BIBLIOGRAPHY

BOGAWIT, FELY A. APRIL 2013. Production and Marketing Practices of Swine Raisers and Traders in Mankayan, Benguet. Benguet State University, La Trinidad, Benguet.

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ABSTRACT

The study primarily aimed to determine the production and marketing practices of swine raisers and traders, determine the marketing flow of swine, and determine the production and marketing problems encountered by the swine raisers and traders and to identify the solutions to the identified problems.

The respondents of the study were 40 swine raiser and 10 swine trader. The data were gathered by means of survey questionnaires supplemented by personal interview. Descriptive statistics was employed in the analysis of the data.

Results revealed that most of the respondents belonged to the middle age group. Majority of the respondents finished high school level, married and have 3-5 number of children. Most of them had experienced swine raising from 11 to 15 years and financed their piggery business from on their own savings. Raisers made use of commercial feeds when the pigs are about 1 to 3 months and mixed with vegetable waste when they are already 4 months old and above. The live hogs were marketed directly to meat carcass traders or to direct consumer on wholesale or retail basis either live weight or dress weight.



Common problems identified were lack of capital, disease, high cost of commercial feeds, lack of technical knowledge and too much credit by buyers of their product, and inaccurate weighing scale. Results of this study pointed out the need for the Bureau of Animal Industry (BAI) and other agencies involved in the swine industry to conduct seminar or training on the barangay level, specifically on improved breeding, feeds and feeding and animal health practices.



INTRODUCTION

Rationale

Mankayan is the north most municipality of Benguet bounded by the municipality of Cervantes Ilocus Sur in the Northwest; Bakun, Benguet on the Southwest; Bauko and Tadian Mt. Province on the Northeast and Buguias on the Southeast. It is about 17,494.50 hectares which is 6.69 percent of the total provincial land area. The municipality have twelve barangay with two (2) barangay as identified as urban areas namely Barangay Poblacion and Paco, while the rural barangay are Barangay Balili, Bedbed, Colalo, Cabitin, Sapid, Bulalacao, Guinaong and Taneg. The indigenous people of Mankayan belong to the Kankana-ey tribe.

Basically main source of income of Mankayan is agriculture and mining. The favourable climatic condition for vegetable production have encouraged majority of the inhabitants to engage in farming. Swine rising is one of the most promising livelihoods for most of the residents in the municipality. The high demand for pork has encouraged most households to raise pigs in their backyards. Due to the high production cost, caused by the increasing prices of feeds, most households were discouraged from continuing raising pigs, particularly in barangay Poblacion and Paco.

Most of the livestock raised in the municipality are classified as backyard type of production. Local livestock production cannot supply meat demand of the towns population, thereby, needing additional supply from other producing towns particularly the lowlands. Thus the primary outlet of these livestock product is within the municipality. According to Daculan, Rudy (Mankayan Municipal Agricultural Office) the supply of the



swine is not solely produced in the municipality but from other municipalities particularly lowlands.

Statement of the Problem

Swine raising in a larger scale would be the potential livelihood project of the municipality. The following questions were formulated to help guide the objectives of the study:

1. What are the production practices of swine raisers in Mankayan, Benguet;

2. What are the marketing practices of swine raisers and traders in Mankayan,

Benguet;

3. What are the marketing flows of swine in Mankayan, Benguet;

4. What are the production and marketing problems encountered by the swine raisers and traders in Mankayan, Benguet; and,

5. What are their solutions to the identified problems?

Objectives of the Study

The study aimed to:

1. determine the production practices of swine raisers in Mankayan, Benguet;

2. determine the marketing practices of swine raisers and traders in Mankayan,

Benguet;

3. determine the marketing flows of swine in Mankayan, Benguet;

4. determine the production and marketing problems encountered by the swine raisers and traders in Mankayan, Benguet; and,



5. identify their possible solutions to the identified problems.

Importance of the Study

The aim of every swine producer on backyard level is to achieve maximum production efficiency. It is felt that a study on backyard farms in the municipality of Mankayan, Benguet would reveal their production performance and some of their management practices on production and marketing hogs. The data and information presented in this study would provide our government and other interested agencies a profile of the management practices of hog raisers in Mankayan for the formulation of a strategy to further the local swine industry.

More over, the findings could serve as a basic material or tool for further researches related to the study.

Scope and Limitations of the Study

The research study dealt on the production and marketing of locally produced swine in Mankayan, Benguet particularly in Barangay Colalo, Sapid, Paco, Poblacion and Tabio.



REVIEW OF LITERATURE

Livestock Industry

The livestock industry is getting ready to play the global yield. Rightly so, since the industry is a major contributor to the growth of the Philippine economy, accounting for 50 percent of gross value added in agriculture. Livestock production systems are predominantly backyard with pork and broilers composing 83 percent of meat output. The industry also provides a stable market for corn farmers, absorbing 60 percent of their produce (Hidalgo, 1996).

The breeds raised in Benguet are Duroc, Landrace, Hybrid, and Native. The native ones are those offered to "Kabunyan" or God. Folks claimed that the meat of native pigs is tastier and delicious compared to the improved breeds. The pork is major type of meat consumed by Filipinos. It is roughly 60 percent increase for pork does not show signs of levelling off spite its retail price with poultry meat as a potential substitute (Wagang, 1984).

Based on the record gathered from the National Meat Inspection Commission (NMIC) the listed data of Table 1 was the sum total inventory of all the swine bought per head or in kilograms from Mankayan, Benguet.



MONTH	HOG (No. Of heads)	DRESSEDWEIGHT (Kgs.)
January	268	14,765
February	232	12,045
March	296	15,390
April	265	13,760
May	300	15,460

Table 1. Number of hogs butchered at the slaughter house in Mankayan, Benguet as of January to May 2011.

General Swine Management

PCARRD (1976) recommended the following management practices on standard operating producers for successful swine rising:

- 1. Buy only healthy stocks.
- 2. Give improved breeds the latest up-dated way of management.
- 3. Maintain herd population which can be properly and efficiently managed with

the existing facilities and management skills on the farms.

- 4. Group animals accounting to size, age, and function for the ease of providing well-balanced rations and prevent spread of disease that are latent in older animals but transmitted to young animals.
 - 5. Provide proper nutrition for all class of swine.
 - 6. Provide animals with well ventilated and comfortable houses.
 - 7. Observe cleanliness.
 - 8. Dispose dead animals immediately.



Growing pigs have a less demanding management. However growing finisher pigs should be provided with outmost protection from pest and diseases. Grower-finisher pigs are feed according to their requirements (Agribusinessweek, 2008).

Housing and Equipment

According to Pfizer (1987), housing and equipment must be provided to the pigs with favorable environment for effective production. Hence, it must involve the least expenditure and effort for efficient management of stock. The flooring should be concrete for easy clearing to minimize the occurrence of pest and diseases. The slatted floor conserves time and labour in the maintenance of sanitation.

Gillispe (1981) stated that furrowing houses for swine should be warm, dry and free of drafts. Additional heat may be required. Slats should be placed parallel to the sow top provide them warmer place to sleep.

Feeding and Management

According to Sastry and Singh (1982) he mentioned that kitchen garbage is also widely used as a cheap swine feed. The only difficult is that raw garbage sometimes spreads diseases. Therefore garbage should be cooked before feeding to swine. Cooking however makes garbage costlier and somewhat less potable. Many human foods like wheat and others can partially replace grains in swine production.

Tande (1990) found that swine given 25% level of commercial feeds plus slops and vegetable refuse had the best efficiency and produced the highest gain in weight. Green chops such as forage grass, legumes, corn, sorghum plants and residue of food crops used



for human consumption such as cannery waste, cull green bean, vegetable refuse and other by products has more advantages compared to forage crops for it contains more digestive nutrients that can be salvaged over a unit of land with other methods such as pasturina.

Marketing System

One of the most important characteristics of livestock production is the diversity of producing units. There are other producers who view the livestock enterprise as an income supplement and use to occupy excess labor, buildings or other resources. This diversity has contributed to the difficulty in organizing livestock producers for collective market actions. Farmer is being offered different methods of selling their products. Swine proposals guarantee returns in exchange for the privileged of permitting a marketing firm to make certain operating decisions on the farm (Kohls and Uhl, 1980).

According to Ackel (1983) the most finish hogs are sold directly by the producers to the processors, some to be aided for on the bases of carcass grade and yield. Producers have to be kept abreast of all phases of marketing and they have to keep themselves in a position to do the best possible job of marketing their products. Selecting the market and marketing methods involves very important decisions in the production program and in the final analysis, may determine whether or not the enterprise is profitable. He added that, top producers monitor the market daily. Swine handle the sales as a dealer or via auctions or other markets.

The swine marketing channel is composed of swine breeder, pig raisers, traders, butchers, retailers, and processors (PCARRD, 1976).



De Guzman (2003) reported that marketing outlet of swine raisers usually selling their animals to the public consumers. They sell different forms like wholesale (bulto), live weight. Eviscerated and cuts. But mostly selling the meat by wholesale, retail and wholesale-retail that practiced by the different meat carcass traders they disposed their animals through pick-up, delivering their animals to the buyers as well as to the neighbourhood on pick-up and delivery are practiced. This observation collaborates the finding of Litilit (1997) that most of the swine raisers marketed their hogs live weight. Majority of them disposed from 6-12 months and mostly to the middlemen on wholesale basis.

The most problem encountered by swine raisers was the occurrence of outbreaks of diseases, the location, absence of buyers, late disposal, and low pricing of the meat and inaccurate weighing scale.

Definitions of Terms

<u>Carcass</u>. the major portion of a meat animal remaining after slaughter varies among animals, but usually the head and internal organs have been removed.

Meat carcass Traders. One who sell meat carcass

<u>Marketing</u>. is the process by which sellers find buyers by which goods and services move from producers to consumers.

Mark-up. this is the percent price of traders added their procurement cost.



METHODOLOGY

Locale and Time of the Study

The study was conducted in Barangay Colalo, Paco, Poblacion, Sapid and Tabio, Mankayan, Benguet, from the month of December 2012 to January 2013.

The Respondents of the Study

The respondents of the study were the backyard swine raisers and traders in Mankayan, Benguet. A total number of 50 were taken randomly as the respondents of the study.

Research Instrument

The study used survey questionnaires containing the necessary questions related to the objectives of the study and a follow-up interview was done to verify and satisfy the information needed in the study.

Data Analysis

The data gathered were tabulated, analyzed and discussed using descriptive statistical tools such as range, mean, frequency, and percentage.



RESULTS AND DISCUSSION

This chapter deals with the presentation, analysis, and interpretation of data on the management practices of swine raisers and traders in Mankayan, Benguet. The data were based on the information gathered from questionnaires and interviews. The respondents of the study were 28 backyard swine raiser engaged into piglet production, 12 hog fattener and 10 meat carcass trader.

Respondents' Profile

Table 2 presents the respondents profile according to age, gender, civil status, number of children, highest educational attainment and their occupation.

Age. The age of the respondents ranged from 30 to 70 years old. The findings shows that most of the respondents belonged to the age bracket 41 to 50 (42%). This is followed by the age bracket ranged from 30 to 40 years (28%), age bracket ranged from 51 to 60 years (22%) and only 4 respondents belonged to age bracket 61 to 70 (8%). It is evident that the respondents are matured.

<u>Gender</u>. Most of the respondents were female (82%) and the rest were males (18%).

<u>Civil status</u>. Majority of the respondents were married (86%), five were widow (10%) while two of them were still single (4%).

<u>Number of children</u>. Among married respondents 60% have 3 to 5 number of dependents, followed by 20% that have 6 to 8 dependents while 14% have the zero to 2 and 6% have 9 to 11 dependents. The average number of dependents of the respondents is



3. Thus, a large number of dependents maybe an asset, especially to the labor force required in maintaining the piggery.

<u>Highest educational attainment</u>. Most of the respondents reached high school level. Seven teen (34%) reached elementary level and a total of twelve (24%) reached college level. The level of education attained by the respondents is not relatively low.

Occupation. Twenty (40%) of the respondents were housewives or househusband. It is followed by nineteen (38%) who were businessmen/women while eleven (22%) engaged into farming.



SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

<u>Summary</u>

The study was conducted in Mankayan, Benguet from the month of December 2012 to January 2013. This study aimed to determine the demographic profile of the swine raisers and traders in Mankayan, Benguet, determine the production and marketing practices of the swine raisers and traders, know the marketing flow of swine, and determine the production and marketing problems encountered by the swine raisers and traders and identify their practical solutions to the identified problems.

The respondents were 40 swine raisers engaged in backyard piglet production and hog fattening and 10 meat carcass traders for a total enumeration of 50 respondents.

Survey questionnaire used, after which the data were tabulated, categorized and were analyzed. Descriptive statistics such as frequency counts, percentage, and mean were used in the data analysis.

The findings show that majority of the respondents belonged to the age bracket 30 to 70 years old and most of them belonged to the age bracket 40 to 50. Most of the respondents were females, married and with an average of 3 children. Most of them reached high school level. They had experience swine raising with an average of 14.18 years.

The optimum heads of swine usually managed by the swine raiser is 7 heads of pigs. Majority of them attended seminar. The 40 swine raisers revealed that their purposes in swine raising; primary source of income, secondary source of income and additional source of income. Most of the swine raiser used their own savings to finance their piggery business.



The swine raiser engage in piglet production and hog fattening used concrete type of shelter for their pigs. Lighting system is present in the pigpen of piglet producer while hog fattener does not use lighting system. The breed of swine usually raised by the piglet producer includes Landrace, Durok, Spotted Poland China, Large white, and Hampshire. The same breeds were fatteners by hog fatteners' because they buy their stocks for the backyard raisers. It has been observed that fattening stocks are sold when they are at 45 days old for a price of 2,500 pesos per piglet. The criteria employed by the hog fattener in buyins piglets include physical appearance of the piglet, breed and performance record of the piglet. Swine raisers engage in piglet production used Uno, B-meg, Vitarich, Purina and Hope brand of commercial feeds and this is supplemented by vegetables such as sweet potato leaves, "gabi" leaves and "sayote" to feed finisher hogs. In case of sickness piglet producer and hog fattener consult livestock technician than relying on the other pig raiser of what they know. The average piglet per farrowing of sow is 12 piglets. The sow farrow 2 times a year, and by means of natural breeding and artificial insemination.

In marketing swine, piglet producer dispose their swine at 4 to 9 months old, while hog fatteners said that the best selling time of fattened hogs is at 6 to 7 months old. Most of them dispose their swine thru credit or cash advance. Piglet producer price their mother sow at 90 to 100 pesos per kilogram live weight while hog fatteners price their fattened hogs at 100 pesos to 110 pesos per kilogram live weight. Pricing strategy employed by piglet producer and hog fattener is based on their production cost plus a percentage markup and based on the age of the swine.

Six of the meat carcass traders purchase their stocks live weight and 4 of them is dress weight. The 4 respondents purchasing dress weight buy their stocks from swine meat



carcass that buy live swine and butcher them. They either buy on cash or credit. Their buying price for dress weight meat product is 140 to 150 pesos and their selling price is 160 pesos per kilogram.

The marketing flow of the swine produced by the backyard raisers in Mankayan starts from the swine raisers engage in piglet production and hog fattening. Hog fattener dispose their hogs to the meat carcass traders and this are distributed to whole sellers and retailers. More over piglet producer dispose their piglets to hog fatteners or fattened them before selling to meat carcass traders and then sell to direct consumers or to whole sellers and retailers.

The production and marketing problems encountered by the swine raiser engage in piglet production and hog fattening includes high cost of feeds, lack of capital, disease and lack of technical knowledge. The problems they encountered in marketing their swine include inaccurate weighing scale, low price of swine and too much credit sales. The solutions applied by the swine raiser engage in piglet production and hog fattening includes controlling the use of feeds, borrowing capital from relatives, consulting livestock technician or other pig raiser and attending seminars. Swine meat carcass trader said that they solve their problem by giving 2 weeks due date to their credit sales.

Conclusions

Based on the findings of the study, the following conclusions were drawn:

- 1. Swine raising in Mankayan, Benguet fall under backyard raising type;
- 2. The respondents financed their swine business on their own savings;



3. Swine raisers engage in piglet production and hog fattening follow a similar practice in production and marketing; and,

4. The commodity flow of the meat product is simple.

Recommendations

Based on the findings of the study, some recommendations are considered essential for the improvement of swine industry in Mankayan, Benguet.

1. Bureau of Animal Industry (BAI) should do extensive research on some indigenous material such that a practical ration would be established to enable the hog raiser to minimize their cost of production;

2. Bureau of Animal Industry (BAI) should be encouraged to conduct more practical trainings and seminars on the barangay level, specifically, improved swine management;

3. Results of studies conducted by research institutions or agencies should be disseminated on time to the farmers through barangay level seminars and open forums; and,

4. Bureau of Animal Industry (BAI) should teach the swine raiser in marketing their swine to be able to receive fair price for their hogs instead of farmers selling on a contract basis or head or "bulto" which is always a disadvantage of the swine raiser.



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