

***A STUDY OF PIGGERY FARMING IN LUNGSEN, LUNGLEI DISTRICT***



***A report submitted to Department of Commerce, Higher And Technical Institute, Mizoram  
(HATIM) for the academic year 2022-23***

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**CERTIFICATE**

This is to certify that the dissertation entitled “A Study of piggery farming in Lungsen” submitted to the Mizoram University for the award of the degree of Bachelor of Commerce, is a record of research work carried out by B. Lalruatdika, Roll No. 2123BCOM001, IV Semester B.Com. He has fulfilled all the requirements laid down in the regulations of Mizoram University. This dissertation is the result of his investigation into the subject. Neither the dissertation as a whole nor any part of it was ever submitted any other University for any degree.

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## **DECLARATION**

I, B. Lalruatdika, hereby declare that the subject matter of this dissertation is the record of work done by me, that the contents of this dissertation did not form to anybody else, and that the dissertation has not been submitted by me for any research degree in any other university or institute. This is being submitted to the Mizoram University for the degree of Bachelor of Commerce.

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Thank you,

*B. LALRUATDIKA*

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## Chapter – I

### Introduction

#### 1.1 Conceptual Framework

Pig farming is one of the most technologically advanced and continuously growing production sectors. As the pig herds grow larger and at the same time the number of farmers decreases worldwide, it is almost impossible for the farmers to assess every individual animal and assure its wellbeing. Precision Livestock Farming (PLF) could provide solutions to these problems. PLF is intending to achieve fully automated continuous monitoring of pigs, emphasizing on each pen, by using technological advancements as part of the management process. It can potentially improve animal welfare, feed efficiency, performance and reduce livestock emissions and therefore positively impact the financial viability of the unit. The data may be collected by cameras (CCTV, infra-red, thermal, etc.) and real-time analyses systems, by microphones and sound analyses systems, or by any other sensor within the production unit or on the animal such as accelerometers, RFID sensors, etc. This overview presents and critically discusses several papers, attempts to make predictions of future technological developments, and proposes potential research needed.

##### 1.1.1 Meaning and concept of Piggery Farming

**Pig farming** or **pork farming** or **hog farming** is the raising and breeding of domestic pigs as livestock, and is a branch of animal husbandry. Pigs are farmed principally for food (e.g. pork: bacon, ham, gammon) and skins.

Pigs are amenable to many different styles of farming: intensive commercial units, commercial free range enterprises, or extensive farming (being allowed to wander around a village, town or city, or tethered in a simple shelter or kept in a pen outside the owner's house). Historically, farm pigs were kept in small numbers and were closely associated with the residence of the owner, or in the same village or town. They were valued as a source of meat and fat, and for their ability to convert inedible food into meat and manure, and were often fed household food waste when kept on a homestead. Pigs have been farmed to dispose of municipal garbage on a large scale.

All these forms of pig farm are in use today, though intensive farms are by far the most popular, due to their potential to raise a large amount of pigs in a very cost-efficient manner. In

developed nations, commercial farms house thousands of pigs in climate-controlled buildings. Pigs are a popular form of livestock, with more than one billion pigs butchered each year worldwide, 100 million in the United States. The majority of pigs are used for human food, but also supply skin, fat and other materials for use in clothing, ingredients for processed foods, cosmetics, and medical use.

**Use as Food:** Almost all of the pig can be used as food. Preparations of pig parts into specialties include: sausage (and casings made from the intestines), bacon, gammon, ham, skin into pork scratchings, feet into trotters, head into a meat jelly called head cheese (brawn), and consumption of the liver, chitterings, and blood (blood pudding or brown pudding).

**Production and Trade:** Pigs are farmed in many countries, though the main consuming countries are in Asia, meaning there is a significant international and even intercontinental trade in live and slaughtered pigs. Despite having the world's largest herd, China is a net importer of pigs as China consumes about 50% of global pork production. The total amount of pork consumed in China is 57 million tons (as of 2021) and pork accounted for 60 percent of total meat consumption within the country. China has been increasing its imports during its economic development; many within China's population of 1.2 billion people prioritize eating pork as their main consumption of meat, unlike other countries where most people would prioritize having poultry. In addition, since 2007, China possesses a strategic pork reserve with a government mandate to "stabilize live hog prices, prevent excessive hog price drops, which damage the interests of farmers and to ease the negative effects of the cyclical nature of hog production and market prices." In China, the government actively intervened in the pork market during periods of instability by releasing pork reserves into the market whenever hogs get too expensive in China, in order to hold down prices for consumers. Conversely when prices of pork are deemed too low and unsustainable for farmers, the reserve buys up pigs to ensure farmers remain profitable.

The largest exporters of pigs are the United States, the European Union, and Canada. As an example, more than half of Canadian production (22.8 million pigs) in 2008 was exported, going to 143 countries. Older pigs will consume eleven to nineteen litres (three to five US gallons) of water per day.

Among meat animals, pigs have a lower feed conversion ratio than cattle, which can provide an advantage in lower unit price of meat because the cost of animal feed per kilogram or pound of resultant meat is lower. However, there are also many other economic variables in meat



production and distribution, so the price differential of pork and beef at the point of retail sale does not always correspond closely to the differential in feed conversion ratios. Nonetheless, the favorable ratio often tends to make pork affordable relative to beef.

**Impacts on sow breedings:** Hogs raised in confinement systems tend to produce 23.5 piglets per year. Between 2013 and 2016, sow death rates nearly doubled in the United States, from 5.8 to 10.2 percent. 25 to 50 percent of deaths were caused by prolapse. Other probable causes of death include vitamin deficiency, mycotoxins in feed, high density diets or abdominal issues. Iowa's Pork Industry Center collects mortality data in collaboration with the National Pork Board to collect data from over 400,000 sows from 16 U.S. states. The farms range in size and facility types. Increasing death rates are a profit concern to the industry, so money is invested into research to find solutions.

**Genetic Manipulation:** Pigs were originally bred to rapidly gain weight and backfat in the late 1980s. In a more fat-conscious modern day America, pigs are now being bred to have less back fat and produce more offspring, which pushes the sow's body too far and is deemed one of the causes of the current prolapse epidemic. Researchers and veterinarians are seeking ways to positively impact the health of the hogs and benefit the hog business without taking much from the economy.

**Environmental and Health Impacts:** Feces and waste often spread to surrounding neighborhoods, polluting air and water with toxic waste particles. Waste from swine on these farms carry a host of pathogens and bacteria as well as heavy metals. These toxins can leach down through the soil into groundwater, polluting local drinking water supplies. Pathogens can also become airborne, polluting the air and harming individuals when ingested. Contents from waste have been shown to cause detrimental health implications, as well as harmful algal blooms in surrounding bodies of water. Due to Concentrated Animal Feed Operations (CAFOs), those who live in the surrounding areas of pig farms tend to experience health complications. Symptoms included headaches, nausea, and weakness due to the fumes that are emitted from these farms. Those who work directly inside these farms often experience these symptoms more intensely. Typically, workers of these farms experience respiratory issues such as wheezing, coughing, and tightness of the chest as well as eye and nasal irritation. This is in part due to the air quality being poor because of the air particles being contaminated with hog feces.

## 1.2 Review of Literature

The performance of Dairy and Piggery Enterprises and their impact on rural economy, is a very important subject of Social Sciences. As such, it has been a popular subject among the researchers and student community at National and International level of study in all the Universities of the Country as a whole. In most of the developing economies, Dairy and Piggery Enterprises play a vital role for the middle class people of any state, particularly for rural India. Various studies have been made from time to time to look into the different aspects of dairy and Piggery Enterprises towards socio – economic development of the states in particular and the nation in general. A review of literature pertaining to these studies are given below:

**Levy et al. (2014)** studied the challenges and opportunities of smallholder pig production and marketing in Western Kenya. The overall goal of this thesis was to evaluate the organization and efficiency of local pork marketing and the challenges of butchers and farmers in rural and peri-urban settings of Western Kenya. The specific objectives of this study were: to examine the competitiveness, efficiency and profitability of pig butchers, to describe the components of training workshops intended to enhance butcher's business skills, knowledge of pork safety and to evaluate the economic potential of semi-intensive pig rearing in the local pork marketing chains of Western Kenya. A cross sectional, observational study was conducted in 50 pig butchers to collect their demographic information, challenges, operating practices and costs. Factors associated with pig prices, pork prices, marketing and operating costs, profit and marketing margins were determined using mixed and generalized linear models. A unique algorithm that emulates least-cost pig feeding was developed to assess the impact of season, average daily gain, opportunity cost of farm grown feed and butcher price variation on farmer's maximum revenue and profit potential when pigs are sold to butchers. The study found that butchers were Central in coordinating activities required to connect pig farmers to pork consumers. Capital constraints, government license fee and pig prices were common challenges to butchers. The butchers business profit margins ranging from 5% to 10%. Marketing margins ranged from 27% to 41% for 45 and 22 kg pigs respectively. It also observed that butcher education was positively associated with pork prices charged to consumers and butcher profit.

**Munzhelele (2015)** studied on 'Evaluation of the production systems and constraints of smallholder Pig farming in three agro-ecological zones of Mpumalanga province, South Africa attempted to identify factors that influence production positively or negatively and impact of

climatic condition on the small scale pig production systems in the various agro-ecological zones. The study was conducted in Mpumalanga of South Africa in three agro-ecological zones namely, the Highveld, the Lowveld and the Midveld. The study followed mixed methods approach, using qualitative and quantitative data. In total, 220 randomly selected smallholder pig farmers were interviewed some hypotheses were tested by descriptive and correlation analyses. Association between agricultural training, government assistance and thirteen herd and farmer- related variables were analysed using multivariable logistic regression model. A pairwise correlation was used where necessary and output were generated to associate certain variables and preferred methods including markets, market determinants, treatment methods for sick pigs, feed preference, body conditions of the sows and age at weaning. The study indicated that smallholder pig farming was predominated by males (64%), age group 51 years and above (54%), black Africans (98.6%) and approximately three-quarters of the smallholder farmers were classified as being poor to just below average. The majority of respondents had no prior pig husbandry training while few had received assistance from Department of Agriculture. The study also found out that low quality of breeds, diseases, lack of knowledge are the problems faced by pig farmers in the study areas. Poor quality of pigs produced in smallholder pig farms result in low returns of profits. It also revealed that change in climatic condition affects the production system of pig in the study areas as pigs respond to temperature changes due to their lack of skin pigment and sweat glands. The association study showed that the receipt of agricultural assistance from Government and training positively influence the farm inputs and outputs, so the government should explore how identified inputs can be distributed to farmers within the province and perhaps nationally.

**Shadap (2016)** studied on the purposes, problems and prospects of Piggery development in West Jaintia Hills district of Meghalaya, India. The research work was carried out in West Jaintia Hills, district of Meghalaya. Laskein block and Thadlaskein block were selected for the study area. The respondents were divided into beneficiaries and non-beneficiaries of government Grant/aid/subsidy. From beneficiaries and non-beneficiaries 5 respondents from 5 clusters of villages were selected randomly. This comprised of 50 beneficiaries and 50 non-beneficiaries total of 100 sample size. Data were collected through a pre-tested dependable and valid objective interview schedule. Major statistical tools used were mean, standard deviation, frequency distribution, percentage, range, correlation, regression and ttest. The study revealed that recycling waste food, having additional income, mark of insurance, better profit in short time and primary income were identified as the major purposes of pig rearing problems of

concentrate feed, medicines and vaccines. Input supply, economic problem, lack of transportation facilities, accessibility to market, absence of cooperatives and bank linkages were the major constraints perceived by the respondents. The study indicated that interdisciplinary approaches could do well with farming, marketing, linkage convergence and other related issues.

**Thirah, K. Avele (2016)** in his study have found out that in Nagaland, that with the establishment of the Nagaland Directorate of Veterinary & Animal Husbandry in 1965, the state has started commendable schemes and projects to improve the animal sector especially diary and piggery enterprises. Affiliated bodies like NSDCF, Nagaland Livestock Development Board, Nagaland Veterinary Council and Nagaland State Piggery Corporatives Federation (NSPCF) Ltd. Kohima have been set up with various su schemes and programmes for overall livestock/ animal husbandry development. The Indian Council of Agricultural Research (ICAR) is promoting breeding superior pig germplasm through artificial insemination with aims to employ artificial insemination to, hopefully, transform Nagaland state from a pig-importer to self sustainable in pork production by 2020.

**Perey (2017)** conducted a study on determinants of sustainability of backyard pig farming in the Philippines. The purpose of this study was to investigate the factors that determine the sustainability of backyard pig raising in the Philippines. Descriptive research method with survey and use of Secondary sources was used. The respondents were 60 backyard pig farmers, 26 of them had sustainable and 34 had non-sustainable backyard pig farming. They were interviewed with structured questionnaire; the municipality of Siniloan in the province of Laguna was the study area. Statistical tools like mean, Standard Deviation were used in comparing the group of farmers with sustainable and non-sustainable backyard pig farming. Two sample t-statistics was used to test for significant differences between the two groups characteristics. Binary logistic regression analysis was used to identify the significant factors that in combination determine the sustainability of backyard pig farming. Empirical data were collected from 60 farmers, among the farmer respondents, less than majority (43.33%) were able to sustain production. The results of a logistic regression model showed that family income, farmer's organizational affiliation whether the farmer is a contract or an independent producer, access to credit and exposure to extension services have significant influence on the decision of farmers on whether to continue or stop backyard pig farming. On the other hand, age, educational attainment, number of household size, access to bank credit, access to market and complaints by neighbours were not significant factors that determine the farmers decision

to engage continuously in pig farming. Prospective businessmen, extortionists and policy maker can consider these factors in Planning and designing a sustainable pig production for smallholder farmers in Philippines.

### **1.3 Rationale of the study**

Domestication of animals is part of the Mizo life traditionally and contemporarily, and pigs and chickens are the most commonly chosen livestock animals. With economic development and increasing urbanisation, the need for undertaking animal rearing in a commercial scale was realised. As such, livestock farming has become one of the important livelihood sources in Mizoram. Since recently, large number of families has started to undertake livestock farming for commercial purposes and as their family's main livelihood activity. It has become the main alternative (or additional) income source among the population, especially for farmers and poor families.

In spite of its livelihood significance, people do not have the practice of keeping records about the various activities and expenditure on the rearing of livestock animal in most of the cases. So they are easily misled by the returns from sale of their animals or its products without clear understanding of the cost they had incurred in the farming activities and fail to understand clearly the actual cost-benefit conditions. Further, people in Mizoram take pig rearing as additional (or subsidiary) livelihood in most of the cases without having clear knowledge on the profitability of the farming keeping in view the material and human labour incurred in its farming activities. Thus, there has to be research inputs on the aspects of cost of farming, marketing, profits, etc. to enable better understanding of the economy of piggery farming.

### **1.4 Statement of Problem**

Piggery Farming has become an additional income source for the rural areas. There is a great potential for pig production but hardly any attempt has been made to record systematically and analyse the pig rearing system followed by the farmers. Therefore, this study was motivated by the need to contribute to knowledge about the nature of Piggery production function and the significance of income generated on the family income. It is expected that this study would be very beneficial for pig farmers as well as for the general public.

The farming system involves buying of young animals (piglets, chicks, etc.) for replacement of the matured ones when they are sold, feeding the animals, prevention of animals from diseases, construction and maintenance of animal houses, equipment, etc. All these activities

demand substantial amount of expenditures which has to be incurred regularly. Therefore, the success of livestock farming not only depends on the commitment and hard work of a farmer, but also on their levels of management skills. An individual who intends to undertake livestock farming has to know about the requirements of initial capital for construction of animal sheds, expenditure requirements for intermediary activities, and the marketing chain.

### **1.5 Objectives of the study**

The main objectives of the study are as follows:

- i. To examine the basic farming conditions of piggery in Lungsan, Lunglei District Mizoram.
- ii. To study the income generated from piggery farming and examine sustainability of income.
- iii. To study the cost structure of piggery farming and its disaggregation to various activities like equipment, feeds, etc.
- iv. To identify various problems faced by the farmers with respect to production activities and marketing.
- v. To examine the nature of piggery production function and the significance of income generated on the family income.

### **1.6 Research Methodology**

The current study is being done in Lungsan, Lunglei District, Mizoram, among 28 respondents attempted the question created for the study's purposes, using a reasonable sampling method. Primary data was gathered via a structured questionnaire. The questionnaire was designed using the academic data. The respondents were contacted using a Google form by being sent a link to the survey using Whatsapp.

The secondary data were collected through different sources. Such sources include journals and thesis published, existing research articles and various websites of the internet, which have been very helpful in understanding the concept and meeting the objectives.

In order to analyse and interpret these data collected various tools like graph and mean are employed. This is undertaken through Microsoft Excel.

### **1.7 Limitation of the study**

- i. The survey has been conducted only on 28 respondents.
- ii. By using Google form, the researcher was able to collect the data but cannot collect much more than expectations.
- iii. The respondents may not be completely honest when answering the questionnaire given to them and may provide incorrect information.
- iv. Though 28 respondents were there some of the respondents did not attempt all the question.

## Chapter-II

### Data Analysis and Interpretation

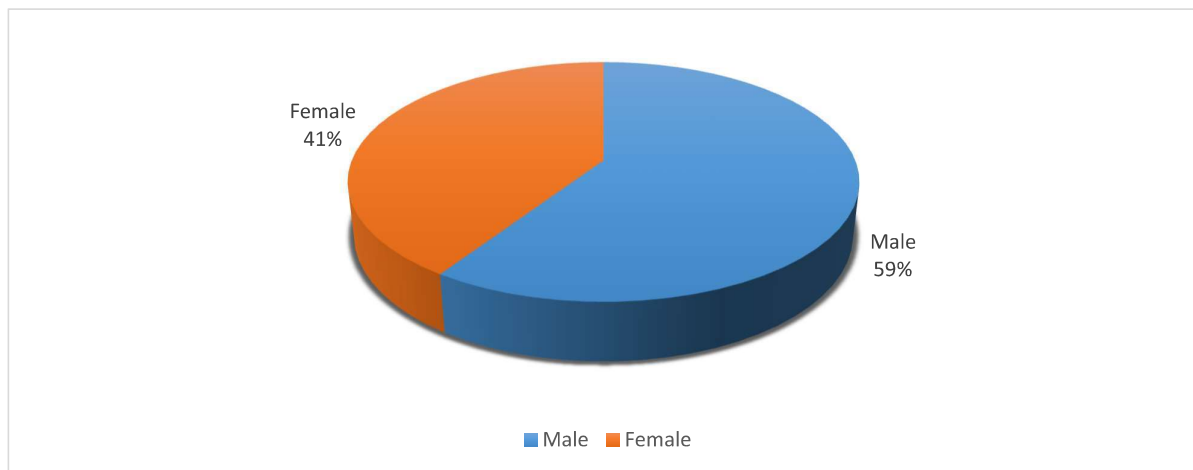
This chapter analyse the demographic background of the respondent.

#### 2.1 Gender of the respondents

Table 2.1 indicates the gender of the respondents. The gender of the respondents is classified into two categories, viz., Male and Female.

**Table 2.1 Gender of the respondents:**

Male	16
Female	11
Total	27



**Fig. 2.1**

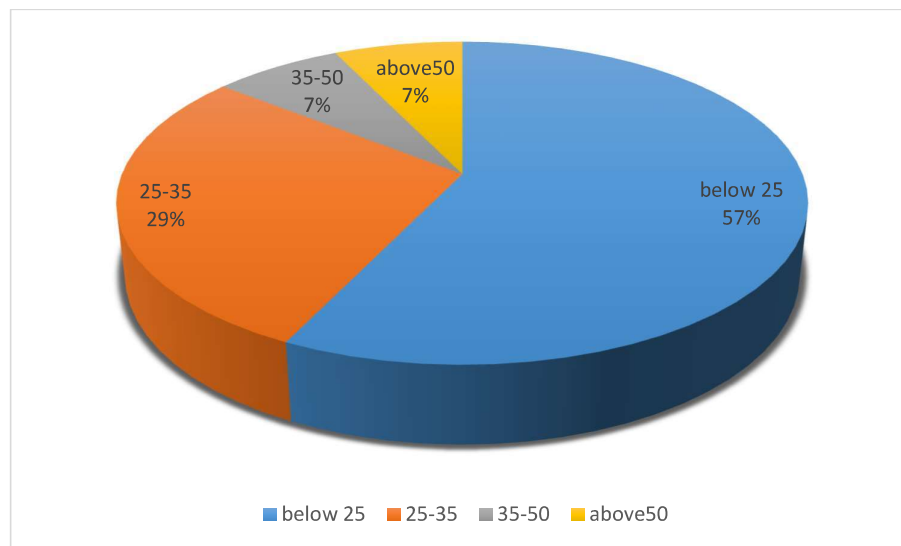


## 2.2 Age of the respondents

Table 2.2 indicates the age of the respondents. The respondents are classified into different age groups: the first age group is a representation of the respondent below 25 years, the second group represent 25-35 years, the third group consist of respondents between 35 – 50 and the last one represent the age of above 50 years.

**Table 2.2 Age of the respondents**

Below 25	16
25-35	8
35-50	2
Above50	2
Total	28



**Fig. 2.2**

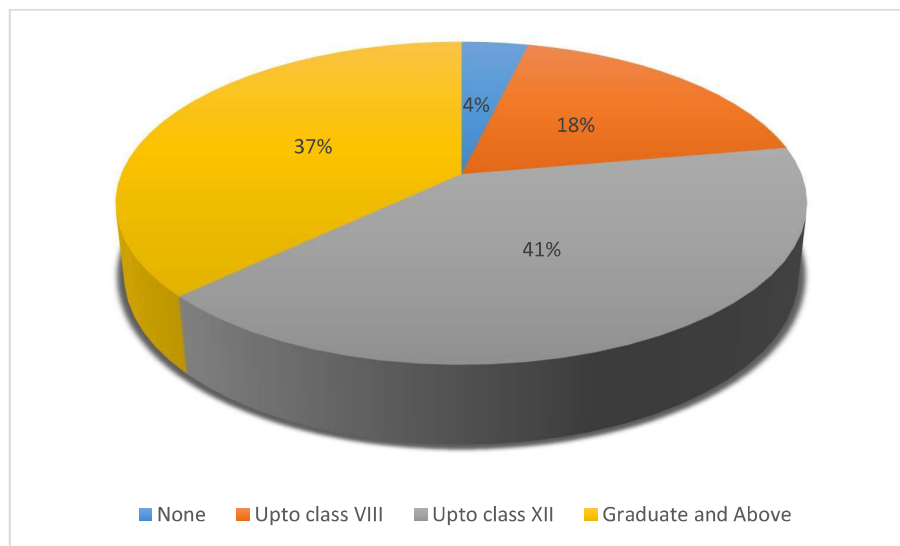
The folloing figure shows respondents at the age of below 25 are the highest which is 57%. Which result to people at lower age interest in self-employed.

### 2.3 Qualification of the respondents

Table 2.3 indicates the qualification of the respondents.

**Table 2.3 Qualification of the respondents**

Qualification	No. of Respondents
None	1
Upto class VIII	5
Upto class XII	11
Graduate and Above	10
Total	27



**Fig. 2.3**

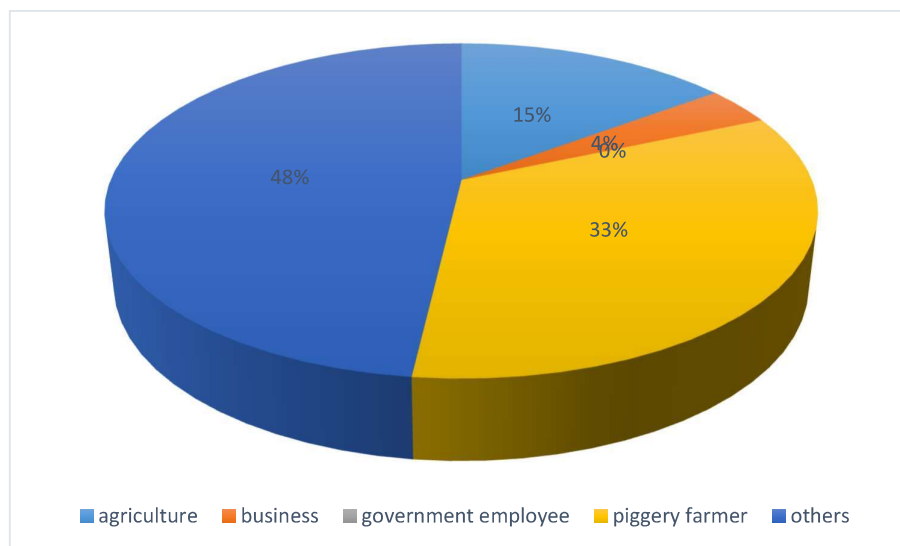
The above figure shows that respondents with a qualification of class XII is the highest at 41%, and Graduate and above at second on 37%. Which indicates their level and quality of farming cannot be at low level.

## 2.4 Occupation of the respondents

Table 2.4 indicates Occupation of the respondents.

**Table 2.4 Occupation of the respondents**

Occupation	No. of respondents
Agriculture	4
Business	1
Government Job	0
Piggery farmer	9
Others	13
Total	27



**Fig. 2.4**

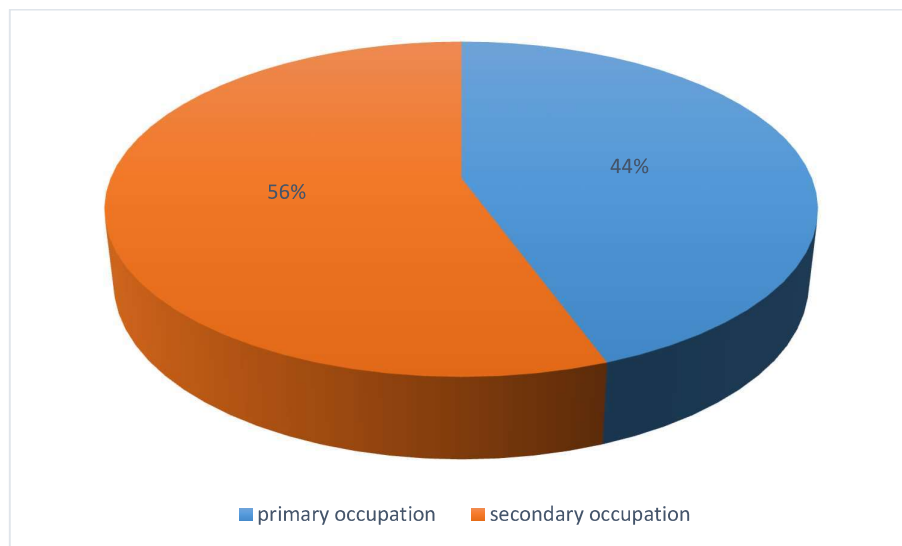
From the above figure main occupation of the respondents is Piggery farming is at the second on 33% next to Others occupation at 48%.

## 2.5 Job of the respondents

Table 2.5 indicates their piggery farming is their primary or secondary occupation.

**Table 2.5 Job of the respondents**

Occupation	No. of respondents
Primary Occupation	12
Secondary Occupation	15
Total	27



**Fig. 2.5**

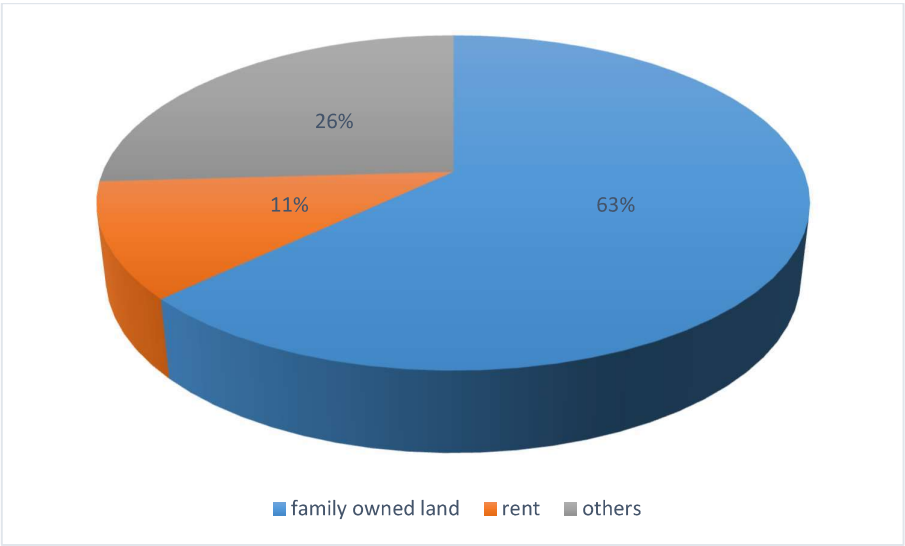
The above figure state that respondents using piggery farm as secondary occupation is morer than respondents using piggery farm as primary occupation. Here primary occupation is at 44% which is lesser than secondary occupation at 56%, which the difference is slighty at 12%.

**2.6 Situation of the farm**

Table 2.6 indicates where they situated their farm.

**Table 2.6 Situation of Farm**

Family owned land	17
Rent	3
Others	7
Total	27



**Fig. 2.6**

The following figure shows that situation of the farm where Family owned land is at 63% which is the highest. Secondly Others at 26% and Rent at 11% only which is the lowest.

## 2.7 Influenced to start venture on piggery farming

Table 2.7 indicates what influenced them to start their Piggery farming.

**Table 2.7 Influenced to start venture on piggery farming**

Types	No. of respondents
Family inheritance	13
Non- availability of gov't job	2
Availabilty of assistance from gov't	0
Others	12

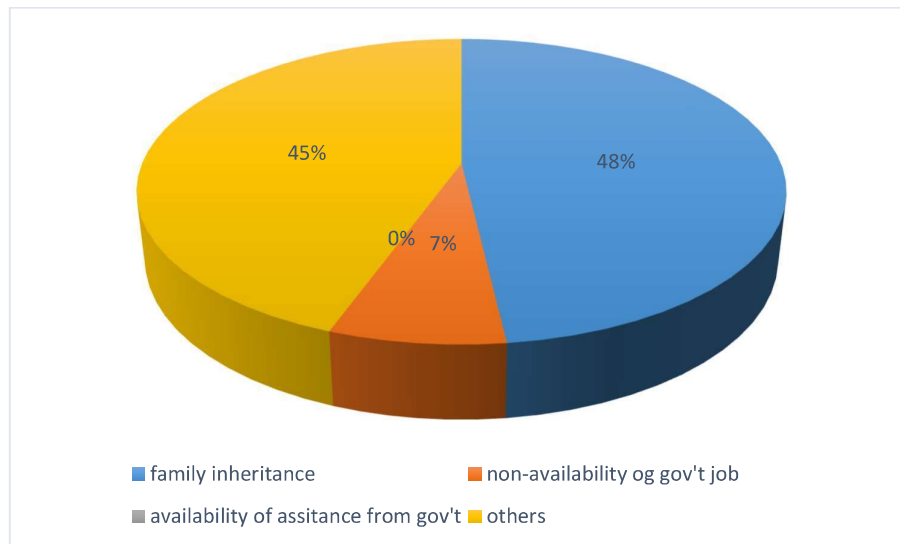


Fig. 2.7

The above figure state that Family inheritance is the highest at 48%, Others at 45% and Non-availability at 7% only, Availabilty of assistance fromm gov't at 0%.

## 2.8 Availability of Veterinary/ Aid center in their locality or Area

Table 2.8 indicates is there any veterinary / aid center in their locality/ Area.

**Table 2.8 Availability of any veterinary/ aid center in their locality**

Availability of aid center	No. of respondents
Yes	25
No	2
Total	27

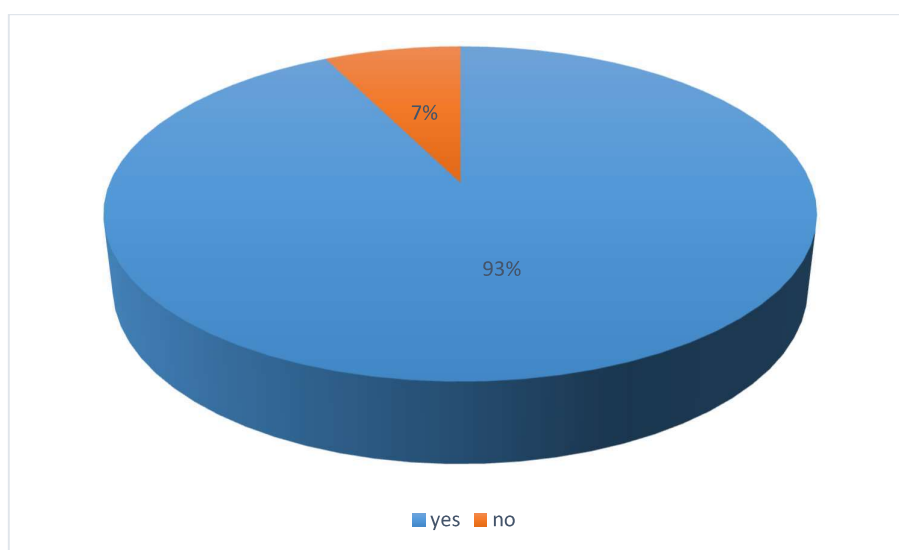


Fig. 2.8

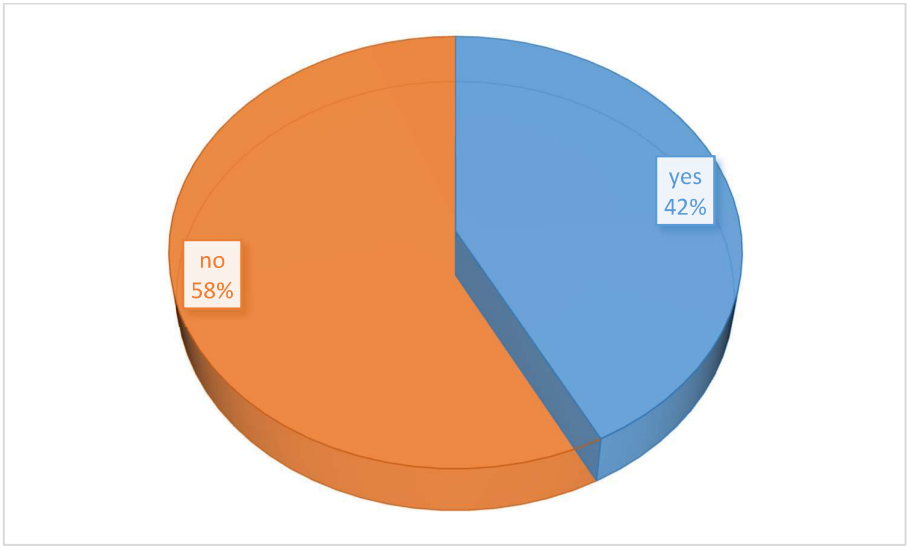
The following figure state that, availability of veterinary/ aid ceneter is available at 93%, while there is not available at 7%.

**2.9 Providing or conduct awareness program in their locality**

Table 2.9 indicates is there any provide or conduct of awareness program in their locality.

**Table 2.9 Providing or conduct awareness program in their locality**

Yes	11
No	15
Total	23



**Fig. 2.9**

The above figure shows conduct of awareness at their locality is lesser at 42% , while while awareness is not held at 58%, which indicates proper awareness had not been held.



**2.10 Provide / Avail any benefits or subsidies in locality**

Table 2.10 indicates the provide/ avail any benefits or subsidies in locality.

**Table 2.10 Provoding or Avail any benefit subsidies in locality**

Yes	11
No	15
Total	26

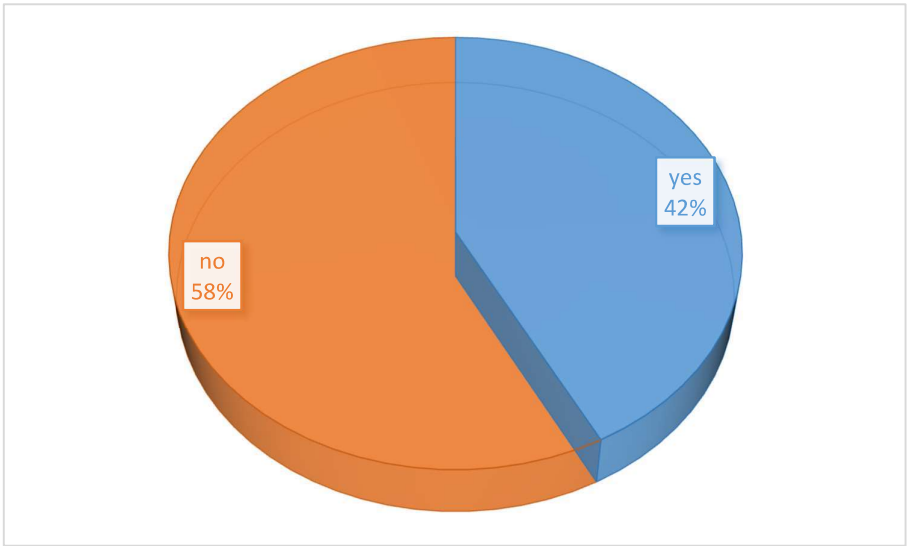


Fig. 2.10

The above figure shows providing/ avail any benefit is not high while from the chart show that 42% only received while 58% which is bigger and larger does not received or avail any benefit/ subsidies.

## 2.11 Taking loan from Bank/ Societies/ Individuals?

Table 2.11 indicates that the respondents take any loan from Bank/ Societies/Individuals.

**Table 2.11 Taking loan from Bank/ Societies/Individuals?**

Types	No. of respondents
Bank	13
Societies	2
Individuals	10
Total	25

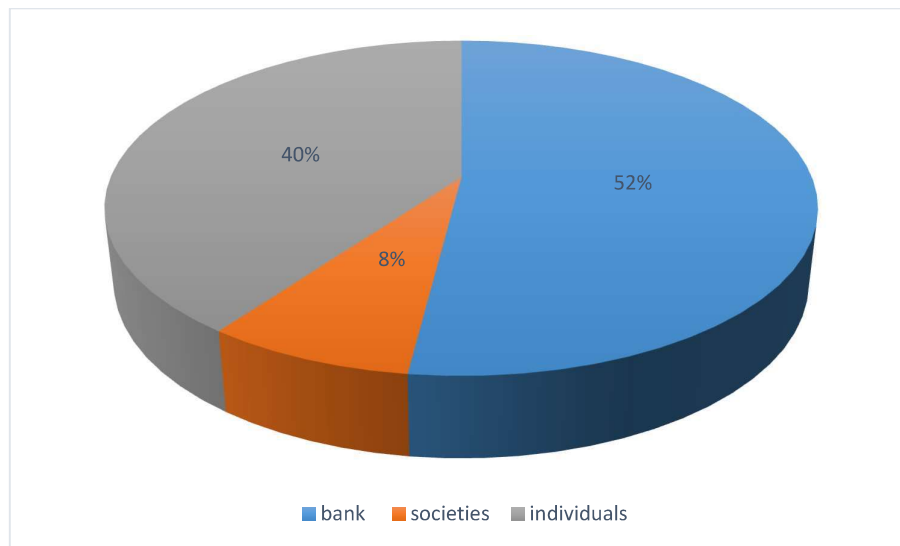


Fig. 2.11

The above statement shows the respondent taking loan from bank is the highest at the rate of 52%, secondly from individuals at 40% while taking from society at 8% only.

## 2.12 Satisfaction by the performance/ quality of service provided by the Bank

Table 2.12 indicates the satisfaction of the respondents which the bank provides of the performance / quality of service.

**Table 2.12 Satisfaction by the performance/ quality of service provided by the Bank**

Yes	14
No	9
Partially	2
Total	25

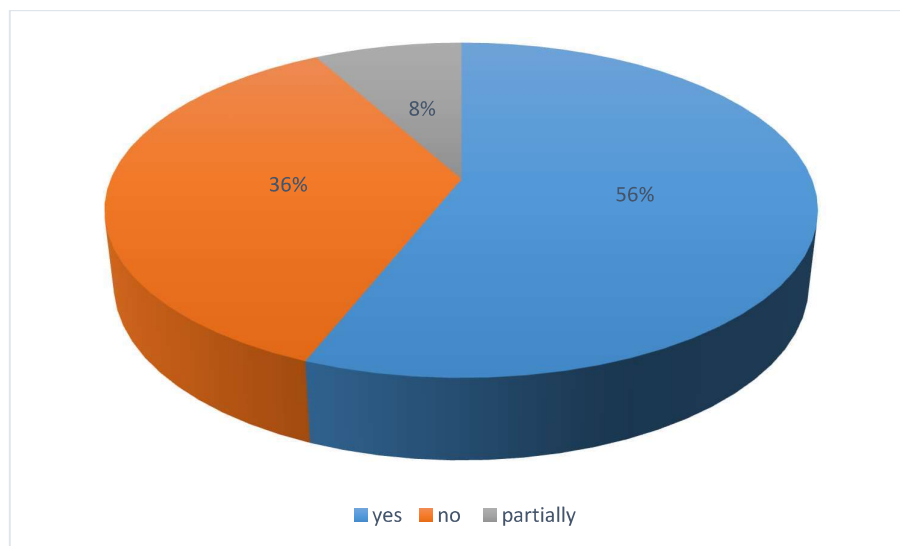


Fig. 2.12

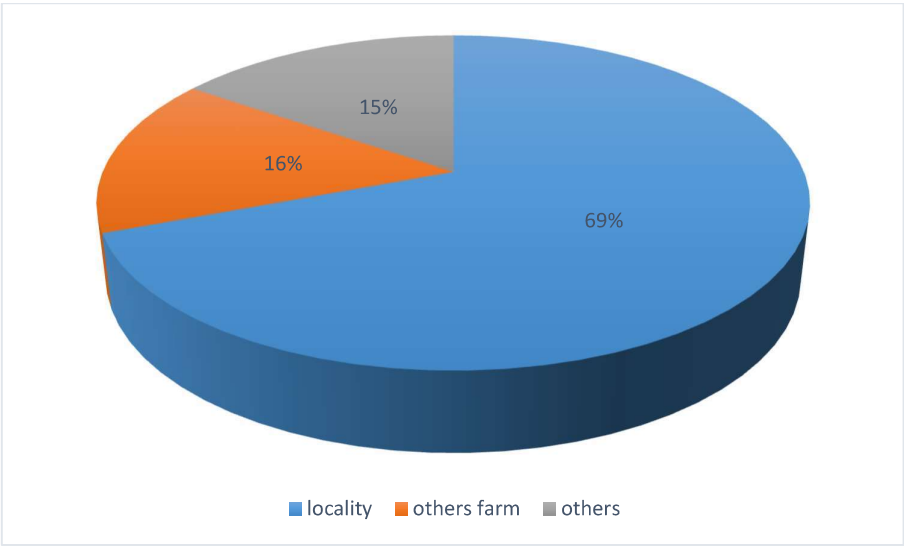
The above figure show the respondents having satisfaction from bank is at 56%, while does not having satisfied with performance/ service provide is at the rate of 36%. Respondents who is partially satisfied is only 8%.

**2.13 Importation of Piglet**

Table 2.13 indicates where the respondents get their piglets

**Table 2.13 Importation of piglet**

Locality	18
Others Farm	4
Others	4
Total	26



**Fig. 2.13**

The above statement shows that respondents gradually import piglet from locality which is at the rate of 69%, while who import from Others farm and others is at 16% and 15% only.

**2.14 Demand in locality/ District for meat?**

Table 2.14 indicates what the amount demand for meat in their locality/ district.

**Table 2.14 Demand in locality/ District for meat?**

High	4
Average	16
Low	7
Total	27

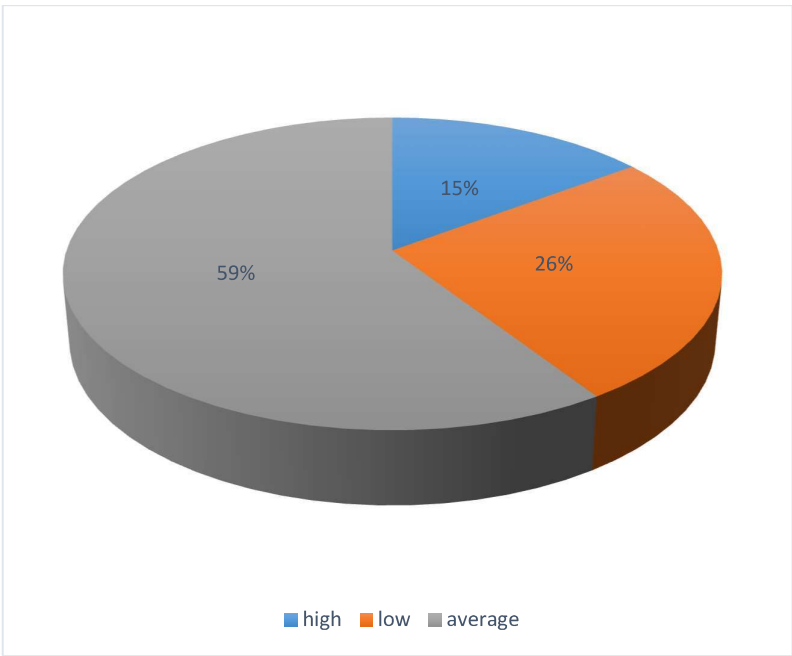


Fig. 2.14

The above figure state that demand for meat in locality is average at the rate of 59%, while low in demand is at second at the rate of 26% which indicates the demand is rarely high at the rate of 15% only.

### 2.15 Cost of one piglet in Locality/ District

Table 2.15 indicates what amount of one piglet in their locality.

**Table 2.15 Cost of one piglet in locality/ district**

Below 6000	4
Above 6000	19
Others	4
Total	27

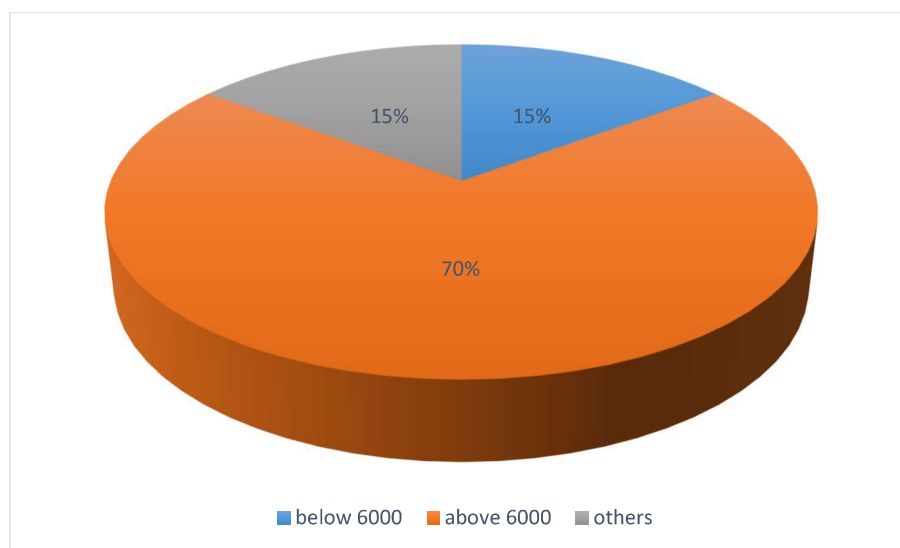


Fig. 2.15

The above figure shows the amount of piglet is highly at above Rs.6000 at the rate of 70%, which states that cost of one piglet is very high. Below Rs. 6000 and others is at 15% only.

## 2.16 Profit earn for selling one mature Pig

Table 2.16 indicates what is the profit one selling one Pig.

**Table 2.16 Profit earn for selling one mature Pig**

Below 20000	5
20000	12
Above 20000	8
Total	25

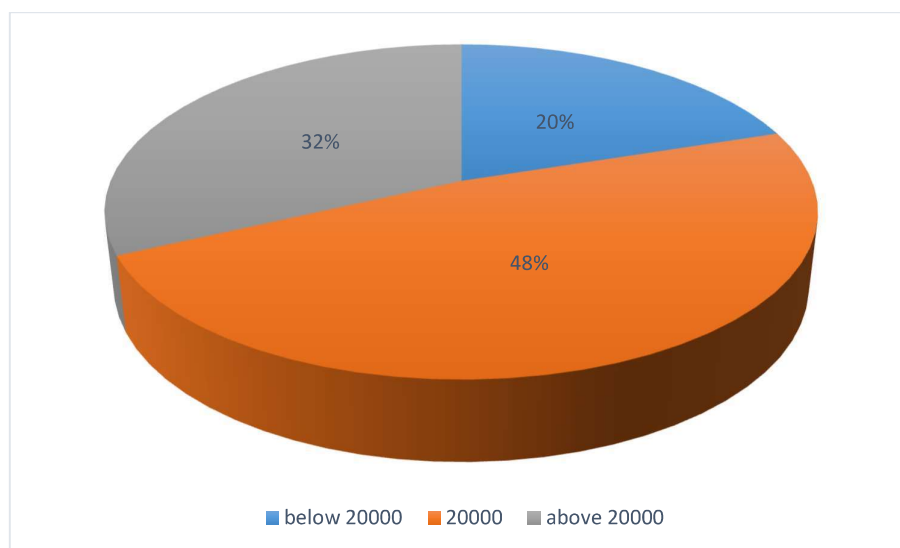


Fig. 2.16

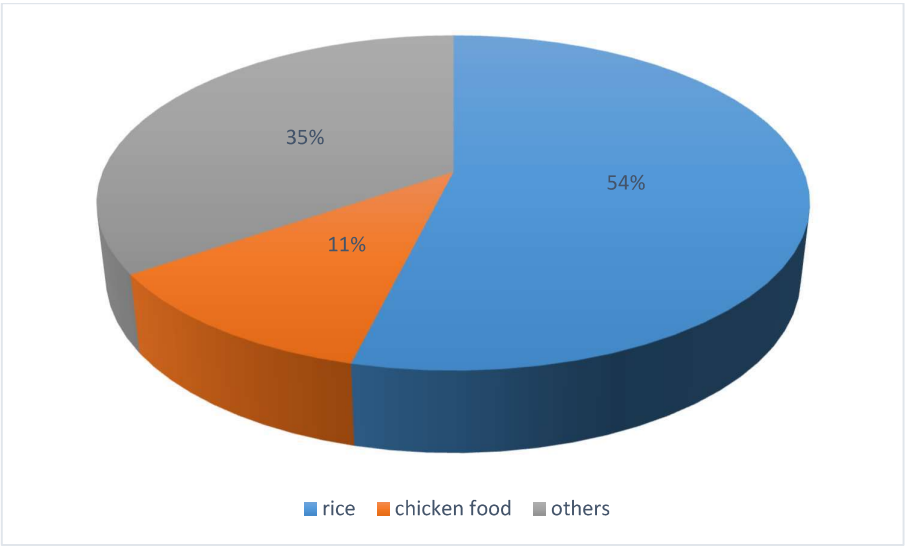
The above figure state that the amount of one mature pig which is Rs. 20000 is at the highest rate at 48%, which means the cost of one mature pig is very average. While above Rs.20000 is second at the rate of 20% and below Rs.20000 is at the rate of 32% only.

**2.17 Food for Pig**

Table 2.17 indicates what usually did the respondents use to feed their Pig.

**Table 2.17 Food for Pig**

Rice	14
Chicken food	3
Others	9
Total	26



**Fig. 2.17**

The above figure state that the respondents usually feed their pig with rice at the rate of 54% which is usually high. Secondly others at the rate of 35% and Chicken food at 11% only. Which indicates that rice is the main food provide their farm.



### 2.18 Average Kg. of pork meat sold in their farm per month

Table 2.18 indicates what the average of meat usually sold from their Piggery in one month.

**Table 2.18 Average Kg. of pork meat sold in their farm per month**

Below 350	7
350-400	12
Above 400	5
Others	2
Total	26

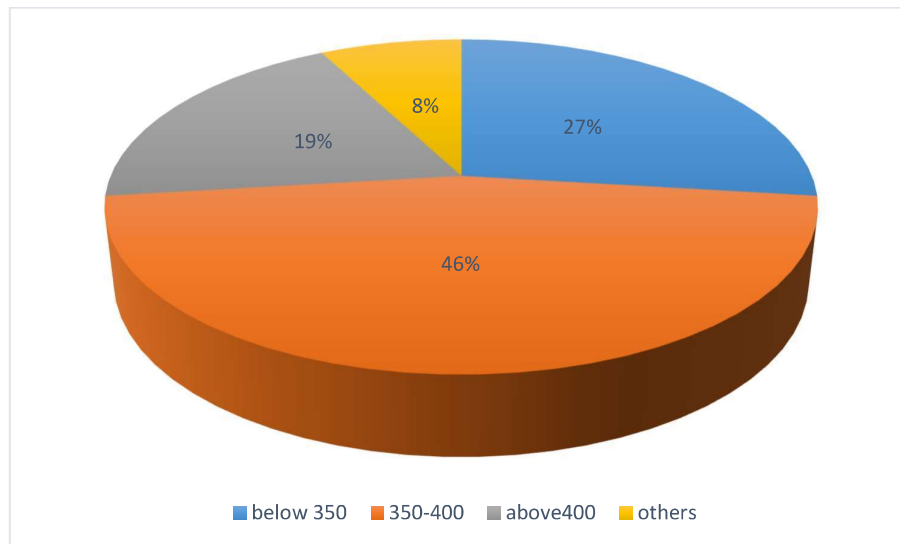


Fig. 2.18

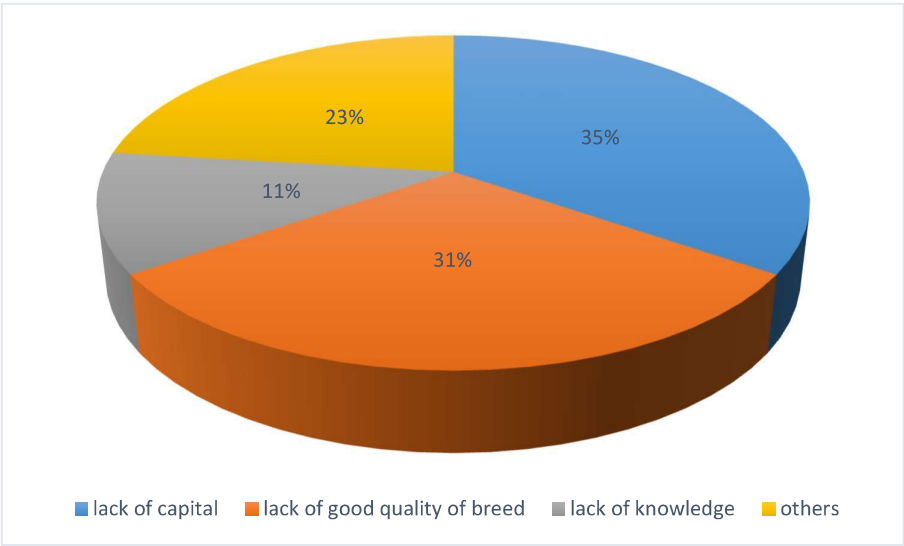
The above statement shows the average cost of meat per one Kg. of Rs. 350-400 is highest at the rate of 46%. While in some area it is still lesser than Rs. 350 at the rate of 27%. While in some area it is above Rs. 400 at the rate of 19%.

**2.19 Lack of problem faced by Piggery farm?**

Table 2.19 indicates what the main problem faced by the respondents farm.

**Table 2.19Lack of Problem faced by Piggery farm?**

Lack of capital	9
Lack of good quality breed	8
Lack of knowledge	3
Others	6
Total	26



**Fig. 2.19**

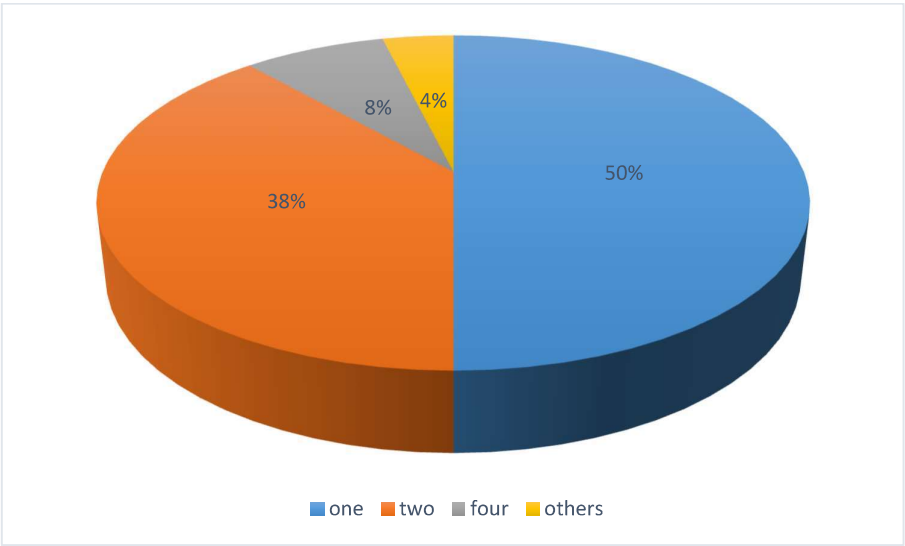
The above statement shows the most problem faced by the respondents is lack of capital which is at the rate of 35%, secondly lack of goog quaity breed at 31% and others at 23% while lack of knowledge at 11% only. Which indicates they have experience in their farm.

**2.20 Numbers of workers in Piggery farm?**

Table 2.20 indicates how many workers were in their Piggery farm.

**Table 2.20 Numbers of workers in Piggery farm?**

One	13
Two	10
Four	2
Others	1
Total	26



**Fig. 2.20**

The above statement shows that the numbers of workers at farm only working one respondents is the highest at the rate of 50%, working two respondents is secondly at the rate of 38%, while working four respondents and others is at the rate of 8% and 4% only.

## 2.21 Total investment for Piggery farm?

Table 2.21 indicates what's the total investment for their Piggery farm.

**Table 2.21 Total investment for Piggery farm?**

Below 1 Lakh	8
1-3 Lakh	8
Above 3 Lakh	3
Others	5
Total	24

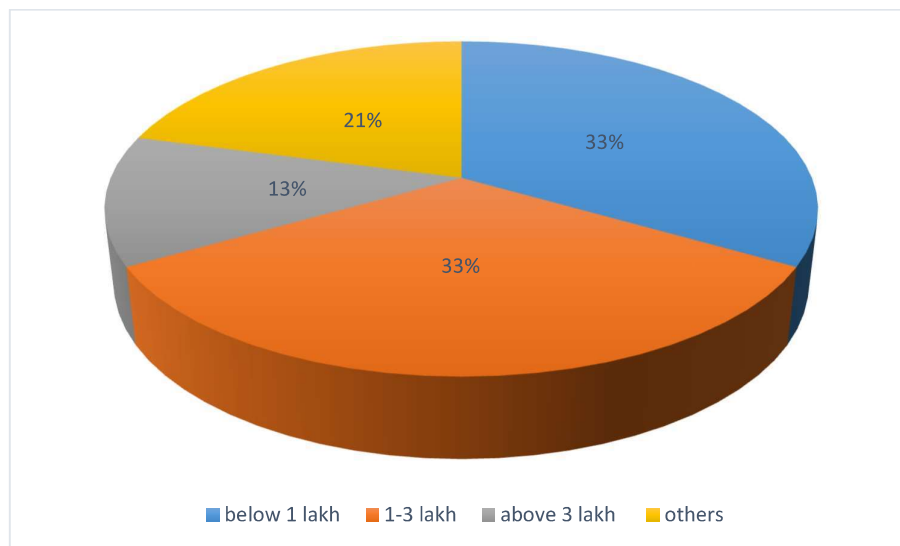


Fig. 2. 21

The above statement shows that respondents earning below 1lakh and 1-3 lakh is the highest at the rate of 33%, while others is secondly at 21% and above 3lakh at 13%.

## 2.22 Numbers of Piglet during start up

Table 2.22 indicates how many Piglet they consumed to start up their farm.

**Table 2.22 Numbers of Piglet during start up**

Below 5	20
5- 10	3
Above 10	2
Total	25

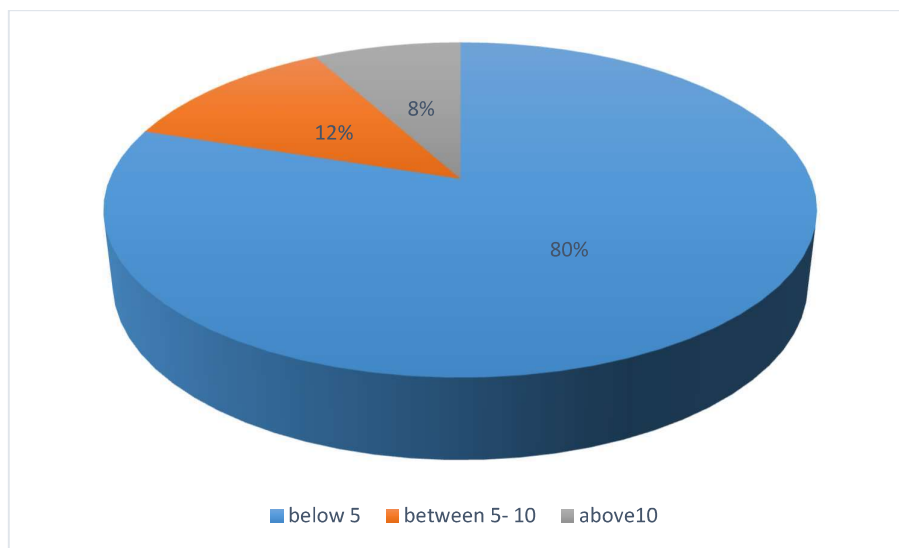


Fig. 2.22

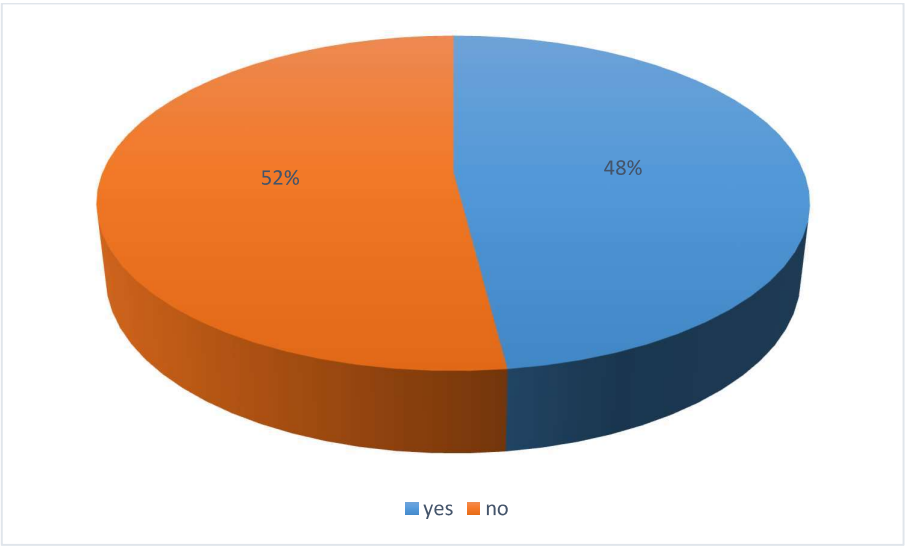
The above statement shows that respondents usually start up at below 5 piglet which is the highest at the rate of 80%. While secondly at 5-10 at 12% and lastly respondents use above 10 piglet at 8% only.

**2.23 Experience/ trouble in delivering birth in farm**

Table 2.23 indicates that the repondents have any triuble in delivering birth in farm

**Table 2.23 Experience / trouble in delivering birth in farm**

Yes	12
No	13
Total	25



**Fig. 2.23**

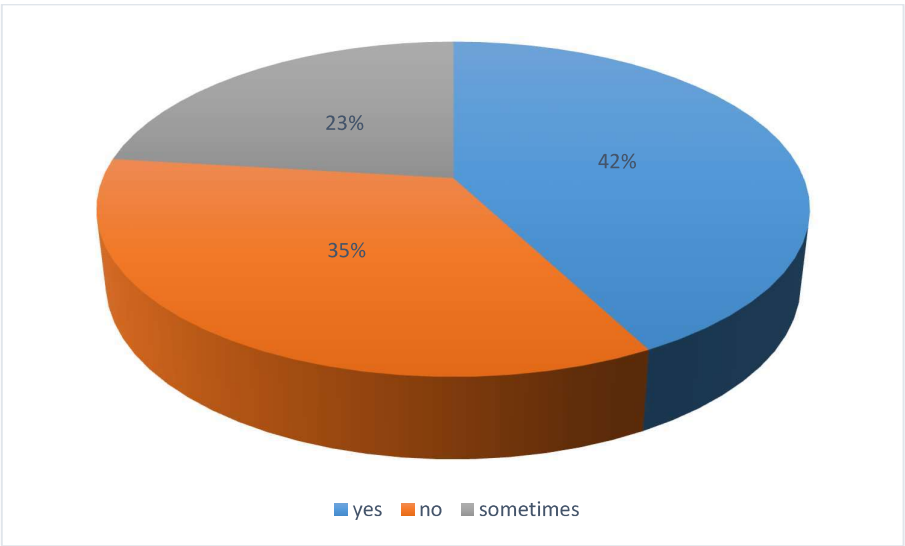
The above statement shows that respondents had lesser trouble in gaving birth in the farm, which is at the rate of 52%. While repondents having trouble in gaving birth is 48% which is lesser.

**2.24 Having death Piglet while delivering period?**

Table 2.24 indicates that the respondents have facing any problem in delivering preiod in their farm.

**Table 2.24 Having death Piglet while delivering period**

Yes	11
No	9
Sometimes	6
Total	26



**Fig. 2.24**

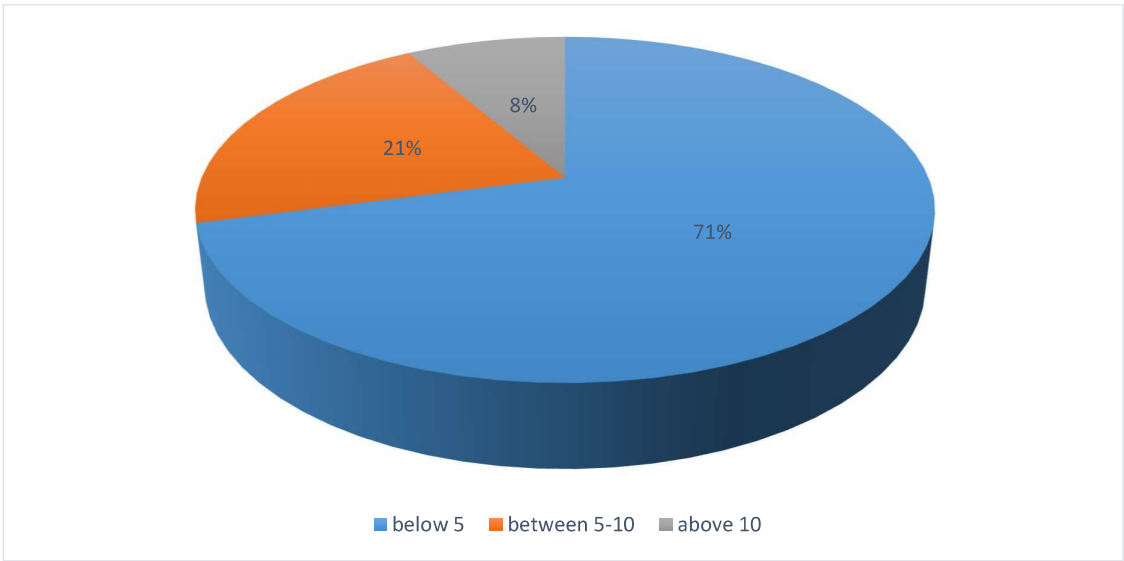
The above statement shows that repondenst having trouble while delivering birth at firm is the highest at the rate of 42%, while having no problem is at the rate of 35% which is second. Having trouble sometimes at delivery is at 23%.

**2.25 Lost of Pig in one year**

Table 2.25 indicates how many loss of Pig they had in one year.

**Table 2.25 Lost of Pig in one year**

Below 5	17
5-10	5
Above 10	2
Total	24



**Fig. 2.25**

The above statement shows that repondents having lost of below 5 pigs is the highest at the rate of 71%, while between 5-10 is at 21%. Above 10 is thw lowest at the rate of 8% only, which indicate lesser lost is more beneficial then morer lost.

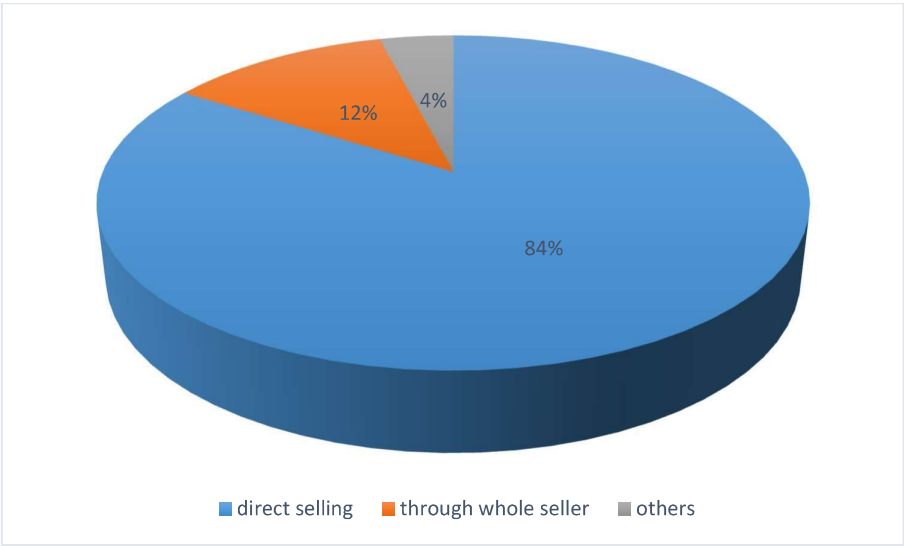


**2.26 Method of selling**

Table 2.26 indicates what is the method of selling for the respondents.

**Table 2.26 Method of selling**

Direct selling	21
Through whole seller	3
Others	1
Total	25



**Fig. 2.26**

The above statement shows that direct selling is the highest at the rate of 84% while through wholeseller is at 12% and Others at the rate of 4% only. Which indicate direct selling is direct selling is the most popular sell in their locality.

## **Chapter - III**

### **Results and Discussion**

#### **Major Findings**

This chapter finally highlights the findings of the study from the data collected from 28 respondents.

- 41 percent of the respondents are female while 59 percent are male which may indicate that male are more interested in Piggery Farming.
- 57 percent of the respondents are below 25 years of age and 29 percent are between 25-35 and 7 percent are between 35-50 and above 50 years of age, which indicate that people at lower age are being interested in Piggery Farming.
- 41 percent of the respondents are HSSLC and 37 percent are graduate and 18 percent are upto class VIII and 4 percent are uneducated in education.
- 48 percent of the respondents are others and 33 percent are piggery farmer and 15 percent are agricultural and 4 percent are business man/woman while government job are at 0 percent in occupation of the respondents.
- 56 percent of the respondents use Piggery Farming as secondary occupation and 44 percent use as primary occupation, which indicates respondents use piggery farming as primary occupation is lesser while it is very useful for secondary user to use piggery farming as side income.
- 63 percent of the respondents situated their farm on family owned land and 26 percent on others and 11 percent on rent. This indicates respondents situated their farm on family owned land would have more beneficial in profit earning than others and rent.
- 48 percent of the respondents are influenced by family inheritance to start on piggery farming and 44 percent are others and 7 percent are non-availability of government job and availability of assistance from government at 0 percent.
- 93 percent of the respondents state there is availability of veterinary/ aid center is available in their area while 7 percent state there is no availability of veterinary/ aid center.
- 58 percent of the respondents state that there is provide/conduct of awareness program is held in their locality while 42 percent state there is no conduct of awareness is held. Which indicate facing problem for the respondents in their farm would not be easy.

- 58 percent of the respondents state that there is no providing/ avail any benefit subsidies from the government while 42 percent state that there is. This shows that the larger percent of the respondents avail themselves to run their farm.
- 52 percent of the respondents take loan from bank to run their farm and 40 percent take from individuals and 8 percent take from societies. Respondents taking loan from bank would have more profit other than taking loan from societies and individuals cause they had to pay lesser interest.
- 56 percent of the respondents are satisfied by ht performance/ quality of service provided by the bank and 36 percent are not satisfied and 8 percent are partially satisfied.
- 69 percent of the respondents import their piglet from locality and 15 percent are from other farm and others. This indicate importing piglet from more easy and lessser expensive than others.
- 59 percent of the respondents state that demand for meat in their locality is average and 26 percent state low and 15 percent state high. The deamand for meat must be high so that it would be more beneficaill for the respondents.
- 70 percent of the respondents state that the cost of one piglet is above Rs.6000 and 15 percent state that it is below Rs. 6000 and others. This indicate the cost of piglet is very high in their area.
- 48 percent of the respondents state the profit earning of selling one mature pig is Rs.20000 and 32 percent state that it is above Rs.20000 and 20 percent state below Rs.20000.
- 54 percent of the respondents usually feed their pig with rice and 35 percent with others and 11 percent with chicken food. In rural area people put leftover food to cook for pig which is very suitalbe and easy.
- 46 percent of the respondents state that one Kg. of meat is Rs.350-400 and 27 percent state below Rs.350 and 19 percent state above Rs.400 and 8 percent state others. This indicates the cost of meat is very suitable to buy for the consumer.
- 35 percent of the respondents state the problem faced by them is lack of capital and 31 percent state lack of good quality of breed and 11 percent state lack of knowledge and 23 percent state others. This indicate lack of capital and good qualty breed is the most problem faced by the respondents.
- 50 percent of the respondents state that only one worker is available at their farm and 38 percent state two workers is available and 8 percent state four workers is available and 4

percent state others. This shows that one and two workers available at their farm is not very huge or well maintained.

- 33 percent of the respondents state that total investment to start up their farm is below Rs. 1Lakh and 1-3 Lakh and 21 percent state others and 13 percent state above Rs.3 Lakh. This indicate the total amount of investment to start up their farm is not very high.
- 80 percent of the respondents use below 5 piglet to start up their piggery farm and 12 percent use 5-10 piglet and 8 percent use above 10 piglet. This indicate the farmer did not use high amount of piglet to start up their piggery farming.
- 52 percent of the respondents does not have experience/ trouble in delivering birth in farm, while 48 percent have experience/ trouble in delivering birth in farm. This state that repondents have still trouble in delivering birth in farm.
- 42 percent of the respondents state they have faced piglet death while delivering period and 35 percent have not and 23 percent had faced sometimes. This shows that they need proper study and prevention.
- 71 percent of the respondents state that they had lost below 5 pigs in one year in theis farm and 21 percent lost 5-10 pigs and 8 percent lost above 10 pigs. According to the quantity of pigs their farm the loss could have cost many problem for them. 84 percent of the respondents usually sell their pig through direct selling and 12 percent through whole seller and 4 percent through others. This indicate that direct selling must be the most profitable or most suitable for the respondents.

## **Chapter - IV**

### **Conclusion and Suggestion**

#### **4.1 CONCLUSION**

Piggery farming is practised in Mizoram as subsidiary occupation which is undertaken as backyard farming in the vicinity of residential house by keeping small number of animal. Even those family members who are involved in its farming spent only part of their time in addition to the work they devoted on their main occupation. So, the pig farming is basically an additional source of employment for the family members.

In spite of the limited time devoted to the piggery farming, the farmers earned substantial income from the sale of pig which is normally. The income is found to be much higher among the family who produce piglets. The paired t-test for the contribution of income from piggery on the total family income significant at all levels. Thus, piggery farming has significantly increased the income levels of the farmers.

According to the study the result show that most of the respondents were influenced by Family inheritance to start up their Piggery farming, the cost of Piglet is also high according to the sell of pork and maintenance of their daily food for their farm. They had also faced many problem in giving birth and lost many piglet and pig during one year which may cause many loss for the respondents. Proper awareness program and subsidies provided by the Government were very low which may affect in improvement and self-development for the respondents.

#### **4.2 SUGGESTION**

- It is found out that most of the respondents in Lungsan area are at the age of below 25 years of age which result that their future is very bright to start up entrepreneurship and earn income for themselves. If they develop and improve in their work and treatment and maintenance of their farm they can all success in their farm.
- It is also found out that there is lack of assistance and provision from the government but they still develop their farm, if there is more availability and assistance from the government they can success faster and larger and their production would be increase at higher.

- It is found out that there are many piggery farmer in Lungsan, which they can form association or group to help each others. So, if they had any problem or trouble they can rely on each others and develop faster.
- From the research it is found out that the demand of pork in their area is not high, so if they can sell and transport their pork to their district it would be very profitable for them.

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## Appendix

### QUESTIONNAIRE

(Fill in the blanks /tick whichever is applicable)

General information of the respondent:

Name:

Gender: Male \_\_\_\_\_ Female \_\_\_\_\_

c. Age:

d. District:

e. Village \_\_\_\_\_ Town \_\_\_\_\_ Valley \_\_\_\_\_ Colony \_\_\_\_\_

f. Qualification: i. None \_\_\_\_\_ ii. Up to class8 \_\_\_\_\_

iii. Up to class12 \_\_\_\_\_ iv. Graduate and Above \_\_\_\_\_

2. Occupation

i. Agriculture \_\_\_\_\_ ii. Business \_\_\_\_\_

iii. Government employee \_\_\_\_\_ iv. Piggery Farmer \_\_\_\_\_ v. Others \_\_\_\_\_

3. Is piggery farming your's?

i. Primary occupation \_\_\_\_\_ ii. Secondary occupation \_\_\_\_\_

Where is your farm situated

i. Family owned land \_\_\_\_\_ ii. Rent \_\_\_\_\_

iii. Others \_\_\_\_\_

5. What influenced you to start your venture on Piggery farming?

i. Family inheritance \_\_\_\_\_

ii. Non-availability of gov't job \_\_\_\_\_

iii Availability of assistance of gov't \_\_\_\_\_



iv. Others\_\_

6. Is there any veterinary aid center in your locality

i. Yes\_\_

ii. No\_\_

7. Does the gov't provide or conduct awareness program in your locality

i. Yes\_\_

ii. No\_\_

8. Does the gov't provide or avail any benefits / subsidies in your locality?

i. Yes\_\_

ii. No\_\_

9. Did you take any loan from Bank / Societies / Individuals?

i. Bank\_\_

ii. Societies\_\_

iii. Individuals\_\_

10. Are you satisfied with the performance / quality of service provided by the bank

i. Yes\_\_

ii. No\_\_

iii. Partially\_\_

11. Where did you get piglet from?

i. Locality\_\_

ii. Others farm

iii. others

12. What is the demand in your locality / district for meat?

i. High\_\_

ii. Low\_\_

iii. Average\_\_

13. How much profit you earn around for sell one mature pig?

i. Below 15000\_\_

ii. 20000\_\_

iii. Above 20000\_\_

14. How much one piglet cost in your locality/ District?

i. Below 6000\_\_

ii. Above 6000\_\_

iii. Others\_\_

15. What do you give for feed your pig?

i. Rice\_\_

ii. Chicken food\_\_

iii. Others\_\_

16. What is the average kg. of pork meat sold in your farm in a month?

i. Below 350\_\_

ii. 350 – 400\_\_

iii. Above 400\_\_

iv. Others\_\_

17. What is the biggest problem faced by a piggery farm?

i. Lack of capital\_\_

ii. Lack of good quality breed\_\_

iii. Lack of knowledge\_\_

iv. Others\_\_

18. What is the number of workers in your farm?

i. One\_\_

ii. Two\_\_

iii. Four\_\_

iv. Others\_\_

19. What is your total Investment?

i. Below 1 Lakh\_\_

ii. 1 – 3 Lakh\_\_

iii. Above 3 Lakh\_\_

20. Number of piglet during start up ?

i. Below 5\_\_

ii. 5 – 10\_\_

iii. Above 10\_\_

21. Did you have any experience / trouble in delivering birth in your farm?

i. Yes\_\_

ii. No\_\_

iii. Have trouble\_\_

22. Did you faced any pig and piglet death while delivering period?

i. Yes\_\_

ii. No\_\_

iii. Sometimes\_\_

23. How much pig you lost in one-year?

i. Below 5\_\_

ii. 5 – 10\_\_

iii. Above 10\_\_

24. What is the method of your selling?

i. Direct selling\_\_

ii. Through Whole seller\_\_

iii. Others\_\_

25. How much you earn in one year from your Piggery farm?

i. Below 3 Lakh\_\_

ii. 3 – 5 Lakh\_\_

iii. Above 5 Lakh\_\_