consent.</p> <p>Personal Notes</p> <p>He really answered every questions very religiously. He also make sure that I feel comfortable and I understand his answers. It took as longer time to finish the interview since he is very talkative and loves to share his experience in organic farming. He also showed his profit computation. He also shared all the benefits in organic farming aside from the challenges and struggles he has experienced.</p>



Date/ Time	Venue	Notes
<p>May 30, 2020 11:00 AM</p>	<p>Informant’s Farm</p>	<p>Informant 7 He is the owner of God’s Grace Farm. He is also the one who manages the marketing of the organic produce harvested in their farm. He has been into farming for how many years and is very experienced in terms of organic farming. He is very hands-on when it comes to the farm management and operations to his farm.</p> <p>Observational Notes He is very willing to be interviewed and even extended his time to tour my liaison officer to his farm. He make sure to answer each interview questions with a full detail. He even sent me an email on the full view and aerial view on his farm in order for me to be familiar with organic farming practices in his farm. He also provided a written answers to the interview questions as an additional information, aside from the actual interview.</p> <p>Methodological Notes First, I contacted a liaison officer to conduct an interview in Negros Occidental, since I cannot travel because of the travel restrictions implemented by the different local government units due to COVID-19 pandemic. After I have oriented my liaison officer on the things needed to be done in the interview, he then contacted the president of the farmer’s cooperative in the area to make an appointment. I also provided my liaison officer the supporting letter of intent and authorization letter to conduct the interview. After the appointment was set, the liaison officer then explained the purpose of the interview and then let him signed the informed consent form. The proceeding interview was audio recorded with the participant’s consent.</p> <p>Personal Notes The participant is very accommodating and very good in answering to every questions. He also make it to the point to answer each questions in Hiligaynon-English language so that it will be easier for me to understand. After the interview, he then messaged me thru Facebook Messenger, telling me that he is very willing to help me complete my dissertation and to call him whenever I have further questions.</p>



Date/ Time	Venue	Notes
<p>May 30, 2020 3:00 PM</p>	<p>Informant’s Farm</p>	<p>Informant 8 She is the owner of the Buro-Buro Spring Black Pepper, Flowers and Vermi Farm in Sitio Balogo, Brgy. Concepcion Talisay City, Negros Occidental. She is the owner/manager of the farm and has been practicing organic farming since 1993.</p> <p>Observational Notes She answers the questions directly. She also explains technical terms properly and connect it to her answers. She is very hands-on to her farm and knows every small details in her farm operations. She is very lenient and always make sure that every question has a detailed answer. She also takes time in giving and laying all the challenges she had experience in organic farming practices to make sure that she missed nothing. She is very meticulous.</p> <p>Methodological Notes First, I contacted a liaison officer to conduct an interview in Negros Occidental, since I cannot travel because of the travel restrictions implemented by the different local government units due to COVID-19 pandemic. After I have oriented my liaison officer on the things needed to be done in the interview, he then contacted the president of the farmer’s cooperative in the area to make an appointment. I also provided my liaison officer the supporting letter of intent and authorization letter to conduct the interview. After the appointment was set, the liaison officer then explained the purpose of the interview and then let him signed the informed consent form. The proceeding interview was audio recorded with the participant’s consent.</p> <p>Personal Notes I really appreciate how the owner of the farm took time to do an interview given that we were able to notify her on the same day of the interview. She has no second thoughts in saying yes for the interview despite of her busy schedule. I also appreciate how she is being so honest and with no hesitations in telling us all the challenges and even discussed to us the technicalities of these challenges to make sure that all the answers were properly noted and recorded. She tried her best to answer in English as much as possible.</p>



Date/ Time	Venue	Notes
June 1, 2020 9:00 AM	Informant's Farm	<p>Informant 9</p> <p>He is the president of Negros Island Organic Producers Association (NIOPA). He is also a business owner. He also owns a farm and have a few numbers of farm workers. He is one of the suppliers of organic produce in Visayas and also attended several trainings for organic farming.</p> <p>Observational Notes</p> <p>He is very active in different organic farming activity. He is also one of the activists that push organic farming practices in the Visayas, specifically in Negros Occidental. He is very accommodating and give a full detail on the challenges that he has experienced in the practice of organic farming. He also tries his best to use Cebuano terminologies as much as possible.</p> <p>Methodological Notes</p> <p>First, I contacted a liaison officer to conduct an interview in Negros Occidental, since I cannot travel because of the travel restrictions implemented by the different local government units due to COVID-19 pandemic. After I have oriented my liaison officer on the things needed to be done in the interview, he then contacted the president of the farmer's cooperative in the area to make an appointment. I also provided my liaison officer the supporting letter of intent and authorization letter to conduct the interview. After the appointment was set, the liaison officer then explained the purpose of the interview and then let him signed the informed consent form. The proceeding interview was audio recorded with the participant's consent.</p> <p>Personal Notes</p> <p>Given the time constraints, travel restriction, and busy schedules, he never hesitated to spare us some of his time for the interview. He even gave my liaison officer some organic produce like vegetables and black rice as a token. I have a challenge in recording and decoding the responses because some terminologies were in Hiligaynon but thanks to the technology that we have now, it is easier for me to translate the answers.</p>



Date/ Time	Venue	Notes
June 1, 2020 3:00 PM	Informant's Office	<p>Informant 10</p> <p>He is an employee in Provincial Agricultural Office in Negros Occidental. He is also a farm owner. He also have a number of farm workers in his farm. He is adopting organic farming practices since 2003.</p> <p>Observational Notes</p> <p>He was very straight-forward when it comes to answering the interview questions. He was also very comfortable with the interviewer since they know each other because of a common friend. He is also very detailed when it comes to his answers. He is working in the provincial agricultural office and at the same time own a farm. This is the reason why he needs some farm workers to work in his farm. His wife and a number of family members helped him in managing his farm.</p> <p>Methodological Notes</p> <p>First, I contacted a liaison officer to conduct an interview in Negros Occidental, since I cannot travel because of the travel restrictions implemented by the different local government units due to COVID-19 pandemic. After I have oriented my liaison officer on the things needed to be done in the interview, he then contacted the president of the farmer's cooperative in the area to make an appointment. I also provided my liaison officer the supporting letter of intent and authorization letter to conduct the interview. After the appointment was set, the liaison officer then explained the purpose of the interview and then let him signed the informed consent form. The proceeding interview was audio recorded with the participant's consent.</p> <p>Personal Notes</p> <p>I have struggle in understanding the answers of the participants since he is speaking in Hiligaynon. I have also difficulty in receiving the audio recording from my liaison officer since the signal in their area is very poor. But all these were managed properly because of the technology that we have right now. The bottom line is that the interview went well.</p>



APPENDIX H
University of Cebu Research Ethics Committee Certificate of Final Approval



University of Cebu Academe
Research Ethics Committee



CERTIFICATE OF FINAL APPROVAL REPORT

Form 4.6

June 22, 2020

AMABELLA GRACE SIATON
University of Cebu- Main Campus

Re: GS(1)- 2020- 05- 004 **“The Underlying Concerns in Organic Farming in the Philippines”**

Dear Madam:

We wish to inform you that the FINAL REPORT submitted on the abovementioned protocol is hereby granted approval.

Thank you.

Very truly yours,

DR. JUANITO N. ZUASULA, JR.
Chair, UC System- Research Ethics Committee