

Original Research Article

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## Exploration of Marketing Channels Followed by Pig Farmers in Punjab, India

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### ABSTRACT

Pig farming is gaining popularity among Punjab farmers from last 3-4 years, shedding old traditions. At present roughly 1500 pig farmers are there but there is no pig market as such either for live animal or its products. A cross-sectional study was conducted to access the marketing channels followed by Pig farmers in Punjab. A total of 150 pig farmers from different agro-climatic zones of Punjab, India were selected purposively and interviewed at their farms during the year 2018-2019. Data was analyzed using descriptive analysis. The results revealed that major channel for sale of live animal preferred by the farmer is through middleman followed by directly to the farmers especially to new entrants. The study found that the price of animal was decided only on the basis of live weight of the animal and further price of the animal remain same for farmers who were rearing them exclusively on feed or on waste. North-east and South is the main hub for the sale of live pig through middleman in Punjab. Only 2% of farmers were engaged in value addition of pork in form of pickles, sausages and ham and marketing is undertaken through brand name either directly to consumer or retailer chain. Study concluded that at present pig market is in the hand of brokers who can manipulate the price in either way and there is immediate need to establish proper pig market/processing plant to safe guard the interest of pig farmers.

#### Keywords

Farmer, Marketing channels, Market price, Pig

#### Article Info

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### Introduction

Pig industry in Punjab is showing an upward trend in last few years with a population around 0.32 Lakh (Livestock Census 2012). Shedding the age old taboo, people from all social arena and status are coming forward to adopt pig farming as their livelihood mean. Pig farming generates income through the

sale, manure production and slaughter (Kimbi *et al.*, 2015). This income meets essential household expenses and provides some financial capital to carry out other agricultural investments (Kimbi *et al.*, 2003, Ngowi 2005). Pig farming is becoming famous in smallholder systems as an important risk reduction strategy for vulnerable communities (Phiri *et al.*, 2003, Mutua *et al.*, 2011, FAO

2012). Successful marketing is a necessary part of any profitable enterprise, so does for pig farming. Efficient marketing involves various factors such as distance, problems in transportation, methods of grading, handling and selling charges (Chandrasah and Saini 2013). Inadequate abattoir, absence of refrigerators, absence of standard weights and measures, high cost of transportation, lack of access to formal credit sources and lack of good roads are several factors perceived by participants in the market as limiting constraints to pig production and marketing (Ajala and Adesehinwa 2007). Pig marketing though profitable but inefficient due to lack of capital, high cost of transportation, lack of abattoir, lack of standardization, fluctuating price, and lack of price information etc. (Ajala and Adesehinwa 2008). Meat by-products were distributed from the pig farm to the final consumer through a meat processor or wholesale market, wholesaler, retailer, and butcher shop. Most meat by-products were distributed by wholesalers in bulk packaging with wrap and polystyrene boxes (Kang *et al.*, 2014). Since pig farming is at starter phase and there exist uncertainty regarding the marketing of live pig and their processed products among the new entrants/aspirants. Keeping this in mind this study was planned to explore the different marketing channels prevalent in the state.

### **Materials and Methods**

Location of the study: The study was conducted in the state of the Punjab. The state has been divided into five different agro climatic zones of Punjab.

There are approximately 1500 farms in Punjab and 150 farmers from different agro-climatic zones of Punjab were selected purposively constituting 10% of the total. The selection of the each respondent was made based on the possession of pigs at their farm at the time of

survey and willingness of the farmer to participate in the study. The survey comprises of socio-demographic characteristics (age, family type, education, main occupation, land holding, experience, training, other animals kept, herd size, ratio of boar to sow, location of farm) and the marketing channels followed by Pig farmers of Punjab.

The interview schedule was pre-tested by personally visiting/interviewing 20 pig farmers in and around Ludhiana district. On the basis of information obtained through pre-testing, necessary modifications were made in the body of interview schedule so as to make it more convenient and easy for respondents. Result of pretesting study was not included in final data analysis.

### **Statistical analysis**

Data was entered and analyzed using statistical package for the social science (SPSS) version 20. Descriptive statistics including frequencies, percentages and means were run for continuous/categorical variables.

### **Results and Discussion**

#### **Socio-demographic characteristics of pig farmers**

Respondent's information regarding (age, family type, education, main occupation, land holding, experience, training, other animals kept, herd size, ratio of boar to sow, location of farm) is depicted in (Table 1).

#### **Marketing channels followed by pig farmers in Punjab**

Majority (98%) farmers were found selling their live animal through various channels to middleman. Out of these, majority (96%) farmers were selling directly to middleman (channel I), 44% farmers were selling directly to other farmers mainly new entrants

(Channel II), 38% farmers were selling through online marketing to middleman (Channel III) and 1.33% farmers were acting as assembler for the sale of animal to middleman (Channel IV) and only (2%) of farmers were doing value addition of pork and were selling through brand name or directly to consumer or through retailer chain (Channel V) (As shown in Figure I).

Brokers after buying live pigs from different channels and transport them either in specially designed trucks or by hiring bogies of train to Dimapur, Nagaland or other North-East destination as shown in Fig-I. Suchiang *et al.*, (2017) also revealed that majority (72.5%) farmers disposed their pigs through local traders followed by (25%) through retailers and only (2.5%) disposed their pigs directly to consumers. Generally piglets were sold after weaning at 8 weeks of age @ Rs 3000 each and pregnant animal @ Rs 150/ Kg. Finishers were sold after achieving the weight of 80-100 kg.

Study found that overall pig marketing in Punjab is in the hands of finger counted brokers as evident from the (channel 1). Whatsapp group is the major online channel used by pig farmer to sell their animals.

It is important to mention that pig farmers across Punjab have created different whatsapp groups as per area, so message regarding sale or purchase of pigs can easily be exchanged between those groups. All farmers were using multiple channels for sale of animals, no farmer was found dependent solely upon single marketing channel.

### **Animal preferred for sale by farmer**

Majority farmers preferred to sale finisher pig, followed by piglet, pregnant animal, gilt, boar to farmer respectively (Table 2). Dietz (2011) quoted the purpose of sale of different type of

animal viz boar for breeding, finisher for meat purpose, piglets for starting new pig venture etc.

### **Other market related Information**

The study revealed no difference in price of live pig reared on either feed or on kitchen/industrial waste and the price of animal is generally fixed on the basis of live weight of the animal. Fellow pig farmers were the major source of market price information said majority respondents (62%). Majority (62.67%) farmers disclosed the seasonal variation in the demand and price of the live animal. However Deka *et al.*, (2007) reported that the price of pork in Assam did not vary by season because market committee control it but if price increased during festival season it remained unchanged for at least another year. Whatever the channel finally the middleman supplies the pigs to either North-East states or to south. Only 3 farmers were doing value addition of pork and were marketing under brand name and selling either directly to consumer or through retailer chain. (Table 3)

### **Average Rearing cost and Price of animal**

The study disclosed the average existing price of live animal per kg was Rs 106.38±2.4 with maximum and minimum price of Rs 115 and Rs 100 respectively. Respondents revealed the mean cost of raising one adult pig to the weight of 1 quintal in 7.5 months on readymade feed was Rs 6225.17±242.77 with maximum of Rs 7000 and minimum price Rs 6000 (Table 4). Recently Bhadauria *et al.*, (2019) also reported that a fully mature pig can be sold at Rs 8000-10000. Mean cost of raising adult animal on waste was Rs 4357.14±198.81 with maximum of Rs 4500 and minimum price of Rs 4000. Average maximum price fetched by farmer in past was Rs 120 and minimum price was Rs 80.



<b>Illiterate</b>	3	02.00
<b>Primary School</b>	14	09.33
<b>Matriculation</b>	120	80.00
<b>Senior Secondary</b>	12	8.00
<b>Graduation</b>	1	0.67
<b>Occupation</b>		
<b>Piggery</b>	135	90.00
<b>Agriculture</b>	15	10.00
<b>Land holding</b>		
<b>Land less</b>	10	6.67
<b>&lt; 5 Acre</b>	121	80.67
<b>5-10 Acre</b>	14	9.33
<b>&gt; 10 Acre</b>	5	3.33
<b>Training</b>		
<b>Yes</b>	80	53.33
<b>No</b>	70	46.67
<b>Pet Animal (Dog)</b>		
<b>Kept</b>	6	4.00
<b>Not kept</b>	144	96.00
<b>Livestock</b>		
<b>Yes</b>	5	3.33
<b>No</b>	145	96.67
<b>Fishery</b>		
<b>Yes</b>	1	0.67
<b>No</b>	0	99.33
<b>Poultry</b>		
<b>Yes</b>	13	8.67
<b>No</b>	137	91.33
<b>Experience of farming</b>		
<b>&lt;1 year</b>	76	50.67
<b>1- 5 year</b>	58	38.67
<b>&gt; 5 year</b>	16	10.67
<b>Herd Size</b>		
<b>&lt; 12</b>	1	0.67
<b>&lt; 25</b>	37	24.67
<b>&gt; 25</b>	112	74.67
<b>Boar: Sow ratio</b>		
<b>01:10</b>	18	12.00
<b>1: &gt; 10</b>	13	8.67
<b>1: &lt; 10</b>	119	79.33
<b>Farm Location</b>		
<b>Within Village</b>	12	08.00
<b>Away from Village</b>	44	29.33
<b>At periphery of Village</b>	94	62.67

**Table.2** Animal preferred for sale by farmer

Animal sold	Purpose of sale	Number	Percentage
Piglets	Sold to new entrant	109	72.67
Finisher	Sold for slaughtering	137	91.33
Gilt	Sold for breeding	19	12.67
Boar	Sold for breeding	16	10.67
Pregnant animal	Sold to new entrant	61	40.67

**Table.3** Other market related information

Category	Frequency (n=150)	Percentage
<b>Do Price of pig varies for rearing exclusively on waste or feed</b>		
Yes	0	0
No	150	100
<b>Source of market price information</b>		
Middleman	57	38
Farmer	93	62
<b>Price is totally decided on basis of weight</b>		
Yes	150	100
No	0	0
<b>Effect of season on demand/price of pigs</b>		
Yes	94	62.67
No	56	37.33

**Table.4** Average Rearing cost and Price of animal

Category	Mean	Std. deviation	Maximum	Minimum
Existing price of live animal per Kg	106.38	2.4	115	100
Cost of raising one adult pig (Readymade feed) (n=136)	6525.17	242.77	7000	6000
Cost of raising one adult pig (waste) (n=14)	4357.14	198.81	4500	4000
Maximum price fetched by farmer	113.25	2.9	120	100
Minimum price fetched by farmer	88.84	3.43	100	80

North-eastern and Southern states are the major hub for live pigs and are absorbing majority of live pig coming from Punjab through middleman. Only 2% of farmers were

practicing value addition of pork. The study found that there is no well defined market structure for pig and pig products. This market is fully under the control of brokers/

middleman. This channel has both advantage and disadvantage. Advantage is that all the live pigs are directly picked up by the brokers from the farm gate and disadvantage is that the middleman/ broker can exploit the situation to get maximum economic return. Secondly there is no pork processing unit established anywhere in North India, though the pig farmers associations are trying their best to establish the same in Punjab but it seems a distinct dream. Presently the study warrants that to prevent the exploitation of the pig farmers in future, local market or processing plant should be established in Punjab. Further quality/ designer pork should be promoted through scientific information and by giving incentive on basic price.

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