**Marketing of Pig in Mizoram: A Study on Select Districts**

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**Abstract**

Marketing is a human activity directed at satisfying needs and wants through exchange processes. It includes all actions designed to generate and facilitate any replace intended to satisfy human needs or wants, marketing occurs when people decide to satisfy needs and wants through exchange of values. Pork being most favoured and highly demanded in Mizoram although with features of low production, needs less effort to sell. The livestock is sold at the individual level or in markets where the prices are controlled by the traders, brokers and even some by the money lenders, having no consideration in the input or the real value of cost of rearing the animal. The paper attempts to study marketing of pigs through 4 Ps viz., product, price, place and promotion. The condition of the pig marketing is still very poor among the livestock marketing, as the pig farmers are small in numbers, but also scattered over a large area. The study finds majority of farmers acquired comparatively low literacy, economically weak and the marketing process in a nascent stage.

Keywords: pig farming, 4 Ps, pig, pork, marketing

1. **Introduction**:

Livestock production is backbone of Indian agriculture contributing 4 percent to national GDP and source of employment and ultimate livelihood for 70 percent population in rural areas. Contribution of livestock to agriculture sector GDP has been steadily increasing. The growth of demand for animal products has arisen from the growth of population, urbanization and rising income in the developing countries (FAO, 2003). As a result, there has been an increase in production of animal products especially in the poultry and swine production. Pig is one of the most prolific and fast growing livestock species that can convert food waste to valuable products (Rodriguez-Estevez et al., 2010). Further with the growing demand of meat, fast growing products like pigs accounts for a major share in the growth of livestock sector. Pig farming is considered to be an important economic activity which provides opportunity as an income generating activity among the small scale farmers especially in developing countries. Pigs have higher turnover rate due to large litter sizes, shorter gestation period (114 days) and more efficient carcass yield than other cattle, sheep or goat, dressing out at about 70% compared to 52.5% for cattle and about 50% for sheep and goat (Tewe and Adesehinwa, 1995).

Pig rearing is an important economic activity in the eastern states of the India and particularly among the tribal communities (Rangnekar, 2006). Animal farming has a special significance as it plays an important role in improving the socio-economic development of the weaker sections of the society. Livestock is the source of income for the small scale farmers and acts as an insurance against crop failures and unforeseen calamities. The importance of livestock goes beyond its food production function (Birthal et al 2002). It provides draught power and organic manure for crop production. It also provides hides, skin, bones, blood and fibers to the industrial sector. It generates a continuous stream of income and employment and reduces seasonality in livelihood patterns particularly of the rural poor (Birthal and Ali, 2005). The dietary protein consumption of India is estimated at 60g/person/day (FAO, 2010) which is lower than the average dietary protein consumption of the world (85g/person/day), developed countries (104 g/person/day) and developing countries (80g/person/day). The low protein consumption is partly due to the high cost of animal protein sources such as meat of cattle, goat, sheep and poultry.

Mizoram located in the north eastern part of India is a mountainous region with a population of about 11 lakhs (Economic Survey of Mizoram,2016) and it lies within the tropics between latitude 21.190 to 24.350 north and longitude 92.150 to 93.290 east. An aerial survey of the states gives an impression of shape of a bitter gourd which has been cut horizontally and put in north-south direction on the ground. The whole state is broken into innumerable broken hills locally called as “Tlang” with sharp and pointed hill tops. The slopes are steep on all sides and the elevation ranges from 40 metres to 2157 metres. The average altitude is about 900 metres from sea level. The hills are covered with dense vegetation and bamboo forests are common, due to this rough terrain, growths of industries are difficult unlike other parts of the country. As crop production is still follows traditional method, livestock plays an important role in this hilly state. Livestock rearing is an incumbent part of the culture of the people in Mizoram. Amongst the livestock animal reared, pig is most significantly reared in every household as an additional economic activity. Pig farming is one of the main sources of income for the subsistence farmers as well as determining the family’s purchasing power.

The number of livestock owned by the families in the rural areas of Mizoram often is referred as an indicator of wealth of the village. The history of livestock keeping and pig rearing could be traced back with the earlier part of the Mizo history. According to the officials of Animal Husbandry and Veterinary Department, Government of Mizoram, commonly cited reasons for this rising meat consumption are due to changing dietary preferences towards meat, poultry and milk being associated with the increase of disposable income and rapid urbanization in the state.

Studies find that improving the local market system could enhance the benefit of smallholder farmers (Tadesse et al., 2013). It means the financial benefits can be derived by the small farmers by exploiting the market opportunities. According to Gausi et al. (2004), small animal farmers have propensity to pay no attention to new technology even when it appears to be better than their current practices due to market barriers. The farmers prefer to the patterns of pricing , production process in consistent to the best seasonal prices and consumer preferences. (Ehui et al., 2000). Study of the pig marketing system may lead to innovations, interventions, or opportunities to educate to increase the marketing efficiencies and improve product quality, which ultimately increase profitability of farmers (Levy, 2014).

1. **The Problem of the Study:**

According to the Livestock census 18th Quinquennial Livestock Census-2007 by Animal Husbandry and Veterinary Department of Mizoram finds that pig is the largest livestock reared in Mizoram. The census also shows that the highest rate of growth in its population, and the crossbred population consist 90 percent where the indigenous pig accounts for only 10 percent of the total population. The marketing of pig needs to be studied and analysed because it is the most demanded meat in Mizoram. Although there are few studies conducted in general, on production of pigs in north east India, there is limited information in relation to marketing practices of pig in Mizoram. It is also perceived that the results of the present research will be utilized by different stakeholders to review the marketing system as an initiative to uplift the livelihoods small farmers. Therefore, in view of the above mentioned facts, the present study is carried out with the general and specific objectives.

1. **Literature Review:**

Ajala and Adesehinwa (2008) have worked in Analysis of Pig Marketing in Zango Kataf Local Government Area of Kaduna State, Nigeria where they found most of the traded pigs brought to the markets are from pig farmers living in Kafanchan and the surrounding villages. At village levels, itinerant traders visit the homes of pig farmers to buy animals in small numbers such as one or two. They are then sold at local village markets to intermediate traders who are assemblers with more funds and capacities for bulking larger numbers.

Linden (1992) found that livestock farmers in the Northern Communal Areas of Namibia are particularly disadvantaged as far as livestock marketing is concerned, because of the Veterinary Cordon Fence that runs from Palgrave Point on the West Coast of the country through Oshivelo to the Namibia-Botswana border in the north-eastern Omaheke.

According to Dang-Nguyen (2014) in their work “Recent Progress in Swine Breeding and Raising Technologies”, finds that pork consumption per head in Vietnam increased rapidly from 2001 to 2013. In 2013, the average pork consumption per head is 20.1 kg that is double compared to what it was in 2001 (12.84 Kg/he ad/year). The pork consumers in Vietnam prefer fresh pork, and don’t like the frozen one, that‘s why they usually buy fresh pork in the small sleeve market. In the countryside, 93.3 percent of the people buy pork in the small market.

Ajala and Adesehinwa (2008) have observed the marketing channel of Kaduna state, Nigeria where they found that pigs are first sold at local village markets to intermediate traders who are assemblers with more funds and capacities for bulking larger numbers. These intermediate traders visit similar smaller (rural) markets, such as Zonkwa and Samaru markets, and gradually build up a herd for sale in the Katsit (urban) market. Ownership of pigs may in some cases change hands two or three times before reaching Katsit, while in other cases it may be a direct supply from buyers at the village to the Katsit (Kafanchan) market.

Fan (2014) have lay out suggestions in China to expand market access and promote coordination among actors in the supply chain, small-scale pork producers should be linked to large-scale commercialized producers through institutional arrangements such as contract farming with self-enforcing agreements. These types of linkages also help small farmers to more easily access food safety and quality assurance standards, such as certification schemes, which would have otherwise been inaccessible.

Mamman (2005) have found that transportation of livestock depend largely of the availability of vehicles (trailers) most of which (95 ) are owned by transporters in Jega town, Kebbi state. It is organised through *Yan Kwammission* (commission agents) who are approached by potential livestock traders for a vehicle. The *yan kwommission* arranges for the price, date and time that the cattle are to be transported. Members of NURTW (*yan union*) also assist the *yan kwommission* in sourcing vehicles for livestock traders.

Kumar et al (2007), finds that organized marketing of livestock in the north eastern region of India remains relatively insignificant, despite efforts in the past to develop and promote collective market mechanisms.

Singh (1997), reported that, the live animal market of the Guwahati city was operated 6 days in a week, the goats from village markets of neighboring places being sold by households were brought for the city market. They also identified sixteen channels for marketing of live animals from producer to consumer with and without the involvement of middle man.

Das (1999) reported that the hygienic and other conditions of butcher shops available in the market area of Guwahati city are far from the satisfaction and that the butchers have aligned and are mostly below the minimum requirement as prescribed by the BIS (1973). There are small number of butcher shops that have some facilities but are maintained in very poor condition. Hazarika (1993) reported that the hygienic status of butcher shops were very poor and primitive in nature.

Changmai (2005) finds that the pork market in Guwahati has not been well organized and running in a chaotic manner flouting all norms of flesh marketing. The markets are more distributed in the area dominated by the tribal and harijan community and they follow traditional methods as reported by Assam Livestock & Poultry Corporation. There are also information regarding the rate of consumption of pork is highest in the entire region compared to the rest of the country.

Feroze et al (2010) stated that absence of organized marketing channels in NER is one of the major constraints faced by livestock sector of the region. Only a few cooperative milk plants are working in the region. Only three per cent of the total marketed milk and milk products is handled by organized sector, both cooperative and private in Assam. Thus, the traditional market is the only option available in the region to market the indigenous as well as processed milk products.

According to Deka et al(2007) as elsewhere in the NE, pork consumption and pig production in Assam is strongly associated with tribal (ST) communities . Tribals have a high per capita consumption of pork whereas consumption is very low in the predominant general community.

From the above studies, it can be found that there is a need to study on the marketing practices of pig in North east India especially in Mizoram. Very few literature is found regarding marketing of pigs specifically for Mizoram state although some literature can be found about other countries and states. Therefore, the study finds a research gap in the are especially for marketing of pigs and production process in the area of Mizoram state.

1. **Objective of the study**

The primary objective of the paper is to study the marketing process of pigs in Mizoram. This primary objective is studied by looking into the four secondary objectives. The secondary objectives are studied by exploring the four (4) Ps of marketing viz., product, price, place and promotion.

1. **Methodology**:

The study was carried out in three selected districts Aizawl, Lunglei and Kolasib of the eight districts of Mizoram, in India. 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 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 is analysed by though the 4 Ps of marketing viz., product, price, place and promotion.

1. **Data Analysis:**

**Table 1. Socio-economic characteristics of the Pig Farmers in Mizoram**

|  |  |  |  |
| --- | --- | --- | --- |
| Categories | District | Total N % | Test |
| Aizawl (N %) | Lunglei (N%) | Kolasib (N%) | λ2  Value | P Value |
| Gender | Male | 177 (90.7%) | 190(95.5%) | 199(100%) | 566(95.4%) | 394.453 | 0.000 |
| Female | 18(9.2%) | 9(4.5%) | 0(0.0%) | 27(4.6%) | 17.518 | 0.410 |
| Educational Qualification | Illiterate | 6(42.9%) | 7(50.0%) | 1(7.1%) | 14(100.0%) | 19.6 | 0.033 |
| Under Matric | 114(31.6%) | 124(34.3%) | 123(34.1%) | 361(100.0%) | 258.882 | 0.000 |
| Matric | 58(37.9%) | 41(26.8%) | 54(35.3%) | 153(100.0%) | 116.561 | 0.000 |
| Intermediate | 7(28.0%) | 10(40.0%) | 8(32.0%) | 25(100.0%) | 21.995 | 0.145 |
| Graduate | 6(18.8%) | 16(50.0%) | 10(31.3%) | 32(100.0%) | 37.198 | 0.005 |
| Post Graduate | 4(50.0%) | 1(12.5%) | 3(37.5%) | 8(100.0%) | 16.000 | 0.100 |
| Sources of income | Pig Farming Only | 83(32.7%) | 70(27.6%) | 101(39.8%) | 254(100.0%) | 220.498 | 0.000 |
| Pig Farming + Business | 65(36.5%) | 53(29.8%) | 60(33.7%) | 178(100.0%) | 172.361 | 0.000 |
| Pig Farming + Govt. Job | 22(31.4%) | 37(52.9%) | 11(15.7%) | 70(100.0%) | 54.9777 | 0.000 |
| Agro-Farm + Pig Farming + Govt. Job | 13(26.0%) | 10(20.0%) | 27(54.0%) | 50(100.0%) | 36.058 | 0.003 |
| Others | 12(29.3%) | 29(70.7%) | 0(0.0%) | 41(100.0%) | 15.659 | 0.074 |
| Income Category | Poor | 127(33.8%) | 144(38.3%) | 105(27.9%) | 376(100.0%) | 144.008 | 0.000 |
| Middle | 62(29.7%) | 54(25.8%) | 93(44.5%) | 209(100.0%) | 280.916 | 0.000 |
| Well to do | 6(75.0%) | 1(12.5%) | 1(12.5%) | 8(100.0%) | 2.667 | 0.615 |
|   | Mean±SD | Mean±SD | Mean±SD | Total Mean±SD | F Value | P Value |
| Age in years | 44.83±11.50 | 48.15± 12.36 | 50.59± 11.87 | 48.8±11.91 | 11.606 | 0.000 |
| Farm Experience | 2.25±.91 | 2.71±.90 | 2.51±.822 | 2.49±879 | 13.65 | 0.000 |

*Source: Sample survey*

The socio-economic characteristics of pig farmers in Mizoram are shown in table 1. Gender of respondents was not associated with the towns (p>0.05). Majority (95.4%) of the respondents were households headed by male while 4.6 percent were female headed households. The results of the analysis showed that age of pig farmers at the three districts were similar (p>0.05). The average age of the pig farmers with standard deviation was 48.8±11.91. In examining the pig rearing experiences of farmers, the data shows that the experiences of the farmers were different (P<0.05) across the study areas, the resultant of this findings was that only continuation of at least 2 years were taken, though there are respondents who occasionally practice pig rearing activities on their conveniences and not on a regular basis, showing 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. In terms of education level the table shows that majority of the pig farmers are matriculates, highest percentage in Aizawl at 58 percent from the respondents. The survey also shows that 52.9 percent from the respondents of Lunglei were practicing pig farming with government jobs, 31.4 percent and 15.7 percent in Aizawl and Kolasib respectively. This is a clear indication that there has been an immense practice of pig rearing as an extra household activity and in small scale, but this does not mean that individuals in the house do the work alone. It was also observed that members of the families help out with the pig farming activities. The study also shows that more than half of the respondents fall under poor income category as they claimed to have an annual income below Rs.50,000 and there are only 8 respondents who enjoy substantial amount of income, and they represent large scale commercial farmers.

**Table 2. Farming and Management of Pig Production in Mizoram**

|  |  |  |
| --- | --- | --- |
| Criteria | District  | Total |
| Aizawl | Lunglei | Kolasib |
| Number of pigs bred in the farm | 1-10 | 179 | 184 | 85 | 448 |
| 91.8% | 92.5% | 42.7% | 75.5% |
| 11-20 | 8 | 9 | 63 | 80 |
| 4.1% | 4.5% | 31.7% | 13.5% |
| 21-50 | 4 | 6 | 30 | 40 |
| 2.1% | 3.0% | 15.1% | 6.7% |
| 51-100 | 4 | 0 | 15 | 19 |
| 2.1% | 0.0% | 7.5% | 3.2% |
| 101-250 | 0 | 0 | 6 | 6 |
| 0.0% | 0.0% | 3.0% | 1.0% |
| Time spent for farming in a day | Less than two hours | 93 | 55 | 91 | 239 |
| 47.7% | 27.6% | 45.7% | 40.3% |
| 2-5hours | 90 | 121 | 58 | 269 |
| 46.2% | 60.8% | 29.1% | 45.4% |
| 5-10 hours | 5 | 14 | 49 | 68 |
| 2.6% | 7.0% | 24.6% | 11.5% |
| More than 10 hours | 7 | 9 | 1 | 17 |
| 3.6% | 4.5% | .5% | 2.9% |

 *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 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, at 92.5 percent Lunglei has the highest concentration of farms having less number of pigs followed by Aizawl at 91.8 percent and Kolasib at 42.7 percent. 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 respondents. 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.

**6.1 Product**

**Table 3. Product market profile of pigs in Mizoram**

|  |  |  |  |
| --- | --- | --- | --- |
| **Particulars** | **Responses** | Frequency | Percent |
| Farming Society | Joined | 138 | 23.3 |
| No | 442 | 74.5 |
| Demand for storage | Yes | 78 | 13.2 |
| No | 515 | 86.8 |
| Processing of meat for sale | Yes | 75 | 12.6 |
| No | 529 | 86.3 |
| Average quantity of meat sold in a week | Below 100kgs | 19 | 3.2 |
| 100-200kgs | 22 | 3.7 |
| 300-400kgs | 5 | 0.8 |
| 400-500kgs | 4 | 0.7 |
| Above 500kgs | 543 | 91.6 |
| Piglets sold in a year | Below 10 | 198 | 34.4 |
| 20-30 | 82 | 13.8 |
| 30-40 | 15 | 2.5 |
| Above 40 | 19 | 3.2 |
| Meat/Others | 279 | 47 |

 *Source: Sample Survey*

Majority of the pig market in Mizoram can be claimed to comprise of meat and the piglet bazaar. Pork is the major item in the market and the sample shows that there are 87.4 percent of the producers do not practice further processing of the meat for reselling, while there are 12.6 percent respondents in the market who sells and prepare smoked meat for preservation and for taste enhancement. The main motive of the sellers can be said that “it adds value to the meat”, and can be sold at higher price than the non-smoked. Likewise, there is a very little requirement for cold storage and there are only 13.2 percent of the respondents who require extra storage for their produce. Most of the farmers are able to sell their piglets proving that there is a ready market for the piglets. Although there are ready markets for the meat and piglets, there has been scarcity of these in the market recently. Maximum of the sales occurs in the festive seasons as they are usually the main dish in the feast. There are few markets where the butchers have their stalls in line at specified area. These butchers however sells quite a large amount of meat in a week, the sample shows 91.6 percent of these butchers sells more than 500kgs of meat in a week, one supporting fact is that most of the families buys meat and pork bring the favorite food item. There are 23.9 percent of the farmers who sells their pig to other farms, which are usually bought for rearing purposes. There are also 61.9 percent who sells to butchers and 11.6 percent who slaughter the produce for selling meat.

**6.2 Price**

Price is the amount of money charged for a product or service, or the total values that consumers exchange for the benefits of having or using the product or service (Kotler, Armstrong, Wong, and Saunders, 2008). Price is considered as the most important measurement of repurchase intentions (Parasuraman and Grewal, 2000). According to the Telegraph (2010), meat prices in Mizoram markets are always inflated and these do not reflect the market conditions. The Mizoram government, in order to control the prices of animal products and agriculture produce, passed a bill titled the State Agriculture Produce Marketing (Development And Regulation) Bill, 2010. Selling of piglets and pork is not a major issue in Mizoram as pork is the staple food for the Mizos and it is sold throughout the state. In the absence of organized piggery infrastructure, there is monopoly of private traders leading to misery of the consumer who are exploited by the pig traders/butchers to fetch poor quality meat at an exorbitantly high price. As of October 2016, the retail rate of pork is Rs.250/- per kg. Farmers sell pigs of size 40 inches of pigs (measured round the chest) at a price of Rs.18,500/-(approx) and size 50 inches at a price of Rs.30,000/-(approx). The local butchers have developed a mechanism to calculate the weight of pigs depending on the chest size measure of pigs and the price of the pig is usually negotiated.

**Table 4. Prices (as on October 2016) of Pig and By products in Mizoram**

|  |  |  |
| --- | --- | --- |
| Particulars | Unit |  Amount in Rs. |
| Live Pig | 40" (round the chest) | 18,500 |
| 50" (round the chest) | 30,000 |
| Piglet |  Per unit | 5,000 |
| Pork |  Per Kg | 250/ Kg |
| Smoked Pork |  Per 5 or 6 pieces | 250/5pieces |

*Source: Sample survey*

**6.3 Place (Distribution)**

Hirankitti et al., (2009) considers place as the ease of access which potential customer associates to a service such as location and distribution. The strategy of place needs effective distribution of the firm’s products among the channels of marketing like wholesalers or retailers (Berman, 1996). Piglets are mainly sold right out of the farm’s premises where the buyers have to approach on their own convenience. With this reference it can be said that the place of the farm is where the sale of piglets usually happen. Pork on the other hand, which is the most favored meat is sold in the market at specified stalls. When in times of scarcity, the buyers are often to be seen in line to catch their turn for buying their share. Pork is also sold in convenience at the local places where the locally sourced pigs are favoured by the buyers, this is also the premises where individual farmers slaughters and sells themselves. Table 4 shows 66.3 percent who does not use extra effort to transport their produce, which shows the convenience selling of meat at the local streets at large.

**Table 5. Opinion on the Pig Product Market in Mizoram**

|  |  |  |
| --- | --- | --- |
|  | District Address | Total |
| Aizawl | Lunglei | Kolasib |
| The local market is enough | Count | 101 | 147 | 178 | 425 |
| % within Sample | 23.5% | 34.6% | 41.9% | 100.0% |
| % within District  | 51.8% | 73.9% | 89.4% | 71.9% |
| Needs improvement | Count | 12 | 27 | 11 | 50 |
| % within Sample | 24.0% | 54.0% | 22.0% | 100.0% |
| % within District  | 6.2% | 13.6% | 5.5% | 8.4% |
| Not Good | Count | 78 | 2 | 1 | 81 |
| % within Sample | 96.3% | 2.5% | 1.2% | 100.0% |
| % within District  | 40.0% | 1.0% | .5% | 13.7% |
| There should be a new plan | Count | 5 | 23 | 8 | 36 |
| % within Sample | 13.9% | 63.9% | 22.2% | 100.0% |
| % within District  | 2.6% | 11.6% | 4.0% | 6.1% |

*Source: Sample survey*

From table 5, it can be seen that the respondents have less idea about the concept of new form of marketing system as the data shows that 71.9 percent responses that claimed that the local market is sufficient. The sample shows that 23.5 percent (101 respondents) are from Aizawl district, 34.6 percent from Lunglei and 41.9 percent from Kolasib district respectively. The sample respondents at a very low rate, 6.1 percent who have been thinking of and wants to enter into new meat markets. These new ideas are mostly regarding the control of import of pigs and large scale of production. There are 8.4 percent and 13.7 percent respondents from the sample who finds that the current pig market is not sufficient for Mizoram and these respondents mostly ants to diminished the import of pigs and they have opined that this will enhanced the growth of production of pigs in Mizoram

**Table 6. Market Distance of Pig market from the respondents in Mizoram**

|  |  |  |
| --- | --- | --- |
| **Distance** | **District Address** | **Total** |
| **Aizawl** | **Lunglei** | **Kolasib** |
| Less than 2 kms | Count | 97 | 149 | 192 | 437 |
| % within Sample | 22.0% | 34.1% | 43.9% | 100.0% |
| % within District  | 49.5% | 74.9% | 96.5% | 73.9% |
| 2-3 kms | Count | 80 | 13 | 2 | 95 |
| % within Sample | 84.2% | 13.7% | 2.1% | 100.0% |
| % within District  | 41.0% | 6.5% | 1.0% | 16.0% |
| 3-4 kms | Count | 16 | 23 | 0 | 39 |
| % within Sample | 41.0% | 59.0% | 0.0% | 100.0% |
| % within District  | 8.2% | 11.6% | 0.0% | 6.6% |
| 4-5kms | Count | 1 | 0 | 1 | 2 |
| % within Sample | 50.0% | 0.0% | 50.0% | 100.0% |
| % within District  | 0.5% | 0.0% | 0.5% | 0.3% |
| More than 5 kms | Count | 2 | 13 | 4 | 19 |
| % within Sample | 10.5% | 68.4% | 21.1% | 100.0% |
| % within District  | 1.0% | 6.5% | 2.0% | 3.2% |

*Source: Sample survey*

The table shows that majority 73.7 percent of the respondents that local market are as near as less than 2 kms which is quite convenient for the general transportation of the products. Aizawl district have 22.0 percent Lunglei has 34.1 percent and Kolasib district have 43.9 percent which can be concluded that the meat market is more near in the rural than in the urban areas. The sample also reveals that there are very minimal cases where the farmers have to travel more than 2 kilometers to sell their pigs.

**Table 7. Transportation used by the respondents in Mizoram**

|  |  |  |
| --- | --- | --- |
| **Means of transport** | **District Address** | **Total** |
| **Aizawl** | **Lunglei** | **Kolasib** |
| Hired Public carrier | Count | 31 | 83 | 43 | 154 |
| % within Sample | 18.2% | 53.9% | 27.9% | 100.0% |
| % within District  | 15.4% | 41.7% | 22.1% | 26.5% |
| Own Vehicle | Count | 14 | 22 | 10 | 46 |
| % within Sample | 30.4% | 47.8% | 21.7% | 100.0% |
| % within District  | 7.2% | 11.1% | 5.0% | 7.8% |
| Others | Count | 151 | 94 | 145 | 390 |
| % within Sample | 38.7% | 24.1% | 37.2% | 100.0% |
| % within District  | 77.4% | 47.2% | 72.9% | 65.8% |

*Source: Sample survey*

The study attempts at finding the transportation of the respondents in dealing their pigs, it was observed that there are 26.5 percent of the pig producers who use public convenience for transport of their produce to the market and there are 65.8 percent respondents who happened to sell their produce at their place itself and also sells them at the local market and often slaughter the produce themselves as well. Kolasib and Aizawl districts shows a very high percentages at 38.7 and 37.2 percentages respectively and Lunglei district shows 24.1 percent of the respondents as well. The study also shows that there are few percentage of the respondents who claimed to have use their won vehicle to transport their pigs (7.8 percent). This is a clear indication that the farms are not self sufficient with their own vehicles for conveniences and that these farms are still in the lower income sector of the economy.

**Table 8. Selling of Pigs in Mizoram**

|  |  |  |
| --- | --- | --- |
| **Selling of Pigs** | **District Address** | **Total** |
| **Aizawl** | **Lunglei** | **Kolasib** |
| To other farms | Count | 11 | 12 | 119 | 142 |
| % within Sample | 7.7% | 8.5% | 83.8% | 100.0% |
| % within District Address | 5.6% | 6.0% | 59.8% | 23.9% |
| To the butcher | Count | 173 | 140 | 54 | 367 |
| % within Sample | 47.1% | 38.1% | 14.7% | 100.0% |
| % within District Address | 88.7% | 70.4% | 27.1% | 61.9% |
| Slaughter and sell  | Count | 9 | 42 | 18 | 69 |
| % within Sample | 13.0% | 60.9% | 26.1% | 100.0% |
| % within District Address | 4.6% | 21.1% | 9.0% | 11.6% |
| Others | Count | 2 | 5 | 8 | 15 |
| % within Sample | 13.3% | 33.3% | 53.3% | 100.0% |
| % within District Address | 1.0% | 2.5% | 4.0% | 2.5% |

*Source: Sample survey*

The producers in the pig market of Mizoram were interviewed for gathering information regarding how they sell the live animals. In Aizawl district, majority of the producers i.e, 88.7 percent sold their produce to the butchers. This shows that the main motive of the production is meat since there are only 5.6 percent sells to other farms which can be treated as they sold piglets for re–production or breeding purpose. The table shows that there are only 2 percent who retain their produce for rearing them in their farm. There are 70.4 percent respondents in Lunglei who claims to sell their produce to butchers only, the data also shows that there are 21.1 percent who does the slaughtering and sells themselves. The increase in this self slaughtering at Lunglei district could be assumed that there are many respondents from the rural areas who have no other option. On the other hand in Kolasib district data finds 59.8 percent who sells their pigs to other farms, 27.1 and percent to the butchers and 9 percent slaughtered themselves and 4 percent who retains their own produce for re-production respectively. Some of the variation in these proportion could result from fact that the traders from the urban areas have sourced the market requirement from the neighboring rural areas as well.

**Table 9. Availability of ready Market for the piglets in Mizoram**

|  |  |  |
| --- | --- | --- |
|  | **District Address** | **Total** |
| **Aizawl** | **Lunglei** | **Kolasib** |
| Availability of ready Market for the piglets | Available | Count | 138 | 114 | 183 | 435 |
| % within Sample | 31.7% | 26.2% | 42.1% | 100.0% |
| % within District  | 70.8% | 57.3% | 92.0% | 73.4% |
| Not Available | Count | 15 | 6 | 4 | 25 |
| % within Sample | 60.0% | 24.0% | 16.0% | 100.0% |
| % within District  | 7.7% | 3.0% | 2.0% | 4.2% |
| Others | Count | 42 | 79 | 12 | 133 |
| % within Sample | 31.6% | 59.4% | 9.0% | 100.0% |
| % within District  | 21.5% | 39.7% | 6.0% | 22.4% |

*Source: Sample survey*

**Table 10. Regular channel of selling Pig in Mizoram**

|  |  |  |
| --- | --- | --- |
|  | District Address | Total |
| Aizawl | Lunglei | Kolasib |
| Regular channel of selling the Pig | Yes | Count | 36 | 31 | 80 | 147 |
| % within Sample | 24.5% | 21.1% | 54.4% | 100.0% |
| % within District  | 18.5% | 15.6% | 40.2% | 24.8% |
| No | Count | 159 | 168 | 119 | 446 |
| % within Sample | 35.7% | 37.7% | 26.7% | 100.0% |
| % within District  | 81.5% | 84.4% | 59.8% | 75.2% |

 *Source: Sample survey*

These regular producers and sellers do have their ways of channeling to the market, but the larger producers only have claimed to have regular channel of selling in the market, as denoted by the sample survey 72.5 percent of the producers have no regular channel of selling their animals which can be concluded that the farmers usually sells their produce on convenience which is usually available at the local disposals either on every Fridays and Saturdays. Despite the fact that the pig market in Mizoram remains un organized, there are 24.8 percent representing 147 respondents amongst the selected districts, who claimed to have regular channel for disposing their produce to the market. Thus it was also observed that majority of these regular channels were confined to the meat retailers, especially the processed meat sellers.

**6.4 Promotion**

Promotion brings an interactive dialogue between an organization and its customers and it takes place during the pre-selling, selling, consuming and post-consumption stage. Such promotional elements include: sales promotion, advertising, sales force, public relation and direct selling. It is defined as sales promotion, advertising, personal selling, public relations and direct marketing (Borden, 1984). According to Lovelock, Patterson and Walker (1998) promotion is decision of how best to relate the product to the target market and how to persuade them to buy it. A communication program is important in marketing strategies because it plays three vital roles: providing needed information and advice, persuading target customers of the merits of a specific product, and encouraging them to take action at specific times (Lovelock and Wright, 2002). Activities that cater to promotion are advertising, sales promotions, personal selling and publicity; they can all influence consumer’s way of thinking, their emotions, their experience as well as their purchasing. Communications are devised by marketers in such a way that it (a) offer consistent messages about their products and (b) are placed in media that consumers in the target market are likely to use (Munusamy and Hoo,2008). Promotion is a selling technique; to succeed in any marketing program, it should be involved with communication (promotion). Promotion is important as it provides information, advice, and persuades the target market. It guides and teaches the customer to take action at a specific time and how they can use the product and get beneficial result from it. The product advertisement can be delivered by individual salespeople, T.V, radio, internet, magazine, press, and all types of media.

The marketing of pigs or promotion of pig market is a rare phenomenon in Mizoram, since the demand is not at par with the supply i.e., production of pig is very low within Mizoram. However, in the earlier days or in the rural areas, “Tagging of papers” in the road side where it is easily visible for the passer by, notifying the slaughter of pigs in the local area used to be carried out, through this, the other members of the village who are the target audience came to know about the pigs to be slaughtered and sold.

Word of mouth (WOM) generally refers to the information gained through interpersonal communication with friends and family relating to organizations and their offerings. Word of mouth from the relatives and friends of the farmers to slaughter their pig is also a common promotion method used in Mizoram. Word of mouth is one of the fundamental means of distribution. Word of mouth can influence others’ views, thoughts and their decisions. If word of mouth power is utilized correctly, it could market any product/services for the long time. During the survey, it was also found from general discussion with the respondents that the word of mouth referencing has been widely used as a form of sales promotion in the rural areas and even still to some extent practiced in the urban area within Mizoram.

These are some shops with specialized in selling smoked meat located at various localities (*Veng*). These shop are identified by the hanging signboards with words like “*Vawksa rep kan nei reng e*”, “*Vawksa rep a awm*”, meaning “Smoked pork is available”. These shops also sell fresh meat and other by products like lard, fried skin etc. The numbers of such shops are not in abundance.

In the recent years, some of the entrepreneurs have established modern meat shops at certain places in Aizawl hoping to evolve with a better marketing standard and to have a systematic way of supplying the market with fresh and healthy meat. The meat sold at these shops are both in the form of fresh and frozen form. The prevailing system of selling at the butchers places located in the markets tends to be more comfortable by the people. Also the customers were able to make choice of meat portion which they wanted to buy in comparing to the modern meat shop where most of the meat was chunk of meat pre-cut. Due to the high demand, there are often times when non certified pigs are slaughtered resulting in the supply of poor quality meat to the customers. This is also often related with import of the live animals which brings infected ones and spreading the same. Thus, it can be concluded that there is a very high necessity for the promotion of the pig and pork market in Mizoram.

1. **Conclusions**

Marketing is a human activity directed at satisfying needs and wants through exchange processes. It includes all actions designed to generate and facilitate any replace intended to satisfy human needs or wants, marketing occurs when people decide to satisfy needs and wants through exchange. Pork being most favoured and highly demanded in Mizoram although with features of low production, needs less effort to sell. The livestock is sold at the individual level or in markets where the prices are controlled by the traders, brokers and even some by the money lenders, having no consideration in the input or the real value of cost of rearing the animal. The condition of the pig marketing is still very poor among the livestock marketing, as the pig farmers are not only small in numbers, but also scattered over a large area. The study finds majority of farmers acquired comparatively low literacy, economically weak and eventually not in the position to retain their productivity over a period of time. In marketing a lot of sub activities are performed, along with the activities like identification of demand, research, market segmentation, product development, launching of products, modification of products, deletion of products, product design, pricing, different types of pricing, promotion of products and services, sales promotion, personal selling, publicity, public relations, adverting, distribution of products and services, consumer behaviour and many other activities. The marketing activities were discussed in terms of 4Ps of marketing.

In Mizoram, pork is further processed into the following products: cured, sausages and pies, pig skin.The product market can be separated into two which are meat and the live animals. Pig is sold throughout the state. Usually it is seen that despite rearing of pigs by majority of the population, demand for pork exceeds supply. As of October 2016, the retail rate of pork is Rs.250/- per kg. The pigs are usually marketed when they reach the expected price of approximately Rs.19,000/- to Rs.30,000/- and the piglets at Rs.5,000/-. Piglets are mainly sold right out of the farm’s premises where the buyers approach on their own convenience. Pork on the other hand, which is the most favored meat is sold in the market at specified stalls. During times of scarcity, the buyers are often to be seen in queue to catch their turn for buying. Pork is also sold in convenience at the local places where the locally sourced pigs are favoured by the buyers, in which where individual farmers slaughters and sells themselves or often hire butchers to do the selling.

The study shows that the respondents were quite satisfied in the current form of market. It was also observed that the channels of marketing includes producers, middlemen, consumers, retailers and importers and their combinations that represent the marketing channels of pigs in Mizoram. Pork and by products require very less effort to sell as there is a huge demand. The market places of pigs in Mizoram includes Bara Bazar at Aizawl, town market at all the towns, roadside market, hog dealers who often sells at convenient places and times. Although there is a huge scope in the market of pigs in the state, the players in the market are of the lower economic background. They find difficulty in transporting the live animals to the market places. The study concludes that there is a need to have a formal channel of logistics to transport the product from rural to urban areas where the demand of the product is higher.

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