

BIBLIOGRAPHY

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ABSTRACT

This study primarily aimed to find out the potential of ostrich farming in Benguet and Baguio City. The study was conducting; to determine investment required in ostrich farming; to identify the problems encountered by ostrich farm owners and to identify the potential market of ostrich products and by-products. The data were gathered through personal interview, with the aid of an interview schedule. Actual observation was also done. Descriptive statistics was employed for the analysis of data.

Results revealed that the capital investment for the Tuba farm was 1,378,878 pesos and 531,933 pesos for Irisan farm. The problems encountered by the ostrich farm owner were; the ostrich is easy to be fractured, high cost of feeds, disease and parasite and lack of veterinarian service. The marketing problems identified were high price of the ostrich product.

Majority of consumer respondents were aware about the ostrich and ostrich product. Most of the respondents got the information about the ostrich from their friends. Majority of the respondents were willing to buy ostrich product. Very few of the respondents have tasted the ostrich meat because it is expensive. Majority of the

respondents were willing to buy ostrich meat and egg if the price is lessened or reduced. For the ostrich non food product majority of the respondents have never tried ostrich product such as feather and leather because it expensive.

For the problems on production, ostrich raisers attended seminars and consult veterinarian. The marketing solutions were the two ostrich farm owner should try to reduced or lessen the price of the ostrich product.

Market outlet and price of live ostrich and ostrich product. The two ostrich farms were both a member of the Philippine Import-Export Ostrich Foundation (PIEOF). That is why they only sell the ostrich meat, egg and live ostrich. The farms sell to their neighbors and to all the people who visits the farm. The price per kilogram of meat is 1,000-1,500 peso and for the egg is 300-600 peso per piece for the Tuba farm and the farm in Irisan the price is 400-600 peso per piece. The price for the live ostrich is 100,000 peso per head for the 8 months old ostrich. For the leather and feather, they sell to the Philippine Import-Export Ostrich Foundation (PIEOF) because the foundation exports the feather and leather to the different manufacturing company for bags and duster and other products that could be produced from feather and leather.

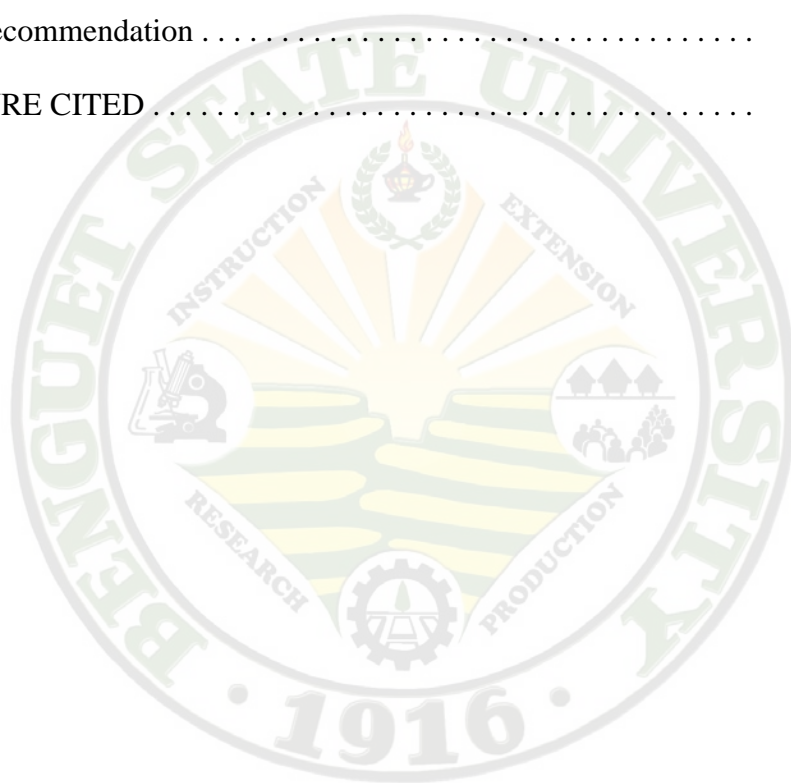
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INTRODUCTION

Rationale

The Philippines is an agricultural country where Filipinos derive their income through farming. Poultry production is one of the major enterprises favorable in the country, either in backyard or commercial basis. Furthermore, there is a consistent demand for poultry meat due to the increasing human population. Filipinos are meat eaters. However, in raising poultry there are several factors affecting production. These factors could be lack of capital, unavailability of stock, adaptability of the stock to local conditions, care and management and the high cost of commercial feed.

Poultry production in the Philippines is limited to raising chicken, duck, quail and turkey. But today, there is one bird that is being considered as one of the most profitable bird in the world “Ostrich”. Ostrich are the largest living birds in the world. Native to Africa, ostriches are flightless, a characteristics they share with emu, rhea and cassowary. For the past decade, the ostrich has been seen as potential “get rich quick” scheme. In the beginning of ostrich craze, people in the market saw their original investment increase tenfold. But, as number of breeding stock increased, potential investors are cautioned that the ostrich production may become a financially risky proposition.

Ostriches are farmed for their meat, feathers, egg and skin. The feathers are used to make feather dusters or as decorations or accessories to clothing. Ostrich feathers are loose, soft and smooth. They don't hook together the way feathers of other birds do, giving ostriches that “shaggy” look. The unique design of the ostrich feather is that dirt and dust are actually trapped by the many barbs or fingers on the feather. This allows dust to be gathered and held rather than just moved to a different place. The skin makes



strong leather. Ostrich produces exotic leather, which is considered as one of the most luxurious, flexible and durable in the world. It has the same quality as the crocodiles and snake's skin, making it an ideal working material for the manufacture of most leather goods and certainly luxurious leather items. Although an ostrich egg is the largest of all eggs, it is the smallest egg in relation to the size of the bird. The ostrich egg weighs 1600-2300 gm (about 3.5 to 5 pounds) and is equivalent in volume to 2 dozen chicken eggs. Ostrich eggs have been eaten for thousands of years as a delicious healthy food. It is a little sweeter and fluffier than chicken eggs but tastes almost the same. The egg were lower in cholesterol and healthier than chicken eggs. The egg yolk is deep yellow-orange color. Ostrich meat is a wonderful healthy red meat with all the flavor and texture of beef. It is rich in protein and high in iron yet is lower in fat, calories and cholesterol than skinless chicken or turkey. Ostrich by-product is the ostrich eggshell. Eggshell used as an elegant decorations, can be turned into necklaces, bracelet, beads and other accessories. It can also be decorated, carved, painted or wrapped with printed decorative special paper and can be sold as jewelry box, lamps or just as decorative ornaments. Other ostrich by-product is the ostrich oil. Ostrich oil is that the natural way of restoring life and health to our bodies. The benefit of ostrich oil is it has high concentrate of the healing Omega Fatty Acids. The oil cures any sorts of skin condition such as cracked heels, burns, dry skin, acne, eczema etc. The oil is great as a face moisturizer or after shave lotion (Sell, 2006).

Ostrich production is starting to boost in Benguet. There was one farm in Tuba, Benguet and one in Irisan, Baguio City who started to venture into ostrich production.

With all the above mentioned utilization of ostrich from feathers to meat and eggs, it is a very attractive enterprise to someone who has the capital and resources.

Importance of the Study

This study looked into the potential of ostrich production in Benguet and Baguio City.

The result of the study could be used as a decision factor for entrepreneur intending to go into ostrich production. Result could be a reference for the other researchers who are in the same line of interest.

Statement of the Problem

The study aimed to answer the following question.

1. How much capital investment is required in ostrich farming?
2. What are the potential problems encountered by the ostrich farm owners?
3. Who are the potential markets?

Objectives of the Study

1. To determine investment required in ostrich farming.
2. To identify the problems encountered by ostrich farm owners.
3. To identify the potential market of ostrich products and by-products.

Scope and Delimitation of the Study

The study focused on the ostrich production practices, investment requirement, products and by-products and income potential of producers in Benguet and Baguio City.

REVIEW OF LITERATURE

Ostrich Production Enterprise

Ostrich has been seen as a potential “get rich quick” scheme. In the beginning of the ostrich craze, people in the market saw their original investment increase tenfold. But, as breeding stock numbers increase, potential investors are cautioned that ostrich production may become a financially risky proposition (Sell, 2006).

Ostrich is a red meat; it's lower in fat than chicken. Ostrich is a red meat with the nutritional benefits of poultry. It tastes like beef but is lower in cholesterol and fat and higher in protein. Ostrich meat may also be healthier than chicken. A 100 gram serving contains about 9 percent less cholesterol, 48 fewer calories, 57 percent less fat and 7 percent more protein than chicken. When it comes to sustainability, ostrich compare favorably with cattle because they require less feed and less land, and they reproduce quickly. Ostriches produce less methane gas than cattle (Censky, 2006).

Benson and Holle (2002) mentioned that in determining the profit potential of ostrich it is necessary to develop a greater understanding of the factors that control production end product quality and profitability. The cost per chick should be considered. It is important to include the costs of incubation. If eggs are infertile or have poor hatchability, the costs are very much higher per chick hatched.

Enterprising Cordillera traders have successfully marketed the bird to Cordillera communities by presenting it as a richer alternative to native chicken used in pinikpikan, a native chicken broth meal that is shared after the chicken undergoes a ritual (Chumawin, 2009).



Ostrich Products and its Socio-Economic Importance

Ostriches were often killed for the use of their hides, which makes fine leather, and their feathers. Their eggs, which are equivalent to 24 fowl eggs, are often eaten by animals as well as humans (Donegan, 2002).

Markets for ostriches are currently breeder markets with value determined as much by nostalgia as the value of products provided by the ostriches. In the long term, if the ostrich industry is to thrive, the birds will have to generate revenue sufficient to cover their costs of production. The main products from ostrich are 1) a red meat which is lower in fat and cholesterol than turkey, 2) leather which is extremely durable with unique markings and 3) decorative by-products, namely, feathers and eggs. People currently in the industry believe the ostrich industry will reach maturity in four to seven years (Sell, 2006).

Ostrich Production and Breeding

Breeding birds needs high level of vitamins at correct ratios to one another to ensure a good nutrient transfer from hen to egg, and egg to chick. Feeding any less than these amounts will cause chicks survival problems (UST, 2002).

If your breeders currently have low egg laying, late egg laying, variability in egg weights, low conversion of eggs to chicks, poorer quality chicks at the end of the season, high chick mortalities, these are all symptoms of nutritional deficiencies in the breeder rations. When these nutritional deficiencies are present, common sense dictates that the inherent genetic potential cannot be correctly identified. If your chicks are hatched with deformities, they are slow to get growing, there is high mortality, if you are experiencing

yolk sac problems, again these are symptoms of poor breeder nutrition. It is therefore common sense that chicks that are slow to get growing are not only losing valuable time and optimization of the best period of good feed conversion; it is also not possible to identify accurately the inherent genetic abilities of the birds (Benson and Holle, 2002).

This can be translated into an imbalanced ration in livestock production. With Ostrich, they may have plenty to eat, but with their limited daily intake of feed, the birds will have symptoms of malnutrition if the overall daily intake is insufficient in total nutrients no matter how much they actually eat (Benson and Holle, 2002).

Furthermore, Benson and Holle (2002) states that good nutrition affects more things than simply egg production or chick survival. This study proves that Proper Nutrition influences the age of follicle development and quality of the skin. With proper nutrition, there are additional economic benefits. Birds raised in this manner produce greater meat yields. The meat from faster grown muscles is more tender, even in color and has a good aroma. It is also possible to inventory a lower number of Breeder birds as their egg production, fertility and hatchability is much higher per bird. Increasing income from skin, meat and from increased number of birds slaughtered, while lowering the expense per unit produced with earlier slaughter ages and less Breeder birds is most certainly “the path to profitability” for the future of the industry.

Cooking Ostrich Meat

With its low fat and cholesterol, and mild beef-like taste it is being highly touted as a healthy alternative to the meat from cattle. Revealed ostrich meat as lower in fat and calories than turkey, chicken, pork, and of course beef, ostrich is now clearly considered as one of the proteins of choice for heart and other cholesterol-sensitive patients who

miss the flavor of "red meat", but are skittish about the side effects. "Because of its low fat content, ostrich cooks faster than other higher fat meat products. It should be cooked to medium rare but not more than medium to optimize flavor and moisture retention. Cooking ostrich meat to well will result in a dry product with a slight liver-like after taste" (Rosenberg, 2006).

Bob (2002) had some tips in cooking Ostrich meat. These are the following:

Steaking, if muscle cuts are not large enough for steaking, make butterfly steaks or smaller medallions and fillets, using ends and pieces for stir fry, fajita, kabobs, skewers, etc

Roasting, muscle cuts have to be seared or sealed and cooked quite quickly, always checking the temperature for doneness.

Mincing, leg trim and better muscle trimming blend well- leave some fat included.

Processing and Curing, full muscles and trim are well suited for hams, pastrami, fresh and smoked sausages, pepperoni, jerky, etc.

Cooking Temperatures, steaks should be cooked to the likeness of rare to med-rare beef appearance. Internal roasting temperature of 140 degree (F) or rare is when to remove roasts from the oven allowing for hold cooking temperature, cooked ostrich does not hold well for long periods of time.

METHODOLOGY

Locale and Time of the Study

The study was conducted in Benguet and Baguio City. Specifically in Tuba, Benguet and Irisan, Baguio City. The study was conducted from November to December 2009.

Respondent of the Study

The respondents of the study were the owners of the ostrich farms, the current and potential buyers or consumers of ostrich and its by-product in Tuba, Benguet and Irisan, Baguio City.

Data Gathering Procedure

Data were gathered through personal interview, with the aid of an interview schedule. Actual observation was also done.

Data Gathered

The data gathered were the investments in ostrich farming, care and management practices. On the part of the potential buyers and consumers the data gathered were their perception on ostrich and ostrich by- product.

Data Analysis

The data and information gathered from the respondents were tabulated and analyzed using frequency and descriptive analysis.



RESULTS AND DISCUSSION

Socio-Demographic Profile of the Owner of the Ostrich Farm

There were only 2 owners of an ostrich farm, one in Tuba, Benguet and the other one is located in Irisan, Baguio City. These owners served as the respondents of the study.

The two owners were engaged in business and ostrich farming. Ostrich farming is a new business venture for them. The ages of the respondents were 39 and 42 years old respectively. Respondents were male and female. The incomes of the two respondents were 100,000 to 150,000 pesos per month. The respondents had finished college.

Inventory of Stock

Table 1 shows the inventory of stock of the ostrich farm in Tuba, Benguet and Irisan, Baguio City.

There were 10 mature ostrich in Tuba, Benguet and 2 mature ostrich in Irisan, Baguio City. The cost per one mature ostrich in both ostrich farm was 50,000 peso per head. There were also 21 young ostrich in Tuba, Benguet and 15 young ostrich in Irisan, Baguio City. The cost per head of young ostrich in both ostrich farm was 12,500 peso per head.



Table 1. Inventory of stock

PARTICULARS	NUMBER OF HEADS		COST PER HEAD BOTH (PESO)
	TUBA	IRISAN	
Mature	10	2	50,000
Young	21	15	12,500
TOTAL NUMBER OF HEADS	31	17	

Ostrich Farm Housing, Equipment and Facilities

Table 2 shows the housing, equipment and the facilities used in the ostrich farm in Tuba, Benguet and Irisan, Baguio City.

Equipment and utilities. Both the ostrich farm used electricity and water. The ostrich farm in Tuba, Benguet paid 3,500 peso for the electricity and 2,000 peso for the water bill, while the ostrich farm in Irisan, Baguio City paid 2,000 peso for the electricity and 1,500 peso for the water bill.

Housing or shed. The kind of housing for both ostrich farm were Bamboo with galvanized roofing. The cost of the housing for the ostrich farm in Tuba, Benguet was 30,000 peso for a floor area of 30 square meters and for the ostrich farm in Irisan, Baguio City was 20,000 peso for a floor area of 20 square meter.

Facilities. There were two kinds of facilities in the ostrich farm, the drinking facilities and the feeding facilities. For the drinking facilities, both ostrich farm used bucket and a homemade waterers made out of plastic jars. For the feeding facilities they both used aluminum trays and homemade feeders. The homemade feeders in Tuba,



Benguet was made out of plastic jars and for the homemade feeders in Irisan, Baguio City is made of used wheels or tire of a car or truck.

Table 2. Housing, equipment and facilities

PARTICULARS	TUBA	IRISAN
Utilities (cost) peso		
Electricity	3,500	2,000
Water	2,000	1,500
Housing or shed		
Kinds of housing	Bamboo with galvanized roofing	Bamboo with galvanized roofing
Cost of housing (peso)	30,000	20,000
Facilities		
Drinking facilities		
Bucket (cost)	300	200
Homemade waterers		
Used tires	300	
Plastic jag		300
Feeding facilities		
Trays (cost)	300	300
Homemade feeders		
Used tires	300	
Plastic jag		300

Feed and Medicine Management

Table 3 shows the feed source of the ostrich farm in Tuba, Benguet and Irisan, Baguio City. Both farms were getting their feeds and medicines or vitamins from a feeds supply store in Baguio City. For the ostrich farm in Tuba, Benguet, the ostrich consume 1 tablet of vitamin B complex a day, 1 tablet of calcium a day and 1 sachet of electrolyte a day. Aside from the vitamins and the electrolyte, the ostrich consume 1 sachet of vetracin powder (antibiotic) per month. For the ostrich farm in Irisan, Baguio City the ostrich consume 1 tablet of vitamin B complex a day, 1 tablet of calcium a day and 1 sachet of electrolyte a day. The cost of vitamin B complex was 30 pesos per bottle which contain 100 tablets. The cost of calcium was 30 pesos per bottle which contain 100 tablets. The cost of electrolyte was 15 pesos per sachets and for the vetracin was 20 pesos per sachets.

Table 3. Medicines and vitamins intake of the ostrich in the 2 farms

MEDICINES/VITAMINS	DOSAGE		COST (PESO)
	TUBA	IRISAN	
Vitamin B complex (cost)	1 tab/day	1 tab/day	30
Deworming			
Calcium (cost)	1 tab/day	1 tab/day	30
Electrolyte (cost)	1 sachet/day	1 sachet/day	15
Vetracin powder (cost)	1(per month)		20



Types of Feeds Used in the Ostrich Farm

There were different types of feeds used for the different growth stages of the ostrich, just like chicks, juvenile and adults' stage and also when the ostrich start to lay their eggs. For the ostrich farm in Tuba, Benguet for the total of the 31 heads, the birds were able to consume 5 sacks of chick booster mash, 5 sacks of chick starter mash, 5 sack of chick grower mash, and for those ostrich laying eggs 5 sack of chick layer mash were already consumed. In addition a total of 3 sack of corn was also consumed by the birds. For the ostrich farm in Irisan, Baguio City, for a total of 17 heads, the birds were able to consume 3 sack of chick starter mash, 3 sack of chick grower mash and in addition 2 sacks of corn was consume by the birds. The estimated cost of feeds consume of one ostrich chick to juvenile to adult stage in Tuba, Benguet was 16,000 peso per head, distributed as follows; from chick stage they spend 5,000 peso for the feeds, juvenile stage they spend 5,000 peso for the feeds while for the adult stage they spend 6,000 peso for the feeds. The estimated cost of feeds consumed from chick stage to juvenile stage to adult stage in Irisan, Baguio City was 10,000 peso per head distribution as follows; for the chick stage they spend 3,000 peso for the feeds, for the juvenile stage they spend 3,000 peso for the feeds while for the adult stage they spend 4,000 peso for the feeds.

General Flock Management

Table 4 shows the layer and chick management of the ostrich farm in Tuba, Benguet and Irisan, Baguio City. The two ostrich farm used brooding management and they maintained proper temperature. In Tuba, Benguet the farm used proper ventilation because it is usually warm in the place.



Health and Sanitation Management

Table 5 shows the disease control program of the ostrich farm in Tuba, Benguet and Irisan, Baguio City. Both farm used deworming and vaccination for the ostrich. The Tuba ostrich farm had their own veterinarian to oversee the health condition of the birds while in Irisan, Baguio City they don't have their own veterinarian. The reason why ostrich farm in Irisan, Baguio City have no veterinarians for their ostrich is because there is only few ostrich in this farm.

Table 4. General flock management

TUBA	IRISAN
Do not use incubator (Natural incubation)	Do not use incubator (Natural incubation)
Used brooding house	Used brooding house
Maintained proper temperature	Maintained proper temperature
With proper ventilation	None

Table 5. Health and sanitation management

PARTICULARS	TUBA	IRISAN
Disease control program		
Deworming	practice deworming	practice deworming
Vaccination	practice vaccination of bird	practice vaccination of bird
Veterinary services	Available	Not available



Market Outlet of Live Ostrich and Ostrich Product

Table 6 shows the outlet of live ostrich and ostrich product. The two ostrich farms were both a member of the Philippine Import-Export Ostrich Foundation (PIEOF). That is why they only sell the ostrich meat, egg and live ostrich. The farms sell to their neighbors and to the people who visits the farm. The prices per kilogram of meat is 1,000-1,500 peso and for the egg is 300-600 peso per piece for the Tuba farm, while the farm in Irisan, the price is 400-600 peso per piece. The price for the live ostrich is 100,000 peso per head for the 8 months old ostrich in the both farm. For the leather and feather, they sell to the Philippine Import-Export Ostrich Foundation (PIEOF) because the foundation exports the feather and leather to the different manufacturing company for bags and duster and other products that could be produced from feather and leather.

Capital Investment

The investment of the Tuba farm for the stock, housing and facilities: drinking facilities and feeding facilities totaled to 792,500 peso while for the Irisan farm with lesser number of head had a total investment of 308,500 peso. For the supplies and material, the total cost for the Tuba farm is 586,378 peso for entire growing period while for the Irisan farm total was 223,433 peso. Total investment of Tuba farm with the 31 heads is 1,378,878 peso and for Irisan farm was 531,933 peso for the 17 heads (Table 7).

Table 6. Market outlet and price of live ostrich and ostrich product

PARTICULARS	PRICE (PhP)	
	TUBA	IRISAN
Ostrich meat	1,000-1, 5000/kg	1,000-1,500/kg
Ostrich Egg	300-600/pc	400-600/pc



Table 6. Continued. . . .

PARTICULARS	PRICE (PhP)	
	TUBA	IRISAN
Ostrich Feather	did not reveal	did not reveal
Ostrich Leather	did not reveal	did not reveal
Live Ostrich	100,000/head	100,000/head

Table 7. Capital investment

PARTICULARS	AMOUNT (PESOS)	
	TUBA (31 HEADS)	IRISAN (17 HEADS)
Bird		
Mature	500,000	100,000
Young	262,500	187,500
Housing	30,000	20,000
Drinking and feeding facilities	16,800	6,000
Sub-Total	792,500	308,500
Supplies and utilities		
Feeds	496,000	170,000
Medicines	46,378	25,433
Utilities (Water and electricity)	44,000	28,000
Sub. Total	586,378	223,433
TOTAL	1,378,878	531,933



Problems Encountered by the Ostrich
Farm Owner and Action Undertaken

Both ostrich farm owners encountered the following problems; ostrich easily get fractured, high cost of feeds, disease and parasite. In addition, the farm owner in Irisan experienced lack of veterinarian service. This was because he did not have any veterinarian for his farm. Marketing problems encountered were the high price of ostrich product both food and non-food.

To solve the problem, the farm owners attended seminars in ostrich raising through the Philippine Import-Export Ostrich Foundation and consult veterinarian. Sometimes, the farm owners reduce the price of the ostrich product to solve marketing problems.

Socio-Demographic Profile of the
Consumer or Potential Consumer

Table 8 shows the profile of the consumer respondents according to occupation, age, sex, ethnic affiliation, monthly income or allowance and highest educational attainment.

Table 8. Profile of the consumer or potential consumer

CHARACTERISTICS	FREQUENCY	PERCENTAGE
Occupation		
Housewife	73	37
Government employee or Private agencies	49	24
Businessman or woman	40	20
Student	29	14



Table 8. Continued. . . .

CHARACTERISTICS	FREQUENCY	PERCENTAGE
Farmer	9	5
TOTAL	200	100
Age		
Less than 20	31	15
21-39	131	65
40- 59	31	16
60- 69	5	3
70 and above	2	1
TOTAL	200	100
Mean age= 38.5		
Gender		
Female	129	65
Male	71	35
TOTAL	200	100
Ethnic affiliation		
Igorot	93	46.5
Ilocano	82	41
Tagalog	24	12
Pangasinense	1	.5
TOTAL	200	100



Table 8. Continued. . . .

CHARACTERISTICS	FREQUENCY	PERCENTAGE
Income or monthly allowance		
5000- below	113	57
5001- 10000	63	31
10001- 15000	7	3.5
15001- 20000	16	8
20001- above	1	0.5
TOTAL	200	100
Highest Educational Attainment		
Elementary	4	2
High School	48	24
College	145	72
Vocational and Undergraduate	3	2
TOTAL	200	100

Occupation. Thirty seven percent of the respondents were housewife, and other respondents include teachers, security guard, driver etc (24%). Twenty percent were businessman or woman, 14% were student while the 5% were farmers.

Age. The age of the respondent range from less than 20 years old to 70 years old and above. Most (65%) of the respondents belonged to age bracket 21- 39 years old, 16% were from the age bracket of 40- 59 and 15% were the less than 20 years old, 3% were



the 60- 69 years old and 1% was more than 70 years old. The mean age of the respondents was 38.5 years old. The result shows that there was a wide distribution on the age of the respondents.

Gender. Out of the 200 respondents, 65% were female and 35% were male.

Ethnic affiliation. Igorot was the common ethnic affiliation of the respondents. This was followed by Ilocano 41% then Tagalog 12% and Pangasinense 0.5%.

Income or monthly allowance. The income or monthly allowance of the respondent ranges from below 5,000 to above 20,000 peso per month. Most (57%) belonged to income bracket of 5000 pesos and below. 31% belonged income bracket ranging from 5,001-10,000 pesos, 8% from income bracket of 15,001-20,000 peso, 3.5% from the income bracket of 10,001- 15,000 peso and 0.5% with the income bracket of 20,001 peso and above.

Highest educational attainment. The educational attainment was classified into four: elementary, high school, college and the vocational and undergraduate.

Majority (72%) of the respondents, reached college level, 24% finished high school level, 2% had finished elementary level while 2% had finished vocational course or college undergraduate.



Awareness of Respondent About the Ostrich and Ostrich By-Product

Majority (86%) of the respondents knew or heard the ostrich and ostrich product, thus, the respondents were aware of what is ostrich and ostrich by-product. On the other hand, 14% of the respondents have no idea or were not aware of ostrich and ostrich by-product (Table 9).

Source of Information about Ostrich and Ostrich By-Product

Table 10 shows that majority (71%) of the respondents acquired the information about ostrich and its by-product from their friends, 70% acquired from their neighbors. 39% from family; 37% from literature and publications; 31% from television and 4% from radio and internet.

Table 9. Awareness of respondents about ostrich and ostrich by-product

CHARACTERISTICS	FREQUENCY	PERCENTAGE
Aware	172	86
Not aware	28	14
TOTAL	200	100

Table 10. Source of information about ostrich and Ostrich by-product

CHARACTERISTICS	FREQUENCY	PERCENTAGE
Family	78	39
Friends	141	71
Neighbor	139	70
Literature/publication	73	37
Television	62	31
Radio and internet	8	4

* Multiple responses

Willingness to Buy the Ostrich Products

Table 11 and 12 shows that majority (83%) of the respondents were willing to buy ostrich meat while only 17% do not want to buy ostrich meat. All of the respondents were willing to buy ostrich meat for food. For the feather, 72% of the respondents want to buy ostrich feather and 28% do not want to buy it. For the feather 27% of the respondents who were willing to buy ostrich feather wants it for business purposes while 78% want it for other purposes such as for cleaning and decorations. For the leather, 74% want to buy it and 27% do not want to buy ostrich leather because it was too expensive. For the leather, 27% of the respondents who were willing to buy ostrich leather want it for business purposes while 87% want it for others purposes like decorations and for own use. Out of the 162 respondents who were willing to buy ostrich eggs want to buy for food. Majority (69%) of the respondents want to buy ostrich by-product such as ostrich eggshell and ostrich oil, while 31% do not want to buy it. For the ostrich by-product 29%



of the respondents who were willing to buy ostrich by-product want it for business while 77% want it for others purposes such as for decorations and for their own use.

Table 11. Willingness to buy the ostrich products

PRODUCT	WILLING TO BUY	%	NOT WILLING TO BUY	%
Meat	167	83	33	17
Feather	145	72	55	28
Leather	147	73	53	27
Egg	162	81	38	19
By-product	139	70	61	31
Mean= 159				

* Multiple responses

Table 12. Where to use the ostrich product

	FOOD	%	BUSINESS	%	OTHERS	%
Meat	167	100				
Feather			40	28	113	78
Leather			40	27	122	83
Egg	160	99				
By-product			40	29	107	77

* Multiple responses



Number of Respondents who have Tasted the Ostrich Meat

Majority (77%) of the respondents have never tasted ostrich meat because it is so expensive and they cannot afford to buy. The respondents mentioned that it is better to buy pork or chicken meat because it is much cheaper than the ostrich meat. Furthermore, they mentioned that if the price of the ostrich meat will be lower they will buy because it is very nutritious. Only 23% have tasted ostrich meat. The respondent who tasted it says that it taste like beef and it is very delicious (Table 13).

Price Acceptability About the Ostrich Product

Table 14 shows that majority (74%) of the respondents want to buy ostrich meat if the price will range from 100-500 peso per kilo, 17% were willing to buy at price ranging from 501- 1000 peso, and 8% were willing at price ranging from 1001-1500 peso. For the egg majority (87%) of the respondents want to buy ostrich egg if the price range from 100-300 pesos, 7% with price ranging from 301-500 and 5% with price ranging from 501-700 peso.

Table 13. No. of respondents who have tasted the ostrich meat

PARTICULARS	FREQUENCY	PERCENTAGE
Tasted ostrich meat	46	23
Have not tasted ostrich meat	154	77
TOTAL	200	100



Table 14. Price acceptability about the ostrich product

PARTICULARS	FREQUENCY	PERCENTAGE
Meat		
100-500	118	74
501-1000	28	17.5
1001-1500	13	8.5
TOTAL	159	100
Egg		
100-300	134	86.5
301-500	14	9
501-700	7	4.5
TOTAL	155	100

Willingness to buy Ostrich Meat and Egg

Majority (79%) of the respondents were willing to buy ostrich meat and egg. For the meat, the consumer respondents mentioned that it is very nutritious, lower in fat, calories, cholesterol and good for the heart. For the egg they say that it is very nutritious and lower in cholesterol than any other eggs. While 21% do not want to buy because they mentioned that it is so expensive and they prefer chicken meat and egg rather than ostrich meat and egg because it is always available in the market (Table 15).

Consumer Respondents who Tried
Ostrich Non-Food Product

Table 16 shows that majority of the respondents never tried to use ostrich product such as ostrich feather, leather and ostrich by-product such as ostrich eggshell and ostrich oil. Only 2% of the respondents tried using ostrich feather, 7% of the respondents tried ostrich leather and only 4% of the respondents tried ostrich by-product. The reason for this was the ostrich non food product was so expensive, only rich people can afford to buy these products. Result implies that very few have tried using ostrich non-food product.

Table 15. Willingness to buy ostrich meat and egg

PARTICULARS	FREQUENCY	PERCENTAGE
Willing to buy	159	79.5
Not willing to buy	41	20.5
TOTAL	200	100

Table 16. Consumer respondents who tried ostrich non-food product

PARTICULARS	TRIED		HAVE NOT TRIED	
	F	%	F	%
Feather	4	2	196	98
Leather	14	7	186	93
Eggshell and ostrich oil	8	4	192	96



Perception about Ostrich Feather
and Ostrich leather

Table 17 shows that only 3% have tried ostrich feather duster and they say it is very good or more convenient for cleaning. The reason for this was because there are only few stores who sell ostrich feather duster and price had higher compared to the other feather dusters that sold to the market or malls. The respondent mentioned that they prefer to buy the cheap feather duster because it is available anywhere. For the ostrich leather only 7% of the respondent tried ostrich leather and they mentioned that it is very durable. The reason for the small percentage of respondents who have tried ostrich leather was because it was very expensive; some ostrich leather is worth million. Furthermore, there were few stores who sell ostrich leather.

Table 17. Perception about the ostrich feather and ostrich leather

PARTICULARS	FREQUENCY	PERCENTAGE
The feather were attractive and good for cleaning	5	3
The leather was durable	14	7

SUMMARY, CONCLUSIONS AND RECOMMENDATION

Summary

This study was conducted in Benguet and Baguio City particularly in Tadiangan, Tuba, Benguet and Santo Nino, Irisan, Baguio City. The study was conducted; to determine investment required in ostrich farming; to identify the problems encountered by ostrich farm owners and to identify the potential market of ostrich products and by-products.

The 2 owners of the ostrich farm in Tadiangan, Tuba, Benguet and Santo Nino, Irisan, Baguio City and 200 consumer or potential consumer served as respondents of the study. Consumer respondents were chosen at random.

Ostrich farming is a new business venture for the two farm owner. The ages of the respondents were 39 and 42 years old respectively. The incomes of the two respondents were 100,000 to 150,000 pesos per month. The two respondents had finished college.

The housing or shed of the both ostrich farm, was made of bamboo with galvanized roofing, their utilities were both water and electricity and for their facilities they have 2 different kinds of drinking and feeding facilities. For their feed source both get their feeds from feed supply store. The feeds used by the ostrich farm in Tuba, Benguet were chick booster mash, starter mash, grower mash and layer mash. For the ostrich farm in Irisan, Baguio City, chick starter mash and the grower mash were used. For the general flock management, both used brooding management and maintenance of proper temperature. On the health and sanitation management both ostrich farm deworm and vaccinate their birds. Ostrich farm in Benguet have her own veterinarian while ostrich farm in Baguio City have no veterinarians. The capital investment for the Tuba



farm was 1,378,878 pesos and 531,933 pesos for Irisan farm. Both farms sell the ostrich meat at 1,000- 1,500 peso per kilo, the egg at 300- 600 peso in Tuba and 400-600 peso in Irisan and the live ostrich at 100,000 peso for an eight month old ostrich.

The problems encountered by the ostrich farm owner were; the ostrich is easy to be fractured, high cost of feeds, disease and parasite and lack of veterinarian service. The marketing problems identified were high price of the ostrich product. For the problems on production, ostrich raisers attended seminars and consult veterinarian. The marketing solutions were the two ostrich farm owner should try to reduced or lessen the price of the ostrich product.

Most of the consumer respondents were housewife. The ages of the respondents' ranges from less than 20 years old and 70 years old and above. Majority were female. Majority of consumer respondents were aware about the ostrich and ostrich product. Most of the respondents got the information about the ostrich from their friends. Majority of the respondents were willing to buy ostrich product if the price were reduced. Very few of the respondents have tasted the ostrich meat because it is expensive. For the ostrich non food product majority of the respondents have never tried ostrich product such as feather and leather because it expensive.

Conclusions

The following conclusions were drawn based on the findings of the study:

1. There were 2 commercial ostrich farm identified, one farm in Tuba, Benguet and one in Irisan, Baguio City.
2. The capital investment for ostrich farm was 1,378,878 pesos for 31 heads and 531,933 pesos for 17 heads.

3. The problems encountered by the ostrich farm owner were; the ostrich easily get fractured, high cost of feeds, disease and parasite and the ostrich farm in Irisan, Baguio City was lack of veterinarian service.

4. Ostrich was raised mainly for meat. However other product could be derived such as egg, feather, leather and ostrich by-product like eggshell and ostrich oil.

5. Very few consumers have tasted ostrich meat and have tried or used ostrich non-food products.

6. Consumers do not want to buy ostrich products because of its high price.

7. Consumers were willing to buy ostrich food and non-food product if price will be reduced or lessen.

8. Ostrich farming was potentially viable as a business but for those who have capital and target market for the product was the class A consumers who can afford to buy.

Recommendation

The owner of the both ostrich farm should lower the price of the ostrich product such as meat and egg, because not all people can afford to buy it. It is recommended that raiser should put up their own store in the market to make it available to other consumers.

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