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EXPLORING THE REALITY OF HOG RAISERS IN CEBU AMIDST THE AFRICAN SWINE FEVER (ASF) OUTBREAK

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ABSTRACT

Hog farming is a significant industry in the Philippines, providing 60% of the country's animal meat consumption. However, the African Swine Fever (ASF) outbreak has caused its collapse. In effect, the hog raisers stopped their operation and sought alternatives to earn money for the family's needs. As a result, a phenomenological study investigated the hog raisers' lived experiences and how they cope with the existing phenomenon. Six key informants were selected based on inclusion criteria and purposive sampling for one-on-one interviews conducted by researchers. Using Creswell's approach, (1) fear of the virus, (2) frustration from the border controls and lockdowns, (3) broken promises of financial assistance from the Department of Agriculture, and (4) incurred substantial financial loss were themes concerning the lived experiences of the key informants. Also, the key informants shared how they coped with the outbreak, including (1) shifting to a farming business, (2) working in a construction site, and (3) making hollow blocks. An effective approach to combat the ASF outbreak in Cebu necessitates a comprehensive strategy that draws on insights from key informants. It is imperative to establish systems of support that consider the financial, emotional, and psychological needs of those affected. Collaborative efforts with local communities, researchers, and government organizations are also crucial to devising sustainable plans for managing and preventing ASF in the long run. This study sheds light on the obstacles encountered by the hog industry in Cebu and underscores the significance of implementing coordinated measures to mitigate the effects of ASF.

Keywords: African Swine Fever, hog raisers, lived experiences, phenomenology, Cebu, Philippines

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INTRODUCTION

The African Swine Fever (ASF) outbreak has significantly impacted the global hog industry, causing substantial economic losses and disrupting the livelihoods of hog raisers. The World Organisation for Animal Health (n.d) defined it as a contagious viral disease of farm-raised (domestic) and feral (wild) pigs whose mortality rate can reach 100%. In Asia, African swine fever (ASF) was first discovered in Shenyang, a city in China's northeast, on August 3, 2018 (Liu et al., 2020). ASF has just begun to appear in China, the world's most significant producer and consumer of pigs. The Food and Agriculture Organization of the United Nations (2020) reported a 21.3% decrease in port output in China in 2019 compared to the previous year. This decline poses a significant threat to the livelihoods of vulnerable rural families, as well as food and nutritional security, and disrupts the market. Thirty-three ASF occurrences have been recorded nationwide as of October 8 across eight provinces (Wang et al., 2018).



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ASF is a viral disease that is highly contagious and affects both domestic and wild pigs., leading to severe illness and high mortality rates. Since its emergence in China in 2018, ASF has spread to various countries, including the Philippines.

In 2019, African swine fever was discovered in the Philippines, eliminating numerous pigs and considerably decreasing the domestic hog population (Reuters, 2023). Due to a decrease in domestic pork supply, the Philippines has increased its meat imports as local prices have risen, causing inflation to be further impacted. In 2023, it was announced that the first case of ASF infection was detected in Carcar City, Cebu, a well-known location for lechon (Israel, 2023). Even though Cebu has been ASF-free for the past three years, it is not a guarantee that it will not be affected by the virus. According to an article published by the Philippine News Agency on March 31, 2023, the supply of pork and pork-related products in Cebu City's markets remains stable despite the virus's presence in 12 areas within the province (Saavedra, 2023). Currently, Cebu, one of the cities' most populous provinces and a center for hog farming has yet to be immune to the catastrophic impacts of ASF. The outbreak has caused trade restrictions, the culling of diseased pigs, and a downturn in the regional pork industry. Hog farmers in Cebu, who rely on pig farming as their primary source of income and subsistence, have been directly impacted by these impacts. According to a report by Saavedra and Ayuman (2023), the Cebu provincial government has imposed a ban on live hogs, sows, piglets, boar semen, pork, and pork-related products from Negros Island. This decision was made after the African swine fever (ASF) virus was detected in Carcar City.

For several reasons, it is vital to comprehend the situation hog farmers in Cebu are in during the ASF outbreak. In the first place, it offers insights into the issues and challenges these people face, assisting policymakers and other stakeholders in developing suitable interventions and support mechanisms. Second, it clarifies the effects of the ASF outbreak on the economy and society. Lastly, exploring the coping strategies employed by hog raisers can offer valuable lessons and best practices for mitigating the impact of future disease outbreaks.

There is a need for locally focused research that focuses on the unique circumstances of hog raisers in Cebu, even if some studies have looked at the economic impact of ASF on a national scale. Such research can offer a more thorough understanding of the difficulties encountered by hog farmers in this area and the distinctive dynamics affecting their experiences.

In light of the ASF outbreak, this research intends to investigate the realities of hog farmers in Cebu. This study aims to add to the body of knowledge on ASF by investigating the difficulties, economic effects, and coping mechanisms hog farmers face. It also offers valuable information for stakeholders, agricultural organizations, and policymakers. Finally, the results of this research can assist in developing focused interventions and support initiatives to help Cebu's hog farmers recover their livelihoods and deal with the ASF epidemic successfully.

Research Questions

This phenomenology study aimed to unearth the lived experiences of the hog raisers in Cebu who were significantly affected by the African Swine Fever (ASF) outbreak.

Specifically, the following objectives were addressed at the end of the study:

1. To discover the lived experiences of the hog raisers during the African Swine Fever (ASF) outbreak.
2. To bring to light the different coping mechanisms of the hog raisers in managing the phenomenon



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RESEARCH METHODOLOGY

Research Design

A qualitative approach explored hog raisers' experiences during the ASF outbreak in Cebu. Specifically, a phenomenology approach was chosen to uncover their firsthand experiences. This involved interviews with individuals who experienced the phenomenon, which is the foundation of phenomenological investigation (Giorgi, 1985; Van Manen, Moustakas, as cited by Alhazmi & Kaufmann, 2022).

Research Respondents

The researchers used a non-probability sampling method, particularly the purposive sampling technique since this approach allows the researchers to choose the qualified key informants based on the inclusion criteria. Consequently, six (6) key informants participated in the study. The researchers set criteria to qualify individuals to participate; they should be hog raisers living and operating anywhere in Cebu. Additionally, these informants should have firsthand experience of the ASF since that is the considered phenomenon of the study. Moreover, these informants should be willing and not forced to participate in the data gathering.

Research Instrument

This present study utilized a validated and semi-structured interview guide crafted by the researchers to collect the lived experiences of the hog raisers during the outbreak. In the actual interview, the interviewer, who is the primary researcher, will cover the first part of the interview guide, which addresses the lived experiences of hog raisers during the African swine fever. After that, the interviewer will now ask questions about the challenges faced by the hog raisers during the outbreak and how they coped with those challenges they encountered.

Data Analysis

In the work of Creswell (2007), a qualitative study revealed that when examining a topic that impacts many people, attention is often paid to a small number of individuals' experiences. However, generalization becomes meaningless when the researchers know that the fact of interest was in the key informants. When a study addresses the "how" and "why" questions, b) participant responses cannot be manipulated, c) one wishes to cover the contextual circumstances of the phenomenon relevant to the study, or d) there are ambiguous boundaries between the study's background and the phenomenon, a case study design should be considered.

RESULTS AND DISCUSSION

Lived Experiences of the Hog Raisers during the African Swine Fever (ASF)

Theme no. 1: Fear of the virus

Due to the destructive effects of the ASF virus on the local swine sector, pig farmers in Cebu Province have been expressing serious concerns about it for a long time. Both domestic and wild pigs can contract the highly contagious and fatal ASF virus. The worry is caused by the fact that ASF can spread quickly through direct contact with sick pigs, tainted food, or even through unintentional touch with objects contaminated with the virus. Once the virus is present, it can cause extremely high rates of pig mortality, frequently requiring the culling of affected herds to stop the virus from spreading. The local pork supply chain gets thrown off, which raises prices and can cause economic instability in addition to



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causing significant financial losses for the pig farmers. It is even more concerning for pig producers as there is no vaccination or therapy for the ASF virus. Pigs who are infected often display signs including fever, appetite loss, and internal bleeding, which can cause a rapid deterioration in health. Stopping the virus's spread can be difficult because it can linger in the environment for long periods. In addition to the potential for ASF to completely wipe out the swine population in the area, which would endanger their way of life and economic security, pig farmers in Cebu Province are concerned about the direct effects on their enterprises. As a result, the increased concern over ASF highlights the significance of strict biosecurity measures, public awareness efforts, and prompt government engagement to prevent and manage potential outbreaks.

The response of Key Informant No. 5 expressly said that “tungod sa lockdown wala na baligya ang mga baboy hangtod na hurot nalang tanan ug ka igo sa ASF virus, patay tanan baboy human ni igo ang maong virus.”

According to an article, it is crucial to have a robust disease prevention program to safeguard against the virus (Wang et al., 2018). Daily good hygiene can also help reduce germs entering the farm and keep the animals healthier (The Livestock Project, 2022). Furthermore, a biosecurity plan was recommended as one of the valuable solutions to the problem (GF-TAD, n.d.). Biosecurity measures such as restricting visitor access, implementing good hygiene practices, disinfecting footwear or using dedicated footwear, maintaining closed herds, and quarantining new animals can prevent the introduction of viruses onto farms. This plan identifies potential pathways for introducing and preventing the spread of the disease into a country, zone, compartment, or farm. It describes the measures that are being applied to lessen the risk.

Theme no. 2: Frustration from the border controls and lockdowns.

The severe border controls and movement lockdowns enacted during the African Swine Fever (ASF) epidemic have caused hog farmers in Cebu Province to be more frustrated and concerned. While necessary to stop the spread of the highly contagious virus, these efforts have severely interfered with farmers' regular activities and means of subsistence. The lockdowns have restricted the transit of pigs and pork products, making it more difficult for farmers to sell their livestock and satisfy consumer demand. This results from financial losses and more significant uncertainty about the company's future. The uncertainty surrounding the potential timing of these restrictions being eliminated adds to the frustration in an already difficult circumstance.

In addition, the restrictions have made getting the feed and veterinary services needed for pig raising challenging. Farmers have needed help getting to markets and necessary services, which has increased worries about animal health and total production. Pig farmers' concerns are exacerbated by their inability to respond quickly to problems like feed shortages or to deliver timely veterinary care as they work to maintain the health and welfare of their livestock. The delicate balance that authorities must find between limiting the ASF epidemic and minimizing the negative consequences on the livelihoods of pig farmers in Cebu Province has been underscored by the dual impact of economic hardship and logistical challenges.

Key Informant no. 2 also stated that “perti gyud lisura adtong mga panahona, ang mga sakyanan nga kargahanan ug mga baboy bantayan pag ayo sa mga taga department of agriculture kung asa ka gikan or asa ka padulong. Gi bawalan nila ang pag gawas sa mga binuhing baboy, dili pwede ibaligya sa merkado maski walay problema or sakit. Hasta sa pag palit ug feeds sa mga baboy lisod kay Pa lukaton



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pa ka nila ug pink form sa municipyo ug interviewhon paka sa municipal agriculturist or MAO para magpa ma tuod nga lumad ka nga taga diha nga barangay ug dili ka mag karga ug baboy (These are very difficult times for the swine farmers, the farm vehicles are being closely monitored by the staff of department of agriculture. Pigs within the 1-kilometer radius where ASF is being declared are not allowed to be marketed in the local slaughterhouse or auction market. Municipal agriculture requires a pink form before you can sell your hogs to make sure your barangay is not part of the ASF outbreak and to justify your true farm address. Hogs are not allowed to go out of the farm premises, to be marketed even those that are healthy and have no clinical signs of ASF virus. Even when buying feeds for the farm, it's very difficult.)

Strict border control is necessary to lessen the chances of different countries being infected with the virus. In their 2020 study, the researchers found that controlling ASF is difficult due to geography, inadequate veterinary structures, and ineffective animal traceability systems (Bora et al., 2020). South Korea's mitigation plan is to have a control zone within a 500-meter radius of an infected farm, a protection zone within a 3-kilometer radius, and a surveillance zone between a 3- and 10-kilometer radius (Kim et al., 2021). The United States Department of Agriculture (n.d.) recommends that international travelers declare if they have recently visited farms to the U.S. Customs and Border Protection. Additionally, they advise these individuals to ensure that any clothing or shoes worn around pigs have been adequately cleaned, disinfected, or disposed of before re-entering the U.S. This is to prevent the spread of potential diseases.

Theme no. 3: Frustration of the broken promises of financial assistance from the Department of Agriculture (DOA)

The Department of Agriculture's promise of 5,000 pesos in monetary aid was meant to be a lifeline for the pig farmers struggling with mounting costs and unstable markets during the ASF outbreak (DA Press Office, 2021). Nevertheless, when days became weeks, and weeks became months, that hope vanished and was replaced with a sharp pain of disappointment. As the pig farmer thinks about lost possibilities to take care of their swine, invest in necessary resources, and offer a semblance of stability for their family, the weight of broken promises hangs heavily over them.

The Key informant no. 1 told the enumerator that “Ingun sila mo hatag ang taga agriculture ug 5000 kada baboy nga ilang imbargohun tungod sa possible na nga infected as African Swine Fever pero katong uban namong baboy nga na apil sa imbargo ug sa mga kaila namo hangtod karon wala man gyud mi naka dawat ug bayad.” (The local agriculture said that there would be an indemnification of 5000 pesos for every pig condemned due to ASF or possible ASF, but until now, farmers have not received any cash assistance from them.)

In other provinces, like Antique, the provincial government gave the farmers two million pesos as financial aid (Petinglay, 2023). The amount varies, such as 2,000 pesos for farmers with one to five hog mortalities, 3,000 pesos for six to nineteen deaths, and 4,000 pesos for twenty deaths and above. Financial aid amounting to 10.4 million was distributed to 1,225 swine farmers in twenty municipalities in Iloilo province, according to PICA0's report in 2023. Additionally, the provincial government has implemented a sentinel program at the barangay level as part of their plan for virus recovery.

In recent news published in Sunstar Cebu last September 12, 2023, the Department of Agriculture (DOA) will extend financial assistance worth 120 million pesos to a group of pork producers in Central



Visayas (Padronia, 2023). The funds are intended to repopulate swine breeder stocks in the region, stressing the importance of Central Visayas as the second-largest producer of hogs in the country.

Theme no. 4: Incurred substantial financial loss.

The swine industry has suffered enormous financial losses due to the emergence of African Swine Fever (ASF). The movement of pigs has been severely constrained, and the supply chain has been interrupted due to the implementation of municipal lockdowns in essential locations like Cebu City, Mandaue City, and Lapu-Lapu City, as well as transportation restrictions. As a result, there are now too many pigs in small-town markets. The cost of buying pig live weight has significantly decreased due to the oversaturation of local marketplaces. An oversupplied market and falling pricing have seriously undermined pig farmers' financial security as demand declines due to reduced economic activity and consumer concern.

The interconnected challenges of ASF and lockdown-induced supply chain disruptions have created a complex predicament for pig farmers. The inability to access significant markets has led to inventory surpluses and obstructed their capacity to tap into higher-value markets, exacerbating the financial losses. The reduced prices of pig live weight need to cover production costs and pose a daunting threat to the viability of many pig farming enterprises. Addressing these financial losses requires a multi-faceted approach involving disease containment measures and strategic initiatives to establish alternative distribution channels, promote local consumption, and diversify revenue streams for pig farmers to weather this storm and rebuild their industry in the post-ASF landscape.

One of the key informants (No. 6) declaimed “Grabe gyud ang pilde namo, dili mi maka pa gawas sa among mga baboy ug dili pod namo pwede ihawon for personal consumption. Unsa man among ipalit ug feeds? Ug sa dihang pwede na mapa gawas sulod sa municipality kung asa ka nahimutang, perting napod daghana supply sa baboy kay ang tanan namuhi nalisang sa sa ASF, ila nalang gipang baligya ilang mga baboy maski dili pa sakto sa edad kaysa kuno mo samot ka dako ilang pilde.” (Our financial losses are very high. We cannot sell our hogs to the market; we cannot even slaughter them for our own consumption. How can we pay for our feeds? When the border controls were stopped, there was an extreme surplus of hogs due to farmers selling their livestock even if they were not marketable yet due to the fear of the virus.)

According to a study by Cooper et al. (2022), both small and large farmers have suffered financial losses due to the ASF epidemic. Although commercial farms may have more financial resources to cope with the impact of ASF for longer, all farmers have been affected by the outbreak. To support the value chain, governments could focus on aiding backyard farmers who expressed a desire to return to pig farming. Getting these farmers back into the industry is crucial to ensure the continuity of the value chain. Weaver and Habib's (2020) research highlights the concerning effects of ASF in the Republic of China and surrounding areas. The study found that ASF has had a considerable economic impact, with direct costs reaching up to \$130 billion for China, which produces half of the world's pork. Smallholders have disproportionately felt this burden and are now more vulnerable to poverty and food insecurity. Additionally, ASF has caused an increase in pork and food prices, negatively impacting human health, trade, climate change resilience, and local environments.



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Coping Mechanisms of the Hog Raisers

Theme no. 5: Shifting from hog raising to farming

The farmer decided to change his agricultural endeavors when his pig farm was infected with African Swine Fever (ASF); he fearlessly switched his attention away from pig farming to growing vegetables after realizing the need for a resilient and sustainable strategy. In addition to reducing the hazards related to ASF, this change allowed him to diversify his income streams and improve local food security by growing wholesome vegetables for the community.

Key informant no. 2 stated: “Nag tanum nalang mi ug mga utanon para naa mi ma kunsumo sa among pamilya. Ug naa pay sobra ma baligya pod namo ang uban sa merkado. (We planted vegetables of different kinds to help augment my family’s need, and if there is extra, I will sell it to the local market.)

Theme no. 6: Working in a construction site as a ‘band-aid solution’

Key informants indicated they were forced to make a heartbreaking decision when African swine fever infected his once-vibrant pig farm. He switched from caring for pigs to laboring on building sites because he was determined to support his family. He put away his dungarees and picked up a hard hat.

Key informant no. 3 shared: “Ni trabaho nalang ko ug construction para lang gyud naa ko ma palit pag kaon sa akong pamilya. Maski bug.at sa akong dughan. (We shifted to construction work with a heavy heart just to provide food for our family.)

Another response from the key informant “Ni-trabaho nalang ko sa ako kaila sir sa gipatukod niya balay para lang jud naa mi makaon sa ako pamilya sa mga nilabay na adlaw na nawala amo piggery business (I worked as a construction worker on my friend's house project as an alternative way to earn money for my family's food for multiple days).

Theme no. 7: Making hollow blocks as another way to survive

Many pig farmers quickly modified their livelihoods by switching to producing hollow blocks in response to the devastating African Swine Fever (ASF) outbreak that ravaged their farms. Since ASF is contagious, the pig farming business suffered enormous losses, forcing these farmers to look for alternate income streams. They focused on the construction industry and started producing hollow blocks after realizing the necessity for diversification. In addition to aiding them in their financial recovery, this change showed their adaptability and ability to innovate in the face of difficulty.

Key informant no. 6 stated that “namuhat nalang mi ug hollowblocks sir, para naa mi ma supporta sa among mga pamilya, maayo pod ni kay deli delikado ma igo ug sakit kay wala may kinabuhi.”

Numerous studies agree that individuals will seek alternatives to cope with a phenomenon. In the study of Xu et al. (2021), pig farmers have two approaches to coping with epidemics: problem-orientedness and emotion-orientedness, influenced by their perception of epidemic risk and attitude toward managing. Higher risk perception leads to problem-oriented coping, while a heightened sense of ability and lower perception of effort lead to corresponding behaviors. The Vice President of the People for the Ethical Treatment (PETA) of Asia, Jason Baker, suggests a problem-oriented coping approach for



farmers in the Philippines (SciDev.Net, 2021). He proposes they use their land to grow sustainable and healthy crops that do not threaten any lives. Mr. Baker also recommends that Filipino shoppers shift to safer vegan foods like tofu. A scholarly paper represents the best illustration of emotion-orientedness that avoiding dealing with a problem leads to a higher degree of depression, anxiety, and stress (Elshaer, 2023). With that in mind, coping, in any way, is imperative to lessen the adverse effect of a phenomenon.

In a different context, Dayour et al. (2020) expressed that small-medium enterprise (SME) owners should prioritize having insurance as one crucial measure to cope with the losses from the impact of the COVID-19 pandemic.

CONCLUSION

The enormous effect that African swine fever (ASF) has had on the local hog industry in Cebu has been made clear by this phenomenological study, which has thrown light on it. The study revealed many facets of this terrible disease through in-depth interviews. The study's initial area of focus is on the lived experiences of hog farmers in Cebu, wherein, according to key informants, the emotional and psychological toll it has had on their lives as pig farmers and stakeholders is incomprehensible, in addition to the economic and agricultural losses, ASF also took a toll on family relationships as the financial burden and uncertainties strained domestic harmony while in the farming community, the outbreak led to a sense of isolation and mistrust disrupting once cohesive bonds among fellow farmers. The researchers also discovered recent discrepancies in the Department of Agriculture's policies. They have used color coding for provinces impacted by African swine fever (ASF) to restrict the epidemic.

On the other hand, they have not given huge ASF-free farms shipping licenses. This counterintuitive strategy has caused an overstock of hogs initially planned for export on the local market, negatively impacting the live hog market price. The financial difficulties experienced by backyard hog farmers, who depend on steady pricing for their income, have been made worse by this unstable market environment. A more well-rounded and comprehensive policy strategy is urgently required to deal with these severe problems in the swine business.

Considering the identified themes, tackling the ASF outbreak in Cebu necessitates a diverse approach when considering the key informants' tales. The coping mechanism of pig farmers' quick response by switching to hollow block manufacturing highlights their exceptional resiliency and inventiveness. Other farmers planted various veggies to supplement their families' needs, and if there were any extras, they would sell them to the neighborhood market. In contrast, others opted to work as construction workers. There is an urgent need for support networks that include financial aid and emotional and psychological help for people affected. The findings also highlight the significance of working together with local communities, researchers, and government organizations to create long-term plans for managing and avoiding ASF in the future. This study provides insights into the experiences and difficulties faced by the local hog business in Cebu and emphasizes the need for coordinated measures to reduce the impact of ASF.



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