



Research Article

Listen to the voice of farmers in the wake of pandemic

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ABSTRACT

With the ongoing chaos in this pandemic, much of what we took for granted is now in doubt. Nonetheless, one thing appears to have remained constant: marginalized groups in society continue to suffer the most, and these are small-scale farmers. Thus, this qualitative study sought to understand small-scale farmers' experiences during the COVID 19 outbreak. Specifically, it explored the challenges they have experienced and identified the coping mechanisms they employed. A total of 15 small-scale farmers were conveniently and purposely selected from Cabarroguis, Quirino, who took part in an individual in-depth and semi-structured interview. The results of the study revealed the typical issues faced by farmers which include financial problems, poverty, a lack of employment, transportation/mobility, climate change, and higher commodity prices. Despite these obstacles, farmers used coping techniques to overcome them. They are compelled to borrow from credit companies to maintain production. Additionally, they received government assistance. They also earned money from direct selling. Finally, farmers keep their resilience in the face of difficulties during the pandemic. Hence, this study serves as a foundation for developing inclusive, practical pro-farmer policies that consider the perspectives of small-scale farmers during and after the COVID 19 crisis.

Keywords: *Home Learning; Modular Remote Learning; Pandemic*

1. INTRODUCTION

The epidemic caused by COVID-19 has resulted in a devastating loss of human life worldwide and poses enormous problems to food systems, public health, and the workplace (FAO, IFAD, and WHO 2020). We have seen severe disruptions in food supply chains due to worldwide health crisis lockdowns and a major global economic slump. These crises have reduced earnings and increased food prices, putting many people out of reach of food, weakening the right to food, and slowing efforts to achieve SDG 2: "Zero hunger." The World Health Organization says the worst is yet to come (Ghebreyesus, 2020). Most health experts expect this virus will continue to circulate for another year or two.

Food security and nutrition are jeopardized as a result of these phenomena. According to the most recent State of Food Security and Nutrition report, about two billion people had moderate or severe food insecurity before the outbreak (FAO et al., 2020). Since 2014, these figures have been steadily increasing by 60 million in five years. The epidemic of COVID-19 is jeopardizing efforts to fulfill SDG 2. The complex dynamics produced by the disease-



containment lockdowns lay the groundwork for a huge disruption of food systems, resulting in a drastic increase in hunger. According to the most recent assessments, the pandemic directly affects between 83 and 132 million additional people (FAO et al., 2020), including 38–80 million individuals, especially low-income countries that rely on imported food (Torero, 2020). At least 25 countries, including Yemen, Lebanon, and South Sudan, face a major deterioration in food security due to the pandemic's secondary socioeconomic effects (FAO and WFP, 2020). In Latin America, many individuals in need of food aid nearly tripled between 2000 and 2020. (UN, 2020a). Food productivity may potentially be harmed in the future, particularly if the infection remains uncontained and lockdown measures are maintained.

With the ongoing chaos in this pandemic, much of what we took for granted is now in doubt. Nonetheless, one thing appears to have remained constant: marginalized groups in society continue to suffer the most, and these are smallholder farmers. Smallholder farmers include subsistence farmers, landless farm laborers, livestock herders, and small-scale agricultural businesses in various parts of the world. These farmers frequently lack the money to feed and safeguard their families, and as a result of the – at times violently enforced – lockdowns, they are unable to grow as they once did or sell their harvests at local markets (Jámbor et al., 2020). These smallholder farming systems are often less resilient to shocks and have fewer support structures to decrease the impact and increase the recovery rate due to shocks (FAO et al., 2019).

Moreover, previous studies have been undertaken on the pandemic's direct impact on small-scale farmers globally. Several have been conducted to document hunger, malnutrition, and high poverty rates (Middendorf et al., 2020) as well as financial difficulties (Thang et al., 2020). Others have discussed poor income and unemployment among farmers (Lakhan et al., 2020) as well as transportation and mobility issues associated with commercializing agricultural products (Mandala et al., 2021). Additionally, farmers' mental health examinations were done (Rudolphi et al., 2020). Meanwhile, some researchers have examined the influence of climate change (Dela Cruz, 2019) and the effects of price increase. While several studies were conducted on the impact of the pandemic on farmers worldwide, as indicated by the literature and related studies above, little has been established in the local setting, like Quirino province, specifically on the lived experiences of small scale farmers during the COVID 19 pandemic. As a result, the current study aims to fill a research gap by adding to the body of knowledge on the challenges experienced by small-scale farmers in the province. It specifically seeks to identify the challenges they experienced and the coping strategies during COVID 19 crisis. Further, its ultimate goal is to develop interventions or recommendations to address the challenges experienced by farmers.

2. METHODOLOGY/MATERIALS

This research used a qualitative approach and employed a phenomenological technique to explore and understand the challenges encountered by small-scale farmers in the wake of the COVID 19 pandemic. Understanding lived experiences marks phenomenology as a philosophy. A method and procedures involve studying a few subjects through extensive

and prolonged engagement to develop patterns and relationships of meaning (Creswell & Creswell, 2017). Further, the study includes 15 small-scale farmers in Cabarroguis, Quirino, and the convenient purposive sampling method was used to identify the participants. The participants consisted of vegetable growers, corn, and rice farmers.

Moreover, request letters were sent to the municipal mayors' offices and barangay captains' offices, and the researchers' courtesy calls to farmers were made before conducting the interview. For ethical concerns, a consent form was provided to inform participants that their participation was entirely voluntary, that there would be no monetary compensation for their time, and that all information gathered during the research would be treated in strict confidence. The research studied and applied the ethical concepts of informed consent, secrecy, confidentiality, and privacy. Further, the interview was conducted by complying with the IATF protocols. To protect the participants' identity, their real names were changed to pseudonyms. Likewise, they were informed that the interview process would be audio recorded to ensure accuracy.

Further, this paper used an in-depth and semi-structured interview in Iloko as the participants' dialect to express themselves freely. The interview sessions lasted for 1-2 hours and were conducted in their respective houses. The said interview primarily focused on the experiences of small-scale farmers in the wake of the COVID 19 pandemic. Their sharing revolved around the following key questions in the interview guide: (a) What are the challenges of small-scale farmers during a pandemic? and (b) What are the coping mechanisms employed by small-scale farmers? The participant determined the flow of conversation, although, for some occasions, the researcher needed to ask questions for clarification and to probe deeper responses.

To retain the original meaning of the articulations, the audio-recorded interviews were transcribed verbatim, and the utterances were interpreted and checked. In addition, data was analyzed topically to complete the research goals. Themes were developed based on the participants' repeated statements, and they served as the foundation for an inquiry-based assessment of the research problem. Research analyses were carried out correctly by familiarizing, organizing, coding, documenting, summarizing, and interpreting Nowell (2017).

3. RESULTS AND FINDINGS

The farmers shared their experiences during the pandemic. Following the face-to-face interview, several themes emerged as to the challenges experienced by farmers during the pandemic. They are as follows:

3.1. CHALLENGES EXPERIENCED BY FARMERS DURING PANDEMIC

3.1.1. Financial Struggle

Financial struggle is one of the impacts that have made the situation of farmers difficult. Moreover, the farmers disclosed that this pandemic caused them accumulated debts, making them extremely difficult to manage. Two participants shared:

"We already have a lot of debt, so we could provide our basic needs and also we can pay our debts." (Mang Istan)

"Life is very difficult in times of pandemic. I don't know how I can manage to pay all our debts." (Mang Procarpio)

The preceding statements demonstrate the difficult lives of farmers because they are buried in suffering and acquired debts to survive in these trying times. This finding corroborates Lubang's (2019) allegation that most farmers are poor and financially stressed due to a lack of savings or, in some cases, debts. To provide for the family's needs, farmers are forced to borrow money from cooperatives or microfinance companies to make money, despite high-interest rates. This is apparent from the participants' statements:

"I owe a lot of debts in the lending company because I need money. I just ignore the big interest rate ... what I always think is the welfare of my family...specially to provide their meals every day." (Tatay Celso)

The statements above imply that farmers are becoming indebted because of the crisis they experienced. According to them, borrowing money from microfinance companies would provide them instant funds to support the basic needs of their families. The result confirms the findings of Iderawumi et al. (2015), who identified microcredit finance provides a lifeline for small-scale farmers, and cooperative groups are essential non-governmental microcredit financial institutions. Furthermore, high interest rates are a hindrance to farmers accessing commercial microcredit; as a result, farmers require funding to cover agricultural expenses. Additionally, Siddiqui et al. (2020) concluded that restrictive terms, collateral restrictions, and high interest rates further limit smallholders' access to finance. The farmers voiced that "it's quite tough to live" because they are struggling almost every day in this time of the pandemic. For them, they can cope with extreme poverty as long as they survive the virus infection. Such narratives from participants include the following:

"For me, it is okay to experience poverty in this pandemic time, what is important is the safety of my family against the COVID. If my family get sick these days, I would have trouble in their hospitalization. It's really hard to earn money now adays." (Tatay Reynaldo)

The statements above indicate that farmers are concerned about a shortage of money, which is their primary means of covering necessities, mainly when a family member is ill. This implies that farmers' financial difficulties in this pandemic have a significant impact on their health. The result confirms the findings of Karpman et al. (2020), who contended that the economic effect of the COVID-19 epidemic jeopardizes the health and well-being of families across the country. On the other hand, Shaflai & Moi (2015) stressed that the farmers faced financial problems during cultivation, yet they could save at the financial institutions. Furthermore, Lubang (2019) conveyed that Filipino farmers' outstanding loans impeded them from obtaining new credit banks and other institutional credit facilities. As a result, farmers continue to be exploited by financial institutions or the underground market. Farmers have been brought to their knees by the excessive interest rates imposed by these

informal lenders. Thus, borrowing more to repay earlier loans has been ingrained in the minds of many small farmers.

3.1.2. Poverty

Poverty remains mainly a rural phenomenon and majority of the poor is still found in rural areas and in the agriculture sector, mostly farmers (Ablao, 2015). In this study, one of the farmers' experiences throughout the pandemic is poverty. The problem has caused them hunger, malnutrition, and mental stress. This is evident in their responses:

Our life became miserable because of this pandemic. In fact, my children experienced not eating all day. During lockdowns, we just ate sardines and noodles as aids given by the barangay.” (Mang Gido)

The statements above suggest that the pandemic imposed severe hardships on farmers. According to them, they went hungry due to a lack of food supplies. Further, malnutrition is a concern due to the intensity of the crisis, as they do not consume the proper nutrients. According to a 2019 FAO assessment, falling earnings would make food, particularly nutritious items required for a balanced diet, less accessible to many people, particularly the poor. Further, hunger is also a key issue during pandemics. As a result of these problems, many people are unable to buy food, diminishing the right to food and impeding attempts to achieve SDG 2: "Zero Hunger" (FAO, 2020). Based on economic growth, the global population of undernourished people is expected to rise by 83 million to 132 million by 2020, with the pandemic generating a 14.3 percent increase in severe malnutrition (Fore et al., 2020). Furthermore, disruptions in the marketing, transportation, and trade networks, as well as labor shortages, may lead to food shortages in specific places and at specific times. Hunger and malnutrition will undoubtedly increase (FAO, 2020). Finally, according to the UNDP and ZEP COVID-19 Pulse Philippines Survey, 33% of respondents skipped one meal each week, and 10% skipped two or more. Meal skipping is related to income, with the poor and unemployed being more likely to be food insecure. In addition to malnutrition and hunger, the epidemic impacted farmers' mental health. This is evident from the following statements made by participants:

*“Instead of sleeping well at night, I just think about the welfare of my kids.”
Sometimes, if I am depressed, I thought of committing suicide.” (Tatay Carding)*

This implies that farmers experience anxiety and depression due to the COVID 19 crisis. This is consistent with Rudolphi et al. (2020) and Patnaik (2020) that farmers have a higher prevalence of anxiety disorders and other psychological concerns than the general population. Furthermore, COVID-19 restrictions implemented during harvest season, labor restraints, and supply chain separation from the market harmed already struggling farmers (Hossain et al., 2020).

3.1.3. Lack of employment

Unemployment was the third challenge that afflicted farmers during the pandemic. According to the participants, unemployment becomes a burden to them because it is the only thing they expect to meet the needs of the whole family. Further, lack of employment

leads to low or lack of income among farmers. As they expressed in the following statements:

"I just find work from our neighbors just to earn money. Yeah, I usually to hard labor. I used to be a construction worker." (Mang Bernie)

The above statements indicate that farmers struggle to find work because it is their only hope to make money, but it became impossible during the COVID 19 crisis. This circumstance exacerbates the situation because they depend so much on it aside from their harvests. The PSA (2018) reports that Filipinos employed in agriculture are among the poorest, with the majority living below the national poverty line. Agricultural laborers earned the lowest daily salary in comparison to workers in the industry and service sectors. Further, Ragasa et al. (2021) posited that the pandemic affected 68% of non-farm enterprises owned by landed and landless households. During the crisis, 47% of landed households and 55% of landless families reported difficulty finding farm labor due to reduced access, pay, and mobility.

Additionally, according to Thang et al. (2020), households with a primary source of income from agriculture experience the most shocks (approximately 30 percent), followed by households with a primary source of income from salaries (roughly 28 percent) and households with a primary source of income from non-farm activities or wages (about 25 percent). Indeed, the pandemic has resulted in a severe global economic collapse. Slowdowns and recessions result in employment and income losses. Moreover, Ragasa et al. (2021) affirmed that in Myanmar, 47% of people employed in farm labor and 55% of landless households struggled to obtain work due to fewer jobs, lower pay, and temporary movement limitations. On the other hand, in China, COVID-19 had a significant impact on farmers' income in two areas: wage and agricultural income. Income growth and farmer income are both high-frequency terms (Yang et al. 2020). The farmers also stated that, despite their desire to work in a nearby barangay, they were unable to do so since they were prohibited from leaving their homes during the lockdown's peak period. They remained in their houses and relied on DSWD assistance. The participants voiced:

It's hard to find work because we are restricted from travelling one place to another during lock downs. If the authorities from the barangay will catch you going from one place to another, they will require you to be quarantined, so we just waited aids given by the Department of Social Welfare & Development." (Mang Isko)

The statements above signify that prohibiting farmers from working elsewhere has become a burden to those who struggle every day just to survive. According to them, the lockdown caused them to be restricted from working. This finding is supported by Bochtis et al. (2020) claim that COVID-19 affects the agricultural sector, notably the seasonal agricultural workers. These are migrant workers who work in farm harvesting and require excellent skill and physical ability. Employment restrictions and lockdowns worsened labor shortages, especially in countries reliant on seasonal workers. In addition, farming in Myanmar accounts for over half of all jobs and over 30% of the country's GDP. As of 2020,

its growth forecast was negative, raising concerns about its ability to absorb newly unemployed from COVID-19-affected sectors (World Bank, 2020).

3.1.4. Transportation/Mobility

Transport is often considered a critical aspect of agricultural development. It is the only means of transporting food produced on agricultural sites to various houses and markets. Transport creates markets for farm products, improves contact between geographical and economic regions, and enables the economic focus to shift to other areas. One of the farmers' struggles during the pandemic includes the issue of mobility or transportation. Two participants uttered:

"We had a problem in terms of transportation, specially on how we transport our products." (Mang Juan)

"We had hard time going to the market, we need to hire a tricycle just to go there." (Tatay Bert)

The statements of the farmers indicate their difficulty in transportation during the pandemic. According to them, transportation has become an obstacle in bringing their products to the market. Additionally, they had to endure expensive transportation. For them, this problem has not been easy because it has hindered their livelihood. The result of this study substantiates the assertions of Siddiqui et al., (2020). They believe that farmers, particularly those engaged in the production of single crops or perishable food, suffered losses due to their inability to access markets. This is attributable to an average rise of 44% in transportation expenses, especially significant for farms located in distant areas.

Farmers face difficulties bringing their goods to market due to government restrictions on their transportation. Additionally, in Morocco, farmers' markets were blocked, transport and movement were restricted, and agricultural inputs were challenging to obtain (Bossenbroek et al., 2020). Additionally, a shortage of transportation for raw materials and produced goods has significantly affected farm and company operations, resulting in a snowball effect on the country's economic productivity (Brul, 2021). Finally, the lockdowns and travel restrictions enforced in the Philippines and throughout the world impacted the transportation of produce from farms to markets, the availability of agricultural labor; and demand, both domestically and internationally (Dy, 2020).

3.1.5. Climate Crisis

The fifth challenge experienced by the participants was the climatic catastrophe which has brought tremendous hardship to farmers and the problem of the COVID 19 virus. This is apparent to their responses, as follows:

"One of our problems is the weather. There was no rain for a long time, so crops are affected." (Mang Ben)

"We had lost this year; the problem is that we still owe our capital to the bank." (Tatay Bert)

According to the interviewees' statements, the climate is one of the elements influencing farmers' planting. This is where they will find their abundant harvest. According to them,

the dry season has a terrible impact on their crops as their primary source of income. Their planting losses are a source of additional distress, aside from the pandemic issue. According to Dela Cruz (2019), climate change effects food supply, access, and quality through increasing weather variability. For farmers, this pattern is important since it helps them plan their sowing schedules. Due to climate change, local weather patterns have altered considerably, making it increasingly difficult for farmers to decide when to plant their crops. According to the International Trade Centre, small farmers in the Global South suffer the burden of climate change in 2020. Unpredictable weather patterns, rising temperatures, natural disasters, and lengthy droughts have all contributed to a decrease in agricultural productivity. Climate change is anticipated to boost the cost of agricultural food between 2030 and 2050, reducing access to the poor (Rosegran et al. 2015). Finally, according to the World Bank's Cambodia Economic Update 2020, agriculture employs the majority of Cambodia's poor. It has just recently begun growth following a two-year drought that severely curtailed rice production, the country's principal agricultural activity.

3.1.6. Increased prices of commodities

Another significant effect of the pandemic highlighted in this paper is the inevitable increase in commodities prices. Farmers claim that, among other things, they have lost their employment and lost their crops, and these hardships have been made worse by the high prices of goods and commodities in the market. As they expressed:

"I have no permanent job, and still the commodities are very expensive." In fact, it's almost a year when we ate meat." (Mang Isko)

"We don't buy rice before because I was still farming but now we were forced to buy rice." (Mang Gido)

The participants' testimonies imply that an increase in the price of commodities on the market has resulted in tremendous suffering for the poor, particularly those in the agricultural sector. They claim that during the pandemic, they choose not to consume meat since it is too expensive. They also remarked that the price of the rice they require has risen dramatically. This problem has greatly affected the farmers during the pandemic. According to Espitia et al. (2020), the pandemic has resulted in localized price shifts, with certain nations seeing price increases, particularly those that rely on food imports. Because food is getting increasingly expensive and hence more difficult to obtain, localized price rises have a direct influence on food security and nutrition. Similarly, Elleby et al. (2020) stated that the COVID-19 pandemic has reduced consumer spending across many industries, including agriculture. The recession reduces prices, particularly for high-value products such as pig, beef, and dairy. Finally, Waltenburg et al. (2020) emphasized that global grain production is at an all-time high, while global food commodity prices are falling. Broad food price index trends, on the other hand, conceal post-lockdown insecurity. Initially, prices for meat, dairy, sugar, and petroleum fell dramatically. As the plague progressed, meat costs skyrocketed as sick meatpackers closed down to minimize disease transmission.

3.2. COPING MECHANISMS EMPLOYED BY FARMERS DURING PANDEMIC

3.2.1. Subsidy from the government

The government's financial aid is one of the farmers' coping techniques during the pandemic. This was demonstrated by their statements:

"The government provided us financial aids during lock down, but it's not sufficient to finance our basic needs." Mang Isko

"We received aids from DSWD. There were also aids coming from our barangay in in the local government unit." Tatay Celso

The statements above indicate that farmers were supported by government during the pandemic. It was beneficial to them because it alleviated their hardships throughout the lockdown. In the Philippines, Congress passed Republic Act 11649, also known as the "Bayanihan Heal as One Act," which declared the existence of a national emergency arising from the Corona Virus Disease 2019 (COVID-19). This included providing an emergency subsidy of between 5,000 and 8,000 per month for two months to approximately 18 million low-income households, and (ii) implementing an expanded and enhanced Pantawid Pamilyang Pilipino Program (4Ps) responsive to the crisis, including cash assistance programs through local governments. The bill also gave the President the authority to provide resources and programs for the most vulnerable people. Following COVID-19, the national food poverty rate would be 7.8 percent in scenario 1, 11.48 percent in scenario 2, and 16.7 percent in scenario 3. Pre-COVID-19 figures suggest a 2.5 to 11.4 percentage point increase. In the three scenarios, rural food poverty spans from 12.6 percent to 25.9 percent, whereas urban food poverty ranges from 3.4 to 8.2 percent (UNICEF, 2020). The farmers in this study stated that the government helped them by providing them with cash and products throughout the lockdown. They claim that if the government had not provided the aforementioned subsidies, their families would have gone hungry for a longer period of time. This confirms the findings of the UNDP Philippines study, which found that most households (94%) had received food relief packets from the Philippine government. Furthermore, in countries such as China, the government is assisting underprivileged farmers by giving financial help as well as restoring agricultural productivity and farmer jobs (Pan et al., 2020). Moreover, during the COVID-19 pandemic, the Moroccan "Tadamon" (solidarity) programme aided the poorest of the poor.

3.2.2. Direct Selling

Direct selling is one of the farmers' primary strategies for generating income in the face of catastrophe. As a result of the economic crisis, which has caused many people to lose jobs and become impoverished, they have developed a method of self-sufficiency known as direct selling. As evident from their responses:

"We just sell our products to our neighbors due to travel restrictions," Mang Juan

"We sell them to the households. Our harvest does not supply our needs." Tatay Reynaldo

The farmers' comments indicate that they experience difficulty in selling their products during the pandemic. However, they used direct selling to earn money to sustain their living. According to Benedek et al. (2021), direct sale is a frequent strategy used by smaller agricultural firms. Exemptions from local farmers or farmers who sell through specified marketing channels (such as farmers markets) are a typical administrative measure used to assist small farms. On the other hand, Siddiqui et al. (2020) concluded that decreased demand and price volatility in produce have affected farmer profitability. Further, farmers lose money due to a lack of market access and difficulty selling commodities, particularly those who raise single crops or perishable items. Moreover, in this paper, the farmers gained money through direct selling since they were restricted to go to the market during the lockdown. According to them, this strategy lifted them somehow out of poverty. They go to households just to sell. This confirms Thang et al. (2020) findings that the lockdown harmed agricultural labor organizations. This has affected small-scale farming families and agricultural laborers too. Those who own land and hire employees opted to weed and harvest with family members. Given the challenges of commercializing their products, they did this to reduce human contact, infection risk, and agricultural input costs. Direct selling also aids in the development of long-term client relationships as well as a low-cost, flexible business.

3.2.3. Accessed credits

To meet their needs during the pandemic, the farmers opted to borrow from microfinance credit companies and banks. Some of them disclosed that they have no other way to think, so borrowing is the easiest way to survive. Some of their articulations are as follows:

*"We had lost this year; the problem is that we still owe our capital to the bank."
(Tatay Bert)*

"We incurred more credits from ASKI (a micro-finance company) because we are suffering from financial constraint. I just ignore the highest interest they offer, what is important is to provide our immediate needs." (Tatay Celso)

Based on the participants' narratives, it can be concluded that farmers' access to microfinance credit companies is one of their strategies to survive during a pandemic. This finding validates Moahid & Maharjan's (2020) results that formal financial structures facilitate sustainable agriculture. There is a need for creative lending schemes that target poor and small farmers in particular. Moreover, in this paper, the farmers also complain about the high interest on their loans, but they can do nothing because they believe it is the fastest way to make money. This result confirms Iderawumi et al.'s (2015) ideas that another critical factor limiting farmers' ability to acquire microcredit from commercial institutions is high interest rates.

Similarly, Siddiqui et al., (2020) emphasized that farmers require financing to cover growing costs. They are, however, severely limited in their availability of credit while they service current loans. They will most likely default unless the situation improves. Furthermore, strict terms and conditions, collateral requirements, and high lending charges limit smallholders' access to finance. In addition, Herliana et al. (2018) assumed that low access

to credit in the agricultural sector is also caused by issues with agricultural sector actors (mainly farmers) and financial institutions. Farmers continue to face difficulties in obtaining credit (accessibility and bankability) and a lack of financial institutions that channel credit to the agricultural sector.

3.2.4. Resiliency

The pandemic situation in the country has brought enormous problems and leave deep scars to the farmers. Consequently, the farmers displayed a positive trait of being resilient in times of COVID 19 crisis. This is evident from their narratives:

“Life is really hard during the pandemic, we need to work to provide the needs of our family. My conscience would bother me if my family would die because of poverty.” Tatay Carding

“In the absence of rice, we just biol roots crops and banana found in the backyard. It is really difficult but we need to accept the reality. All we need to do is to become strong against all odds brought by the pandemic.” Mang Istan

The statements above mean that resiliency is one of the best strategies employed by farmers to combat the challenges brought by the pandemic. According to them, there being resilient in times of crisis helped them a lot to survive. This validates the concept of Kuntz (2020) that resilience is the ability to recover from problems and modify goals and behaviors in response to changes in the environment, emphasizing the adaptive principles behind a recovery trajectory. On the other hand, the United Nations (2020) has stated that smallholder farmers are essential players in global production systems. Still, they are often less likely to have the resources, opportunities, and voice required to manage risk and maintain their livelihoods when faced with shocks. This contradicts the findings of the present study. Indeed, it is remarkable to note that farmers remain optimistic despite the struggles they experienced during the lockdown. As one of them expressed:

“For me, life is precious, even if it is so tough in this pandemic time. We just need to persevere and have faith in God.” Mang Juan

The statements from the participants proved that resiliency was the best weapon they employed during the pandemic. According to Ungar and Theron (2020), resilience refers to one's ability to bounce back from an individual standpoint. This character trait is being possessed by the farmers to survive amidst the tensions brought by the present crisis. Additionally, Coulombe et al. (2020) revealed that individuals demonstrate a high level of resilience when confronted with adversity, which works as a shield against the harmful impacts of stressors. Finally, Palo et al. (2020) stated that Filipino farmers had evolved resilience due to their exposure to excessive risk and frequent economic shocks to respective farm activities.

4. CONCLUSION

The findings of this study revealed that financial difficulties, poverty, unemployment, transportation/mobility, climate change, and rising commodity prices were identified as the challenges experienced by small-scale farmers. Despite these challenges, they were

able to adopt coping strategies. They are compelled to borrow from credit companies to maintain production. Additionally, they received government assistance. Similarly, they earned money from direct selling. Finally, farmers keep their resilience in the face of difficulties during the pandemic.

Moreover, farmers cannot overcome certain socioeconomic obstacles alone. Policies and programs geared towards small-scale farmers are required to help them escape poverty. The benefits may include easier access to formal financial institutions with low-interest loans and streamlined procedures, lower input costs, better irrigation systems, and livelihood initiatives for farmers and their families (i.e., livestock program and crop diversification). A farmer-friendly micro-finance credit company that meets the financial needs of farmers and rural residents is a good example. Furthermore, farmer organizations must be strengthened in order to properly reflect the interests of their members. Additionally, farmers' cooperatives can borrow money from formal institutions and bargain collectively for reduced input costs and higher product prices. This is only possible if these organizations have the necessary leadership and management skills to generate income for their members.

A multi-stakeholder collaboration comprised of rural farmers, Department of Agriculture aid agencies, and local government bodies at various levels - province, municipal, and barangay - can provide farmers with timely and needed assistance. Prioritizing marginalized farmers over dealers, importers, and manufacturers boosts farmers' yields and income, resulting in increased rice and corn sufficiency.

Given the study site, the findings may not reflect the experiences of all farmers locally and globally. As a result, this study suggests more research to be conducted in order to capture the genuine experiences of farmers on a large scale. Future studies could potentially employ triangulation to maximize the benefits of these strategies while avoiding their limitations.

Author Contributions:

Roselle M. Soriano and Carmela Blando gathered data from the participants through interview. Kristine Bernadette Apolonio contributed to the conceptualization of the manuscript particularly on introduction, methodology, and analysis of the data gathered. R.M.S. prepared the first draft. Finally, all authors contributed substantially to the finalization of the manuscript and cooperatively planned for the intervention program to be conducted to address the mental issues of students during pandemic.

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The study was conducted according to the guidelines stipulated in the University Research Manual and approved by the Institutional Review Ethics Committee of QUIRINO STATE UNIVERSITY last October 10, 2021.

Informed Consent Statement:

Written informed consent has been obtained from the participants for publication of this paper.

Data Availability Statement:

The data that support the findings of this study are available on request from the corresponding author, R.M.S.

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Conflicts of Interest:

The authors have declared that no conflict of interests exist.

Reference:

- Ablao, R. (2015). Poverty and the Filipino mindset- <https://www.academia.edu/33521272/poverty>.
- Bochtis, D., Benos, L., Lampridi, M., Marinoudi, V., Pearson, S., & Sørensen, C. G. (2020). Agricultural workforce crisis in light of the COVID-19 pandemic. *Sustainability*, 12(19), 8212.
- Brul, B. (2021). The continuing toll of the COVID-19 pandemic on farmers in the Philippines. <https://grameenfoundation.org/stories/blog/the-continuing-toll-of-the-covid-19-pandemic>
- Coulombe, S., Pacheco, T., Cox, E., Khalil, C., Doucerain, M. M., Auger, E., & Meunier, S. (2020). Risk and resilience factors during the COVID-19 pandemic: a snapshot of the experiences of Canadian workers early on in the crisis. *Frontiers in psychology*, 11, 580702.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Dela Cruz, D. N. J. (2019). "Dry season to come earlier than usual." *The Manila Times Publishing Corp*, <http://www.manilatimes.net/2019/03/21/news>.
- Elleby, C., Domínguez, I. P., Adenauer, M., & Genovese, G. (2020). Impacts of the COVID-19 pandemic on the global agricultural markets. *Environmental and Resource Economics*, 76(4), 1067-1079.
- Espitia, A., Rocha, N. & Ruta, M. (2020). Covid-19 and food protectionism, Policy Research Working Paper, Washington, DC, World Bank. <http://documents1.worldbank.org>.
- FAO & WFP (2020). *FAO-WFP early warning analysis of acute food insecurity hotspots*, Rome, FAO & WFP. <http://www.fao.org/documents/card>.
- FAO (2020). *Rapid assessment of the impact of COVID-19 on food supply chains in the Philippines*, <https://reliefweb.int/report/philippines>.
- FAO, IFAD, UNICEF, WFP and WHO (2019). *The state of food security and nutrition in the world. Safeguarding against economic slowdowns and downturns*.
- Fore, H. H., Dongyu, Q., Beasley, D. M., Ghebreyesus, T. A. (2020). Child malnutrition, and COVID-19: the time to act is now. *The Lancet*, DOI: <https://doi.org/10.1016/S0140>.
- Herliana, S., Sutardi, A., Aina, Q., Aliya, Q. H., & Lawiyah, N. (2018). The Constraints of agricultural credit and government policy strategy. In *MATEC Web of Conferences* (Vol. 215, p. 02008). EDP Sciences.
- Hossain, M. M., Purohit, N., Sharma, R., Bhattacharya, S., McKyer, E. L. J., & Ma, P. (2020). Suicide of a farmer amid COVID-19 in India: Perspectives on social determinants of suicidal behavior and prevention strategies.
- Iderawumi, A. M. (2016). Impact of Micro Credit Financing on Agricultural Production. *ANGLISTICUM. Journal of the Association-Institute for English Language and American Studies*, 4(8), 8-15.
- Jámbor, A., Czine, P., & Balogh, P. (2020). The impact of the coronavirus on agriculture: first evidence based on global newspapers. *Sustainability*, 12(11), 4535.

- Karpman, M., Gonzalez, D., & Kenney, G. M. (2020). Parents are struggling to provide for their families during the pandemic. Washington, DC: Urban Institute.
- Lubang, S. (2019). Towards liberation from debts of Filipino farmers, food & fertilizer technology Center for the Asia & Pacific Region, FFTC Agricultural Policy Platform (FFTC-AP).
- Kuntz, J. C. (2021). Resilience in times of global pandemic: Steering recovery and thriving trajectories. *Applied Psychology= Psychologie Appliquee*, 70(1), 188.
- Lakhan, G. R., Channa, S. A., Magsi, H., Koondher, M. A., Wang, J., & Channa, N. A. (2020). Credit constraints and rural farmers' welfare in an agrarian economy. *Heliyon*, 6(10), e05252.
- Benedek Z, Fertó I, Galamba Marreiros C, Aguiar PMd, Pocol CB, Čechura L, et al. (2021) Farm diversification as a potential success factor for small-scale farmers constrained by COVID-related lockdown. Contributions from a survey were conducted in four European countries during the first wave of COVID-19. Vol. 16, No. 5. <https://doi.org/10.1371/journal.pone.0251715>.
- Mandala, G. N., Sangode, P. B., Devi, S. A., & Gandreti, V. R. R. (2021). Problems and Constraints Faced by Farmers in Financing and Marketing of Agricultural Produce in India. *Universal Journal of Accounting and Finance*, 9(2), 139-144.
- Middendorf, B. J., Faye, A., Middendorf, G., Stewart, Z. P., Jha, P. K., & Prasad, P. (2021). Smallholder farmer perceptions about the impact of COVID-19 on agriculture and livelihoods in Senegal *Agricultural Systems*, Vol. 190. <https://doi.org/10.1016/j.agsy.2021.103108>.
- Moahid, M., & Maharjan, K. L. (2020). Factors affecting farmers' access to formal and informal credit: Evidence from rural Afghanistan. *Sustainability*, 12(3), 1268.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods*, 16(1), 1609406917733847.
- Palo, A. Rosetes, M. & Cariño, D. (2020). COVID-19 and food systems in the Philippines. <https://www.aciar.gov.au/publication/covid19>.
- Pan, D., Yang, J., Zhou, G., & Kong, F. (2020). The influence of COVID-19 on agricultural economy and emergency mitigation measures in China: A text mining analysis. *PLoS one*, 15(10), e0241167.
- Patnaik, N. M. (2020). The effects of COVID-19 and its Psychological impact on people from different strata in India. *Agricultural Extension in South Asia*.
- Philippine Statistics Authority (2019). Minimum wage rates by sector and region, Philippines <https://psa.gov.ph/sites/default/files.pdf>
- Ragasa, C., Lambrecht, I., Mahrt, K., Aung, Z. W., & Wang, M. (2022). 9. COVID-19 undermines incomes, livelihoods in rural Myanmar. *2YEARS*, 58.
- Rosegrant, M., Perez, N., Pradesha, A. and Thomas, S. (2015). The economy-wide impacts of climate change on Philippine Agriculture. <https://www.ctc-n.org/sites/www.ctc-n.org/files/129755.pdf>.
- Rudolphi, J. M., Berg, R. L., & Parsaik, A. (2020). Depression, anxiety and stress among young farmers and ranchers: a pilot study. *Community mental health journal*, 56(1), 126-134.
- Scudellari, M. (2020). How the pandemic might play out in 2021 and beyond. *Nature*, 22-25.
- Shafiai, M. H. M. & Moi, M. R. (2015). Financial problems among farmers in Malaysia: Islamic agricultural finance as a possible solution, Vol. 11, No. 4, DOI: 10.5539/ass.v11n4p1.
- Siddiqui, D., Matibe, E., Obiero, O., Singh, A. (2020). Impact of the COVID-19 pandemic on farmers. Kenya Report, <https://www.microsave.net/wp-content>.
- Thang, T., Trang, T., Linh, N., & Thuy, N. (2020). Impacts of COVID 19 pandemic on smallholder farmers and vulnerable rural people in Vietnam. <https://ap.fttc.org.tw/article/2676>.

- Torero, M. (2020). Prepare food systems for a long-haul fight against COVID-19. IFPRI book chapters, 118-121.
- Ungar, M., and Theron, L. (2020). Resilience and mental health: how multisystemic processes contribute to positive outcomes. *Lancet Psychiatr.* Vol. 7, pp. 441–448, doi: 10.1016/S2215-0366(19).
- UNICEF PHILIPPINES (2021). Effects of COVID-19 on child poverty and efficacy of the Philippines' response. <https://www.unicef.org/philippines/media>.
- United Nations (2020). Maximizing sustainable agri-food supply chain opportunities to redress COVID-19 in developing countries, <https://unctad.org/system/files>.
- United Nations (UN) (2020a). The Impact of COVID-19 on Latin America and the Caribbean. i. <https://unsdg.un.org/resources/policy-brief>.
- Waltenburg, M. A., Victoroff, T., Rose, C. E., Butterfield, M., Jervis, R. H., Fedak, K. M., ... & Zarate-Bermudez, M. (2020). Update: COVID-19 among workers in meat and poultry processing facilities—United States, April–May 2020. *Morbidity and Mortality Weekly Report*, 69(27), 887.
- World Bank (2021). COVID-19 impacts on low-income families in the Philippines. <https://www.worldbank.org>.