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INDIGENOUS PIG PRODUCTION IN RURAL AREAS OF MIZORAM

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ABSTRACT

Livestock keeping is embedded to the culture it is an integral part of the people of Mizoram, amongst which pig is the most favourite and the highest demand but with a very low level of supply within the area. Especially in the rural areas where 48.49 percent(Economic survey Mizoram 2012 - 2013) of the population dwells where pig keeping is akin to their household activity as a supplementary to their agricultural yields. Despite the productivity of the farms in Mizoram, the reason leading to the shortage of supply can be credited to the rise in population, increasing in the economy raising the buying power of the people. Largely availability of Burmese piglets at lower rate in the market and at the streets, knocking out the chances of local and the exotic breeds and apparently the small sized farms causes low production. In order to enhance production, control of imports at certain level is essential. With more awareness in the investment opportunities and the development factor in this sector by the higher capacity income group and people with more potential could be a vital factor. The awareness of such and the like facilities is again an essential element from the Government. The people must be given more awareness about the current situation stating the importance of giving importance to value the local Pigs rather than the Burmese pigs. When higher level educated people get engagement in pig production sector, there is a much prospect of rising the swine production as well as income with higher education, more awareness and scope in this matter would be very much advisable.

Keywords: pig farming, piglets, farrowing, weaning, feeds

1. INTRODUCTION

Animals and livestock keeping is a crucial element in the national economy as well as in the socio economic development of a developing country like India, where majority of the population are engaged in agriculture, and thus, generating gainful employment in the rural and sub urban areas. India has the largest livestock population in the world (Government of India Planning Commission, 11th Five Year Plan Report). Agriculture is the main source of income of the people living in rural areas and livestock is a sub sector of agriculture. Pig farming is one vital element of the farmers' economic activity in the North Eastern region in India. The North Eastern region has a sizeable population of pig i.e., 24.63 percent of total pig population of India is in North Eastern states. Around 50 percent of the country's pork is consumed in North Eastern Region alone (Mazumder, et al, 2012).

Mizoram characterised with its hilly terrain and with a population of about 10 lakhs lies within the tropics between latitude 21.19⁰ C to 24.35⁰ C north and longitude 92.15⁰ C to 93.29⁰ C east. The mountain ranges slopes from north to south direction on the ground. The slopes are steep on all sides and the elevation ranges from 40 metres to 2157 metres. Pig rearing in Mizoram is very common and is attributed to culture as well. The livestock population as per the *Animal Husbandry & Veterinary Department Mizoram*, Pigs constitute the largest group followed by Cattle; 73 percent and 9.62 percent respectively. The major by product of livestock is meat in Mizoram. Majority of the population are meat eaters which add to the value of rearing pig at their backyard. However livestock keeping has been akin to the history of the people and often the wealth of the kings are related with the number of livestock in the kingdom.

According to Kumaresan et. al. (2008), pork is the major meat consumed in the state of Mizoram and contribution of pork to the total meat consumed is as high as 71percent. Pork is the most favourite meat amongst the local residents (Mizo), but in the recent years the supply of pork has been short. This may be due to the rise in population and economy which increases the demand as well. There are very few people who have ventured into pig rearing in order to fill up the gap of short supply. Earlier queues never existed for purchase of pork, but now-a-days queues are more prevalent. This indicates the short supply of meat.

2. THE PROBLEM OF THE STUDY

The big issue is that, the demand is rapidly increasing as population and income increases. Not only that, the economic development of the people and changing lifestyle of the people also attribute to the rise in consumption of pork .While on the other hand the production level is in a stagnant position, and when remained untapped will cause the market to impose import from various available sources, this will bring about availability of unhealthy meat and spread of diseases as well. There has been a huge demand gap of meat as per

the recommendation of the Indian Council of Medical Research (ICMR)¹, the majority of the livestock is occupied by the swine at 73.35 percent, and the meat production comprising 56.18 percent of the total meat production during the year 2011 to 2013 (economic survey 2012-2013). Mizoram today, due to huge supply shortage is experiencing unorganised import of livestock from the border region of Myanmar. There are many instances where reports of swine flu and other diseases that are the outcome from importing of livestock. The outcome is therefore the worst for the economy, forcing the people to source their way of supplementing the supply leading to import, either from the neighbouring territories. Since Mizoram is located in the Far East bordering Burma/ Myanmar and Bangladesh in the south west region. Thus the short supply of production has led to import of livestock from neighbouring countries like Myanmar and Bangladesh. This has even led to the dangers of spreading swine flu and other hazards.

The Indian Council of Medical Research (ICMR) has recommended daily allowance of meat as 34 grams per day. The economic survey Mizoram 2012- 2013 lays out the demand gap to be 807 tonnes of meat in Mizoram as per the recommendation. However, this is just a recommendation as per the other parts of India. In fact Mizoram is a part of the North East India where majority of the pork in India is consumed, and at a very large extent it could be assumed that more quantity of pork could be consumed per capita in Mizoram where majority of the people are not restricted by religious beliefs.

3. LITERATURE REVIEW

Kathleen Jenks (2007) on her essay Pigs in History, Religion, Culture and Art states that the pig has a long history of connection with humans. The paper discusses the properties of pork and states that it contains protein, fat, niacin, zinc, phosphorus, and other crucial minerals.

A. Kumerasan, et. al. (2009) studied the production system of 320 rural pig rearing households in the north east India. The study found that majority of the pigs are reared in intensive system and fed with home made cooked feed (kitchen waste and locally available plants). It was also found that the smallholder resource driven pig production is economically viable and sustainable at household level and there is enough scope to improve the smallholder resource driven pig production system.

A Kumaresan et. al. (2006) undertook a study to assess the growth performance of Hampshire, Large White Yorkshire and Mizo local pigs under field conditions in Mizoram. Piglets (45: 8 males and 7 females of each breed) were selected randomly in and around Kolasib district of Mizoram. The existing local methods of housing, feeding and other management practices were recorded. From this study, it was inferred that Hampshire and Large White Yorkshire pigs gain significantly higher body weight than the Mizo local pigs under field conditions in Mizoram.

S. Rahaman et. al. (2008) studied the production and management system followed by the farmers in Mizoram which was concentrated in Aizawl. The study revealed traditional method of feeding kitchen waste. They also used either traditional or allopathic medicines to deworm the pigs. The study also found that the pigs are marketed at the age of 1 year when they gained the body weight of 90 kg or more.

Saidur Rahahman (2007) studied to identify the factors that influences adoption of pig production technology in pig farmers. A total 100 numbers of the farmers were selected for the study and five different factors namely, housing, breeding, feeding, health care and general care and management practices. The study revealed that 81 percent of the farmers adopted improved technology on breeding and 63 percent of them adopted health care practices at higher level in their farms. The percentage of respondents in adopting improved technology on housing and feeding practices were very low. The study also found that the adoptions of improved technologies were associated with age, education, operational land holding, farm size, income from piggery, social participation, extension contact, farming experience, farm education exposure, scientific orientation, knowledge level, training and financial help received.

From the above studies extracted, there is a clear indication of the connection of pig with the human existence and the by products that are used to satisfy the human needs. The production economy is resulted from the culture and the feeding of household waste. The breeds reared and the adoption of technology in the farm have a far reaching effect on the productivity of the farms. There has not been an attempt to assess the education of the farmers and the incumbent productivity and performance. There arises in the need to find out the relevance

¹ Indian Council of Medical Research recommendation meat consumption per annum is 10.95 kgs .

of education and its contribution to farmers and other attributes for the farms and farming activity of the pig rearers.

4. OBJECTIVE OF THE STUDY

- a) To study the pig production in Mizoram
- b) To examine the income generated from the pig production

5. METHODOLOGY

The study was carried out in three selected districts Aizawl, Lunglei and Kolasib of the eight districts of Mizoram, in India during February to September 2013. The data was collected through questionnaire from the pig rearers, interviews along with questionnaire were held with most of the respondent farmers far as possible. Convenient random sampling was used for the data collection. The data was collected through reference method whereby one farmer will refer to another and so on. In this process varied sizes of farms were covered. The data were analysed by using software like SPSS.

6. DATA ANALYSIS

• BREEDS:

Breeds and breeding management is an important factor contributing to the productivity and efficiency of the input in the farm. To a large extent, the rural pig rearers are very cautious in selecting breeds and management of stocks in their venture. There are over 90 recognized breeds and an estimated 230 varieties of pigs in the world. According to the *Animal Husbandry & Veterinary Department* of Mizoram's training manual for pig farmers, there are around 60 good breeds in the world and about 20 of them are imported to India to test their performances. Out of these 20 imported breeds about 6 exotic breeds have been imported to Mizoram for the development of the pig production. Some of the well known breeds used for production in Mizoram are as follows:

- a) **Large White Yorkshire:** These breeds are distinguished by their picturesque bearing, erect ears, slightly dished face, white colour, pink skin and long deep sides. They have been well known for bacon production. The sows are known for large litters and heavy milk production. An adult male reaches 270 to 360 kgs and adult female reaches 250 to 360 kgs.
- b) **Middle White Yorkshire:** The Middle White is a breed of domestic pig native to the United Kingdom. It originated in Yorkshire roughly around the same time as the Large White. Its name comes from the fact that it was between the size of the Large White and the now-extinct Small White. An adult male reaches 220 to 300 kgs and adult female reaches 250 to 360 kgs.
- c) **Hampshire:** The Hampshire pig is a domestic swine breed characterized by erect ears and a black body with a whitish band around the middle, covering the front legs.
- d) **Berkshire :** Berkshire pigs are a rare breed of pig originating from the English county of Berkshire. A very attractive medium sized pig with prick ears, white socks, a white blaze and a white tip to the tail, otherwise totally black. An adult male reaches 275 to 375 kgs and adult female reaches 200 to 290 kgs.
- e) **Landrace:** This breed is of medium to large breed of domestic pig, white in colour, with long bodies, fine hair, long snouts, and heavy, drooping ears. They are bred for pork production.
- f) **Duroc:** Duroc pig is an older breed of American domestic pig that forms the basis for many mixed-breed commercial hogs. Duroc pigs are red, large-framed, medium length, and muscular, with partially drooping ears, and tend to be one of the least aggressive of all the swine breeds. They also have an excellent rate of gain. Adult male can be 400 kgs and female reaches 350kgs.
- g) **Local :** Small in size and usually pot bellied, hairy and black in colour with long face and short ears. These pigs are reported to have an early maturity and are named upon the tribe rearing it. These pigs are sturdy and would survive without much care especially in feeding and disease management.

Breeds selection is a crucial activity and would determine the productivity of the pig. The sample data shows that the pig rearers preferred cross breed pigs which comprise the highest 37.6 percent of the sample. This can be a convenient breeding service practiced as per availability by the farmers. The farmers prefer those pigs with higher farrowing capacity. The sample data also find that Burmese imported pigs comprises 24.8 percent. The exotic breeds which are initiated by the Government and comprise 23.3 percent and lastly the Mizo local pigs are at 14.3 percent. These local pigs are known for rich taste meat and it is a

favourite among some of the people. Although the demand for local pig is high due to its small size, the farmers are not opting it for breeding in their venture, the low productivity tends to be the disadvantages of the farmers' investment.

Table No. 1: Farmers Preferences on Variables of Production

SI No.	Criteria	Category	Frequency	Percentage
1.	Purpose	Meat	324	54.6
		Reproduction/ Breeding	54	9.1
		Both Meat & Production	210	35.4
2.	Breeds	Trade	5	.8
		Exotic	138	23.3
		Cross	223	37.6
		Burma imported	147	24.8
		Local Pigs	85	14.3
3.	Source of Piglets	Reliable breeder	153	25.8
		Nearest farm	133	22.4
		Govt. Farm	26	4.4
		Others	281	47.4
4.	Age of stock Purchase	< (2 months)	136	22.9
		2-3months	367	61.9
		4 months and above	84	14.2
		Self sufficient(inbreeding)	6	1.0
5	Breeding service	Yes	113	19.1
		No	480	80.9
6.	Farrowing per year	Once	82	17.6
		Twice	384	82.4
7.	Litters at Birth per pig	less than 5	24	7.8
		5-8	97	31.5
		Above8	187	60.0
8.	Litters at Weaning	less than 4	35	11.2
		4-6	103	33.1
		above 6	173	55.6

Source: Sample survey

The major purpose of pig rearing is meat, there are two phases of pig production: (1) sow farms (breeding and rearing) and (2) fattening farms (growing and finishing). It is clearly observed that in Mizoram, the major concern for farming pig is meat where majority of the respondents' activity opt for meat production and fattening, resulting 54.6 percent of the farmers keep their pig for the purpose of meat production and 9.1 percent of them keep them for reproduction and 35.4 percent keep for both purposes as shown in Table no. 1. Lastly there are a small portion of players 0.8 percent who does it only for trade.

The productivity of pigs is determined by the breed selection and availability of good breed. During the data collection, the farmers gave the opinion that they are not able to purchase the piglets whenever they require. It was found that majority of the farmers opt for the Burmese pigs and the source of stock (piglets) purchase from these street vendors which is represented by 47.4 percent. The above table no. 1 shows that 25.8 percent of the farmers have purchased from a reliable breeder at their region, 22.4 percent buys from nearest farm on convenience and 4.4 percent from Government farm. The second highest purchase of stocks (piglets) is from the reliable breeders. There are very little number of Government farms that are at the reach of the majority of the farmers, that only 4.4 percent of the farmers do avail their piglets from the most convenient Burmese vendors at 47.4 percent of the sample.

Weaning large litters, having an appropriate size and weight is a key factor for a profitable herd. There are some pig keepers represented by 14.2 percent who buys pigs at older age i.e., at or after 4 months with the assumption that these pigs have high rate of growth and some of them will be sold in the market. It was also found that majority 61.9 percent of the litters when bought are 2 to 3 months of age and 22.9 percent are purchased at the age below 2 months. There are also farms which are self sufficient which is represented by 1 percent who provide stock(piglets) from their own farm. Only 19.1 percent of the farmers keep male pig for servicing.

Farrowing is another name for giving birth after a normal gestation. A productive sow usually farrows twice in a year, the study shows that 82.4 percent of the sows in the farm farrows twice in a year and are quite reproductive where 60 percent of the average litters per sow is above 8. The table also shows that 31.5 percent of the sample farrows between 5 to 8 litters per farrowing, it was also observed that some sows gives birth up to 17 litters and these farmers do engage more than the others in caring the pigs. There are some responses where 7.8 percent of the sample produces less than 5 litters per farrowing, the attributes of this group of low rate of output per sow resulted from the rearing of local pigs.

Weaning is the taking away of piglets from the mother on or after two months. Cross breeding among the exotic breed are found to give large litters till the time of weaning. It was also found that 55.6 percent at weaning time were above 6 months and 33.1 percent were 4 to 6 months and 11.2 percent were below 4 months. It was observed that the breed reared does have a substantial impact in the size of the litters at birth and weaning. The data shows that the care practices in Mizoram are acceptable for survival of the piglets. Though majority of the respondents have pig keeping as part time, it was found that the breeds are quite productive. It can be assumed that if more time is allocated to the care practices, productivity in aspects of farrowing can be at higher level.

Table No. 2: Farming and Management of Pig Production

Sl.No.	Criteria	Category	Frequency	Percent
1.	Duration of Farming	<(1 year)	68	11.5
		2-5yrs	261	44.0
		5-10 yrs	167	28.2
		>(10 years)	97	16.4
2.	Farm size	1-10	448	75.5
		11-20	80	13.5
		21-50	40	6.7
		51-100	19	3.2
		>(100)	6	1.0
3.	Daily engagement	less than two hours	239	40.3
		2-5hours	268	45.2
		5-10 hours	68	11.5
		more than 10 hours	18	3.1
4.	Feeds	Kitchen waste	149	25.1
		Feeds	66	11.1
		Kitchen waste and Feeds	135	22.8
		Vegetation	67	11.3
		Vegetation, feeds and kitchen waste	176	29.7
5.	Feeds in a day	Twice	501	84.5
		Thrice	92	15.5
6.	Boiling of feeds	yes	563	94.9
		no	30	5.0
7.	Sty	Bamboo and wood	138	23.3
		Wood Only	315	53.2
		Mud and others	70	11.8
		Concrete	11	1.9
		Concrete and wood	43	7.3

		Others	16	2.7
8.	Waste management	Planned	332	56.0
		Unplanned	261	44.0

Source: Sample survey

It has been said that pig keeping is a part of the culture of the Mizos, partial engagement in pig keeping is another reason that attributes to the type of farming in Mizoram. The study finds that there are variances in the duration of rearing pigs. The study shows that 44 percent of the respondents have been keeping pig for 2 to 5 years, and 28.2 percent are keeping for 5 to 10 years. A substantial 16.4 percent of the respondents have been keeping pigs for more than 10 years and 11.5 percent below 1 year. It was observed that the diversity in the duration of farming is attributed to be the breakdown of families into smaller nuclear families. It was observed that there has been inconsistency in the farming due to engagement in other activities. The study also finds some big farms which are at the nascent stages of development.

The sizes of the farms are quite small due to the fact that majority of the farmers are keeping their pigs as a backyard venture or substitute activity for additional income. The study finds that 75.5 percent of the respondents keep their pig to clear up the kitchen waste and rear usually less than 10 pigs. The study also finds that there were substantial number of midsize farmers in the state viz., 13.5 percent of the farmers keep 11 to 20 pigs, and 6.7 percent keep 21 to 50 pigs. Big farms which rears more than 20 pigs requires extensive maintenance and intensive care. A very small number representing 1 percent of farmers keep more than 100 pigs. It was observed that the highest number of pigs in a farm was about 250 live pigs among the sample size. The Government has also appointed these big farms as piglet multiplication centre as well. There were few farms as much as 3.2 percent who keeps 50 to 100 pigs and they too have their plans to expand to larger units.

Pigs require intensive care and other activities for their productivity. The time that the farmers give to the pigs makes a difference in their growth and health. Farming hours or time spent for farming are as follows, highest among the sample 45.2 percent spends 2 to 5 hours looking after the farm. A large percent resulting as much as 40.3 percent spends less than 2 hours per day. There are 3.1 percent of the farmers who spends more than 10 hours due to their large farm. The sample also shows that 11.5 percent spends 5 to 10 hours in the farm. Larger the farms, more time were estimated to be spent for care and looking after the production. Majority of the small farms were observed to spend less time for farming which consisted of mere preparation of feeds and feeding of pigs.

Feeding is as important element in pig farming to produce meat or breeds. The sample study shows that the farmers do feed twice in a day and 94.9 percent boil their feeds. Boiling is carried out to soften the feeds. Feed supply from the market could be quite expensive for the lower income group farmers. The most common practice in pig rearing in Mizoram is feeding of kitchen waste while 25 percent of the farmers extensively make use of it. There are some farmers who have the opinion that use of readymade feeds from the market is more economical than boiling the feeds prepared from vegetation and kitchen waste. From the sample survey, 11.1 percent uses only the readymade feeds purchased from the market. According to the farmers, these readymade feeds gives the highest growth rate. On the other hand there are 11.3 percent farmers who practices the method of boiling green leaves and other vegetation as feeds which is convenient in the rural areas. There survey also finds that 22.8 percent uses both kitchen waste and feeds, while 29.7 percent utilise a mixture of available feeds, vegetation and kitchen waste. It was also observed that around 2 to 3.5 kilograms of dry feeds were given to adult pigs in a day. The kitchen waste feeding practice is very common and economical as well. The respondents who use readymade feeds have shared their difficulties in the availability, high price and stocking of the feeds. It was also observed that the larger farms have been utilising readymade feeds prior to the smaller farms who can manage with kitchen waste and other vegetation.

A well constructed sty is a crucial factor of hygienic farming of pigs. Most of the sties were constructed with a small or little elevation levelling the slope of the land. It was found that 76.5 percent of the pig sties were constructed using bamboo and wood which are the most abundant materials found in the region. There are some village farmers who builds with mud and other available convenient materials which are represented by 11.8 percent. In the more urban areas, there are small farmers who uses better materials like concrete and mortar for the construction of the sty. It was also found that 1.9 percent uses concrete and wood with other conveniences. Most of the farmers use the waste products as manures for crops and vegetation which is shown by the result that 56 percent of the farms claimed to utilise the waste as manure, fertilizers, etc.. for the crops.

Table No.3. Demographic Profile of the Pig Farmers

SI No.	Criteria	Category	Frequency	Percentage
1.	Age Group	18 to 29	42	7.1
		30 to 49	308	51.9
		50 to 69	217	36.6
		70 & above	26	4.4
2.	Education	Illiterate	14	2.3
		Under Matric	361	60.9
		Matric	153	25.8
		Intermediate	25	4.2
		Graduate	32	5.4
		Post Graduate	8	1.3
3.	Sources of income	Pig Only	116	19.6
		Farm +Pig	136	22.9
		Pig + Business	221	37.2
		Pig + Govt. Job	70	11.8
		Farm + Pig + Govt. Job	50	8.4
4.	Revenue from pig farming	Below Rs. 15000	61	10.3
		Rs. 15000-20000	69	11.6
		Rs. 20000-25000	89	15.0
		Rs. 25000- 30000	104	17.5
		Rs. 30000-35000	56	9.4
		Rs. 35000-40000	22	3.7
		Rs. 40000-45000	36	6.1
		Rs. 50000-100000	49	8.3
		Rs. 100001-250000	72	12.1
		Rs. 250000 and above	35	5.9

Source: Sample survey

The above table no. 3 shows the demographic profile of the farmers who rear pigs in Mizoram. The study finds that majority of the farmers are in the age-group of 30-49 who are young adults. The second largest group falls in the category of age group between 50 to 69 which is represented by 36.6 percent. This group is the group who have the experience of life and highly motivated to achieve more. The study also found that there are small number of youths in the farming too, at 7.1 percent of the sample in the age group 18 to 29. They are doing as much to support their low income. Lastly the age group 70 to 100 is represented by 4.4 percent of the total. This group are doing the farming to spend some time as well as to supplement the family income.

Majority of pig rearers in Mizoram can be estimated to have a literacy level under matric. From the sample, 61 percent of the farmers are having some literacy below matriculation standard which means that they have some basic education. It was also seen that 25.8 percent of the sample respondents has passed class ten, 4.2 percent were at intermediate and 5.8 percent graduated level. The lowest group is post graduate farmers which was represented by 1.3 percent.

The farmers were queried about their purpose of pig rearing. Out of the total, 116 respondents representing 19.6 percent said that they are primarily engaged in the swine production. These fulltime farmers are working hard so that their earnings are as par with some Government employees earning. The farmers are self employed in their farm and according to their response they had been earning quite substantially in comparison to the national and state per capita income which are estimated to Rs 61,564/- and Rs. 54,689 /- respectively (Economic Survey, 2013). There are also some farmers whose income is higher than government employees. There are 22.9 percent respondents who does pig keeping along with other agro-based farming. 37.2 percent of

the respondents carry on with other business like hotels, stores, etc., while 11.8 percent of the farmers are with some governmental jobs. Finally the respondents who does farming of pigs, along with government jobs as well as some forms of business is represented by 8.4 percent of the respondents.

Mizoram state's per capita income is estimated at Rs 54,689/- in 2012 while the national per capita income during the same period is estimated to be Rs 61,564/- (Economic Survey, 2012-13). Pig rearing is economic activity due to the fulfilling of demand and supply of pigs which may be in the form of piglets, meat, etc. Those who are engaged in pig rearing are more or less self employed and are generating revenue for the state.

An attempt was made to assess the income from pig rearing from the respondents through a questionnaire. In order to assess the income from pig rearing, the results are classified in categories so as to keep the confidentiality of the respondents. It was observed that maximum farmers representing 17.5 percent made an income from pigs as much as Rs. 25,000 to 30,000 per annum. 15 percent of the respondents earns about Rs. 20,000 to 25,000. There are 12.1 percent of the farmers who earns Rs.1,00,000-2,50,000 , small sized farms whose earnings range Rs.15,000-20,000 were at 11.6 percent while 10.3 percent of farmers earns below Rs. 15,000. The table no. 3 also shows 9.4 percent of the respondents were earning between Rs. 30,000 and 35,000 . It was also observed that 8.3 percent respondents were earnings at lower rate at Rs. 50,000-1,00,000, consequently Rs. 40,000-45,000 by 6.1 percent respondents. The highest income category could be found in more than Rs. 2,50,000 and above was earned by 5.9 percent of the respondents and while a small category of Rs.35,000-40,000 by 3.7 percent respectively. The study finds that the higher income earners were from the large farms whose efforts were more intensive and have their farming as main occupation. The income made from pig keeping was quite substantial as majority of the respondents have it as a supplementary income earning activity along with other occupation.

CONCLUSIONS

Livestock keeping is embedded to the culture it is an integral part of the people of Mizoram, amongst which pig is the most favourite and the most demanded product. During the recent years, there has been a very stagnant level of supply within the area. The reason leading to the shortage of supply can be credited to the rise in population, increase in the purchasing power of the people. Another stagnating factor is the availability of the Burmese pigs at a large extent and at a reasonable price, which are imported from the Myanmar border at Zokhawthar at the Far East corner Champhai. The change in lifestyle and more migrants to urban area are akin to the people with more intension to have more economic activities. Majority of the respondents had been supplementing their income with the pig farming and are generating income.

It was observed that majority of the farms are small in size and consist of people with lower level of income having a tendency to invest more in the field. There were large number of respondents who keep farming as part time or backyard venture. These groups are rearing the pigs as more domestic consumption and to earn a side income. They are not serious about full time production and management of the pig production. Therefore, these are the groups which could contribute to the filling up of the gap in supply. Awareness in the investment opportunities and profitability is essential for enhancing the production as early as possible, to tackle the demand and minimising the gap of supply. The productivity of the rearing system results in the selection of the breeds and availability of stocks when required.

The sources of stock purchase clearly shows the evidence of imports of live swine from the Myanmar border which is bought at lower price. The farmers on the other hand prefers to pay for the cheaper piglets because of convenience and availability at larger unit, keeping the local and exotic cross breeds away which are available in the locality. In order to enhance production, control of imports are required at certain level, but it has become the need to import from Burma, despite of the threats. The people must be given more awareness about the value of the local exotic breeds of swine initiated by the Government, rather than the Burmese pigs. The Government on the other line could have been more active in controlling the imports to protect the local products and to increase production which further could increase the economic activity. The study also concludes that the average income of the respondents is approx Rs. 35,400. There are farmers (5.9 percent) who earns more than Rs. 2,50,000 from pig rearing alone. Therefore it can be concluded that indigenous pig production in Mizoram could encourage economic activity.

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