# African Swine Fever (ASF) and Its Impact among Pig Farmers at Tawipui N-II

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## **CERTIFICATE**

This is to certify that the project title 'ASF and it's negative impact towards piggery at Electric Veng Community' submitted by Lalhlimpuii Sailo, Department of Social Work, Higher and Technical Institute, Mizoram for the award of Bachelor of Social Work is carried out under my guidance and incorporates the student's bonafide research and this has not been submitted for the award of any degree in this or any other Universities or Institute of learning.

Dated: 1st November, 2022 Place: Lunglei, Mizoram

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(H.LALHIMPUII)

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# A study on African Swine Fever (ASF) and Its Impact among Pig Farmers at Tawipui N-II Structure interview schedule

(Confidential)

H.Lalhimpuii
V semester
Department of Social Work

Assistant professor Department of Social Work

Date: Time:

**RTC Lalremruata** 

# I. Profile of the Respondents:

Name			
Age			
Head of the family	1)Male 2)Female		
Religion	1)Christian	2)Hindu	3)Others
Denomination	1)BCM	2)Synod	3)UPC
Type of family	1)Nuclear	2)Joint	
Size of family			
No. of worker in the			
family			
Form of family	1)Stable, 2)Broker	n 3)Recon	stituted
Socio-economic Status	1)AAY	2)PHH	3)Non-NFSA
Occupation	1.Teacher, 2.Agric	ulture, 3.Driver	, 4.mistiri, 5.Business,
	6.Pensioner,7.daily	labour, 8.Othe	rs

# **II. Economic Condition:**

SI.No		Response
1	No. of pigs	
2	No. of pig dead	
3	Value of pig	

<sup>4</sup> No. of worker in the farm

# III. Farm characteristics:

SI.No.		Response
1	Number of Workers in the farm	
2	Type of production	a)Breed to finish b)Fattening c)weaned
3	Frequency of feeding	a)once a day in the morning b)once a day in the evening c)every morning and evening
4	How often do you monitor your pigs?	a)once a day b)twice a day c)more than twice day
5	Which breeds of pigs do you have on his farm?	a)only local breed b)only exotic breed c)mixed local d)crossed between local and exotic
6	How do you take care of the infected various pigs	a).buried b). burn c).throw

# IV. Preventive measures:

SI.No.		Always	Sometimes	Never
1	Do you get dress before going to pig farm?			
2	Do you give vaccine or other chemical your pigs?			
3	Do you report to vety doctor or field staff when your pig sick?			
4	Do you agree that pig should not be sold or slaughter after they die?			

5	Do you allow visiting your pig farm?		
6	After slaughtering do you clean the surrounding?		
7	Do you clean pig farm by using various chemical?		
8	Do you clean pig farm by using boil water or soap?		
9	Do you have interaction with other who race pig?		
10	Do you collect pig food from various houses?		
11	Do you quarantine your pig for at least 30 days after taking/buying?		
12	Do you think sick pig can influence healthy pig?		
13	Do you collect pig food from various houses?		
14	Do you think there is in an impact on the pig when we eat sick pork?		
15	Do you pig faced any problem during diagnosis process		

Do you get any welfare from the government?

# V. Effect

Sl/no	Effects	Strongly Agree	Agree	Disagre	Strongly Disagree
1		Agree		e	Disagree
1	Price and the kg are not met				
2	Rice in pork price				
3	Rice in piglet price				
4	Many of pig farmer face challenges in loan debt				
5	Do you think pig food supplier faced any kind of problem				

# **CHAPTER-1**

# **INTRODUCTION**

The study will focus on the impact, and causes faced by ASF pig farmer in Tawipui N-II communities.

#### 1.1 Global context

The ASF events reported to the OIE by its Members through the World Animal Health Information System, WAHIS from 2016 to 2020 (up to June 18) were included; as since 2016, a pattern of significant increase in the amount of outbreaks was identified. The disease is present in the African, European, and Asian region. In this period, 30% (60/201) of the reporting countries and territories have reported the disease as present. In Europe, many countries reported the first occurrence of the disease since 2016. Moldova notified the disease as present in September 2016, then Czech Republic in June 2017, followed by Romania in July 2017, Hungary in April 2018, Bulgaria in August 2018, the recurrence of the disease was reported by Belgium in September 2018 (last event occurred in 1985), Slovakia reported the first occurrence of the disease in July 2019, and most recently, Serbia in January 2020 and Greece in February 2020. In Asia and the Pacific, China People's Republic of) notified the presence of the disease for the first time in August 2018, Mongolia in January 2019, then Vietnam in February 2019, Cambodia in March 2019, Hong Kong (SAR-PRC) in May 2019, Korea (Dem. People's Rep.) in May 2019, Laos in June 2019, Myanmar in August 2019, Philippines in July, 2019, Korea (Rep. of) in September 2019, Timor-Leste in September 2019, Indonesia in November 2019, and more recently, Papua New Guinea in March, 2020 and India in May 2020. The distribution of the disease since 2006. The disease is endemic in most South-Saharan African countries.

#### 1.2 Indian context

African Swine Fever (ASF) killed more than 33,000 pigs in Mizoram and cost the state losses amounting to over Rs 60 core in the 2021 outbreak. The outbreak led to the culling of 10,910 pigs to prevent further spread of the disease and a ban on import of pigs from neighboring states and countries for about 17 months (August 2020-January 2022) Mizoram is not the only state to have been affected by this virus. In fact, ASF killed 38,700 pigs in Assam, News 18 reported in July 2021. The virus had also spread to Meghalaya,

killing about 300 pigs. Further, cases were also detected in districts of Arunachal Pradesh, Nagaland and Tripura.

There are around 90 lakh pigs in India, which is 1.7% of the total livestock in the country. Of this, nearly half (46.85%) of the pig population is in the north-eastern states; according to a June 2020 report by the Union Ministry of Fisheries, Animal Husbandry and Dairying.

The Food and Agriculture Organization of the United Nations (FAO) has said several cases of ASF have also been reported in other Southeast Asian countries such as China, Bhutan, Myanmar, Thailand, Indonesia, etc since August 2018.

#### 1.3 Mizoram context

In Mizoram, the ASF, which created havoc last year killing over 33,400 pigs, has reappeared in a few districts, killing over 800 pigs over the past two months. Officials of the Animal Husbandry and Veterinary Department said that fresh pig deaths due to ASF were reported from some villages in Champhai, Aizawl, Lunglei and Saitual districts since February this year. "We have asked the concerned officials to send daily reports of fresh ASF outbreak to the directorate in Aizawl," an official of the department told IANS over phone.

ASF was first detected in Lunglei district in March last year and subsequently, it spread to all the 11 districts of Mizoram, claiming the lives of 33,417 pigs and affecting over 10,000 families besides causing financial loss of Rs 61 core. Around 11,000 pigs were culled last year and compensation for culled pigs amounting to around Rs 12 core was sought from the Central government.

#### 1.4 Statement of the problem

African swine fever is a highly contagious viral disease of pigs, whose mortality rate can reach 100% it is not a danger to human health, but it has devasting effect on pig's population and the farming economy. There is currently no effective vaccine against ASF. The virus does not affect people and there is no impact on human health. ASF can be spread through ticks, live or dead pigs and pork products, contaminated feed and by humans. In fact, humans can carry the virus on their shoes or clothing, which means traveling from a country that has African swine fever to one that does not could lead to new

outbreaks without proper in bio-security practices. The virus is highly resistant in the environment, meaning that it can survive on clothes, boots, wheels, and other materials. It can also survive in various pork products, such as ham, sausages or bacon. Therefore, human behaviors can play an important role in spreading this pig disease across borders if adequate measures are not taken.

This ASF also affected the Tawipui north 2 community and problems arise from different areas and the research will be focus of the study of pigs marketing and to understand the negative impact of ASF on pig farmers. As the ASF victim of the community suffered the consequences.

#### 1.5 Objectives:

The following are the objectives to have specific study about the impact of the pig farmers in the community and the objectives are the guideline to have relevant studies about the pig farmer.

The following are the objective to study about the pig farmer in Tawipui north 2 community.

i)To Identify the nature of pig farm in Tawipui 'N' II

- ii). To identify the preventive measure adopted against the African swine fever (ASF) in Tawipui 'N' II
- iii). To identify the effects of ASF the pig farmer of the Tawipui north 2 community.

## 1.6 Chapter scheme

Chapter 1: Introduction Chapter

- 2: Literature Review Chapter
- 3: Methodology Chapter
- 4: Result and Discussion Chapter
- 5: Conclusion

#### CHAPTER -II

#### **REVIEW OF LITERATURE**

In this chapter attempts have been made on the review of literature has been arranged according to the studies related to the study.

**LK Dixon, H Roberts (2019):** In this review we summaries what we know about the African Swine Fever (ASF), the disease it causes ,how it spreads and the current global situation. We discuss current control methods in domestics and wild pigs and prospects for development of vaccines and other tools for control.

Solenne Custards, Barbara Wieland, William De Glanville, Ferran Jori, Rebecca Rowlands, Wilan (2009): African Swine Fever (ASF) is a devastating hemorrhagic fever of pig with mortality rates approaching 100 per cent. It causes major economic loses, threatens food security and limits pigs production in affected countries. ASF caused by a large DNA virus, African Swine Fever Virus (ASFV). There is no vaccine against ASFV and this limits the options for disease control. We review the mechanisms by which ASFV is maintained within wildlife and domestic pig populations and how it can be transmitted. We then consider the risk for global spread of ASFV and discuss possibilities of how disease can be prevented.

JM Sanchez- Vizcaino, JC Gomez-Villamandos, L Carrasco (2015): African Swine Fever (ASF) Is one of the most important infectious disease of swine and has major negative consequences for affected countries ASF is present in many sub-Saharan Countries, Sardinia and several countries of eastern and central Europe, where its continuous spread has the swine industry on heightened alert. ASF is a complex disease for which no vaccine or treatment is available, so its control is based on early detection and rapid control of spread for robust and reliable early detection programmed it is essential to be able to.

Nathan Pitts, Tim Whitnall, Agricultural Commodities (2019): In this review the African Swine Fever (ASF) has spread to every province in China since the first official report in 2018. Outbreaks of the disease have also been reported in neighboring Asian countries and in wild pig herd in Europe. The impact of ASF on the global pig meat industry is only gradually becoming clear.

**G De Lotenzi, L Borella, et al.**Cleaning and disintification, African swine fever, asf, pig holdings: African swine fever (ASF) is one of the most important disease in pigs. Since there are no effective vaccines against the various, farm biosecurity and good farming practices are the only effective tools to prevent the spread of the ASF virus (ASF) in pig holdings. Hence, an important component of farm biosecurity is the cleaning and disinfection (C&D) procedure. Precise indications regarding the ideal disinfectant against ASFV are lacking, but every country has approved and/or authorized a list of biocides effective against ASFV.

M Arias, C Gallardo, J Fernandez-Pinero, JM Sanchez-Vizcaino (2018): According to African Swine Fever (ASF) causes greater sanitary, social and economic impacts on Swine herds than many other Swine Diseases. This article reviews the main characteristics of the causative virus, its molecular epidemiology natural host, clinical features, epidemiology and control worldwide.

It also identifies and prioritizes gaps in ASF from a horizontal point of view encompassing fields including molecular biology, epidemiology, prevention, and diagnosis and vaccine development.

**Emily Ouma et al. (2018):** Pig production in peri-urban smallholder values in Uganda is severely constrained by impact of disease, particularly African Swine Fever (ASF), and the economic consequences of an inefficient pig value chain. Intervention in the form of biosecurity to control ASF disease outbreak and pig business hub models to better link smaller farmer to pig markets have the potential to address the constrains. However, there is a dearth of evidence of the effects.

Linda K Dixon, et al (2020): Here we review the epidemiology of African Swine Fever (ASF) in this different scenarios and methods used for control. ASF is a devasting disease that can result in death in almost all infected pigs. The continuing spread of African swine fever (ASF) from Africa to Europe and recently to the high pig production countries of china and other in Southeast Asia threatens global pork production and food security.

Shibing you, Tingyi Liu, et al (2021): African swine fever (ASF) is a fatal and highly infectious hemorrhagic disease that has spread to all provinces in china the world's largest producer and consumer of pork. Here we use an input –output model, partial equilibrium theory and a substitution indicator approach for handling missing data to develop a systematic valuation framework for assessing economic loss caused by ASF outbreaks in china between august 2018 and July 2019. We show that the total economic loss accounts for

0.78% of china's gross domestic product in 2019 with impact's experienced in almost in economic sectors through the pork industry and a substantial decrease in consumer surplus. The worst cases of pig production reduction and price increase would trig 1.4% and 2.07% decline in gross domestic products,gaps and controversial opinions related to ASF. Over the last decade. Against this background, the presented review focus on current knowledge and advances in ASF virology, clinical disease upon infection with recent strains, epidemiology, diagnosis and control, respectively. These finding demonstrate an urgent need for rapid ASF containment and prevention measures to avoid future outbreaks and economic declines.

SandraBlom, Martin Beer (2020): This review highlights knowledge gaps and controversial opinion related to ASF. Over the last decade, ASF has emerged in several European and Asian countries and has now an unprecedented distribution. Against this background, the presented review focuses on current knowledge and advances in ASF virology, clinical disease upon infection with recent strains, epidemiology, diagnosis and control.

# CHAPTER III METHODOLOGY

## 3.1. Methodology

In this chapter the methodology applies for this study highlight methodology is the corner stone of the study by which data were collected and process to the final conclusion. The following are the methodology of the present conclusion.

The present chapter describes the setting of the study and methodology, a description of the study process, and the techniques used. The chapter deals with the profile of the study area, methodological aspect such as research design, sampling, sample size, data collection, processing and analysis.

## 3.1.1 Research design:

The study is descriptive in each design it was based on the primary. The primary data was collected through quantitative methods.

#### 3.1.2 Sampling:

The study employed the purposive sampling method. A total number of 20 households were drawn and they present the pig farmer unit of the individual. The unit of the study is households and the effect of the pig farmer's household in the community belongs to the population of the study. The sample size of the study is 20 households.

## 3.1.3. Data collection, processing and analysis:

The study based on primary data collected through quantitative method. Structure interview schedule was administered to collected information on i.e., the profile of the respondent, economic condition, farm characteristic, preventive measure, and effect.

The study based on the primary data collected through quantitative method. The quantitative data was process using Microsoft (ms) excel and it was analysis SPSS and presented in the form of frequency, percentage and average.

**CHAPTER-IV** 

**RESULT AND DISCUSSION** 

This chapter represents the results and discussion which were divided into different section such as the profile of the respondents, economic condition, farm characteristics, preventive measures, and effects.

## 4.1. Profile of the respondents

The profile of respondents was divided into two sub-sections such as Demographic characteristics and economic characteristics.

## 4.1.1 . Socio-Demographic Characteristics

The demographic characteristics of the respondents were divided into various sections such as Age, Head of the family, Religion, Denomination, Type of family, Size of family, Family form, no. of worker in the family socio-economic status and occupation.

#### 4.1.2 Age

Among the 20 respondents the mean age is 50.15. More than the respondents are male 16 (81.0%) and mainly the head of the family.

## 4.1.3 Head of the family

From the information collected, 16(81.0%) respondents are male and 4(14.3%) respondents are female.

#### 4.1.4 Religion

The population i.e., 20 (100.00%) are all Christian and follow diverse denominations.

#### 4.1.5.Denomination

All the total population are Christian and in regards to denomination more than half of the respondent that is 11(55.0%) of the belongs to Baptist Church of Mizoram and 2(10.0%) of the respondent belong to Synod and also 7(35.0%) of the belongs to United Pentecostal Church North east India. The majority of the denomination is Baptist Church of Mizoram in this community.

## 4.1.6Type of family

In continuations, 17(85.0%) of the respondents belongs to nuclear family, and 3(15.0%) of the respondents are from joint family. Indicating that from 20 various households most of the families are nuclear family and only some of the families are joint family.

## 4.1.7 Size of family

In regards to family size amongst the 20 family the mean of family size is 4.75. 10 belong to family of 2-5 members and 10 belong to the family above 6 members.

## 4.1.8 No. of worker in the family

The worker of the family, among the respondent the mean of the worker is 2.6 around.

#### 4.1.9 Form of family

20. (95.2%) of the respondent are form Stable family and 0(0.00%) is the broken family. Majority of the participants are the from stable family.

#### 4.1.10 Socio-economic status

The economics of the status was divided into three section mainly, AAY 5(23.8%), PHH 1(4.8%), Non-NFSA 14(66.7%). The majority of the socio-economic statuses are Non-NFSA economic status.

## 4.1.11 Occupation

From of the data collected it is seen that 6(28.6%) of the family occupation is Daily labor, and 5(23.8%) of the family occupation is Agriculture, and teacher and other are 3(14.3) of the family occupation and Driver, mistiri, and pensioner are 1(4.8%) in the family of pig farmer.

## Table No. 4.1. Profile of the respondent Type of production:

Sl.No			Frequency	Percent
1	head of the family	male	16	81.0
	nead of the family	female	4	14.3
2	Religion	Christian	20	100.0
	Kengion	others	0	0.0
		BCM	11	55.0
3	Denomination	Synod	2	10.0
		UPC	7	35.0
4	type of family	nuclear	17	85.0
	type of family	joint	3	15.0
5	form of family	stable	20	95.2
		AAY	5	23.8
	socio-economic	PHH	1	4.8
	status	Non-	14	66.7
6		NFSA		
		teacher	3	14.3
		agriculture	5	23.8
		driver	1	4.8
	Occupation	mistiri	1	4.8
		pensioner	1	4.8
		daily labor	6	28.6
7		others	3	14.3

Source: Computed

#### 4.2. Economic Condition:

**Table No 4.2. Economic Condition:** 

SI.N		mean
0		inean
1	No. of pigs	11.1000
2	No. of pig dead	11.0500
3		262100.
	Value of pig	0
4	No. of worker in the farm	2.1000

Source: Computed

#### 4.3. Farm characteristics

## 4.3.1 Type of production

From the type of population of the total is 12(57.1%) families practices breed to finished, and 7(33.3%) families practices weaned, and 1(4.8%) families practices fattening. The majority of the practices is breed to finished.

## 4.3.2 Frequency of feeding

From the total of pig farmer the frequency of feeding,20(95.2%) they were fed every morning and evening and they didn't fed once a day in the morning and once a day in the evening.

## 4.3.3. How often do you monitor your pigs

The monitoring of their pigs around 18(85.7%) to visit their pigs in more than twice a day and 1(4.8%) they were visit their once a day also twice a day.

## 4.3.4Which breeds of pigs do you have on his/her farm

The majority of the pig farmer breed18 (85%) of the local breed, 4% were from exotic and mixed local breed.

# 4.3.5 How do you take care of the infected various pigs.

All the families were taking care of their infected pigs by buried100 (95%).

Table No.4.3. Farm characteristics

.N				
0			Frequency	Percent
1		Breed to finish	12	57.1
	type of production	fattening	1	4.8
		weaned	7	33.3
		once a day in the morning	0	0.0
2	frequency of feeding	once a day in the evening	0	0.0
		every morning and	20	95.2
		evening		
3		once a day	1	4.8
	how often do you monitor your pigs	twice a day	1	4.8
		more than twice a day	18	85.7
4		only local breed	18	85.7
	which breeds of pigs do you have on his farm	only exotic breed	1	4.8
	nis iarin	mixed local	1	4.8
5	How do you take care of the infected	Buried	20	95.2
	How do you take care of the infected various pigs	Burn	0	0.0
		Throw	0	0.0

Source: Computed

Figures in parentheses represent percentage

# 4.4. Preventive measure of respondent is presented into 16 categories, they are:

When asked if they had get dress before going to pig farm of the 9 (42%) responded 'always'. While 3(14%) is 'sometimes' and 8(38%) is 'never'.

When asked if they had give them vaccine or other medicine their pigs 16(76%) responded, 'always', while 4(19%) is 'sometimes'.

The majority of 18(85%) of the respondent if they thought when their report to vety doctor or field staff with the infected pig and while 2(9%) 'Sometimes' infected pig to report their vety doctor or field staff.

When they ask the population do agree that pig should not be sold or slaughter after that buy. The majority of 19(90%) of the respondent 'always'. While 1(4%) is 'never'.

The majority to visiting their pig farm 12(57%) is 'always', while 1(4%) is never.

The majority 17(81%) is' always' the responded of after slaughtering clean the surrounding, while 1(1%) is 'sometimes' and 2(9%) is 'never'.

When we asked if they clean the pig farm by using various chemical 9(42%)'always' use to clean, and 11(52%) they used to clean 'sometimes'.

When we asked if they use boil water or soap to clean the pig farm 17(81%)'always' use soap or boil water and 3(14%)used 'sometimes'.

When we asked if they had interaction with other who race pig 1(4%) 'Always' interact with other. 11(52%) 'Sometimes' interact with the other and 8(38%) 'Never' interact with other. The majority of the interaction with other is 'never'.

When we asked if they had collected the pig food from various house 3(14)'always' collected the pig food from various house, 4(19%)'sometimes' and 13(61%) 'Never' is the majority of collected the pig food from various house.

When we asked the quarantine the pig for at least 30 days after buying 4(19%)'always' the quarantine, 1(4%)'sometimes', and 5(23%); never' quarantine the pig at least 30days after buying.

The majority 19(90%) of the respondent 'always' the sick pig can influence the healthy pig.

The majority 18(85%) of the respondent 'always' the pig disease can be communicable from i.e. tools, transport, 1(4%) were from 'sometimes' and 'never'.

The majority 16(76%) of the respondent 'always' the impact on the pig when we eat sick pork, while 2(9%) were from 'sometimes' and 'never'.

The majority 17(81%) of the respondent 'always' the pig face any problem during diagnosis process, 1(4%) is 'sometimes' and 2(9%) is; never' face any problem during diagnosis process.

When we asked the pig farmer if they get any welfare from the government 1(4%) of the respondent 'always', and 19(90%) 'Never' they get any welfare from the government.

Table No.4.4. Preventive measures of asf

Sl.N		Always	sometimes	never
0				
	Do you get dress before going to	9(42)	3(14)	8(38)
1	pig farm?			
	Do you give vaccine or other	16(76)	4(19)	
2	chemical your pigs?			0
	Do you report to vety doctor or	18(85)	2(9)	
3	field staff when your pig sick?			0
	Do you agree that pig should not	19(90)	0	1(4)
	be sold or slaughter after they			
4	die?			
	Do you allow visiting your pig	7(33)	1(4)	12(57)
5	farm?			
	After slaughtering do you clean	17(81)	1(1)	2(9)
6	the surrounding?			
	Do you clean pig farm by using	9(42)	11(52)	0.0
7	various chemical?			
8	Do you clean pig farm by using	17(81)	3(14)	
	boil water or soap?			0
	Do you have interaction with	1(4)	11(52)	8(38)
9	other who race pig?			
10	Do you collect pig food from	3(14)	4(19)	13(61)

	various house?			
	Do you quarantine your pig for at	4(19)	1(4)	5(23)
11	least 30 days after taking/buying?			
	Do you think sick pig can	19(90)	0.0	0.0
12	influence healthy pig?			
	Do you think pig disease can be	18(85)	1(4)	1(4)
	communicable from i.e. tools,			
13	transports			
	Do you thinkthere is in an impact	16(76)	2(9)	2(9)
14	on the pig when we eat sick pork?			
	Do you pig faced any problem	17(81)	1(4)	2(9)
15	during diagnosis process			
	Do you get any welfare from the	1(4)	0	19(90)
16	government?			

Source: Computed

Figures in parentheses represent percentages

#### 4.5 Effect

From 20 households, the majority 18(85%) of the responded strongly agree for the price and the kg are not met, And 2(9%) families of the responded with agree.

The majority 16(76%) of the responded strongly agree rice in pork price, and 2(9%) were responded agree and disagree.

The majority 20(95%) of the responded strongly agree rice in piglet price.

When we asked if they have many of pig farmer face challenges in loan debt 18(85%) of the responded agree, and 1(4%) of the responded of disagree and strongly disagree.

When we asked if they think the pig food supplier faced any kind of problem 16(76%) of the responded with agree, and 3(14%) of the responded disagree, and 1(4%) 0f the responded strongly disagree.

**Table No.4.5 Effect of ASF** 

		Strongly			Strongly
Sl.No		agree	Agree	disagree	disagree
1	Price and the kg are not met	18(85)	2(9)	0.0	0.0
2	Rice in pork price	16(76)	2(9)	2(9)	0.0
3	Rice in piglet price	20(95)	0.0	0.0	0.0
	Many of pig farmer face	0.0	18(85)	1(4)	1(4)
4	challenges in loan debt				
	Do you think pig food		16(76)	3(14)	1(4)
	supplier faced any kind of				
5	problem	0.0			

Source: Computed

Figures in parentheses represent percentage

**CHAPTER-V** 

**CONCLUSION** 

5.1 Major findings

The present of the study to find out the preventive measures and pig farmer effected by ASF in Tawipui north 2 community. The number of household present recently in Tawipui north 2 village was 200, out of those 20 households are chosen at the purposive method for the study region. The pig Farming is one of themain occupation at Tawipui north 2 community. The gender of the respondents comprised of81% male and 14.3% female. The majority of the respondent of the occupation is teacher (14.3%), agriculture (23.8%), driver(4.8%), mistiri (4.8%), business (0%), pensioner (4.8%), dailylabour(28.6%), others (14.3%). The average of the respondent of the religion is Christian 100% and the average denomination is 55% BCM, Synod 10%, UPC 35%. The respondent's family type is nuclear family 85% and joint family 15%. The average of the respondents forms of family all the household is 95.2% stable. Family status is AAY 23.8%, PHH4.8% and Non-NFSA 66.7%. The mean of the respondent no. of pigs 11.10, and no. of pig dead 11.05, the value of the pig dead rate 262100.0 .The respondents of the number of worker in the farm is 2.1.

Majority of the respondent of the type of production is 57.1% breed to finished, the average of the respondents frequency of feeding is95.2% every morning and evening, average of the respondent how often do you monitor your pig 4.8% once a day, 4.8% twice a day, and the majority is more than twice a day85.7%. The majority of the respondent which breed of pigs do you have on his farm is85.7% only local breed and 4.8% only exotic breed and mixed breed. Majority of the respondent is how do you take care of the infected of the various pig 95.2% is buried.

The respondent of the get dress before going to pig farm 9(42%) always, 3(14%) sometimes, and 8(38%) is never. The majority of the respondent always is16 (76%) they give vaccine or other medicine. The majority of the respondent they agree that pig should not be sold or slaughter after they die always 19(90%). More than half of the respondent always to visit their pig farm12(57%) of the majority. The average of the respondent 17(81%) always the majority after slaughtering clean the surrounding, 1(1%) sometimes, and 2(9%) is never. The majority of the respondent 11(52%) is sometimes clean the pig farm by using the chemical and 9(42%) is always. Majority of the respondents 17(81%) is always the pig farm clean the boil water or soap, and 3(14%) is sometimes. The average of the respondent 1(4%) is always interaction with other who race pig and the majority of 11(52%) is sometimes and 8(38%) is never. The average of the

respondent 3(14%) is always the collect the pig food for various house and 4(19%) is sometimes and the majority of the respondent 13(61%) is never. The respondent of the quarantine the pig at least 30 days after buying 4(19%) is always and 1(4%) is sometimes and 5(23%) is never. The majority of the respondent 19(90%) is always the sick pig can influence the healthy pig. Majority of the respondent 18(85%) is always the pig disease of the communicable from tools, transport and 1(4%) is sometimes and never. The majority of the respondent 16(76%) is always impact on the pig when we eat pig sick and 2(9%) is sometimes and never. The majority of the respondent is 17(81%) is always pig face any problem during diagnosis process, 1(4%) is sometimes and 2(9%) is never. The average of the respondent 1(4%) is always get any welfare from the government and the majority 19(90%) is never.

The majority of the respondent 18(85%) is strongly agree the price and kg are not met, and 2(%) is agree. Majority of the respondent 16(76%) is strongly agree rice in pork price and 2(9%) is agree and disagree.20 (95%) respondent they all strongly agree in rice piglet price. The majority of the respondent 18(85%) is agree many pig farmer face their challenges in loan debt and 1(4%) is disagree and strongly disagree. The average of the pig food supplier of the any kind of the respondent16 (76%) is agree of the majority and 3(14%) is disagree and 1(4%) is strongly disagree.

#### 5.2. Conclusion

The present study focuses on negative impact towards the piggery. The present of the study reveals the socioeconomic condition of various household such as their faced problem, challenged faced the outcome and so on. The goal research is to find the reason behind the negative impact toward the piggery. The ASF may have a negative impact be in the society, be it is in the individual or the locality itself as it may the ASF infection significantly impacts the economics, livelihood, agricultural development, public health, and safety. The government also did not take proper action for the victim of ASF. A well-structured regional investment plan is required for facilitating safer animal health, which will reduce the livelihood and loss of the ASF epidemic and future animal diseases. The study evaluates the associated socioeconomic factors affecting the production recovery after the ASF epidemic. Farmer who has undergone an epidemic, in particular, will recover. The intention of this research is to aware the piggery to be cautious about the places of importation of pigs and to maintain the pig shed neat and clean in

order to prevent from ASF and other probable viruses as piggery play a very important part in the economic development of Mizoram.