

**CHALLENGES AND PIG KEEPING RAISING PRACTICES IN CARMEN,
BOHOL**

**College of Teacher Education
BOHOL ISLAND STATE UNIVERSITY
Zamora, Bilar, Bohol**

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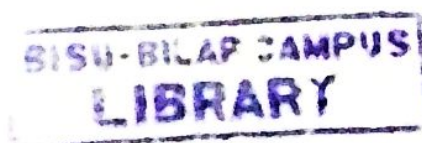
CHALLENGES AND PIG KEEPING/RAISING PRACTICES IN CARMEN,
BOHOL

A THESIS
Presented to the Faculty of the
College of Teacher Education
BOHOL ISLAND STATE UNIVERSITY
Zamora, Bilar, Bohol

In Partial Fulfillment
Of the Requirements for the Degree
In Bachelor of Technology and Livelihood Education

Liezbeth A. Pasoc
Jessa T. Lomosbog
Servando A. Boyonas II


June 2022




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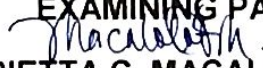

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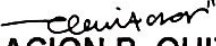
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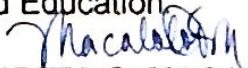

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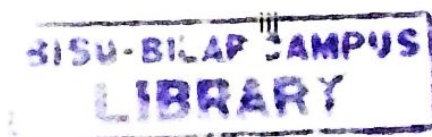

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ACKNOWLEDGMENT

Immeasurable and deepest appreciation and deepest gratitude for the help and support extended to the following persons who have contributed in making this study possible.

First and above all to **ALMIGHTY GOD** for without His grace and blessings, this study would not have been made possible.

Arsenio B. Lejoc Jr., Thesis adviser for the guidance and technical assistance throughout the study from inception, implementation and writing the final output of this dissertation;

Albert A. Suarez, MSc Thesis statistician for his support, advices, guidance, patience, valuable comment, suggestions and interpretations of the data used in the study;

Cecilio C. Ba-ay Jr. for his diligence in giving corrections and sharing of his expertise from proposal making until the completion and final improvement of this manuscript;

Ma. Quimar Q. Gahit, EdD Dean, College of Teacher Education, for her support and approval of the request of permission to conduct the study outside the campus.

Marietta C. Macalolot, PhD Campus Director, for her outstanding support for the whole length of the study.

Hon. Ricardo Francisco A. Toribio Jr., Carmen Municipal Mayor for their invaluable cooperation and support to the researchers for conducting this study on their perspective localities;

Municipal Agriculture Office (MAO), for giving the researchers the additional information needed for the study;

To the researchers' parents, who give their moral and financial support for their children's achievement;

To all the respondents, for their cooperation and the ample time given to researchers to acquire the data needed for the accomplishment of the study;

To all of you who made the researchers believe that there is nothing impossible in realizing dreams through hard work and faith in God. A million thanks!

To God be all the Praise and Glory!

Liezlbeth A. Pasoc
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ABSTRACT

The aim of the study was to assess the challenges and pig keeping/raising practices in Carmen, Bohol. Specifically, it sought to determine the following: pig keeping/raising profile in terms of main purpose of pig keeping/raising, major pig feed sources and frequency of pig feeding (per day); pig keeping/raising practices; and challenges met by pig keeper/raisers. The study used descriptive survey method to achieve the objectives of the study. The data gathered were statistically interpreted using percentage. In the fulfillment of the study, a descriptive research questionnaire was employed for collecting data. The respondents of the study were the pig raisers of Carmen, Bohol acquired from stratified random sampling with the list came from the municipality of agriculture of the town mentioned. The survey was done through interview and face to face discussion with the pig owners. The study revealed that the main purpose of pig raising is to get additional income for the household and they used commercial feeds in feeding their pigs thrice a day. Also, pig raisers refused to consult veterinarians due to its cost so they prefer to use traditional medicine as a way of treatment. Lastly, among the challenges met by pig raisers, diseases is the mostly encountered specifically, diarrhea, followed by high cost of feeds and malnutrition. Based on the findings and conclusions of the study, the following recommendations were suggested. The Municipal Agriculture Office (MAO) should conduct seminars/programs to educate pig raisers about better production system on pig raising. The Local Government Unit (LGU) should provide free access to veterinary services and medicines. The Government may provide a subsidy to local pig raisers for insurance purposes. The Department of Agriculture should provide seminars on how to control /treat pig diseases.

TABLE OF CONTENTS

TITLE PAGE	.....	i
APPROVAL SHEET	.....	ii
ACKNOWLEDGMENTS	.....	iii
ABSTRACT	.....	v
TABLE OF CONTENTS	.....	vi
LIST OF TABLES	.....	viii
LIST OF FIGURES	.....	ix
Chapter		Page
1 THE PROBLEM AND ITS SCOPE		
Rationale	.....	1
Literature Background	.....	2
THE PROBLEM		
Statement of the Problem	.....	13
Significance of the Study	.....	13
RESEARCH METHODOLOGY		
Design	.....	14
Environment and Participants	.....	14
Instrument	.....	15
Data Gathering Procedures	.....	15
Statistical Treatment	.....	16
DEFINITION OF TERMS	.....	16

2	PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA	18
3	SUMMARY, COMCLUSIONS AND RECOMMENDATIONS	
	Summary of Findings	22
	Conclusions	23
	Recommendations	23
	REFERENCES	24
	APPENDICES	
	A. Transmittal Letters	26
	1. Campus Director	26
	2. Carmen Municipal Mayor	27
	B. Summary of Findings	28
	C. Questionnaire	29
	RESEARCHERS' BIO-DATA	30

LIST OF TABLES

Table		Page
1	Purpose of Pig Keeping/raising, major pig feed sources and frequency of pig feeding (per day)	19
2	Pig keeping practices	20
3	Challenges met by pig keeper/raiser	21

LIST OF FIGURES

Figure

1	Theoretical and Conceptual Framework of the Study	12
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Chapter 1

THE PROBLEM AND ITS SCOPE

Rationale

Pig production is an important industry and it is one of the most popular business enterprises in the Philippines. Its popularity can be attributed to its profitability and to good market for finished hogs and pork. It can be engaged in micro or small to large scale. It is an integral part of a farmer's economy in many parts of the world. This is increasing from time to time in many parts of tropical countries. Increased demand on the international market, due to the increased number of pork consumers and the profit obtained from the sector make the production increase rapidly (Robi, et al. 2020).

Disease has been identified as the major problem to pig production in Laos. Classical swine fever (CSF) is recognized as the infectious disease of pigs that has the greatest importance to pig production and likely accounts for a large number of pig deaths in all production systems). Other viral diseases of swine and bacterial diseases such as salmonellosis (*Salmonella choleraesuis*) and erysipelas (*Erysipelothrix rhusiopathiae*) are likely to have a large impact, as does infestation with the parasite *Ascaris suum*, which results in retarded growth and production losses. Poor nutrition is also a major constraint to pig production in Laos and contributes to poor resistance, which in turn exacerbates the problems of infectious disease. Poor nutrition is the result of feeding poor quality feed and the lack of availability of higher quality feeds such as broken and cracked rice, cassava and

maize. The high cost of quality commercial feed limits its use predominantly to semi-intensive pig farmers (Vongthilath and Blacksell, 2000).

In the Philippines, pig farming faces many challenges including high feed costs, inadequate slaughter facilities, unorganized marketing, poor breeding stock, Tran's boundary diseases and inadequate extension service. It, however, appears inadequate slaughter facilities and high feed costs are the top two major challenges. It also experience high feeds and energy prices that are prevalent; these affect all producers and contribute to a relatively high cost of production for the domestic industry.

Consequently, the researchers were able to observe the production of pigs in the locality, that's why the researchers conducted this study. The researchers need to evaluate the way their production has been doing in terms of challenges and practices presented along their experiences.

Literature Background

Based on the theory of production by Robert Dorfman (2016), an effort to explain the principles by which a business firm decides how much of each commodity that it sells (its "outputs" or "products") it will produce and how much of each kind of labor, raw material, fixed capital good, etc., that it employs its inputs or factors of production it will use. It involves some of the most fundamental principles of economics. This includes the relationship between the prices of commodities and the prices of the productive factors used to produce them and

also the relationship between the price of commodities and productive factors on the one hand, and the quantities of these commodities and productive factors that are used.

Furthermore, the theory of constraints by Goldratt (1984), stated that every process has a single constraint and that total process throughout can only be improved when the constraint is improved. It seeks to provide precise and sustained focus on improving the current constraint until it no longer limits throughout, at which point the focus moves to the next constraint. It also provides a specific methodology for identifying and eliminating constraints referred to as the Five focusing steps namely identify, exploit, subordinate, elevate and repeat.

Pursuant to Administrative Order 41 Series of 2000 Section 1 which is the code of practice and minimum standards for the welfare of pigs. Welfare considerations are important for the keeping and farming of animals. Standard procedures in animal welfare are not only important legally, but also have direct economic benefits by enhancing productivity. Good husbandry is essential for good welfare, modern breeding, feeding, housing, and management systems. This will lead to an improvement in the quality of life for the pigs as well as an improvement in the quality of the product. This code is intended to encourage all persons involved in the pig industry to adopt the highest standards of husbandry.

Pigs are kept under conditions ranging from backyard to large commercial enterprises where they are totally reliant on humans for all their daily requirements. Those concerned with the day-to-day care of the pigs shall treat them with skill and

consideration. Their welfare shall be safeguarded under a variety of management systems. Pigs shall be provided with comfortable and secured accommodations. When pigs are kept outside, they shall have shelter available to protect them from inclement weather and access to shade from direct sunlight. Access to high ground shall be available where there is danger of flooding. Pigs confined in houses shall have sufficient space for each to feed, lie down stretch, and express their normal behavioral patterns.

Swine production in the Philippines is a 191 billion industry and is the largest among the livestock and poultry industries of the country. It plays a major role in ensuring the country's food security and ranked eighth in the world in terms of the volume of pork production and number of breeding sows; Despite being dynamic and technologically advanced, the local pig industry is still confronted with inefficient production due to low sow productivity, high mortality due to inefficient diagnostic tool and lack of native pig genetic resource conservation, improvement and utilization initiative, (Livestock Research Division 2016).

Today's pork industry is global in nature, and pork producers find themselves always looking for areas of competitive advantage (Ken Engele and Lee Whittington 2006). One significant area of competitive advantage is through the early adoption of research results. Producers who are successful in identifying and implementing new technologies and management strategies create an advantage through lowering their cost of production, or increasing the amount of revenue generated. However, the perceived financial risks and rewards may limit technological action.

According to Whittington, et. al (2006) estimating the economic impact of research on the commercial farm is extremely important when adopting new technologies or management strategies. To value the economic impact of research, a number of Prairie Swine Centre experiments between 1999-2004 were analyzed. In total 22 projects were selected for a detailed financial analysis, with the final result being the net benefit of specific research projects. Research project were then prioritized in terms of net benefit per hog marketed and ease of production.

It is important to appreciate that the hog industry consists of a series of activities spanning from production of feed inputs, through actual hog production, to the processing and distribution of pork products. Hence the total economic effect of the hog industry is much larger than direct employment and activity on swine farms. Local economies that are more heavily involved in the different stages of the industry (for example growing the feed inputs, raising the hogs, and operating slaughtering facilities) stand to reap a higher portion of the total economic benefits than communities that are less involved in the cumulative industry activities. As such, it is important to again note that each case tends to have a significant number of unique factors involved that ultimately drive resulting economic impacts (Whittington, etc. 2006).

As Costales, (2002) stated that the backyard pig raisers production and market characteristic in the rich pig producing region of Southern Luzon revealed that the access to these scarce resources for expanding small holder pig production is unevenly distributed across locations (provinces). According to him the presence

of institutions like cooperatives that directly link the producers to the whole market chain is of equal importance to expand their production and profit. Thus, in order to develop the whole pig industry of the Philippines, it is essential to address the different problems of the backyard pig sector which plays a significant role in the in the country's livestock industry.

Mostly the causes of these problems can be traced from several factors. Expensive feeds are affected by political-economic factors: middlemen-induced low prices of output and inefficient marketing by socioeconomic factor, spreading of diseases, low animal performance and waste disposal by physical factors. The determination of various factors shows that economic considerations are their strongest drive for venturing to this to small-scale backyard pig raising (Fradejas, 2005).

It was reported that because of religious taboos for pork consumption in the country, producers have fear of poor domestic marketing potential. The government should also formulate an appropriate policy regarding pig production without delay and should be held in the national livestock development program. Animal constraints were perceived by farmers to be important.

Also, this study revealed that the main purpose of production is to get additional income for the household. It also pointed that the pig farming enabled producers to generate additional income. It is the only and first of its kind and has limitation in analysis of whole factors available in the farming system. As pigs are among the animal species which are expected to fulfill the growing demand of meat

in developing countries, better production system and value creation approaches should be introduced in the farming system.

Pig production practices by small holder farmers in two distinct production systems geared toward addressing their constraints and prospects (Kahi, et. al 2014). Marketing of pigs was mainly driven by the type of production operation. Finances, feeds and housing were identified as the major constraints to production.

Farmers were involved in different production operations depending on the resource's availability and target market. The constraints identified through improved management, health care and extension support coupled with genetic improvement to provide quality breeding animals. To counter the feeding challenge, it is important to analyze and record the proximate compositions of commonly used local non-conventional pig feeding materials to enable well balanced rations that will supply the required nutrients. It is important for farmers to understand the market demand and influence of seasonality and therefore appropriately allocate resources for increased profitability.

Efficiency of pig production could be increased through better use of available resources, given the current state of technology and through policies that would encourage farming. Pig famers also are encouraged to belong to pig farmers association around them so as to have access to relevant information about new technologies or practices and the accessibility of credit facilities (Gona, et al 2009).

Alongside economic growth, animal production is increasing rapidly in Asia. However, the increase in production has brought forth a host of social, economic and environmental concerns. Specifically, animal health, animal productivity/genetic make-up, extension services, provision of finance to small-scale producers and marketing.

As Verstegen, et. al (2006) stated that intensive pig farming rely on imported genetics, technology and feed. In addition, there is concern about the rising cost of feed components, leading to efforts to seek feeds substitute and to liberalize the importation of pig feeds. Besides standing as an independent sector, the commercial pig industry sometimes also arranges a contract with small farmers to grow and fatten pigs. The company provides all the inputs and other technical support while the farmers supply labor and the housing facilities.

In accordance to that study, several factors have been reported to limit pig production. First is the provision of adequate nutrition for livestock which is considered a major problem in the region. Through this, feed accounts for almost 70% of the production cost. Some smallholders overcome the prohibitive cost of feed by adding supplements to feed concentrates. Using exotic breeds, and feeding the animals with a mixture of commercial feed and local cheap available by products are also usual practices. Meanwhile, production is scattered and the quality of feedstuffs is often low. There are also problems related to seasonality and processing and storage facilities. Handling and collection costs are high. There is lack of managerial and technical skills to utilize the feeds.

Another constraint is the failure to monitor infectious disease in which obtain as a major limiting factor for pig production. Since pig producers are small holders, a major problem that prevails is the low level of knowledge and understanding among livestock producers regarding the benefits of disease control. Although commercial pig raisers are aware of the benefits of disease control, they are not as knowledgeable about the requirements for a cooperative national disease monitoring program.

Lastly is the genetic make-up. In small scale pig production animals are fed a low-quality diet and are not protected from diseases. In these conditions, genetic traits for survival may be much more important than those for production. Improvements in production traits only become important once certain conditions in health and nutrition are met and certain production levels reached.

Additionally, it has been suggested that in some countries, government policies and interventions might in reality have only a minor influence on the development of pig industry. The sustainable development of pig production might require a new form of intensive and complex farming systems on the existing small-scale farms. Farmers should be involved in all stages of any research and development program. Transformation of know-how from scientist to farmers should be conducted at a grassroots level at which the perceptions of a group. Finally, the system should once establish, has to be monitored to prevent its sustainability.

The main constraints of pig feeding were predominantly four. These were; high cost of feeds, time requirement to collect feeds, lack of fuel food to cook the feed and difficulty in transportation. These constraints all related to the time and expenses incurred in feeding the animals and no mention of the lack of knowledge on the feeding practices (Pool et. al 2010).

It is stated that one of the major constraints of the animal industry especially in developing countries like Nigeria is capital. Financial inadequacies have led to slow growing animal industries or moribund ones or even destroyed animal production industries. Low income earners who dominate the animal industry are not able to cope with the demands of the industry especially when production is not at its optimum level. Arbitrary cost of feed and feed ingredients can hinder pork production (Osasogie, 2016). Also, feed cost and the price of feed ingredients had a substantial impact on profitability of pig production. Higher feed prices can quickly convert profits into losses.

The combination of conventional and participatory approaches concluding with a stakeholder discussion, has enabled that identification of health and management related constraints to pig production among small holder farmers in San Simon Pampanga, Philippines. It was also possible for the project team and stakeholders to jointly prioritize activities, an example of the "deciding together" stance of participation for the immediate future to address this constraint (Blackall, et al. 2020).

As Pezo, et. al (2014) stated that pig keeping systems are dominated by tethering and scavenging in rural areas. In peri-urban and urban areas, intensive production systems are more practiced, with pigs confined in pens. The main constraints identified by farmers include high disease burden such as African Swine Fever (ASF) and parasites, poor housing and feeding practices, poor veterinary services, ineffective drugs and a general lack of knowledge on piggery management. Indigenous curative treatments include the application of human urine and concoctions of local herbs for ASF control and use of old engine oil or tobacco extracts. There is need for better technical services to assist farmers with these problems.

The theoretical and conceptual framework of this study is presented in Figure 1. The study was anchored on the theories and legal bases quoted in the diagram.

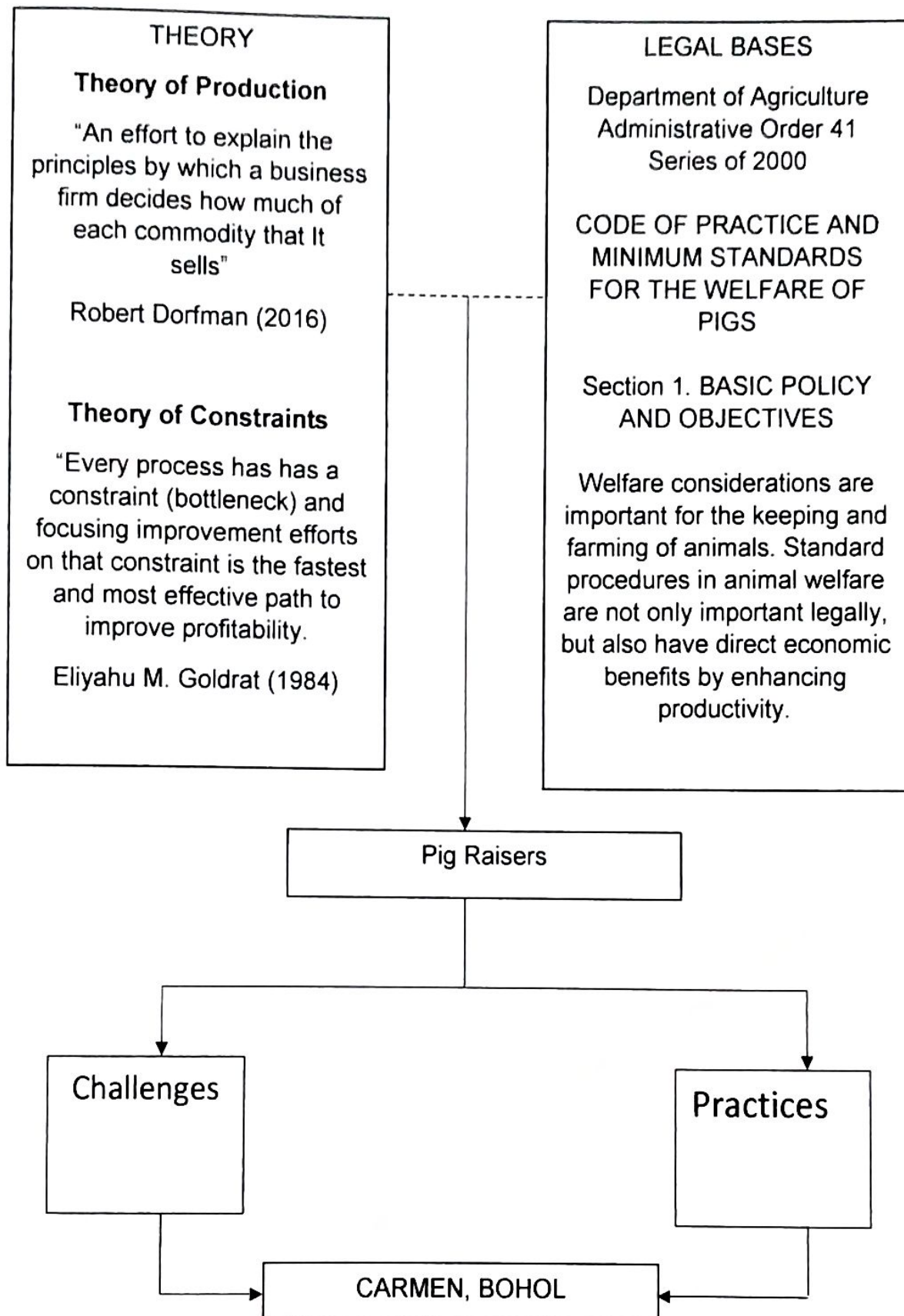


Figure 1. Theoretical and Conceptual Framework

THE PROBLEM

Statement of the Problem

The main thrust of the study is to assess the pig production and constraints in Carmen, Bohol.

Specifically, the study aimed to determine the following:

1. What is the respondents pig keeping/raising profile in terms of:
 - a. Main purpose of pig keeping/raising;
 - b. Major pigfeed sources; and
 - c. Frequency of pig feeding (per day)
2. What are the respondents pig keeping/raising practices?
3. What are the challenges met by pig keeper/raisers?

Significance of the Study

This conducted research would not be worthless. The researcher made the study in order to help the society. The results of the study would be beneficial to the following:

Backyard Raisers. It will motivate them to pursue this business as one of their sources of income.

Industry Raisers. It will be a great advantage for them to continue serving and supplying consumer.

Local Community. The result of this study could help them gain ideas on living which could sustain steady income.

Agriculturist. It will serve as their basis to promote pig raising upon knowing that it has a big impact on the economy.

Department of Agriculture. It will serve as their basis upon enticing people to continue pursuing hog raising business once they see the result of the study.

Future Researchers. This will serve as their guidance upon making their study which is related unto this.

RESEARCH METHODOLOGY

Design

The researchers used descriptive-survey type of questionnaire as a way of data gathering. It was collected and summarized. The questionnaire was utilized to gather pig raisers perspectives upon knowing that they have the capacity to give their own opinion on their experiences on pig raising.

Environment and Participants

The study was conducted in Carmen, Bohol.

The study was conducted at Carmen, Bohol which is situated at the center part of the province of Bohol. This municipality is composed of 29 barangays. The respondents of the Study were the selected Pig Raisers/Keepers in Carmen, Bohol. Carmen Bohol acquired from a purposive random sampling. The respondents of the study were selected through random sampling and there were 178 respondents.

Instrument

The study used descriptive questionnaire. The questions were all about the challenges and pig keeping/raising practices in Carmen, Bohol. The questionnaire was prepared, revised and reviewed by our adviser to develop the relevance, structure and clarity of the statement's constructions. The data gathering tool is divided into three (3) parts. The first part is the respondents pig keeping/raising profile. Second is the respondents pig keeping/raising practices. And the third part is the challenges met by pig keeper/raisers.

Data Gathering Procedures

The researchers addressed a letter to the campus director for the approval. When it was done another letter also was sent to the Municipality Mayor to gain approval in visiting their town. After it has been approved, the researchers requested the list of residents who had a raised pig at the Municipality of Agriculture Office. With all the permission being adhered the survey conducted based on the list being given. It was distributed to the residents of the town who

was registered in the agriculture office, following the protocols administered at this time of pandemic. After gathering information and data, the researchers proceed to the evaluation of data. The result of the survey was tallied, analyzed and interpreted.

Statistical Treatment

The data collected were analyzed through a simple percentage using the formula

$$P = \frac{F}{N} \times 100$$

Where:

P = percentage

F = frequency

N = number of respondents

Definition of Terms

Challenges. It is an obstacles or problems that is encountered by the pig raisers/keepers.

Crop. Plant or product that is grown or harvested to be used as food for the pigs.

Extra Income. The capacity of gaining another source of income aside from usual income received.

Grazing. A method of animal husbandry whereby domestic livestock is allowed outdoors to roam and consume wild vegetations.

Household Offal. A wet feed consisting of mostly kitchen waste mixed with water.

Home Consumption. It is using the reared pigs for any family occasions.

Practices. The actual application of the idea or method to be used.

Pig Raising. The raising and breeding of domestic pigs and also a branch of animal husbandry.

Profit. It is the revenue remaining after all costs are paid through.

Chapter 2

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the presentation, analysis and interpretation of data together with the analysis of its findings. The data were collected through the questionnaires answered by 178 respondents. The answers were presented accordingly based on the items posed in the specific questions of the questionnaires. This includes the analysis of the pig keeping/raising profile in terms of the main purpose of pig keeping/raising; Major pig feed sources; frequency of pig feeding (per day), respondents pig keeping/raising practices and challenges met by pig keeper/raisers.

1. Pig Keeping/Raising Profile

Table 1 illustrates the main purpose of pig keeping, major feed sources of pigs and the frequency of pig feeding. Data revealed that majority (74.16%) of the pig raisers main purpose is to gain extra income while (11.24%) was used for home consumption. This implies that pig raisers main purpose of production is to get additional income for the household. As Asmare et. al (2014) also pointed that the pig farming enabled producers to generate additional income.

For the pig feed sources and the frequency of feeding further revealed that most of the pig raisers (61.80%) used commercial feeds while household offal was least used (1.69%) by the pig raisers for feeding. For the frequency of pig feeding (44.94%) of the pig raisers feed their pig thrice a day while (24.16%) of the pig

raisers feed their pig once a day. This implies that commercial feeds are available in the market and pig raisers are looking after the fast growth of their pig. As Kerala Agricultural University (2009) stated that the pigs may be given complete feed they can consume to attain maximum growth. Alternatively, they may be feed a fixed quantity twice or thrice a day.

Table 1

Purpose of Pig Keeping/raising, major pig feed sources and frequency of pig feeding (per day)

N = 178

Category		Frequency	Percentage %
Main Purpose of Pig Raising	Profit	26	14.61
	Extra Income	132	74.16
	Home Consumption	20	11.24
	Total	178	100
Major Feed Sources	Grazing	20	11.24
	Crop	45	25.28
	Household Offal	3	1.69
	Commercial Feeds	110	61.80
	Total	178	100
Frequency of Pig feeding	Once	43	24.16
	Twice	55	30.90
	Thrice	80	44.94
	Total	178	100

2. Pig keeping/raising practices

Table 2 shows one of the practices of pig keeping that is having an access to veterinary services. Data revealed that (66.29%) don't have access to any

service whereas only (33.71%) of the respondents have an access to veterinary services. The reason is, consulting veterinarian cost a lot of money (56.18%). Moreover, instead of consulting veterinarian they prefer using traditional medicine whenever their pigs encountered some problems (48.88%).

Table 2
Pig keeping practices

N = 178

Category		Frequency	Percentage%
Access to vet. Services	Yes	60	33.71
	No	118	66.29
	Total	178	100
Consult Veterinarians	Yes	63	35.39
	Keep Waiting w/o doing anything	8	4.49
	Use traditional medicine	87	48.88
	Cull their animals	20	11.24
	Total	178	100
Reasons on refusing to consult vet	Cost	100	56.18
	Distance from the clinic	60	33.71
	Lack of Veterinary Drugs	18	10.11
	Total	178	100

3. Challenges met by pig keeper/raisers

Table 3 presents the challenges met by the pig keepers/raisers. Data revealed that diseases is the major challenge met by the pig raisers. Diarrhea is

the mostly encountered disease (100 %) followed by swine fever, respiratory disease, sarcoptic mange, internal parasites and erysipelas. Next is the high cost of feeds and lastly is the malnutrition which could hinders the growth of the pig production.

Table 3
Challenges met by pig keeper/raiser
N=178

Challenges	Frequency	Percentage%	Rank
1. High prices of feeds	160	90	2
2. Diseases			1
Diarrhea	178	100	
Swine Fever	89	50	
Respiratory diseases	50	28	
Erysipelas	4	2	
Sarcoptic mange	45	25	
Internal parasites	10	6	
3. Malnutrition	28	16	3

Chapter 3

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the findings of the study and the conclusions formulated based on the said findings. Recommendations drawn from the findings were relevant to implications that are generated from the study.

Summary of Findings

Based on the analysis and interpretation, the following findings were observed.

Pig keeping/raising profile

The data revealed that majority of the pig raisers purpose was to gain extra income and they used commercial feeds to feed their pigs thrice a day.

Pig keeping/raising practices

Based on the data most of the raisers did not have an access to the veterinary services because consulting veterinarian cost a lot of money.

Challenges met by the pig raiser

The study showed that there were three main challenges that they had met during their pig keeping. First is diseases led by diarrhea as the mostly encountered disease followed by swine fever, respiratory disease, sarcoptic mange, internal parasite and erysipelas. Second is high cost of feeds and lastly is malnutrition.

Conclusions:

The result of the study showed the pig raising profile, practices and challenges encountered along the pig raising experienced. The study revealed that the main purpose of pig raising is to get additional income for the household and they used commercial feeds in feeding their pigs thrice a day. Also, pig raisers refused to consult veterinarians due to its cost so they prefer to use traditional medicine as a way of treatment. Lastly, among the challenges met by pig raisers, diseases is the mostly encountered specifically, diarrhea, followed by high cost of feeds and malnutrition.

Recommendations:

Based on the findings and conclusions of the study, the following recommendations were suggested.

1. The Municipal Agriculture Office (MAO) should conduct seminars/programs to educate pig raisers about better production system on pig raising.
2. The Local Government Unit (LGU) should provide free access to veterinary services and medicines.
3. The Government may provide a subsidy to local pig raisers for insurance purposes.
4. The Department of Agriculture should provide seminars on how to control /treat pig diseases.

References:

- Asmare, et al. (2014) Assessment of Pig Production and Constraints of Mecha District <https://www.hindawi.com/journals/aag/2014/329254/>
- Blackall, et al. (2020) Combining conventional and participatory approaches to identify and prioritize management and health related constraints to smallholder production https://www.researchgate.net/publication/340549639_Combining_conventional_and_participatory_approaches_to_identify_and_prioritise_management_and_healthrelated_constraints_to_smallholder_pig_production_in_San_Simon_Pampanga_Philippines
- Dorfman Theory of Production Economics <https://www.britannica.com/topic/theory-of-production> Fradejas(2005) Problems Confronting Backyard Raisers https://www.jstage.jst.go.jp/article/afe1965/41/1/41_1_236/_article/-char/ja/.
- Goldratt (1984) Theory of Constraints (TOC) <https://www.leanproduction.com/theory-of-constraints>
- Gona, et al (2009) Profitability and Constraints of Pig Production https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Gona+et+A+l+profitability+and+constraints+of+pig+production&btnG=#d=gs_qabs&u=%23p%3D2svc1e-uLFIJ
- Kahi, et. al (2014) Evaluation of Pig Production Practices, Constraints and Opportunities For Small Holder Production https://www.researchgate.net/publication/268989440Evaluation_of_pig_production_practices_constraints_and_opportunities_for_improvement_in_smallholder_production_systems_in_Kenya
- Livestock Research Division, DOST-PCAARRD S&T Media Service (February 24, 2016) Philippine Pork to the World <http://www.pcaard.dost.gov.ph/home/portal/index.php/quickinformationdispatch/2681-philippine-pork-to-the-world#:~:text=Swine%20Production%20in%20the%20Philippines,poultry%20industries%of%20the%20country.&text=Swine%20in%20play%20a%20major,animal%20meat%20consumption%20of%20Filipinos.>
- Pezo, et. al (2014) entitled participatory assessment of animal health and husbandry practices in small holder pig production systems https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=participatory+assessment+of+animal+health+and+husbandry&btnG=#d=gs_qabs&u=%23p%3D0mHDqeoLxIUJ

- Pool et. Al (2010) Pig Production, Management and Marketing
https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=pig+production+management+and+marketing&btnG=#d=gs_qabs&u=%23p%3Dve07VF4cBDYJ
- Robi, etc. (2020) Assessment of Pig Production, Health and Marketing Constraints in Bis-hoftu, Central Ethiopia Southwest Shoa Zone Livestock Development
https://www.researchgate.net/publication/344247367_Assessment_of_Pig_Production_Health_and_Marketing_Constraints_in_Bishoftu_Central_Ethiopia_Southwest_Shoa_Zone_Livestock_Development
- Uddin and Osasogie (2016) Constraints of Pig Production in Nigeria
https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=constraints+of+pig+production+in+nigeria&btnG=#d=gs_qabs&u=%23p%3D2olribwPrtcJ
- Verstegen, et. Al (2006) Pig Production in Cambodia, Laos, Philippines and Vietnam
https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=pig+production+in+Cambodia+%2C+laos+Philippines&btnG=#d=gs_qabs&u=%23p%3DNYp4xzEMrJkJ

APPENDIX A

REQUEST LETTER



Republic of the Philippines
Bohol Island State University - Bilar
 Zamora, Bilar, Bohol



Vision: A premier S and T University for the formation of a world class and virtuous human resource for sustainable development in Bohol and the country.

Mission: BISU is committed to provide quality higher education in the arts and sciences, as well as in professional and technological fields; undertake research and development and extension services for the sustainable development of Bohol and the country.

January 7, 2022

MARIETTA C. MACALOLOT, Ph. D.
 Campus Director
 Bohol Island State University- Bilar Campus

Maam,

Greetings!

The undersigned BTLEd- AFA IV students of Bohol Island State University- Bilar Campus, Zamora, Bilar Bohol humbly request from your good office to conduct the research entitled "**CHALLENGES AND PIG KEEPING/RAISING PRACTICES IN CARMEN, BOHOL**" in partial fulfillment of the requirements for the degree of Bachelor in Technology and Livelihood Education Major in Agri- Fishery Arts.

In line with this, the researchers would like to ask permission to gather data and distribute questionnaires to the respondents, specifically the identified hog raisers, in the Municipality of Carmen, Bohol.

Rest assured that Inter- Agency Task Force (IATF) COVID-19 health protocols will be followed and the data gathered will be kept confidential.

Thank you and God bless!

Sincerely Yours,

(Sgd.) **LIEZLBETH A. PASOC**
 (Sgd.) **JESSA T. LOMOSBOG**
 (Sgd.) **SERVANDO A. BOYONAS II**
 Student Researchers

Noted:

(Sgd.) **ARSENIO B. LEJOC JR.**
 Thesis Adviser

Recommending Approval:

(Sgd.) **MA. QUIMAR Q. GAHIT, EdD**
 Dean, College of Teacher Education

Approved:

(Sgd.) **MARIETTA C. MACALOLOT, Ph.D**
 Campus Director



Republic of the Philippines
Bohol Island State University - Bilar
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January 7, 2022

HON. RICARDO FRANCISCO A. TORIBIO JR.
 Carmen Municipal Mayor
 Carmen, Bohol, Philippines

Maam,

Greetings!

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(Sgd.) **HON. RICARDO FRANCISCO A. TORIBIO JR.**
 Carmen Municipal Mayor

APPENDIX B
SUMMARY OF FINDINGS

Category	Frequency	Percentage	
Goal of Pig Keeping	Profit	26	14.61%
	Extra Income	132	74.16%
	Home Consumption	20	11.24%
	Total	178	100%
Major Feed Sources	Grazing	20	11.24%
	Crop Residues	45	25.28%
	Household Offal	3	1.69%
	Supplements/grains	110	61.80%
	Total	178	100%
Times of Feed Intake	Once	43	24.16%
	Twice	55	30.90%
	Thrice	80	44.94%
	Total	178	100%
Access to vet. Services	Yes	60	33.71%
	No	118	66.29%
	Total	178	100%
Consult Veterinarians	Yes	63	35.39%
	Keep Waiting w/o doing anything	8	4.49%
	Use traditional medicine	87	48.88%
	Cull their animals	20	11.24%
	Total	178	100%
Reasons on refusing to consult vet	Cost	100	56.18%
	Distance from the clinic	60	33.71%
	Lack of Veterinary Drugs	18	10.11%
	Total	178	100%
	Total	178	100%
	Both	0	0
	Total	178	100
	Diarrhea	178	100
Challenges met of pig keeper/raiser	Swine Fever	89	50
	High prices of feeds	160	90
	Respiratory diseases	50	28
	Erysipelas	4	2
	Sarcoptic mange	45	25
	Gastric ulceration	0	0
	Internal parasites	10	6
	Malnutrition	28	16

APPENDIX C
Questionnaire

Name: _____

Directions: Kindly put (√) on the appropriate option where it belongs.

Pig keeping/raising profile

1. Main purpose of pig keeping?

- Profit
 Extra income
 Home consumption

2. Major pig feed sources

- Grazing
 Crop
 Household offal
 Supplements/grains

3. Frequency of pig feeding (per day)

- Once Twice Thrice

Pig Practices

1. Do you have access to veterinary services?

- Yes No

2. Do you consult veterinarians?

- Yes Use traditional medicine
 Keep waiting w/o doing anything Cull their animals

3. Why is it that you refused to consult veterinarian?

- Cost Lack of veterinary drugs
 Distance from the clinic

1. List of challenges met by the pig raisers/keepers