## BIBLIOGRAPHY

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#### ABSTRACT

The Philippine poultry industry is having an impressive growth. Local egg production poultries have been sprouting in Benguet. The Sab-it Poultry Farm is one such enterprise in Mankayan, Benguet.

This study was conducted to document the essential operations, production growth trend, marketing operations, problems encountered and cost and return analysis of Sab-it poultry farm in Sapid, Mankayan, Benguet.

Production technology was acquired through the Benguet State University. Acquisition of pullet stocks, materials and supplies has been through collaboration with the Benguet State University. The production technology acquired has been followed religiously with some adjustments to suit the local condition. However, further improvement on its facility is desired.

Eggs are collected twice a day, stored, then delivered to client-outlets on particular days as scheduled. Drop-in clients are also catered to.

The farm maintains two batches with 720 heads in one part of the poultry house and 980 heads in the other half of the poultry house. The farm has an average daily egg production of 85%. That is, of the total 1,680 birds farm can produce an average daily production of 1,590 eggs. The actual average production however is pegged at 1,200 eggs per day. The farm however, can only supply 10 percent of the local demand for eggs.

The poultry had a good financial performance based on its 2006 to 2007 cycle financial statements.

The farm needs to further improve and expand its facilities to increase its ability to cater to the local market and to explore other alternative to maintain a high efficiency in its operations.



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# INTRODUCTION

# <u>Rationale</u>

Poultry comes from the latin word "poule" which means to hang. It is the category of domesticated birds that people keep for the purpose of collecting their eggs or killing for their meat. Chicken broiler and egg production are the most progressive animal enterprises in the Philippines today. The poultry industry in fact began as a backyard enterprise and has grown or developed into very large integrated contract farming operations (Anonymous, ND).

The growth of the poultry industry in the Philippines has indeed been impressive but its problems including inefficient management and the prevalence of many destructive poultry diseases and parasites cannot be ignored (Anonymous, ND).

Poultry producers incur substantial losses due to over production resulting from its aggressive expansion, coupled with rising cost of grains and other feed materials both in the local and international markets. While the poultry producers have trimmed down growth to more moderate levels, the industry is now faced with an even greater challenge of global competition.

Chicken egg production in the Philippines is a minor industry compared to the broiler production sector that takes center stage in the Philippine chicken trade. But the chicken layer sector had the most growth between 2001 and 2002 because of the increase of chicken layers in the country. In 2002, chicken egg production contributed 3% of the total value in the Philippines. With the socio-economic problems in the country, the chicken egg is one of the cheapest food products that are vastly available in the market. The chicken egg is also considered as one of the most complete food sources with high



nutritional value. Chicken egg production in the Philippines mainly serves the domestic market (Bureau of Agricultural Research, 2005).

Poultry production in Benguet is rare. However, there is a big demand in egg and poultry meat in the locality. The bulk of the Municipality of Mankayan's main source of eggs is from the lowlands. However, local production of eggs has started, although in minimal volumes. The Sab-it Poultry Farm is one such local egg producer and supplier.

# Statement of the Problem

1. What are the essential operational activities and processes of the poultry and how do these compare to recommended standards?

2. What is the growth trend of the poultry in terms of assets, production volume and market share?

3. How does the poultry conduct its marketing activities?

4. What are the problems encountered by the operator?

5. What are the costs and return of the poultry project?

## Objectives of the Study

The study aimed to:

1. Determine the essential operational activities and processes of the poultry and compare these to standards.

2. Document the growth trend of the poultry in terms of assets, production volume and market share.

3. Identify the marketing activities of poultry operation.

4. Identify the problems encountered by Sab-it poultry farm in their operation and marketing.

5. Conduct costs and return analysis on the project.

# Importance of the Study

As the study attempts to document the operations of the particular poultry enterprise, the results of the study would identify the strength and weaknesses of the enterprise and thus act as a guide for the enterprise itself for further improving its business operations. Furthermore, this will also give insights on operational aspects to enterprise and other business entities that plan to venture into poultry enterprise in the future.

# Scope and Delimitation of the Study

The study is a documentation of the operations and marketing practices of Sab-it poultry farm. Though it would refer to the historical growth of the poultry project to determine its growth trend, it however based its assessment of operations on current activities and practices. The study also focuses on the technical and marketing aspects of its management relied on existing records for financial analysis.

#### **REVIEW OF LITERATURE**

## Historical Aspect

The egg industry developed initially when numerous small populations of freerange birds produced egg excess to family requirements and these were sold to barter. With urbanization, larger flocks were developing to supply consumers and as demand and bird numbers increased, the farming of these birds became more intensified. By the mid 20<sup>th</sup> century, a significant egg industry had developed in Australia. While much of the industry clustered around the fingers of mayor cities, a substantial number of farms developed in regional centers where cereal cropping occurred.

These changes enabled higher production levels of eggs as a result of improved husbandry and improved in health conditions with a corresponding reduced labor input. During this time, regulation of the egg industry occurred, with the result that eggs were predominantly marketed through specific state bodies.

The industry had undergone significant structure changes with individual enterprises becoming fewer in number, larger in size and more vertically integrated. The industry became more sophisticated in order to meet both consumer demands in regard to quality of the product and to reduce concerns about animal welfare and antibiotic residues (Hawkins, 2004).

## Management of Pullets

PCARRD (1976) advises that the general management practices of pullets are the following: a) under the two-stage rearing system, 5 to 8 weeks of old chicks are transferred from the brooder to the rearing house until point of lay (18 weeks of age).



This is not necessary under the single stage rearing, b) use the correct feed for the age and growth progress of the bird, c) check the feed, water and lights daily. Fresh and clean drinking water should always be available, d) vaccinate on schedule based in a sound vaccination program, e) keep a flock history/record including feed programs, light programs, vaccination programs and bird's weight that can be transferred to the layer house with the pullets, f) measure growth process and use the correct formulation to attain the necessary growth and target body weight at point of lay, g) follow a lighting program recommended for the strain of bird, h) provide recommended floor, feeder and water space requirements; and i) prevent feather pecking and cannibalism.

#### Light Management

According to McElroy (2009) he said that 25-40 watt bulb located above the feed and water area at ceiling height for each 40 sq. feet of pen. Provide 14 to 16 hours of light per day for maximum year round production. Never decrease the lighting period on birds in production or they will stop producing. An inexpensive time clock can be installed to turn lights on in the morning hours and let the birds go to roost with the natural sunset.

The lighting programme, together with the recommended feeding are designed to achieve the performance standards. An increasing photoperiod stimulates the bird to mature. A decreasing photoperiod retards maturity and will affect production. Day length control in the rearing and laying period is an important management tool in the achievement of economic performance, both in egg number and egg weight. The lighting programme starts immediately day-old chicks arrive. The purpose of controlling day length during the rearing and laying period are: a) to achieve the best rate of egg production, b) to adjust maturity and onset of production for the correct age and stage of



development, c) to achieve required egg size; and d) to achieve adequate body weight (Manual of Commercial Management Poultry Guide, 2000).

In shade houses, natural daylight must be supplemented with artificial lighting in order to obtain desirable lighting patterns which are necessary to adequately control sexual maturity. A constant or decreasing lighting pattern which rearing is essential to prevent too early sexual maturity. An increasing of constant light pattern is necessary after 22.24 weeks of age (Bureau of Agricultural Research, 2005).

# Feeding during Pre-laying Period

Feeding equipment, the mechanics of feeding are nearly as important as the feed itself. Supply enough feeder space so that all the birds can eat at the same time. When space is limited, some birds don't get enough to eat. Keep feed available for the birds constantly. Meal feeding (giving a limited amount of feed several times each day) can reduce productivity if not managed carefully. Place feeders so the through is at the level of the birds' backs. This practice reduces feed spoilage, which encourages rodents, wastes feed and cost money (Bureau of Agricultural Research, 2005).

Layers should be full-fed for maximum production. During the 2-3 weeks prior to first egg, the liver and reproductive systems increase in size in preparation for egg production. Layer 1 ration should be given to the birds as soon as the first secondary sings of sexual maturity appear (combs and wattles). Ideally, at least one week before expected first egg. Pre-lay ration can only be fed until first egg is reached, and never after. Failure to feed laying hens with a complete Layer ration may result in less than optimum shell quality later in production. To obtain the best results, pullets should be housed no later than 16 weeks of age, or one week prior to light stimulation.

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Feeding at onset of production; at first egg, birds must be already on a layer ration. In certain circumstances, the flock might not reach 100 g/bird (22 pounds or 100 pounds) daily feed intake peak productions. In such cases a high nutrient density layer ration may be required to ensure the birds receive the required nutrients for sustained production and early egg size increase. It is also recommended to stimulate feed intake (Bureau of Agricultural Research, 2005).

# Feed Requirement

It is not necessary to feed "meat bird starter" to young layer chickens. Diets formulated for starting meat chickens are higher in protein (22% to maximize growth, which is not necessary or desirable for egg laying chickens and is higher in cost. Once the birds reach about six weeks of age, substitute a grower feed for the starter. Grower feeds are about 15% or 16% protein and are formulated to sustain good growth to maturity. After about 14 weeks of age, you can substitute the grower feed with developer feeds if they are available. Feeds are lower in protein than grower feeds (14% to 15%) and are formulated to prepare young chickens for egg production. Layer feeds are formulated for chickens that are laying table eggs (those used for food). Layer feeds contain about 16% protein and extra calcium so the chickens will lay eggs with strong shells. Start feeding layer feeds at about 20 weeks of age or when the first egg is laid, whichever occurs first (Breeder feeds are formulated for chickens that are producing eggs for hatching (Bureau of Agricultural Research, 2005).

#### Vaccination

The build-up of immunity to disease starts in the egg and continues in the brooding period. A well planned and executed vaccination programme is essential. Vaccinate only against those diseases prevailing in the areas where the flock is expected to live (Bureau of Agricultural Research, 2005).

#### Temperature and Ventilation

Heat stress is one of the major risk factors that one must consider in layer farm management. The ideal temperature for laying hens is between 18 degrees and 29 degrees Celsius (Table 1). Air movement around birds at floor level has a beneficial cooling effect. In shade houses, take full advantage of natural breezes using paddles or circulating fans in periods of still weather and particularly during the heat of the day. Controlled environment house, use inlets with moveable louvers which can direct moving air direct on to the birds at floor level. There are five main objectives for ventilation: to provide fresh air, to remove stale air, to control temperature, to control humidity and to remove dust. Each of these five must be satisfied if the flock is to perform to its best ability in feed conversion, livability, growth and egg production (Bureau of Agricultural Research, 2005).

According to Kekeocha (1985) the optimal laying temperature is between 11°C and 26°C. A humidity level above 75 percent will cause a reduction in egg laying. Table 1 indicates the effect temperature on egg production.



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TEMPERATURE (°C)	EFFECTS
11 – 26	Good production.
26 - 28	Some reduction in feed intake.
28 - 32	Feed consumption reduced and water intake
	increased; eggs of reduced size and thin shell.
32 - 35	Slight panting.
25 - 40	Heat prostration sets in; measures to cool the
	house must be taken.
40 and above	Mortality due to heat stress.

Table 1. Temperature and its effects on egg production

When the temperature rises above 28° C the production and quality of eggs

decrease. Seasonal temperature increases can reduce egg production by about 10 percent.

# Egg Collection and Grading

PCARRD (1976) collect the eggs at least twice a day or as frequent as possible. Collect eggs in clean trays or egg baskets. Dirty eggs should be cleaned. Separate soft shell and cracked eggs. Grading is one of the important steps in marketing eggs. In this process, eggs go through identification, classification and separation. Grading allows you to set different prices for different sizes and quality levels of eggs. High quality eggs may be priced higher, while eggs with small blood spots may be sold to customers such as bakeries. Factors to be considered in grading eggs are appearance, internal quality, size, color, and the soundness of the shell. Eggs are also classified by size. The standard classifications of the commercial chicken egg by weights are: Jumbo = 70 g and above, Extra large = 65-70 g, Large = 56-65 g, Medium = 49-56 g, Small = 42-49 g and Peewee = 35 g or 40 g.

#### Marketing for Eggs

The eggs are paid for under the terms of the contract. Eggs that are not produced under contract are sold to local buyers; producers may sell directly to consumers at the farm or at roadside stands. These types of marketing practices require more labor than selling to produce dealers or through cooperatives. An increasing interest in organic foods has created a good market for locally grown organic eggs sold directly to the consumer or local supermarkets and restaurants (Gillespie and Flanders, 2010).

There are two ways to market table eggs: using direct marketing, or marketing through middlemen or intermediaries. Marketing through middlemen is the more popular method and the more advisable one because this gives the farmers the opportunity to concentrate on the farm and production as compared to spending time on marketing and sales. The most crucial part of marketing is meeting the demands and requirements of customers, and these usually rely on production, handling, storage, and transport of goods. The four ways to conduct direct marketing are: sales from the farm, door-to-door sales, producers' markets, and sales to local retail stores (Bureau of Agricultural Research, 2005).

#### Egg Production Standards

Dagoon (1990) said for profitable egg production, the birds must lay more eggs than those necessary to pay for the cost of feed and all of the other costs involved in producing eggs. For most part of the country, the native laying flock should lay an



average of at least 150 eggs per bird per year to give a reasonable labor income or profit. Neither the best kind of diet nor the most scientific management will enable pullets to lay well if they are not bred for egg production. A pullet to lay well should also possess the following outstanding characteristics: a) early sexual maturity. White leghorns should commence to lay at about 150 days of age and the general purpose varieties at about 170 days of age, b) pullets of all varieties should lay at an average of about 50% production or about 15 eggs per month or better, c) pullets should continue to lay for a period of approximately ten months from the time they start to lay.

#### Housing and Equipment

Poultry housing and equipment can be as simple as a shed roof with chicken wire fencing, nests, water fountains and hand-filled feeders to an environmentally controlled fully automated cage layer house. Make sure that the birds are given adequate floor space. A maximum of three birds per square meter is recommended. Provide birds with up to 100% (depending on severity of conditions) more floor space than is recommended for temperate climates. In the laying house, supply at least one nest per four females or at least provide one 10" x 10" nest for every 5 hens in your flock. Keep the nesting material clean and dry (Bureau of Agricultural Research, 2005).

There are types of poultry house for table egg production; this layer house is for the hens during their entire laying period, the types of the laying cages are the following: a) Conventional Vertical Type Cages also known as the battery type cages consisting of 3-4 tier laying cages. The width is from 4 to 4.5ft. The height rises from 5'9" to 7' based on the number of cage tiers. b) Stepped Cage also known as the Californian Type Cages



or Stair Stepped Cages. Thus, as the most popular type of laying cages in the Philippines. Usually 2 or 3 tiers high and maybe fully stepped or semi-stepped (PCARRD, 1976).

# Watering Equipment

The distribution of waters should be minimizing the distance any bird has to move in order to drink' ideally, both feed and water should be distributed so that no bird has to move more that 1 <sup>1</sup>/<sub>2</sub> meters to get its requirements. Whenever possible, use a water supply such as well which provides cool water. Bury or insulate water pipes to maintain the original coolness. Additionally, supply troughs in which breeders may dip their combs and wattles so that evaporation of water cools the blood supply in the combs and wattles. In extremely hot weather, do not place drugs or other substances in the water which might decrease its palatability (Bureau of Agricultural Research, 2005).

# Floor, Feed and Water Space

Floor space of 1800 to 2200 cm<sup>2</sup> per bird on deep-litter and 337 to 375 cm<sup>2</sup> per bird in cages is recommended for layers. Breeders are provided with little higher space of 2300 to 2700 cm<sup>2</sup> depending on size of birds. About 12 to 15 cm linear feeder space and 2.5 cm water space per bird is adequate during laying. On deep-litter system one laying nest for every 4 to 5 hens with perch at entrance is provided for comfortable laying and clean egg production. An inadequate management facility leads to reduced egg production and feed efficiency; increased diseases incidence and mortality and sometime cannibalism also (Bureau of Agricultural Research, 2005).



# METHODOLOGY

# Locale and Time of the Study

The study was conducted at Mankayan, Benguet, specifically in barangay Sapid where poultry farm is located.

Gathering of information was done from November 2010 to January 2011.

# Respondents of the Study

The respondent of the study Mr. Samuel M. Sab-it is the owner of the farm.

# Data Gathering Procedure

A personal interview with the farm owner was done with the aid of an interview guide and secondary information from farm records was gathered.

# Data Gathered

The gathered data includes the following: operational activities and processes of the poultry, the growth trend of the poultry in terms of assets, production volume and market share, marketing activities of poultry operation and problems encountered by Sabit poultry farm in their operation and marketing.

# Data Analysis

Poultry operations were compared with suggested industry standards, trends were determined on its production volume. Ratio analysis was used on its 2006 to 2007 financial statements and a break-even and margin safety analysis was used to determine shutdown points.



# **RESULTS AND DISCUSSION**

# History of the Farm

The Sab-it Poultry Farm is located at Sapid, Mankayan, Benguet Province. The proprietor, Mr. Samuel M. Sab-it, started his poultry farm upon the suggestion of a friend. Subsequently, Mr. Sab-it attended a seminar on poultry farm particularly on layer production at Benguet State University which was conducted by Mr. Diego Dumapis, who later became his mentor in starting his poultry farm.

Mr. Sab-it who is a graduate of Bachelor of Science in Computer Science, is currently working at the Municipal Government of Mankayan as the Secretary to the Sanggunian Bayan. Apart from his regular work, he was also immensely interested in poultry production such that it inspired him to start his poultry farm. The poultry farm was established in March 2004. For the first operation, they started with 500 pullets. A year later they expanded to 700 pullets in 2006 and considering the increase in the demand for fresh eggs, the farm expanded to 1,500 pullets.

The poultry farm, though not the sole means of livelihood for the family is one of a number of integrated and complementary farming activities contributing to the overall economic welfare of the household. The farm provides an income-generating activity from the sale of eggs, birds as well as chicken dung. It uses family labor in its various activities.



## Farm Operations

## Management of Layer Farm

The layers are acquired and moved to the laying house at 112 days (16 weeks) of age for the preparation for egg production and this is based on the recommended requirement by PCARRD (1976). The farm owner gets feeds, vitamins and stocks from the suppliers who provide the same to the Benguet State University-Poultry. This is done in collaboration with the Benguet State University-Poultry.

<u>Feeding the layers</u>. Feeding of the layers has a schedule. Layers are fed twice a day: at six am and then again at two pm in the afternoon. The Sab-it farm feed the pullets with the recommended amount of 90 grams per head per day until they reach their mature body weight, then they increase the amount of the feed intake to a maximum of 115 grams per head per day. As stated by the Bureau of Agricultural Research (2005), in certain circumstances, the flock might not reach 100 grams per bird or (22 lb/100) daily feed intake before peak production. In such cases, a high nutrient density layer ration may be required to ensure the birds receive the required nutrient for sustained production to stimulate feed intake.

For the provision of water, natural spring water coming from the mountains is provided to the flock by a connecting PVC pipe directed at to the drinker troughs.

Light management. The pullets are not provided with lighting until they reach the age of 21 weeks. At 21 weeks, they are then provided with 30 minutes light starting from 5:30-6:00 in the morning. An increase of 30 minutes light is methodically provided based on the egg production performance of the layers until they reach the optimum light exposure of 16 hours. Based on the recommended requirement of lighting, an increasing



photoperiod stimulates the bird to mature. A decreasing photoperiod retards maturity and will affect production. Once accustomed to a particular level of light intensity, a flock will react to any noticeable change. More brightness will increase activity, may stimulate feed intake and will increase the chance of cannibalism. The farm use red lights to control pecking activity. Based on the recommended requirement, red painted incandescent light bulbs or red glass bulbs covered with a red tube, emitting only red orange to orange wavelengths definitely have a calming effect on the birds. In addition, red lights are of high visibility to chicken, so the bulbs can be used at a higher light intensity, allowing also more visibility to the human eye, making management houses easier than in houses with too dim lights.

<u>Temperature and ventilation</u>. The farm does not provide heating because Benguet has a favorable temperature. As cited (Bureau of Agricultural Research, 2005) the ideal temperature for laying hens is between 18 degrees and 29 degrees Celsius. This is the range within which normal metabolic heat production is balanced by heat loss. However, the average temperature in Mankayan ranges 14 degrees Celsius at minimum and 24 degrees at maximum.

Ventilation should also be provided for the pullets to perform the best ability in feed conversion, livability, growth and egg production; to provide fresh air, to remove stale air, to control humidity and to remove dust between the floor gaps and slats. With open sidings of the poultry house, natural ventilation is provided.

<u>Collection of eggs</u>. Eggs are collected twice a day. After the layers are fed, eggs are collected starting at 9 in the morning and then again at 2:30 in the afternoon. They collect the eggs using a basket and they sort the eggs using egg weighing scale. Collected



eggs are placed in trays. Dirty eggs are cleaned before they are placed in the stock room. Broken, soft-shelled and cracked eggs are separated. They don't immediately deliver the eggs after they collect and sort it. Instead, they place it in the stock room for 2 to 3 days before marketing them to be able to gather more eggs before marketing to lessen the cost of their transportation.

<u>Culling unproductive layers</u>. As cited by PCARRD (1976) the Culling is the removal of unproductive birds from the flock at the onset of laying. This activity is done because the unproductive birds consume feeds and occupy space in the laying house without producing enough profit. The healthy layers have bright, alert eyes; prominent red, large, soft and shiny combs and wattles; and a well developed body. On the other hand, poor layers have pale, shriveled, dry and hard combs and wattles; dull and sleepy eye; and are leggy.

Sab-it poultry farm remove the birds that have pale combs, yellowish shanks and beaks and does not lay eggs for four to five consecutive days or have low production. Culled birds are sold to the market.

Chicken dung is also sold to farmers. If a bird dies, they bury it in a place away from the residential area. Mortality rate ranges from 5%-10% in each batch cycle.

# **Facilities**

In the farm's initial operation, they used the commercial designed cage with the dimension of 12 W" X 19.2 L" X 17 H" as shown in Figure 2 which could accommodate 720 heads but later, they noticed that this cage is small and it is not wide enough for the birds. Consequently, for the expansion of the poultry house, which accommodates 980 heads, they adopted the cage with the dimension of 14 W" X 24 L" X 17 H" as shown in



Figure 3 that is being used by the Benguet State University which was designed by Mr. Diego Dumapis. The cage is more spacious and conducive for the pullets.

The housing system of the layer is stair stepped cages made-up of steel cage. It has 420 cages with a capacity of 1,680 heads (four birds per cage), with the floor space of 541.93 cm<sup>2</sup> per bird based on the recommended floor for bird cage. The poultry house is made-up of wood and galvanized iron. The house is open sided.

# Production

The farm used different breeds through the different cycles because they get only the available pullets produced by the suppliers. The size of the eggs varies within the different stages of one cycle. The farm acquires its stocks and supplies from various dealers from the lowlands, who also incidentally are the same dealers that provide the Benguet State University with its poultry supplies. The farm is dependent on Benguet State University-Poultry because it is where they acquire all their supplies.

The farm maintains two batches. Seven hundred twenty heads are maintained in the old poultry house and 980 heads are maintained in the other half of the extension poultry house. The farm has an average daily egg production of 85%, that is, of the total 1,680 birds, the farm can produce an average daily production of 1,590 eggs. The actual average production however is pegged at 1,200 eggs per day being that the farm maintains two batches, a strategy adopted by the owner in order that whenever the first batch is culled out, the other batch could at least provide, although not enough, the requirement of their customers.

The commercial cage with the dimension of 12 W" X 19.2 L" X 17 H" they used in their first operations has low production growth trend as shown in Figure 3, while in the second batch (expansion) in which they adopted the dimension of BSU-Poultry cage is 14 W" X 24 L" X 17 H" has a good performance as shown in Figures 1 and 5. Production growth trend of different cycles was shown in Figures 4, 6 and 8 along with the sales of the different cycles was shown in Figures 5, 7 and 9.

During their laying cycle, the birds experience common illnesses such as colds and are given antibiotics. As cited by (Bureau of Agricultural Research, 2005) Food supplement such as calcium (in the form of oyster or lime stone grits) are provided to the pullets particularly during their 40<sup>th</sup> weeks of age and onwards. In birds, the efficiency of calcium absorption may become progressively lower after 40 weeks of age. In addition, the increase in egg size raises the amount of calcium required for a strong shell, thus higher daily calcium intake is necessary. However, this is done by the Sab-it poultry farm.

Production growth trend vary as shown in Figure 4, Figure 6 and Figure 8 which the commercial cage they used in the first operation and for the expansion they used the Benguet State University-Poultry dimension. The dimension of 12 W" X 24 L" X 17 H" as shown in Figure 4 and Figure 8 shows a good performance and in terms of egg sizes. However, the old cage as shown in Figure 6 shows low production also with the egg sizes.

The production growth trend and sales on the different cycle has a common decline as shown in Figure 4, Figure 5, Figure 6 and Figure 7, which the layers produced low production and declined at the age of  $58^{\text{th}}$  or  $59^{\text{th}}$  week.

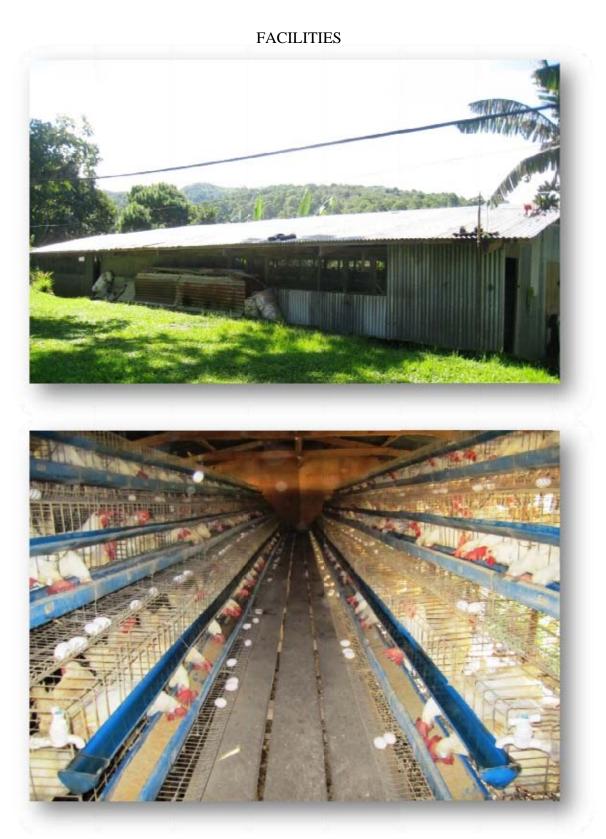


Figure 1. Poultry house and the front view





Figure 2. Commercial dimension (12 W" X 19.2 L" X 17 H")



Figure 3. Benguet State University-Poultry dimension (14 W" X 24 L" X 17 H")



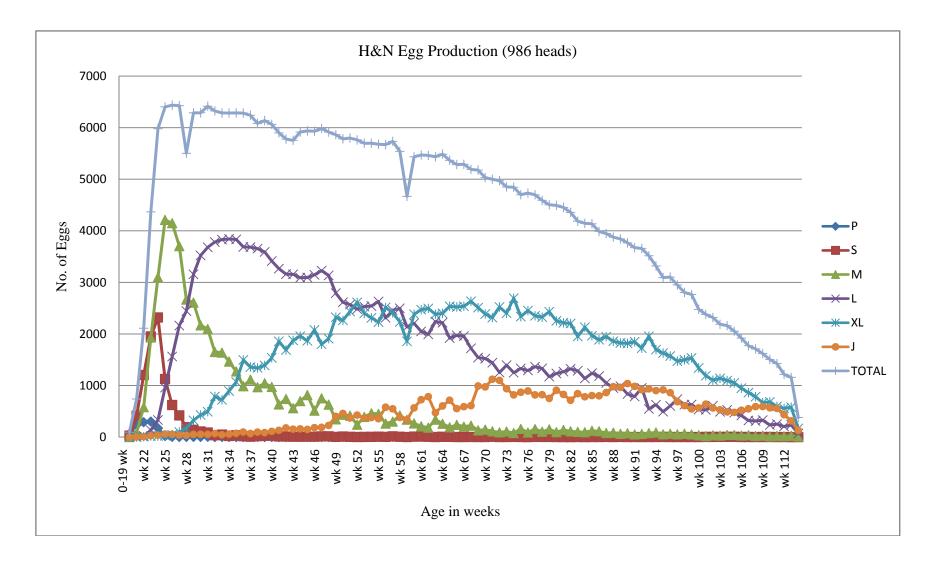


Figure 4. Production Growth Trend of H&N (2006-2007)



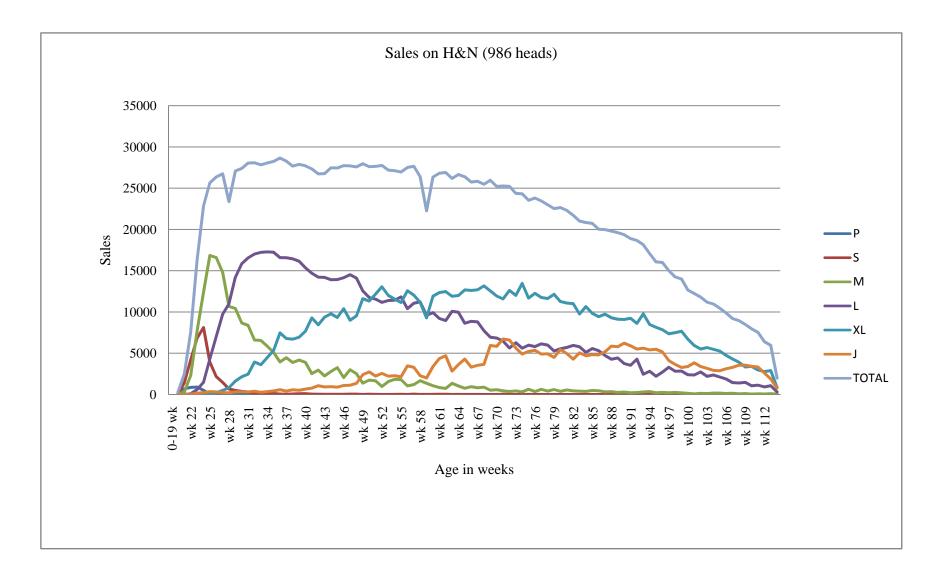


Figure 5. Sales on H&N (2006-2007)



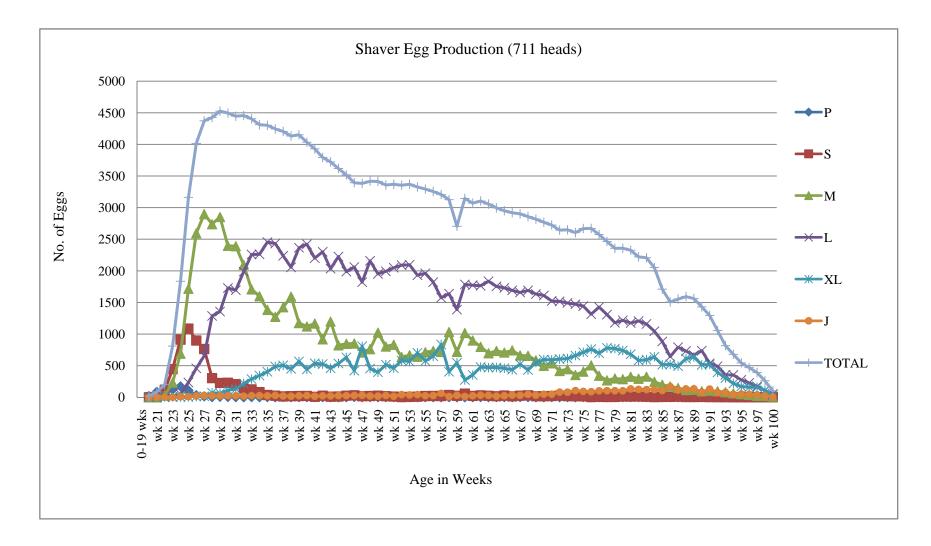


Figure 6. Production Growth Trend of Shaver (2006-2008)



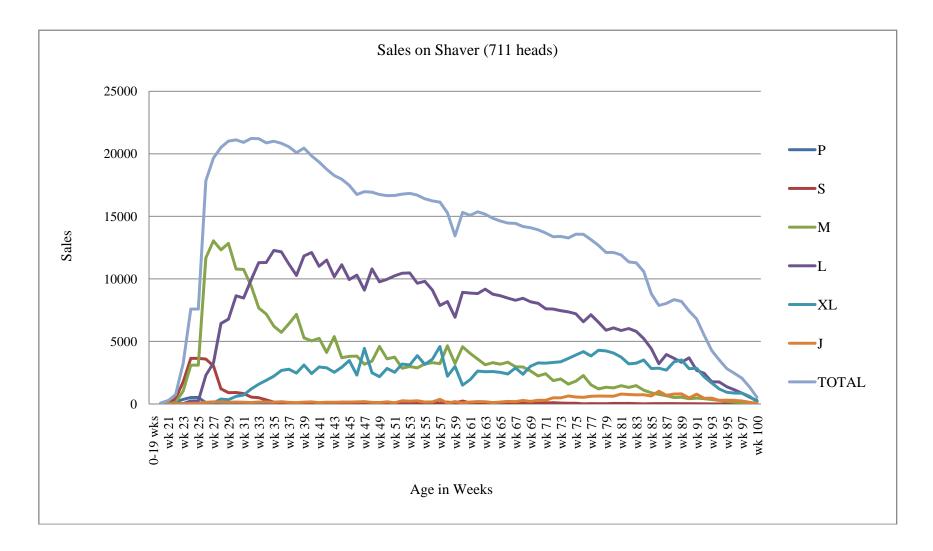


Figure 7. Sales on Shaver (2006-2008)



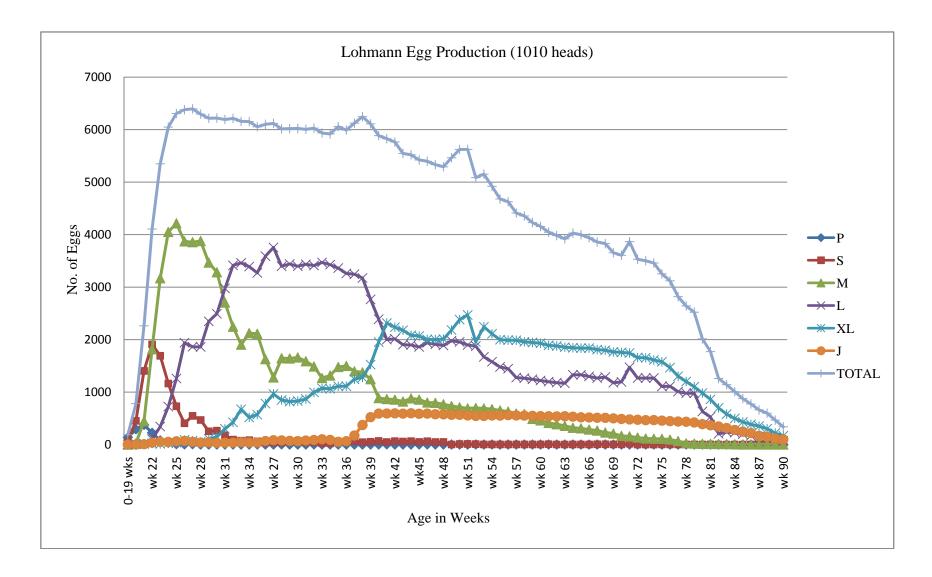


Figure 8. Production Growth Trend of Lohmann (2008-2009)



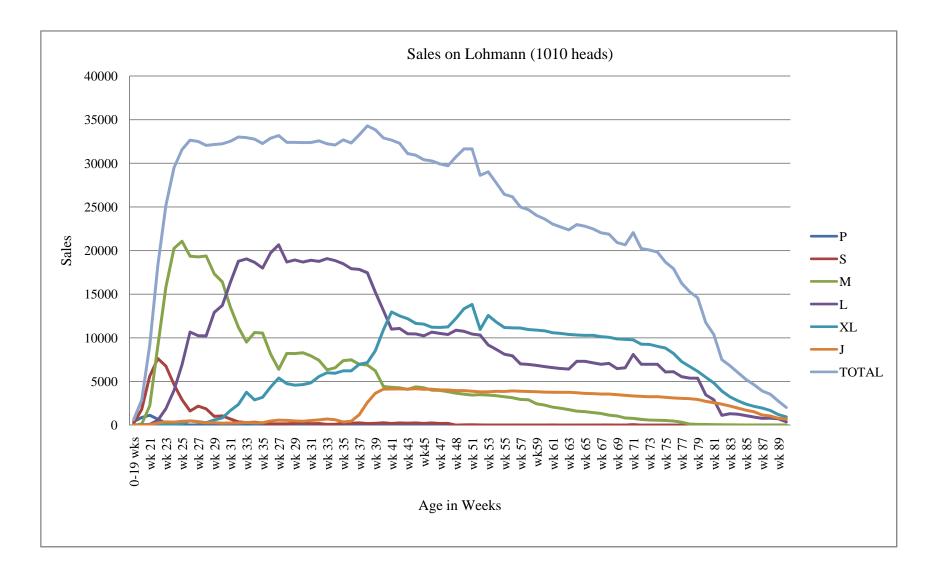


Figure 9. Sales on Lohmann (2008-2009)



# Marketing

The farm is engaged mainly in egg production. The eggs from the farm have a good quality as attributed to the high quality of feeds that are given to the birds. It's being a local poultry assures the market of fresh eggs.

The usual time of delivery is done twice a week: Wednesdays and Saturdays. They deliver their products to the Lepanto Consumers Cooperative and various stores and groceries in Poblacion, Mankayan. They also have drop-in customers who directly go to their farm to buy. These following market outlets were chosen because of their accessibility to customers and because it is near the location of the farm. They use the owners' car in the delivery of the eggs. Deliveries are usually paid in cash but there are some who do it through consignment where in they are going to pay on the next delivery. The volume per delivery is around 10 to 13 cases or 240 trays to 300 trays. Prices vary depending on the size of egg as shown in Figure 10. These are usually higher than that of the commercial price on eggs from the lowlands.

Size	Case	1/2 Case	Tray	1/2 Tray	Dozen	Pcs
Peewee	1,200	600	100	50	36	3
Small	1.560	780	140	65	48	4
Medium	1.680	840	150	75	60	5
Large	1800	900	160	80	66	5.5
X-Large	1.920	960	170	85	68	5.6
Jumbo	2,040	1.020	180	90	72	6

Competitors are the egg suppliers coming from the lowland areas.

Figure 10. Sab-it Poultry's egg price



# Problems Encountered

The farm has experienced problems, but only minor ones are immediately addressed. Production performance is being assessed/monitor regularly and every production detail is recorded. Hence, no major production problem has been encountered.

The farm has one poultry house (sub-divided into two) that could accommodate 1,680 heads.

The eggs produced however are not enough to meet the total demand of the consumers. The price of the eggs is higher than the commercial eggs that come from the lowlands price as shown in Figure 3 and this affects the interest of the consumers in buying their product, some of them prefer to buy the commercial one but there are some who patronize their product because of its quality.

Table 2. Competitors price	Table 2. Competito	ors' price	
----------------------------	--------------------	------------	--

SIZE	1 CASE	1/2 CASE	1 TRAY	1/2 TRAY	1 DOZEN	PIECES
Small	900.00	450.00	105.00	52.50	48.00	4.00
Medium	1,100.00	550.00	118.00	59.00	54.00	4.50
Large	1,250.00	625.00	130.00	65.00	60.00	5.00
Extra-large	1,410.00	705.00	146.00	73.00	72.00	6.00

# A. Measures of Short Term Liquidity

1. Acid Test Ratio

This shows that for every peso of the current liabilities there is P4.2 quick assets to cover for such liability in the 2006-2007 cycle. This means that the poultry project has more than enough liquid assets to pay for its maturing obligations.

2. Working Capital

Working capital for 2006-2007 is 185,869.00. As it is positive, this shows that the firm is able to maintain sufficient level of inventories to meet current obligations on time.

The poultry project has more than enough liquid assets to pay its debts in a short time period and it has a positive working capital that the poultry project is able to maintain sufficient inventories to meet its current obligations on time.

# B. Measures of Long Term Solvency

1. Owner's Equity to Total Assets

This represents that out of the total assets of the farm, equity to asset is .90 meaning 90% of assets comes from net worth of the owner.

2. Total Liabilities to Total Assets

Liabilities on external sources contribute to 10% of the assets.

3. Owner's Equity to Total Liabilities

It represents the relative amounts or resources provided by the owners and creditors. It reflects the strength and weaknesses on basis of financing operation.



This shows that for every one peso of the total liabilities there is 9.2, means that it has more than P9.2 to cover such liabilities for 2006-2007 cycle.

The poultry project has a higher equity that is able to cover all debts for the 2006-2007 cycle operation, making it highly solvent since the project has a higher equity to asset ratio with 90% equity and 10% liability.

#### C. Measures of Profitability

1. Asset Turnover

In the 2006-2007 cycle, the asset turnover of the Sab-it Poultry Farm is 3.30. This means that for every one peso worth of asset invested, P3.30 in sales is generated.

2. Rate of Return on Owner's Equity

It indicates the earning power on the resources provided by the owner. In the Sab-it Poultry Farm the rate of return on owner's equity is 1.18 in 2006-2007. This shows that for the 2006-2007 cycle, the initial investment of the owner has generated 118% returns.

3. Rate of Return on Sales

This is determined by taking the ratio between net income and sales. For Sab-it Poultry Farm, the rate of return on sales is 0.19 in 2006-2007 cycle. This means that for every peso generated in sales, P0.19 is earned in income.

4. Rate of Return on Capital

It is determined by dividing the net income by the total assets. The rate of return on capital for the Sab-it Poultry Farm is 0.64 in 2006-2007 cycle. The investment on assets for operations has generated 64% in income indicating high profitability on such investment.



Overall, the project's 2006-2007 cycle of operation has generated positive profits indicating a desirable operations of the project.

#### D. Measures of Efficiency

1. Accounts Receivable Turnover Ratio

It indicates how many times, on average, accounts receivables are collected during a year. This is determined by dividing sales by the accounts receivable. The accounts receivable turnover by Sab-it Poultry Farm is 27.7 times.

Given that there are 18 months in the cycle; results indicate that accounts receivables are collected within a month of allowing the credit sales. This shows a speedy collection done by the farm.

2. Fixed Asset Turnover Ratio

It measures the firm effectiveness in generating sales from its investments in plant, property, and equipment. The fixed asset turnover by Sab-it Poultry Farm is 5.8 times. This means that the worth of the assets have been used to generate sales 5.8 times its value with sales having a higher value than fixed assets. This shows a positive performance on an efficient use of its fixed assets.

3. Total Asset Turnover Ratio

It measures the ability of a firm to use its assets to generate sales. This is determined by dividing sales by the total assets. The total asset turnover by Sab-it Poultry Farm is 3.4 times.

Results show efficiency in the use of assets and a speedy collection of receivables indicating good performance of the profit for the 2006-2007 cycle.



Overall, the project exhibited good performance in terms of liquidity, solvency, profitability and efficiency for the 2006-2007 cycle.

E. Break-even Analysis (H&N Production, 986 heads as of 2006-2007 cycle)

Break-even point is the computed volume of production where sales are equal to expense or where there is neither profit nor loss. This suggests that production should exceed the computed volume to make a profit.

Total Production (206-2007) = 423,879.00

Total fixed cost = 209,795.00 (refer to income statement)

Total variable cost = 1,265,954.00 (refer to income statement)

Average Variable Cost = 128.39/ head

Average Price = 4.33

Average variable cost per egg = 2.98

Contribution Margin = 4.33-2.98

= 1.35

Break-even Point = <u>Total fixed Cost</u> (Average Price- Average Variable Price)

Break-even Point =  $\frac{209,795.00}{(4.33-2.98)}$ 

Break-even Point =  $\frac{209,795.00}{1.35}$ 

Break-even Point =  $\underline{155,403.70}$ 

The farm has to produce 155,000 eggs to break-even. Breakeven for the farm happens on the  $28^{\text{th}}$  week when the total number of eggs produced exceeds 155,000.



Shutdown Point (H&N Breed)

The shut down point is an estimate for when the project should stop its operations since, at this point and beyond, the additional costs of continuing operations exceed the additional sales made. It suggests that project, if they were to remain efficient should not continue the operations beyond this point.

Marginal Cost = Additional Cost

Total Expense =  $\frac{1,593,229.00}{113}$  (refer to income statement)

= <u>14,099.37</u> average expense per week

Marginal Sales (99 week) = 13,999.00

When the marginal sales of Php.13, 999.00 for the week 99 compared to the marginal or average expense per week (Php.14,099.00), results show that such marginal sales starting on the 99<sup>th</sup> week are lesser than the marginal expense suggesting that the farm spends more than it can earn starting on the 99<sup>th</sup> week.

The average of the weeks when shut down should be done on 83<sup>rd</sup> weeks.

#### Sab-it Poultry Farm

Table 3. Income statement (As of 2006-2007 18 Months Cycle)

PARTICULAR	AMOUNT			
Cash sales:				
Sales from: Eggs	1,920,905.50			
Culls	65,600.00			
Chicken dung	3,000.00			
TOTAL SALES	1,989,505.50			



# Less: Operating Expenses

Salaries and Wages	162,000.00	
Stocks (Pullets) Expense	117,480.00	
Feeds	1,164,510.00	
Food Supplements and Medicines	12,600.00	
Other supplies expense	3,234.00	
Electricity	3,600.00	
Hauling Expense	34,510.00	
Transportation & Delivery	47,500.00	
Repair and Maintenance	16,795.00	
Depreciation Expense	31,000.00	
Total Operating Expenses		1,593,229.00
Net Income Before Tax		396,276.50
Tax (5% of net income)	19 <mark>,81</mark> 3.83	
Net Income After tax		376,462.68

\*Source: Income Statement, based on farm records (2006-2007 cycle, 986 heads)

Items Amou	int
1. Price of pullets	ead
2. Feeds	ack
3. Food supplements and medicines	0/lot
4. Electricity	nos.
5. Hauling cost	ead
6. Repair and maintenance cost (truck)16,79	95
7. Salary4,500	)/mos.
8. Other supplies expenses (office supplies)	ļ.
9. Transportation & delivery47,50	00
10. culled hens	ead
11. chicken manure	ag



# Sab-it Poultry Farm

ASSETS	VALUE			
Current Assets				
Cash on Hand	91,627.00			
Cash in Bank	80,000.83			
Accounts Receivable	71,849.00			
Total current Assets		243,476.83		
Property, Plant and Equipment				
Machineries & Equipment	3,600.00			
Less: Accumulated Depreciation	100.00			
Layer House	310,000.00			
Less: Accumulated Depreciation	31,000.00			
Total Property, Plant & Equipment		344,700.00		
Total Assets		588,176.83		
LIABILITIES AND CAPITAL				
Current Liabilities				
Accounts Payable	33,994.00			
Utilities Payable	3,800.00			
Income Tax Payable (5%)	19,813.83			
Total Current Liabilities		57,607.83		
Owner`s Capital Samuel Sab-it,	320,000.00			
Capital Beginning				

Table 4. Balance sheet (As of 2006-2007 18 months Cycle)



Add: Net Income from the first operation	180,790.00	
-		
Less: Capital Withdrawals	29,779.00	
Less. Capital Willidrawais	2),11).00	
Net Capital for second operation		530,569.00
Total Liabilities and Capital		588,176.83

\*Source: Based on farm records (2004-2005 cycle, 500 heads)

Computations of the Sab-it Poultry Farm Financial Ratios

A. Measures of Short Term Liquidity

a. Acid Test Ratio <u>Cash + Net Receivables</u> Current Liabilities

= <u>243,476.83</u> 57,607.83
= 4.2

b. Working Capital Current Assets - Current Liabilities

= 311, 511.83-57, 607.83 - 57,607.83
= 185,869.00

B. Measures of Long-Term Solvency

a. Owner's Equity to Total Assets <u>Owner's Equity</u> Total Assets

b. Total Liabilities to Total Asset <u>Total Liabilities</u>



**Total Assets** 

$$= \frac{57,607.83}{588,176.83}$$

= 0.10

c. Owner's Equity to Total Liabilities Owner's Equity Total Liabilities

$$=\frac{530,569.00}{57,607.83}$$

= 9.2

C. Measures of Profitability

a. Asset Turnover  
Sales  
Total Assets  

$$= \frac{1.989,505.50}{588,176.83}$$

$$= 3.3$$
b. Rate of Return on Owner's Equity  
Net Income  
Owner's Equity  

$$= \frac{376,462.68}{320,000}$$

= 1.18

c. Rate of Return on Sales <u>Net Income</u> Sales

 $= \frac{376,462.68}{1,989,505.50}$ 

= 0.19 d. Rate of Return on Capital <u>Net Income</u>



**Total Assets** 

= 0.64

- D. Measures of Efficiency
  - a. Accounts Receivable Turnover Ratio
    <u>Sales</u>
    Accounts Receivable

 $=\frac{1,989,505.50}{71,849.00}$ 

= 27.7 times

- b. Fixed Asset Turnover Ratio Sales Net Fixed Assets/ Plant and Equipment
  - $= \frac{1,989,505.50}{344,700.00}$

= 5.8 times

c. Total Asset Turnover Ratio Sales Total Asset

 $= \frac{1,989,505.50}{588,176.83}$ 

= 3.4 times

### SUMMARY, CONCLUSION AND RECOMMENDATION



#### Summary Summary

The study was conducted from November 2010 to January 2011 at Sapid, Mankayan, Benguet to document and describe the operations and marketing practices of the Sab-it Poultry Farm. Interview with the owner, Mr. Samuel Sab-it and use of farm records were used in gathering data.

The farm gets its feeds, vitamins and stocks from the suppliers who provide the same to the Benguet State University-Poultry. Layers are fed twice a day with the recommended requirement amount of 90 grams per head per day. Natural spring water is provided to the flock. The pullets are not provided with lighting until they reach the age of 21 weeks. However, the farm does not provide heating because Benguet has a favorable temperature so the pullets can tolerate the changes of the temperature of the place.

Eggs are collected twice a day. Eggs are not immediately delivered but, rather, stored in preparation for scheduled deliveries. Non laying birds are culled and sold in the market while dead birds are buried.

The farm maintains two batches with 720 heads maintained in the old poultry house, and 980 heads maintained in the other half of the poultry house (extension). The actual average production is pegged at 1,200 eggs per day. The farm is estimated market share in 10.50 percent of estimated demand.

The farm has experienced minor problems such as illnesses but they immediately address this problem because they monitor the birds regularly. The farm has one poultry house (sub-divided into two) that could accommodate 1,680 heads. The eggs that it could produce however are not enough to meet the demand of the consumers.



A trend analysis on the cyclical egg production shows almost the same production trend for the 2006 to 2007 cycle financial statements shows good performance in terms of profitability, liquidity and leverage.

A break-even analysis based on the 2006 to 2007 cycle data suggests that the farm must produce more than a total of 155,403 eggs to generate operational profits. The computed average or marginal expenses of Php. 13,990.00 suggests that the farm should shut down its operations once the weekly marginal sales goes below this value. This usually happens on the 83<sup>rd</sup> week of operations at an average.

#### Conclusions

Based from the findings of the study, the following conclusions were made:

1. The Sab-it poultry farm follows the recommended requirement on feeding, light management as well as the facilities. However, declining performance is observed in old cages. Current facilities are not conducive to maximizing production.

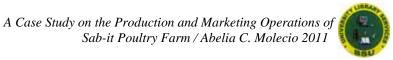
2. Production is in levels that can only serve a small portion of the total market demand. This indicates potentials for increasing production for the farm to cater to the needs of the locality.

3. The financial performance of the farm shows good results. However, a marginal analysis shows that the farm continues to operate beyond its shut down point thereby incurring additional unnecessary costs. This indicates that there is still room for the improving the farm's profitability based on current operations.

#### Recommendations

Based from the findings of this study, the following recommendations were made:

Sab-it Poultry Farm / Abelia C. Molecio 2011



1. There is an increasing demand for fresh egg produce in the community so the owner of the farm should increase the number of pullets and expand the poultry house for them to be able to supply the demands, and at the same time take advantage of economies of scale making it possible to decrease the selling price.

2. An improvement of current facilities (cages) is recommended to improve on production performance or efficiency.

3. Based on the break-even analysis, the poultry should stop the operations after the 83<sup>rd</sup> week to avoid inefficient use of resources and unnecessary additional expenses.

4. The poultry farm has to schedule for a new cycle or explore other methods to increase production.





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#### **APPENDICES**

#### APPENDIX A

#### Letter to the Respondents

### COLLEGE OF AGRICULTURE Department of Agricultural Economics and Agribusiness Management Benguet State University La Trinidad, Benguet

Dear Respondent,

The undersigned is in the process of writing her research proposal entitled "A Case Study on the Production and Marketing Operations of Sab-it poultry Farm" in partial fulfillment of the requirement of the department.

In this connection, please allow me to gather information on your farm's operations and development. This researcher would, hence like to request a series of interview with you and visits to your poultry farm.

Please be assured that data gathered from you will be treated with utmost professionalism.

Thank you for your cooperation and approval on this request.

Respectfully Yours,

ABELIA C. MOLECIO Researcher

Noted by:

CLIFTON D. LLANES Adviser



## APPENDIX B

## Interview Guide

Name of business: \_\_\_\_\_

Proprietor: \_\_\_\_\_

Highest educational attainment:

I. Operational Activities

Management of layer farm:

- 1. In housing system of the layer, what type of cages do you use?
  - Floor space per bird
- 2. What capacity of the layer cages per bird?
- 3. Provision for lighting and how?
- 4. For heating, what and how is temperature maintained?
- 5. Provision for ventilation?
- 6. What time(s) do you usually collect eggs a day? Why?
- 7. In feeding system of the layer, how many times do you fed the layer?
- 8. Source of feeds? Other materials and supplies? Reason for choice of supplier.
- 9. How are birds fed? What are the equipment and system?
- 10. What is the schedule, how much and what is being fed?
- 11. Provision for water? Source?

# II. Production

- 1. How much is your investment on pullets?
- 2. Where were the technologies acquired?
- 3. Number of pullets? How much is the price per bird? Mortality rate?
- 4. Current production volume per harvesting egg
  - Volume (Cases)

(Per tray)	
Age of bird	Productivity (Number of eggs/time)

- 5. What pests/diseases are experienced and how are these controlled/treated/ prevented?
- 6. When are birds disposed? Why? How?
- III. Marketing
  - 1. What usual time of delivery?



- 2. Volume of delivery
- 3. Mode of delivery?
- 4. Mode of payment?
- 5. How do you promote your product?
  - -Where is your market outlet? Reason for choice of outlet.
  - Price per cases? Per tray? What is your basis?
  - Quality of the product.
- IV. What problems are met in the production and marketing of egg products in your locality?
  - A. Problems encountered in production?
    - A. Production operations:
      - How do you maintain/ manage the flock?
      - Maintaining housing/facilities
      - Inventory management
    - B. Problems encountered in marketing? -Demand?

Costs:

- 1. Materials -feeds -stocks -vitamins and supplements
- 2. Labor
  - -administrative manager -production
- 3. Overhead
  - -electricity
  - -water
- 4. Depreciation -house -equipment

## Return:

-Sales per time period



# APPENDIX C

# Egg Production and Sales on Different Cycles

## H&N Egg Production (986 heads, 2006-2007 cycle)

AGE IN WEEKS	PEWEE	SMALL	MEDIUM	LARGE	EXTRA LARGE	JUMBO	TOTAL
0-19wk wk 20	65	28	2	1	0	0	96
wk 20 wk 21	234	414	84	3	0 4	0	739
wk 21 wk 22	288	1204	580	22	9	8	2111
wk 22 wk 23	301	1952	1931	134	21	28	4367
wk 23 wk 24	172	2319	3098	331	20	20 39	5979
wk 25	21	1126	4212	958	27	58	6402
wk 26	5	622	4148	1562	45	54	6436
wk 27	2	420	3703	2162	99	39	6425
wk 28	3	191	2667	2443	164	35	5503
wk 29	4	141	2608	3156	325	53	6287
wk 30	3	109	2167	3522	430	56	6287
wk 31	7	89	2096	3679	492	52	6415
wk 32	2	35	1651	3782	787	67	6324
wk 33	3	48	1638	<u>3828</u>	722	45	6284
wk 34	4	22	1465	3841	894	58	6284
wk 35	1	35	1274	3833	1069	73	6285
wk 36	0	17	987	3687	1495	97	6283
wk 37	7	8	1115	3683	1357	69	6239
wk 38	4	19	968	3654	1341	96	6082
wk 39	1	27	1043	3590	1389	86	6136
wk 40	2	30	973	3413	1536	110	6064
wk 41	0	13	633	3266	1857	130	5899
wk 42	0	11	740	3160	1689	178	5778
wk 43	2	8	561	3155	1875	153	5754
wk 44	2	8	698	3091	1957	159	5915
wk 45	1	9	815	3095	1868	148	5936
wk 46	3	7	514	3146	2078	183	5931
wk 47	1	14	752	3227	1800	188	5982
wk 48	1	14	630	3135	1908	226	5914
wk 49	0	4	344	2791	2323	401	5863
wk 50	1	11	435	2614	2264	457	5782
wk 51	3	5	415	2569	2435	371	5798
wk 52	2	2	241	2481	2611	426	5763
wk 53	0	3	392	2531	2400	370	5696
wk 54	1	5	461	2541	2311	379	5698



wk 55	2	8	451	2629	2230	357	5677
wk 56	1	4	262	2312	2514	579	5672
wk 57	4	14	301	2458	2408	549	5734
wk 58	4	6	420	2497	2233	380	5540
wk 59	2	1	338	2135	1857	334	4667
wk 60	3	10	266	2207	2382	566	5434
wk 61	4	11	210	2050	2470	725	5470
wk 62	3	6	183	1992	2495	783	5462
wk 63	0	2	339	2241	2381	472	5435
wk 64	1	6	259	2218	2398	604	5486
wk 65	2	4	189	1920	2536	715	5366
wk 66	0	2	237	1971	2522	552	5284
wk 67	1	2	203	1957	2537	589	5289
wk 68	2	3	222	1722	2633	609	5191
wk 69	1	2	131	1542	2510	990	5176
wk 70	4	1	145	1522	2386	973	5031
wk 71	1	7	112	1442	2317	1121	5000
wk 72	2	2	92	1252	2522	1100	4970
wk 73	4	1	109	1395	2402	939	4850
wk 74	1	4	79	1249	2693	818	4844
wk 75	4	2	159	1330	2336	869	4700
wk 76	1	0	90	1292	2453	894	4730
wk 77	2	- 5	157	1365	2351	818	4698
wk 78	1	3	105	1332	2327	822	4590
wk 79	0	3	150	1172	2429	750	4504
wk 80	1	2	96	1233	2253	908	4493
wk 81	3	0	138	1268	2216	827	4452
wk 82	5	0	112	1323	2203	714	4357
wk 83	4	2	101	1286	1951	842	4186
wk 84	1	0	95	1137	2130	782	4145
wk 85	0	2	123	1239	1966	805	4135
wk 86	3	1	114	1182	1887	800	3987
wk 87	3	3	80	1050	1947	863	3946
wk 88	2	2	86	951	1859	977	3877
wk 89	2	3	63	986	1824	964	3842
wk 90	1	1	75	834	1818	1037	3766
wk 91	3	1	52	787	1847	983	3673
wk 92	1	1	61	953	1724	918	3658
wk 93	3	1	78	545	1954	935	3516
wk 94	4	1	89	627	1696	901	3318
wk 95	0	3	54	492	1629	915	3093
wk 96	0	2	65	604	1571	861	3103
wk 97	2	1	53	736	1472	685	2949
wk 98	1	1	66	628	1499	609	2804
wk 99	2	1	51	631	1534	546	2765



wk 100	2	1	35	534	1339	566	2477
		-	55				
wk 101	2	3	19	527	1189	639	2379
wk 102	3	3	35	608	1104	565	2318
wk 103	1	4	28	489	1138	528	2188
wk 104	2	5	42	527	1096	488	2160
wk 105	2	5	42	473	1052	479	2053
wk 106	0	2	31	418	948	520	1919
wk 107	0	2	38	322	862	548	1772
wk 108	2	1	21	312	783	591	1710
wk 109	0	2	28	329	667	592	1618
wk 110	2	2	15	236	682	568	1505
wk 111	1	1	21	252	594	556	1425
wk 112	1	1	17	205	557	435	1216
wk 113	0	0	26	237	580	315	1158
wk 114	0	0	12	70	168	129	379

Sales on H&N (2006-2007 cycle)

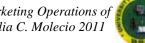
AGE IN WEEKS	PEWEE	SMALL	MEDIUM	LARGE	EXTRA LARGE	JUMBO	TOTAL
0-19 wk							
wk 20	195.00	98.00	8.00	4.50	-	-	305.50
wk 21	702.00	1,449.00	336.00	13.50	20.00	-	2,520.50
wk 22	864.00	4,214.00	2,320.00	99.00	45.00	48.00	7,590.00
wk 23	903.00	6,832.00	7,724.00	603.00	105.00	168.00	16,335.00
wk 24	516.00	8,116.50	12,392.00	1,489.50	100.00	234.00	22,848.00
wk 25	63.00	3,941.00	16,848.00	4,311.00	135.00	348.00	25,646.00
wk 26	15.00	2,177.00	16,592.00	7,029.00	225.00	324.00	26,362.00
wk 27	6.00	1,470.00	14,812.00	9,729.00	495.00	234.00	26,746.00
wk 28	9.00	668.50	10,668.00	10,993.50	820.00	210.00	23,369.00
wk 29	12.00	493.50	10,432.00	14,202.00	1,625.00	318.00	27,082.50
wk 30	9.00	381.50	8,668.00	15,849.00	2,150.00	336.00	27,393.50
wk 31	21.00	311.50	8,384.00	16,555.50	2,460.00	312.00	28,044.00
wk 32	6.00	122.50	6,604.00	17,019.00	3,935.00	402.00	28,088.50



wk 33	9.00	168.00	6,552.00	17,226.00	3,610.00	270.00	27,835.00
wk 34	12.00	77.00	5,860.00	17,284.50	4,470.00	348.00	28,051.50
wk 35	3.00	122.50	5,096.00	17,248.50	5,345.00	438.00	28,253.00
wk 36	-	59.50	3,948.00	16,591.50	7,475.00	582.00	28,656.00
wk 37	21.00	28.00	4,460.00	16,573.50	6,785.00	414.00	28,281.50
wk 38	12.00	66.50	3,872.00	16,443.00	6,705.00	576.00	27,674.50
wk 39	3.00	94.50	4,172.00	16,155.00	6,945.00	516.00	27,885.50
wk 40	6.00	105.00	3,892.00	15,358.50	7,680.00	660.00	27,701.50
wk 41	-	45.50	2,532.00	14,697.00	9,285.00	780.00	27,339.50
wk 42	-	38.50	2,960.00	14,220.00	8,445.00	1,068.00	26,731.50
wk 43	6.00	28.00	2,244.00	1 <mark>4,197</mark> .50	9,375.00	918.00	26,768.50
wk 44	6.00	28.00	2,792.00	13,909.50	9,785.00	954.00	27,474.50
wk 45	3.00	31.50	3,260.00	13,927.50	9,340.00	888.00	27,450.00
wk 46	9.00	24.50	2,056.00	14,157.00	10,390.00	1,098.00	27,734.50
wk 47	3.00	49.00	3,008.00	14,521.50	9,000.00	1,128.00	27,709.50
wk 48	3.00	49.00	2,520.00	14,107.50	9,540.00	1,356.00	27,575.50
wk 49	-	14.00	1,376.00	12,559.50	11,615.00	2,406.00	27,970.50
wk 50	3.00	38.50	1,740.00	11,763.00	11,320.00	2,742.00	27,606.50
wk 51	9.00	17.50	1,660.00	11,560.50	12,175.00	2,226.00	27,648.00
wk 52	6.00	7.00	964.00	11,164.50	13,055.00	2,556.00	27,752.50
wk 53	-	10.50	1,568.00	11,389.50	12,000.00	2,220.00	27,188.00
wk 54	3.00	17.50	1,844.00	11,434.50	11,555.00	2,274.00	27,128.00
wk 55	6.00	28.00	1,804.00	11,830.50	11,150.00	2,142.00	26,960.50
wk 56	3.00	14.00	1,048.00	10,404.00	12,570.00	3,474.00	27,513.00
wk 57	12.00	49.00	1,204.00	11,061.00	12,040.00	3,294.00	27,660.00



wk 58	12.00	21.00	1,680.00	11,236.50	11,165.00	2,280.00	26,394.50
wk 59	6.00	3.50	1,352.00	9,607.50	9,285.00	2,004.00	22,258.00
wk 60	9.00	35.00	1,064.00	9,931.50	11,910.00	3,396.00	26,345.50
wk 61	12.00	38.50	840.00	9,225.00	12,350.00	4,350.00	26,815.50
wk 62	9.00	21.00	732.00	8,964.00	12,475.00	4,698.00	26,899.00
wk 63	-	7.00	1,356.00	10,084.50	11,905.00	2,832.00	26,184.50
wk 64	3.00	21.00	1,036.00	9,981.00	11,990.00	3,624.00	26,655.00
wk 65	6.00	14.00	756.00	8,640.00	12,680.00	4,290.00	26,386.00
wk 66	-	7.00	948.00	8,869.50	12,610.00	3,312.00	25,746.50
wk 67	3.00	7.00	812.00	8,806.50	12,685.00	3,534.00	25,847.50
wk 68	6.00	10.50	888.00	7,749.00	13,165.00	3,654.00	25,472.50
wk 69	3.00	7.00	524.00	6,939.00	12,550.00	5,940.00	25,963.00
wk 70	12.00	3.50	580.00	6,849.00	11,930.00	5,838.00	25,212.50
wk 71	3.00	24.50	448.00	6,489.00	11,585.00	6,726.00	25,275.50
wk 72	6.00	7.00	368.00	5,634.00	12,610.00	6,600.00	25,225.00
wk 73	12.00	3.50	436.00	6,277.50	12,010.00	5,634.00	24,373.00
wk 74	3.00	14.00	316.00	5,620.50	13,465.00	4,908.00	24,326.50
wk 75	12.00	7.00	636.00	5,985.00	11,680.00	5,214.00	23,534.00
wk 76	3.00	-	360.00	5,814.00	12,265.00	5,364.00	23,806.00
wk 77	6.00	17.50	628.00	6,142.50	11,755.00	4,908.00	23,457.00
wk 78	3.00	10.50	420.00	5,994.00	11,635.00	4,932.00	22,994.50
wk 79	-	10.50	600.00	5,274.00	12,145.00	4,500.00	22,529.50
wk 80	3.00	7.00	384.00	5,548.50	11,265.00	5,448.00	22,655.50
wk 81	9.00	-	552.00	5,706.00	11,080.00	4,962.00	22,309.00
wk 82	15.00	-	448.00	5,953.50	11,015.00	4,284.00	21,715.50
wk 83	12.00	7.00	404.00	5,787.00	9,755.00	5,052.00	21,017.00



wk 84	3.00	-	380.00	5,116.50	10,650.00	4,692.00	20,841.50
wk 85	S-	7.00	492.00	5,575.50	9,830.00	4,830.00	20,734.50
wk 86	9.00	3.50	456.00	5,319.00	9,435.00	4,800.00	20,022.50
wk 87	9.00	10.50	320.00	4,725.00	9,735.00	5,178.00	19,977.50
wk 88	6.00	7.00	344.00	4,279.50	9,295.00	5,862.00	19,793.50
wk 89	6.00	10.50	252.00	4,437.00	9,120.00	5,784.00	19,609.50
wk 90	3.00	3.50	300.00	3,753.00	9,090.00	6,222.00	19,371.50
wk 91	9.00	3.50	208.00	3,541.50	9,235.00	5,898.00	18,895.00
wk 92	3.00	3.50	244.00	4,288.50	8,620.00	5,508.00	18,667.00
wk 93	9.00	3.50	312.00	2,452.50	9,770.00	5,610.00	18,157.00
wk 94	12.00	3.50	356.00	2,821.50	8,480.00	5,406.00	17,079.00
wk 95	-	10.50	216.00	2,214.00	8,145.00	5,490.00	16,075.50
wk 96	-	7.00	260.00	2,718.00	7,855.00	5,166.00	16,006.00
wk 97	6.00	3.50	212.00	3,312.00	7,360.00	4,110.00	15,003.50
wk 98	3.00	3.50	264.00	2,826.00	7,495.00	3,654.00	14,245.50
wk 99	6.00	3.50	204.00	2,839.50	7,670.00	3,276.00	13,999.00
wk 100	6.00	3.50	140.00	2,403.00	6,695.00	3,396.00	12,643.50
wk 101	6.00	10.50	76.00	2,371.50	5,945.00	3,834.00	12,243.00
wk 102	9.00	10.50	140.00	2,736.00	5,520.00	3,390.00	11,805.50
wk 103	3.00	14.00	112.00	2,200.50	5,690.00	3,168.00	11,187.50
wk 104	6.00	17.50	168.00	2,371.50	5,480.00	2,928.00	10,971.00
wk 105	6.00	17.50	168.00	2,128.50	5,260.00	2,874.00	10,454.00
wk 106	-	7.00	124.00	1,881.00	4,740.00	3,120.00	9,872.00
wk 107	-	7.00	152.00	1,449.00	4,310.00	3,288.00	9,206.00
wk 108	6.00	3.50	84.00	1,404.00	3,915.00	3,546.00	8,958.50



wk 109	-	7.00	112.00	1,480.50	3,335.00	3,552.00	8,486.50
wk 110	6.00	7.00	60.00	1,062.00	3,410.00	3,408.00	7,953.00
wk 111	3.00	3.50	84.00	1,134.00	2,970.00	3,336.00	7,530.50
wk 112	3.00	3.50	68.00	922.50	2,785.00	2,610.00	6,392.00
wk 113	-	-	104.00	1,066.50	2,900.00	1,890.00	5,960.50
wk 114	-	-	48.00	315.00	840.00	774.00	1,977.00

Shaver Egg Production (711 heads, 2006-2008 cycle)

AGE IN WEEKS 0-19 wk	PEWEE	SMALL	MEDIUM	LARGE	EXTRA LARGE	JUMBO	TOTAL
wk 20	20	0	0	0	0	0	20
wk 21	87	0	0	0	0	0	87
wk 22	56	110	27	0	4	1	198
wk 23	122	444	232	5	5	1	809
wk 24	172	911	689	49	5	9	1835
wk 25	109	1086	1716	234	6	11	3162
wk 26	32	897	2594	458	12	22	4015
wk 27	14	763	2898	655	15	28	4373
wk 28	3	302	2738	1287	71	24	4425
wk 29	8	226	2852	1356	62	22	4526
wk 30	6	229	2396	1729	110	25	4495
wk 31	2	207	2390	1694	130	23	4446
wk 32	0	137	2096	1987	218	19	4457
wk 33	3	124	1706	2259	287	26	4405
wk 34	1	81	1598	2262	343	27	4312
wk 35	3	36	1382	2455	403	23	4302
wk 36	0	24	1272	2432	487	30	4245
wk 37	4	13	1424	2238	505	21	4205
wk 38	2	17	1592	2056	449	17	4133
wk 39	2	19	1174	2367	566	24	4152
wk 40	1	21	1120	2422	442	28	4034
wk 41	1	7	1166	2202	537	17	3930
wk 42	1	25	916	2302	526	23	3793
wk 43	1	9	1197	2034	460	22	3723
wk 44	0	12	821	2226	534	26	3619
wk 45	2	25	845	1989	631	26	3518
wk 46	5	31	850	2060	420	28	3394
wk 47	1	16	707	1821	807	31	3383
wk 48	4	19	761	2159	454	21	3418



wk 49	1	25	1022	1952	396	18	3414
wk 50	1	17	802	1993	516	29	3358
wk 51	2	11	831	2049	461	16	3370
wk 52	3	3	636	2090	580	42	3354
wk 53	0	6	665	2096	566	37	3370
wk 54	0	9	641	1931	702	43	3326
wk 55	2	19	712	1961	575	25	3294
wk 56	1	20	733	1822	650	28	3254
wk 57	0	19	716	1575	835	62	3207
wk 58	2	36	1033	1638	404	13	3126
wk 59	0	23	718	1387	545	31	2704
wk 60	0	57	1016	1785	273	14	3145
wk 61	1	21	898	1773	353	25	3071
wk 62	3	29	798	1765	478	32	3105
wk 63	2	23	696	1836	469	30	3056
wk 64	3	16	733	1755	471	18	2996
wk 65	2	27	707	1731	459	25	2951
wk 66	1	14	742	1692	436	34	2919
wk 67	4	24	661	1658	523	31	2901
wk 68	2	31	656	<u>169</u> 0	432	47	2858
wk 69	0	16	585	1634	549	34	2818
wk 70	0	15	497	1610	597	49	2768
wk 71	3	19	537	1523	593	49	2724
wk 72	0	26	415	1517	604	82	2644
wk 73	2	18	444	1492	613	81	2650
wk 74	0	15	352	1472	660	106	2605
wk 75	3	14	405	1442	712	93	2669
wk 76	1	2	505	1314	761	88	2671
wk 77	0	6	340	1427	698	102	2573
wk 78	1	4	267	1308	780	105	2465
wk 79	0	5	297	1179	771	104	2356
wk 80	1	11	286	1217	740	103	2358
wk 81	3	10	324	1175	681	132	2325
wk 82	3	11	293	1206	583	125	2221
wk 83	1	7	326	1160	593	121	2208
wk 84	0	2	244	1045	639	122	2052
wk 85	2	5	198	883	515	106	1709
wk 86	0	6	170	643	520	169	1508
wk 87	0	9	147	791	492	114	1553
wk 88	1	4	113	731	612	132	1593
wk 89	0	4	119	666	638	134	1561
wk 90	1	5	94	737	513	80	1430
wk 91	1	3	104	537	519	130	1294
wk 92	0	1	95	490	394	75	1055
wk 93	0	1	79	354	304	78	816



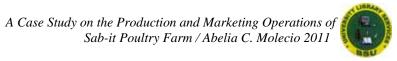
wk 94	0	0	61	352	218	48	679
wk 95	0	0	48	275	170	51	544
wk 96	0	0	36	227	158	48	469
wk 97	0	0	22	173	157	39	391
wk 98	0	0	19	109	110	22	260
wk 100	0	0	10	54	32	6	102

Sales on Shaver (2006-2008 cycle)

AGE IN WEEKS 0-19wk	PEWEE	SMALL	MEDIUM	LARGE	EXTRA LARGE	JUMBO	TOTAL
wk 20	60.00	-	-	-	-	-	60.00
wk 21	261.00	-	-	-	-	-	261.00
wk 22	168.00	440.00	121.50	TTA	22.00	6.00	757.50
wk 23	366.00	1,776.00	1,044.00	25.00	27.50	6.00	3,244.50
wk 24	516.00	3,644.00	3,100.50	245.00	27.50	54.00	7,587.00
wk 25	516.00	3,644.00	3,100.50	245.00	27.50	54.00	7,587.00
wk 26	96.00	3,588.00	11,673.00	2,290.00	66.00	132.00	17,845.00
wk 27	42.00	3,052.00	13,041.00	3,275.00	82.50	168.00	19,660.50
wk 28	9.00	1,208.00	12,321.00	6,435.00	390.50	144.00	20,507.50
wk 29	24.00	904.00	12,834.00	6,780.00	341.00	132.00	21,015.00
wk 30	18.00	916.00	10,782.00	8,645.00	605.00	150.00	21,116.00
wk 31	6.00	828.00	10,755.00	8,470.00	715.00	138.00	20,912.00
wk 32	-	548.00	9,432.00	9,935.00	1,199.00	114.00	21,228.00
wk 33	9.00	496.00	7,677.00	11,295.00	1,578.50	156.00	21,211.50
wk 34	3.00	324.00	7,191.00	11,310.00	1,886.50	162.00	20,876.50
wk 35	9.00	144.00	6,219.00	12,275.00	2,216.50	138.00	21,001.50
wk 36	-	96.00	5,724.00	12,160.00	2,678.50	180.00	20,838.50
wk 37	12.00	52.00	6,408.00	11,190.00	2,777.50	126.00	20,565.50



wk 38	6.00	68.00	7,164.00	10,280.00	2,469.50	102.00	20,089.50
wk 39	6.00	76.00	5,283.00	11,835.00	3,113.00	144.00	20,457.00
wk 40	3.00	84.00	5,040.00	12,110.00	2,431.00	168.00	19,836.00
wk 41	3.00	28.00	5,247.00	11,010.00	2,953.50	102.00	19,343.50
wk 42	3.00	100.00	4,122.00	11,510.00	2,893.00	138.00	18,766.00
wk 43	3.00	36.00	5,386.50	10,170.00	2,530.00	132.00	18,257.50
wk 44	-	48.00	3,694.50	11,130.00	2,937.00	156.00	17,965.50
wk 45	6.00	100.00	3,802.50	9,945.00	3,470.50	156.00	17,480.00
wk 46	15.00	124.00	3,825.00	10,300.00	2,310.00	168.00	16,742.00
wk 47	3.00	64.00	3,181.50	9,105.00	4,438.50	186.00	16,978.00
wk 48	12.00	76.00	3,424.50	10,795.00	2,497.00	126.00	16,930.50
wk 49	3.00	100.00	4,599.00	9,760.00	2,178.00	108.00	16,748.00
wk 50	3.00	68.00	3,609.00	9,965.00	2,838.00	174.00	16,657.00
wk 51	6.00	44.00	3,739.50	10,245.00	2,535.50	96.00	16,666.00
wk 52	9.00	12.00	2,862.00	10,450.00	3,190.00	252.00	16,775.00
wk 53	-	24.00	2,992.50	10,480.00	3,113.00	222.00	16,831.50
wk 54	-	36.00	2,884.50	9,655.00	3,861.00	258.00	16,694.50
wk 55	6.00	76.00	3,204.00	9,805.00	3,162.50	150.00	16,403.50
wk 56	3.00	80.00	3,298.50	9,110.00	3,575.00	168.00	16,234.50
wk 57	-	76.00	3,222.00	7,875.00	4,592.50	372.00	16,137.50
wk 58	6.00	144.00	4,648.50	8,190.00	2,222.00	78.00	15,288.50
wk 59	-	92.00	3,231.00	6,935.00	2,997.50	186.00	13,441.50
wk 60	-	228.00	4,572.00	8,925.00	1,501.50	84.00	15,310.50
wk 61	3.00	84.00	4,041.00	8,865.00	1,941.50	150.00	15,084.50
wk 62	9.00	116.00	3,591.00	8,825.00	2,629.00	192.00	15,362.00
wk 63	6.00	92.00	3,132.00	9,180.00	2,579.50	180.00	15,169.50



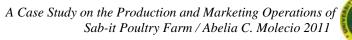
wk 64	9.00	64.00	3,298.50	8,775.00	2,590.50	108.00	14,845.00
wk 65	6.00	108.00	3,181.50	8,655.00	2,524.50	150.00	14,625.00
wk 66	3.00	56.00	3,339.00	8,460.00	2,398.00	204.00	14,460.00
wk 67	12.00	96.00	2,974.50	8,290.00	2,876.50	186.00	14,435.00
wk 68	6.00	124.00	2,952.00	8,450.00	2,376.00	282.00	14,190.00
wk 69	-	64.00	2,632.50	8,170.00	3,019.50	204.00	14,090.00
wk 70	-	60.00	2,236.50	8,050.00	3,283.50	294.00	13,924.00
wk 71	9.00	76.00	2,416.50	7,615.00	3,261.50	294.00	13,672.00
wk 72	-	104.00	1,867.50	7,585.00	3,322.00	492.00	13,370.50
wk 73	6.00	72.00	1,998.00	7,460.00	3,371.50	486.00	13,393.50
wk 74	-	60.00	1,584.00	7,360.00	3,630.00	636.00	13,270.00
wk 75	9.00	56.00	1,822.50	7,210.00	3,916.00	558.00	13,571.50
wk 76	3.00	8.00	2,272.50	6,570.00	<mark>4,1</mark> 85.50	528.00	13,567.00
wk 77	-	24.00	1,530.00	7,135.00	3,839.00	612.00	13,140.00
wk 78	3.00	16.00	1,201.50	6,540.00	4,290.00	630.00	12,680.50
wk 79	-	20.00	1,336.50	5,895.00	4,240.50	624.00	12,116.00
wk 80	3.00	44.00	1,287.00	6,085.00	4,070.00	618.00	12,107.00
wk 81	9.00	40.00	1,458.00	5,875.00	3,745.50	792.00	11,919.50
wk 82	9.00	44.00	1,318.50	6,030.00	3,206.50	750.00	11,358.00
wk 83	3.00	28.00	1,467.00	5,800.00	3,261.50	726.00	11,285.50
wk 84	-	8.00	1,098.00	5,225.00	3,514.50	732.00	10,577.50
wk 85	6.00	20.00	891.00	4,415.00	2,832.50	636.00	8,800.50
wk 86	-	24.00	765.00	3,215.00	2,860.00	1,014.00	7,878.00
wk 87	-	36.00	661.50	3,955.00	2,706.00	684.00	8,042.50
wk 88	3.00	16.00	508.50	3,655.00	3,366.00	792.00	8,340.50



wk 89	-	16.00	535.50	3,330.00	3,509.00	804.00	8,194.50
wk 90	3.00	20.00	423.00	3,685.00	2,821.50	480.00	7,432.50
wk 91	3.00	12.00	468.00	2,685.00	2,854.50	780.00	6,802.50
wk 92	-	4.00	427.50	2,450.00	2,167.00	450.00	5,498.50
wk 93	-	4.00	355.50	1,770.00	1,672.00	468.00	4,269.50
wk 94	-	-	274.50	1,760.00	1,199.00	288.00	3,521.50
wk 95	-	-	216.00	1,375.00	935.00	306.00	2,832.00
wk 96	-	-	162.00	1,135.00	869.00	288.00	2,454.00
wk 97	-	-	99.00	865.00	863.50	234.00	2,061.50
wk 98	-	-	85.50	545.00	605.00	132.00	1,367.50
wk 100	-	-/6	45.00	270.00	176.00	36.00	527.00

Lohmann Egg Production (1010 heads, 2008-2009 cycle)

AGE IN WEEKS	PEWEE	SMALL	MEDIUM	LARGE	EXTRA LARGE	JUMBO	TOTAL
0-19 wk	137	50	0.0	1.000 1	0	0	188
wk 20	292	452	25	3	8	0	780
wk 21	377	1403	445	14	17	7	2263
wk 22	224	1908	1815	102	23	35	4107
wk 23	80	1691	3169	342	14	54	5350
wk 24	35	1163	4051	723	27	50	6049
wk 25	8	730	4215	1258	33	63	6307
wk 26	4	406	3872	1940	89	69	6380
wk 27	7	546	3856	1863	72	52	6396
wk 28	0	468	3878	1860	51	39	6296
wk 29	0	253	3468	2348	107	41	6217
wk 30	1	265	3283	2492	147	33	6221
wk 31	0	176	2706	2975	300	36	6193
wk 32	1	94	2245	3414	424	37	6215
wk 33	1	74	1903	3462	673	45	6158
wk 34	0	84	2123	3391	517	38	6153
wk 35	2	62	2110	3271	570	39	6054





wk 26	0	35	1628	3590	781	68	6102
wk 27	0	38	1279	3756	964	82	6119
wk 28	3	40	1645	3398	850	79	6015
wk 29	0	50	1640	3441	818	70	6019
wk 30	0	72	1660	3398	830	64	6024
wk 31	0	41	1588	3434	867	76	6006
wk 32	2	47	1487	3411	995	87	6029
wk 33	1	24	1268	3470	1072	101	5936
wk 34	0	25	1315	3427	1063	89	5919
wk 35	0	55	1478	3362	1111	52	6058
wk 36	1	56	1498	3260	1112	64	5991
wk 37	0	66	1395	3245	1245	172	6123
wk 38	0	46	1376	3174	1279	372	6247
wk 39	0	53	1245	2766	1524	522	6110
wk 40	1	68	886	2388	1953	590	5886
wk 41	3	49	867	2000	2316	592	5827
wk 42	0	65	856	2014	2236	594	5765
wk 43	0	57	820	1903	2178	589	5547
wk 44	0	65	879	1899	2082	596	5521
wk45	1	50	857	1860	2068	587	5423
wk 46	2	63	801	1938	2003	590	5397
wk 47	1	48	795	1911	2001	578	5334
wk 48	1	50	767	1888	2010	576	5292
wk 48	2	1 •	734	1978	2183	566	5464
wk 50	0	10	710	1955	2382	566	5623
wk 51	0	11	690	1898	2470	555	5624
wk 52	2	8	698	1876	1957	545	5086
wk 53	1	2	689	1670	2244	546	5152
wk 54	2	2	675	1578	2110	554	4921
wk 55	0	2	650	1478	1998	552	4680
wk 56	1	2	628	1445	1990	560	4626
wk 57	1	2	591	1276	1987	555	4412
wk 58	1	2	581	1265	1956	551	4356
wk59	1	2	490	1245	1945	547	4230
wk 60	1	2	461	1220	1930	541	4155
wk 61	1	7	412	1198	1890	539	4047
wk 62	0	1	387	1179	1878	537	3982
wk 63	0	1	356	1168	1856	539	3920
wk 64	1	2	320	1330	1845	531	4029



wk 65	0	2	309	1330	1837	520	3998
wk 66	0	2	287	1298	1838	516	3941
wk 67	1	5	267	1267	1810	510	3860
wk 68	1	5	230	1286	1798	509	3829
wk 69	0	3	210	1178	1765	499	3655
wk 70	0	3	165	1194	1756	488	3606
wk 71	0	15	156	1472	1745	478	3866
wk 72	0	0	134	1268	1657	472	3531
wk 73	0	0	116	1268	1653	465	3502
wk 74	1	0	112	1268	1612	466	3459
wk 75	0	2	109	1108	1578	456	3253
wk 76	0	1	94	1112	1467	446	3120
wk 77	0	1	67	1009	1302	439	2818
wk 78	0	1	24	980	1202	434	2641
wk 79	0	3	19	978	1101	421	2522
wk 80	0	1	14	631	980	389	2015
wk 81	0	3	12	527	862	367	1771
wk 82	0	- Public	10	205	698	345	1259
wk 83	0	0	9	237	580	315	1141
wk 84	0	1	4	228	498	278	1009
wk 85	0	0	2	198	431	245	876
wk 86	0	1	3	167	385	219	775
wk 87	0	0	2	141	351	167	661
wk 88	0	0		145	301	150	598
wk 89	0			132	218	114	466
wk 90	0	0	2	70	168	98	338

# Sales on Lohmann (2008-2009 cycle)

AGE IN WEEKS	PEWEE	SMALL	MEDIUM	LARGE	EXTRA LARGE	JUMBO	TOTAL
0-19 wks	411.00	200.00	-	5.50	-	-	616.50
wk 20	876.00	1,808.00	125.00	16.50	44.80	-	2,870.30
wk 21	1,131.00	5,612.00	2,225.00	77.00	95.20	49.00	9,189.20
wk 22	672.00	7,632.00	9,075.00	561.00	128.80	245.00	18,313.80
wk 23	240.00	6,764.00	15,845.00	1,881.00	78.40	378.00	25,186.40



wk 24	105.00	4,652.00	20,255.00	3,976.50	151.20	350.00	29,489.70
wk 25	24.00	2,920.00	21,075.00	6,919.00	184.80	441.00	31,563.80
wk 26	12.00	1,624.00	19,360.00	10,670.00	498.40	483.00	32,647.40
wk 27	21.00	2,184.00	19,280.00	10,246.50	403.20	364.00	32,498.70
wk 28	-	1,872.00	19,390.00	10,230.00	285.60	273.00	32,050.60
wk 29	-	1,012.00	17,340.00	12,914.00	599.20	287.00	32,152.20
wk 30	3.00	1,060.00	16,415.00	13,706.00	823.20	231.00	32,238.20
wk 31	-	704.00	13,530.00	16,362.50	1,680.00	252.00	32,528.50
wk 32	3.00	376.00	11,225.00	18,777.00	2,374.40	259.00	33,014.40
wk 33	3.00	296.00	9,515.00	19,041.00	3,768.80	315.00	32,938.80
wk 34	-	336.00	10,615. <mark>0</mark> 0	18,650.50	2,895.20	266.00	32,762.70
wk 35	6.00	248.00	10 <mark>,550.00</mark>	17,990.50	3,192.00	273.00	32,259.50
wk 26	-	140.00	8,140.00	19,745.00	4,373.60	476.00	32,874.60
wk 27	-	<mark>152.</mark> 00	6,395.00	20,658.00	5,398.40	574.00	33,177.40
wk 28	9.00	160.00	8,225.00	18,689.00	4,760.00	553.00	32,396.00
wk 29	-	200.00	8,200.00	18,925.50	4,580.80	490.00	32,396.30
wk 30	-	288.00	8,300.00	18,689.00	4,648.00	448.00	32,373.00
wk 31	-	164.00	7,940.00	18,887.00	4,855.20	532.00	32,378.20
wk 32	6.00	188.00	7,435.00	18,760.50	5,572.00	609.00	32,570.50
wk 33	3.00	96.00	6,340.00	19,085.00	6,003.20	707.00	32,234.20
wk 34	-	100.00	6,575.00	18,848.50	5,952.80	623.00	32,099.30
wk 35	-	220.00	7,390.00	18,491.00	6,221.60	364.00	32,686.60
wk 36	3.00	224.00	7,490.00	17,930.00	6,227.20	448.00	32,322.20
wk 37	-	264.00	6,975.00	17,847.50	6,972.00	1,204.00	33,262.50
wk 38	-	184.00	6,880.00	17,457.00	7,162.40	2,604.00	34,287.40
wk 39	-	212.00	6,225.00	15,213.00	8,534.40	3,654.00	33,838.40



wk 40	3.00	272.00	4,430.00	13,134.00	10,936.80	4,130.00	32,905.80
wk 41	9.00	196.00	4,335.00	11,000.00	12,969.60	4,144.00	32,653.60
wk 42	-	260.00	4,280.00	11,077.00	12,521.60	4,158.00	32,296.60
wk 43	-	228.00	4,100.00	10,466.50	12,196.80	4,123.00	31,114.30
wk 44	-	260.00	4,395.00	10,444.50	11,659.20	4,172.00	30,930.70
wk45	3.00	200.00	4,285.00	10,230.00	11,580.80	4,109.00	30,407.80
wk 46	6.00	252.00	4,005.00	10,659.00	11,216.80	4,130.00	30,268.80
wk 47	3.00	192.00	3,975.00	10,510.50	11,205.60	4,046.00	29,932.10
wk 48	3.00	200.00	3,835.00	10,384.00	11,256.00	4,032.00	29,710.00
wk 48	6.00	4.00	3,670.00	10,879.00	12,224.80	3,962.00	30,745.80
wk 50	-	40.00	3,550.00	10,752.50	13,339.20	3,962.00	31,643.70
wk 51	-	44.00	3,450.00	10,439.00	13,832.00	3,885.00	31,650.00
wk 52	6.00	32.00	3,490.00	10,318.00	10,959.20	3,815.00	28,620.20
wk 53	3.00	8.00	3,445.00	9,185.00	12,566.40	3,822.00	29,029.40
wk 54	6.00	8.00	3,375.00	8,679.00	11,816.00	3,878.00	27,762.00
wk 55	-	8.00	3,250.00	8,129.00	11,188.80	3,864.00	26,439.80
wk 56	3.00	8.00	3,140.00	7,947.50	11,144.00	3,920.00	26,162.50
wk 57	3.00	8.00	2,955.00	7,018.00	11,127.20	3,885.00	24,996.20
wk 58	3.00	8.00	2,905.00	6,957.50	10,953.60	3,857.00	24,684.10
wk59	3.00	8.00	2,450.00	6,847.50	10,892.00	3,829.00	24,029.50
wk 60	3.00	8.00	2,305.00	6,710.00	10,808.00	3,787.00	23,621.00
wk 61	3.00	28.00	2,060.00	6,589.00	10,584.00	3,773.00	23,037.00
wk 62	-	4.00	1,935.00	6,484.50	10,516.80	3,759.00	22,699.30
wk 63	-	4.00	1,780.00	6,424.00	10,393.60	3,773.00	22,374.60
wk 64	3.00	8.00	1,600.00	7,315.00	10,332.00	3,717.00	22,975.00



wk 65	-	8.00	1,545.00	7,315.00	10,287.20	3,640.00	22,795.20
wk 66	-	8.00	1,435.00	7,139.00	10,292.80	3,612.00	22,486.80
wk 67	3.00	20.00	1,335.00	6,968.50	10,136.00	3,570.00	22,032.50
wk 68	3.00	20.00	1,150.00	7,073.00	10,068.80	3,563.00	21,877.80
wk 69	-	12.00	1,050.00	6,479.00	9,884.00	3,493.00	20,918.00
wk 70	-	12.00	825.00	6,567.00	9,833.60	3,416.00	20,653.60
wk 71	-	60.00	780.00	8,096.00	9,772.00	3,346.00	22,054.00
wk 72	-	-	670.00	6,974.00	9,279.20	3,304.00	20,227.20
wk 73	-	-	580.00	6,974.00	9,256.80	3,255.00	20,065.80
wk 74	3.00	-	560.00	6,974.00	9,027.20	3,262.00	19,826.20
wk 75	-	8.00	545.00	6,094.00	8,836.80	3,192.00	18,675.80
wk 76	-	4.00	470.00	6,116.00	8,215.20	3,122.00	17,927.20
wk 77	-	4.00	335.00	<mark>5,5</mark> 49.50	7,291.20	3,073.00	16,252.70
wk 78	-	4.00	120.00	5,390.00	6,731.20	3,038.00	15,283.20
wk 79	-	12.00	95.00	5,379.00	6,165.60	2,947.00	14,598.60
wk 80	-	4.00	70.00	3,470.50	5,488.00	2,723.00	11,755.50
wk 81	-	12.00	60.00	2,898.50	4,827.20	2,569.00	10,366.70
wk 82	-	4.00	50.00	1,127.50	3,908.80	2,415.00	7,505.30
wk 83	-	-	45.00	1,303.50	3,248.00	2,205.00	6,801.50
wk 84	-	4.00	20.00	1,254.00	2,788.80	1,946.00	6,012.80
wk 85	-	-	10.00	1,089.00	2,413.60	1,715.00	5,227.60
wk 86	-	4.00	15.00	918.50	2,156.00	1,533.00	4,626.50
wk 87	-	-	10.00	775.50	1,965.60	1,169.00	3,920.10
wk 88	-	-	10.00	797.50	1,685.60	1,050.00	3,543.10
wk 89	-	4.00	5.00	726.00	1,220.80	798.00	2,753.80
wk 90	-	-	10.00	385.00	940.80	686.00	2,021.80





