

MAJOR FACTORS INHIBIT THE CONSUMPTION OF BAN PORK IN THE URBAN MARKET

Dinh Khanh Thuy¹, Le Thi Thanh Huyen¹, Le Tien Dung¹ and Fred Unger²

¹Institute of Animal Science, ²International Livestock Research Center (ILRI), Hanoi

Corresponding author: Dinh Khanh Thuy; Email: Khanhthuy.hua@gmail.com

ABSTRACT

The study aims to determine major factors limiting on the consumption of Ban pork in the urban market. A total of 45 in-depth interviews with green food stores, collectors, restaurants and Ban pork consumers were conducted in Hanoi city to understand the factors influencing on the decision of Ban pork buyers and their difficulties to consume Ban pork. Results show that quality of Ban pork and information, traditional raising methods, and price are common factors influencing on the decision of buyers. Other factors include trust in sellers and information about the origin of Ban pig, especially affecting the consumer group. High prices of Ban pork and inability of distinguish Ban pork from other types of meat are typical barriers of buyers in the purchase. Lack of information on sellers and supply not meeting demand are difficulties specifically for consumers and green food stores. It is implicated that recognizing the factors influencing the consumption of Ban pork can support targeting marketing schemes on specific buyer groups and promote the access of Ban pork in the urban market.

Keywords: *influencing factors, constraints, Ban pork consumption, urban market*

INTRODUCTION

Pig production plays a vital role in the livelihood of smallholder farmers especially in mountainous regions of Vietnam. It accounts for between 9 % and 41% into the household income of ethnic farmers in the northern uplands, Vietnam (Lemke et al., 2006). Further, pigs keep other functions, such as pork for home consumption, manure for cropping, as a gift, payment for hired workers, or sale (Rössler et al., 2005; Lemke et al., 2006). Ban pig is a dominant breed with the good adaptation to harsh conditions in these regions. Some studies found the marketing potential of Ban pigs in the urban market (Huong et al., 2009, Huyen et al. 2016; Thuy et al., 2020). However, Ban pork is mainly distributed in the local market of Ban pork and limited access to the urban market due to the limitation of small farmers in production capacity, access to resources (Thuy et al., 2020), weak linkages in the value chain and market asymmetries (Huong et al., 2009). The question is whether urban buyers have barriers to purchase Ban pork products. As studies in this regard are sparse, this study aims to understand the influencing factors on the decision of Ban pork buyers in the urban market as well as their constraints to purchase Ban pork. Understanding factors affecting buyers' decision and their barriers will help Ban pig producers to implement the suitable promotion schemes in the urban markets.

MATERIALS AND METHODS

Location and time

The study was conducted in Ha noi city, from April to June in 2019.

Materials

Green food stores, restaurants, collectors in Hanoi currently selling Ban pork products, and consumers consuming Ban pork were selected as buyers of Ban pork. They were selected according to a stratified random sampling through two steps: (i) Make a list of green food stores, restaurants, collectors currently selling Ban pork; consumers consuming Ban pork within the last 2 years based on the information in the Internet; (ii) 5 green food stores, 5

restaurants, 5 collectors and 30 Ban pork consumers were randomly selected from the above list for interviews.

Data collection

Data were collected through in-depth interviews with green food stores, collectors, restaurants, and consumers in Hanoi. Semi-structured questionnaires with close and open-ended questions include following topics: general information presenting characteristics of buyers (age, gender, education, types of Ban pork products consumed), influencing factors on buyers' decision, difficulties in the purchase. A Likert-scale with a range from 1 to 5, adapted from Huong (2009) was utilized to evaluate level of difficulty of buyers and the influence on their decision. Of which 1 is not highly difficult or not highly influential; and 5-highly difficult or highly influential.

Data analysis

Information and data from the interviews were synthesized and processed via Microsoft Excel 2016. Qualitative information on influencing factors and constraints of buyers were coded and analyzed via content analysis according to White and Marsh, (2006). Quantitative data were performed via mean, standard errors, and frequencies. Descriptive and comparative statistics analyses were adopted to describe and compare difficulty in the purchase, influencing factors within and between buyer groups.

RESULTS AND DISCUSSIONS

Characteristics of Ban pork buyers

Results on characteristics of Ban pork buyers in Hanoi is presented in Table 1.

Table 1. Characteristics of Ban pork buyers

Indicators	Collectors (n=5)	Food stores (n=5)	Restaurants (n=5)	Consumers (n=30)
Age (years)	39.8	30.8	38	34.8
Sex (%)				
Male	100	100	100	10
Female		-	-	90
Education (%)				
High school	40	-	40	6.7
Higher education	60	100	60	93.3
Type of products (%)				
Live pigs	100	-	20	-
Pig carcass	-	100	60	26.7
Pork cuts	-	-	20	56.6

Source: in-depth interviews, 2019

It can be seen that buyers of Ban pork are medium-aged, under 40 years. Of which, all interviewed collectors, food stores, and restaurants are male. The majority of consumers are female (90%). All investigated buyers has graduated high school. More than ninety percent of investigated food stores and consumers went for a higher education, compared to sixty of interviewed restaurants’ owners and collectors. This implies that buyers of Ban pork in Hanoi are mainly young and educated people.

Groups of buyers purchase different categories of Ban pork products. All investigated collectors bought live pigs while pig carcass was the main type of pork purchased by food stores. In contrast, the majority of interviewed restaurants preferred pig carcass to live pigs as they want to mitigate risk of fat pigs and weight loss of live pigs due to transportation. One-fifth of them chose to buy pork cuts pigs as Ban pork was neither stable frequency of consumption nor lower risk of fat pig than live pigs. This finding exhibits the potential of diversifying Ban pork categories in compatibility with characteristics of buyers can promote the consumption of Ban pork in the urban market.

Influencing factors on the purchasing decision of Ban pork

Table 2 shows results of influencing factors on the purchase decision of buyers in Hanoi.

Table 2. Influencing factors on the purchase decision of Ban pork

Indicators	Collectors (n=5)	Restaurants (n=5)	Food stores (n=5)	Consumers (n=30)
	<i>Mean ± SD</i>	<i>Mean ± SD</i>	<i>Mean ± SD</i>	<i>Mean ± SD</i>
Quality	4.6 ± 0.5	4.6 ± 0.5	4.8 ± 0.4	4.4 ± 0.8
Raising method	4.0 ± 1.0	3.0 ± 1.0	3.8 ± 0.8	4.1 ± 0.9
Price	3.8 ± 0.5	4.4 ± 0.8	3.6 ± 0.5	3.6 ± 1.2
Availability	3.4 ± 0.5	1.8 ± 0.9	2.8 ± 0.8	3.2 ± 1.4
Trust in sellers	2.4 ± 0.5	2.8 ± 1.1	3.4 ± 0.9	3.6 ± 1.1
Origin	2.2 ± 0.4	2.0 ± 1.4	4.2 ± 1.1	4.0 ± 1.1
Distance to sellers	2.2 ± 0.5	2.4 ± 1.5	2.6 ± 1.1	3.3 ± 1.1
Others	3.4 ± 0.5	1.0 ± 0.0	5.0 ± 0.0	4.4 ± 0.8

1-Not highly influential, 2- not influential; 3- Normal; 4- Influential; 5- Highly influential

Source: In-depth interviews, 2019

It is clear that quality, raising method, and price are the three most important factors affecting the buying decision of all interviewed buyer groups. The quality of Ban pork is related to

quality traits such as breed (pure or crossbred), weight, and age at slaughtered (Muth et al., 2017). Most respondents paid attention to raising methods as it affected to the quality of pigs. They supposed that pigs are free-ranged and raised traditionally may produce better pork quality. Most collectors in Hanoi based on the appearance of pigs and the information provided by sellers to predict farming practices. They had to offer a competitive price to restaurants as many sellers want to connect with restaurants in Hanoi. Therefore, they had to choose trading partners, who sold pigs at reasonable prices. Most of the investigated restaurant owners purchased pig carcass, so the quality of pork at the purchase was considered to be more important. The price influenced strongly on the purchase of consumers in Hanoi. They could not regularly consume Ban pork as the higher price compared normal pork. Ban pork costs about 150 to 250 thousand VND per kg, compared to 70 to 100 thousand VND per kg of pork from white pigs. Therefore, most of respondents only bought Ban pork on special occasions in a year for celebrations, or in Lunar New Year.

Other factors affect groups of buyers in different manners. The availability of pigs was another influencing factor on the purchase decision of collectors, food stores and consumers. Trust in sellers and origin factors were more important to consumers and food stores at the point of transaction rather than to collectors and restaurants. Consumers in Hanoi expected to purchase traceable and safe products. Therefore, the information on products made them feel more secured. Besides, they perceived that some special meat had geographical reputation. For example, black pig “lon den” of Lao Cai, Ha Giang, rocket pigs or “lon ten lua” of Tuyen Quang, and Ban pigs (lon Ban or lon Man or lon Muong) of Hoa Binh and Son La. The distance to sellers had the less influence on the purchasing decision of collectors and restaurants compared to consumers and food stores. A minority of food stores took the distance into account as it might affect the color of pork. Some interviewed consumers in Hanoi indicated that either they would not travel for purchasing pork if sellers were far from their houses, or, they would ask sellers for a delivery service. These mentioned differences in the purchase decision of buyers imply the diverse marketing schemes targeted at specific buyers’ groups are essential to promote the consumption of Ban pork in the urban market, such as pork labelling, price discount, etc.

Difficulties in the purchase of Ban pork

Results on constraints of Ban pork buyers in purchasing Ban pork are shown in Table 3

It can be seen that high prices of Ban pork and the inability to realize pure Ban pork were critical problems of almost Ban pork buyers in Hanoi, especially for consumers and food stores. It is due to transportation costs from mountainous areas to Hanoi and many actors involved the supply channel. Some interviewed restaurants in Hanoi decided to buy crossbred Ban pigs with lower prices instead of pure Ban pigs. The findings are comparable with results by Phuong et al. (2014) that most of investigated restaurants in Hung Yen, Hai Duong, Hanoi were using Ban crossbreds due to high prices of pure pigs. Restaurants’ owners intended to mix pork from exotics and Ban pigs as consumers were unable to recognize Ban pork after processed.

Table 3. Constraints of Ban pork buyers

Indicators	Collectors	Restaurants	Food stores	Consumers
	(n=5)	(n=5)	(n=5)	(n=30)
	<i>Mean ± SD</i>	<i>Mean ± SD</i>	<i>Mean ± SD</i>	<i>Mean ± SD</i>
Insufficient supply	2.6 ± 1.1	2.0 ± 0.7	4.2 ± 0.8	2.3 ± 1.0
Instable quality	2.4 ± 1.1	-	2.0 ± 0.00	2.4 ± 1.1
Lack information on pig sources	2.0 ± 0.7	2.2 ± 0.4	2.0 ± 0.7	3.1 ± 1.1
Unaware of origin	-	-	-	2.5 ± 0.9
High loss of weight	2.4 ± 0.5	-	-	-
High price	2.6 ± 1.1	2.8 ± 0.4	3.2 ± 1.5	3.9 ± 1.1
Few sellers in the area	-	-	-	2.4 ± 0.7
Distinguish pure and crossbred pork	-	3.0 ± 1.0	3.4 ± 1.5	4.1 ± 1.1

1-Not highly difficult, 2- difficult; 3- Normal; 4- Difficult; 5- Highly difficult

Source: In-depth interviews, 2019

In addition, insufficient supply was the biggest constraint of green food stores. Interviewed food stores found that the current supply volume of Ban pork has not met their demand and capacity. Lack of the information on pig source and few Ban pork sellers in resident areas were also inhibitors of consumers to buy Ban pork. It is also noted that the weight loss of Ban pigs due to the transportation and instable quality were obstacles for the interviewed collectors in the purchase of Ban pigs.

CONCLUSION

Pork quality, raising method, price, inability of distinguishing Ban pork from other pork types are major factors influencing the consumption of Ban pork in the urban market. It is suggested to implement targeting marketing schemes on different buyer groups, such as pork labelling, price discount to improve the competition of Ban pork in the urban. Future studies on the marketing and labelling options for Ban pork products are necessary to learn about the potential distribution channels of Ban pork in the urban market.

REFERENCES

- Huong, P.T.M., Hau, N.V., Kaufmann, B., Valle-Zárate, A. and Mergenthaler, M. 2009. Emerging supply chains of indigenous pork and their impacts on small- scale farmers in upland areas of Vietnam. In International Association of Agricultural Economists Conference (IAAE), August 16-22, 2009 in Beijing, China. Retrieved from: <https://econpapers.repec.org/paper/agsiaae09/51628.htm>. (Accessed on 3rd July 2019).

- Huyen, L.T.T., Muth, P.C., Markemann, A., Schöll, K. and Valle Zárate, A. 2016. Potential for the development of a marketing option for the specialty local Ban pork of a Thai ethnic smallholder cooperative group in Northwest Vietnam. *Tropical Animal Health and Production* 48 (2), pp. 263–271.
- Lemke, U. 2008. Pig production in Vietnam - a review. *CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources* 23(3).
- Muth, P.C, André Markemann, Le T. T. Huyen, Anne Valle Zárate, 2017. Discriminating the quality of local pork from crossbred pork from extensive production of ethnic minorities in mountainous northern Vietnam. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*. ISSN: 2363-6033 (online); 1612-9830 (print) –Vol. 118 No. 1 (2017) 45–57.
- Phuong, N. V., Hanh, D. T.M., Cuong, T. H., Markemann, A., Valle Zárate, A. and Mergenthaler, M. 2014. Impact of quality attributes and marketing factors on prices for indigenous pork in Vietnam to promote sustainable utilization of local genetic resources. In *Livestock Research for Rural Development* 26(7)
- Rössler, R. 2005. Determining selection traits for local pig breeds in the Northern Vietnam: Smallholder' breeding practices and trait preferences. Diploma Thesis. University of Hohenheim, Stuttgart
- Thuy, D.K., Huyen, L.T.T, Dung, L.T. and Unger, F. 2020. Understanding Ban pig value chain in Hoa Binh province, Northwest Vietnam. *Journal of Animal Husbandry Sciences and Technics* V.258. pp. 54-59
- White, M. D. and Marsh, E. E. 2006. Content analysis: A flexible methodology. *Library trends*, 55(1), 22-45.

Received date: 09/02/2022

Submitted date: 17/02/2022

Acceptance date: 25/02/2022

Opponent: Dr. Nguyen Thanh Trung