ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

DEPARTMENT OF MARKETING MANAGEMENT

HOW VALUE CHAIN AFFECTS POULTRY PRICING: EVIDENCE FROM POULTRY FARMS IN BISHOFTU TOWN

By:- Daniel Gebresilassie (GSE/6051/13)

A Thesis Submitted to the Department of Marketing Management in Partial Fulfillment of the Requirements for Masters of Art in Marketing Management (MAMM)

Advisor: - Beza Libeyesus (Phd)

June, 2023

Declaration

I, the undersigned, hereby declare that the work contained in this thesis entitled "The Effect of Value Chain Characteristics on Poultry Products Pricing: Evidence from Poultry Farmers in Bishoftu Town" is my own original work and I have not previously in its entirety or in part submitted at any university for a degree.

Signiture:_____Date:_____

Letter of Certification

Addis Ababa University

School of Commerce

Graduate Program Unit

This is to certify that the thesis prepared by Daniel Gebresilassie (Mr.), entitled: "The Effect of Value Chain Characteristics on Poultry Products Pricing: Evidence from Poultry Farmers in Bishoftu Town" submitted in partial fulfillment of the requirement for the degree of Master of Arts in Marketing Management complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

Signed by the Examining Committee:

Advisor:

Beza Libeyesus (PhD) Signature :_____Date:_____

External Examiner:

Signature :_____Date:_____

Internal Examiner:

Signature :_____Date:_____

Chair of Department or Graduate Program Unit

Acknowledgements

First and foremost, I would like to thank the Almighty God for His protection and for embracing me with His merciful hands. Thanks to God that I have reached at this chapter of my life.

Second, there are some parties who need to take due credit and gratitude who will be listed as follows. Next to God, I am extremely indebted to you; Dr. Beza Libeyesus Nisrane. I genuinely appreciate and am thankful to your valuable comments on my work in progress; and for your unreserved moral and practical support. I would like to thank my family, my wife Mihiret Endale and my baby girl Rama Daniel for their unreserved moral support and for giving me their valuable time as I was busy with the thesis preparation. I would like to also extend my heartfelt appreciation and gratitude to my friends Girum Girma and Taera Zerihun. I could not make it this far without you guys. A friend in need is a friend indeed, so they say!

Last but by no means the least, I would like to extend my dearest thanks to all the participants of the questionnaire who gave me their precious time and attention.

Table of Contents

ACRONYMS AND ABBREVIATION

ANOVA= Analysis of Variance

ASF=African Swine Influenza

CSA=Central Statistics Agency

DOC=Day-Old-Chicks

DOCSS= Day-Old-Chicks Supply Shortage

ECX=Ethiopian Commodity Exchange

EFMF=European Feed Manufacturers Federation

EoCVoPPP= Effect of Value Chain on Poultry Products Pricing

EPPA=Ethiopian Poultry Producers Association

EPX=Ethiopian Poultry Exchange

FAO=Food and Agricultural Organization

FMD=Foot and Mouth Disease

FPF= Feed Price Fluctuation

GHG=Greenhouse Gas

HPAI=Highly Pathogenic Avian Influenza

IMF=International Monetary Fund

LoHF= Lack of Hatchery Firms

LoPPSF= Lack of Poultry Processing and Storage Firms

MI=Market informality

MS=Market Seasonality

OECD=Organization for Economic Cooperation and Development

PPS=Poultry Processing and Storage

SD=Standard Deviation

USAID=United States Agency for International Development

USAID-FTFE= United States Agency for International Development-Feed the Future Ethiopia

VAT=Value Added Tax

WBCSD=World Business Council for Sustainable Development

List of Tables

List of Figures

Abstract

The aim of this thesis was to investigate the value chain factors that are impacting the pricing of the poultry products in the town of Bishoftu (Debre Zeit). A questionnaire was formulated and distributed to the 124 respondents and all the 124 participants were able to fill and return the questionnaire. Thereafter, both descriptive and inferential statistics were applied to analyses the obtained response using Statistical Package for Social Sciences (SPSS) version 2019. Both descriptive and explanatory research design was used to interpret the outcome of the analysis. The findings of the analyses indicated that feed price fluctuation, market informality, market seasonality, lack of hatchery firms, shortage of Day-Old-Chicks supply, and lack of poultry processing and storage facilities were statistically significant and positively influenced the price setting of poultry products. The study recommends that the farmers should be able to come together as a union to get all the government support and to gain comparative price and market advantage in the poultry industry. The government and the policy makers should also create conducive environment for the farmers to undertake their farming practices properly. The banking institutions are also duty bounded to financially and operationally support the poultry sub-sector.

Keywords: *value chain, feed, pricing, poultry, hatchery, poultry processing, poultry storage, Day-Old-Chicks, market informality, market seasonality*

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

Globally, poultry is expected to represent 41% of all the protein from meat sources in 2030, an increase of two percentage points when compared to the base period of 2018-2020. The global shares of other meat products are lower: beef (20%), pig meat (34%), and sheep meat (5%) during the 2018-2020. This Outlook projects that nominal meat prices for beef, pork, and poultry will recover in 2021, as demand in high income countries recovers from the COVID-19 pandemic. Further nominal price increases are foreseen, albeit modestly, up to 2025 as income and consumer spending are assumed to recover in other countries, especially in middle-income countries where demand is responsive to income (OECD-FAO Agricultural Outlook, 2021-2030).

A clear trend is the rise of poultry meat consumption in virtually all countries and regions. Consumers are attracted to poultry due to comparatively lower prices, product consistency [availability in a continuous basis] and adaptability [mode of consumption is adaptable for every culture and country], and higher protein/lower fat content (OECD-FAO Agricultural Outlook, 2021-2030).

On a per capita basis, the expected robust growth rates in poultry consumption reflect the significant role it plays in the national diets of several populous developing countries, including China and India. Rising imports over the next decade will be comprised mainly of poultry, the largest contributor, and beef (OECD-FAO Agricultural Outlook, 2021-2030).

Poultry prices are expected to closely follow grain prices given the high share of feed costs in their production and the swift response of production to global rising demand. An increase in poultry production means an enhanced demand for maize, which is the largest component of poultry feed (Ashok Gulati et al, 2022) and thereby, an escalating price increment having an indirect impact on the poultry pricing.

Animal diseases such as African Swine Fever (ASF), highly pathogenic avian influenza (HPAI), foot and mouth disease (FMD) always pose significant risks for meat markets. Outbreaks can

occur quickly and shock markets, which may take years to recover (OECD-FAO Agricultural Outlook, 2021-2030).

The Ethiopian poultry population is estimated to be about 59.49 (CSA, 2016/17), native chickens farmed in village systems produce roughly 90.85% of the country's total poultry output (eggs and meat), with the remaining 4.3% coming from intensively raised foreign breeds of chickens and 4.76% from hybrids (CSA, 2016/17).

In the year 2017, the forecasts for Ethiopia's chicken meat consumption was projected to reach 50,000 metric tons, up from 47,000 metric tons in 2016. With annual per capita consumption of about 0.5 kilograms, this is among the lowest in the world and the forecast indicated that the future demand for chicken meat is anticipated to rise as the economy expands, consumer tastes s hift, and the urbanization trend continues (EPPPA, 2020). In comparison, (OECD-FAO Agricultural Outlook 2018-2027) estimated per capita poultry consumption in Sub-Sahara Africa at 2.3 kilograms in 2015, which is more than four-times consumption level in Ethiopia.

Currently, more than 110 legally registered poultry companies are working with the association (EPPPA), among these most of the companies are engaged in both egg production and pullet rearing, some of them engaged in both egg and meat production and only some of them are engaged on broiler production only, four companies have well equipped and designed facilities for poultry meat processing and the rest are egg producing companies. Besides these 110 legally registered companies, large number of small farmers exists (EPPPA, 2020).

The following two tables show the capacity of broiler producers and processors respectively (EPPPA, 2020):-

No.	Broiler Farm	Chicks/batch	No. of Batch	Annual Capacity (Chicks/batch)
1	**Alema farm**	**150,000**	**4**	**600,000**
2	**Elfora farm**	**150,000**	**4**	**600,000**
3	**Jacobs farm**	**45,000**	**4**	**180,000**
4	**FW poultry farm**	**20,000**	**4**	**80,000**
5	**Sinkinesh poultry farm**	**15,000**	**4**	**60,000**
6	**Yo farm**	**19,000**	**3**	**57,000**

7	**Haneri poultry farm**	**11,000**	**3**	**33,000**
8	**Bisrategebreal poultry farm**	**40,000**	**3**	**120,000**
9	**Abraham poultry farm**	**9,000**	**3**	**27,000**
10	**Bora poultry farm**	**10,000**	**4**	**40,000**
11	**Kidist poultry farm**	**9,000**	**4**	**36,000**
12	**Others (66 small poultry farms)**	**132,000**	**3**	**396,000**
	Total	**610,000**		**2,229,000**

Table #1 Broiler producers and their capacity

No.	**Company name**	**Design capacity**			**Annual plan in tones2019**	**Annual performance in tones 2019**	**Performing 2019**
		Chicks/hr	**Chicks/day**	**Annual capacity/ tone**			
1	**Alema farm**	**1000/hr**	**6000**	**2592**	**859.3**	**1108.56**	**42.8% of its capacity**
2	**Elfora poultry processing**	**2500/hr**	**2500**	**1080**	**757.3**	**268.25**	**24.8% of its capacity**
3	**Jacobs poultry processing**	**800/hr**	**5000**	**2160**	**384**	**186.6**	**8.6% of its capacity**
4	**FW poultry processing**	**800/hr**	**5000**	**2160**	**400**	**86.3**	**4% 0f its capacity**
	Total		**18,500**	**7992**	**2400.6**	**1649**	**68%**

Table #2 The capacity of processors and their actual performance in 2019

From the above two tables, we can infer the existence of a high shortage of DOC (Day Old Chicks) supply than the country's poultry sector demand. Prior researchers, for instance, Atsbaha H/Mariam and Lemma Zewdu, 2018, stated that "in Ethiopia, there is a persistent shortage of day-old chicks". Since their poultry buildings would frequently lie vacant for months at a time while they waited for the next shipment of chicks from the hatcheries, this caused many farmers to give up raising poultry since they found it impossible to operate at their best.. A given poultry farmer who raises egg layers for two months will keep the chicks from one day old up to two months. After selling those two months old layers, the house will be cleaned and disinfected and get ready for the next round of DOC reception. The same is true for broilers; it takes between 55-

60 days to make the house ready the next batch of DOC supply. Unfortunately, however, due to lack of adequate hatchery firms and thereby, DOC supply shortage, unethical and corrupt DOC supply proceedings will make it difficult for the farmers to use their house that they made it ready. So often, the farmers are forced to wait, on average, three months having empty houses. This time lapse between one rounds of DOC supply to the other will be a huge gap and the farmers are obliged to pay for house rent, employment cost, and water and electricity bills and so on without a productive time in those times in which they are waiting for the supply of day old chicks. In addition, the personal expenses that the farmers are incurring in these unproductive times will drain away their work budget.

In the broiler production line, the above mentioned hatching facility is found at the beginning of the whole production chain. Once, the chicks are well fattened and ready for sale, there is a need for slaughter houses, and value addition to the product, though most farmers slaughter their chicks at home in a very traditional method which does not insure quality and adds no value to their product. Due to quick perishability, the chicken meat, like fish meat, requires a cold storage facility. In the absence of this cold storage facility, famers are compelled to sell their products at market price since they have no intensive to hold out for a higher price. The number of poultry processors (four) in the country is too small to satisfy the poultry processing, storage and transportation demand of the country and worse yet, the existing processors are 68% underperforming than their full scale potential for various reasons. (Atsbaha H/Mariam and Lemma Zewdu, 2018) Although the available processing capacity is adequate, its performance is rather poor and needs improvement.

In Ethiopia information regarding the poultry marketing system and factors that determine farmer’s poultry supply to market are lacking. The market's performance reflects how structure and behavior affect product pricing, costs, and output volume and quality. Poor market performance is to be expected if an industry's market structure resembles a monopoly rather than pure competition, informality, and brokerage rather than formality. (Awol Zeberga Kerbaga, 2010).

Overall, the sky rocketing feed price, shortage of hatcheries and DOC supply, the absence of adequate poultry processing and storage facilities and the informality and seasonality of the market are the observed variables by the researcher which deems for further investigation. Though many researches are conducted in the poultry sector, most of them are conducted

regarding the poultry disease and related aspects. Hence, the researcher aspires to fill this gap in this research.

The chronic shortage of DOC supply and the lack of poultry processing and storage facilities, undoubtedly and directly impacted the pricing of the nation's poultry products. On top, the fact that the majority of hatcheries (7 out of 12) and poultry slaughter houses (4 out of 4) respectively are located in the study area, i.e., Bishoftu town. Hence, the need to conduct this research in Bishoftu town is of vitally relevant, for the town is nicknamed as “the poultry village of Ethiopia”.

1.2 Statement of the Problem

For decades, the pricing of Ethiopian agricultural sector in general and the poultry sub sector in particular is predominantly governed by the market supply and demand situations and the value chain factors had insignificant role (Ashok Gulati et al, 2022). Agricultural value chains are highly fragmented and prone to a high level of intermediary involvement, which has a negative impact on farmers' ability to realize profits, causes significant losses in product quantity and quality, leaves little room for value addition, and increases price volatility.

Due to a lack of foreign currency for the importation of parent stock (which are the breeders used to produce the layers or broilers used in the production house, typically the parent stock consists of male line and female line), some poultry farms operate their hatcheries below capacity (safacts.co.za/where-to-buy-broiler-parent-stock-in-south-africa).

Based on a base year of 2010–11 and an average price of 2016, price trends for feed components indicate an average increase of 52 percent over five years and an average increase of 11 percent per year. The main obstacles to the sustainable and reasonably priced distribution of compound feeds are seasonality, scarcity, and extremely high prices of feed ingredients. Compound feeds have not been in high demand during the past five years due to price increases for feed ingredients and compound feeds of 52 and 82 percent, respectively, on average. Due to the current circumstances, several commercial farms have even been forced to close because of the poor return on their investments (Seyoum Bediye et al, 2018).

The predominantly traditional nature of Ethiopian poultry production and processing is partly responsible for price determination of the sector. (Abera Geleta, 2022) Ethiopians consume one

of the lowest amounts of poultry and poultry products in the world, with 57 eggs and 2.85 kilograms (though other sources state 2.3 kg) of chicken meat consumed annually (Demmeke Wendimagegn and Getnet Hailu, 2020). In general, only a small number of farms process poultry. Small and medium-sized poultry farms in particular suffer market losses due to a lack of slaughtering and cold storage facility services, particularly during periods of oversupply. If there are centralized, specialized slaughtering, storage, and marketing services, supply might be well regulated.

The lack of sustainable markets is being filled by dealers and brokers, but many small- and medium-sized farmers say that they are pressuring them to lower their prices and spreading false information about the availability and lower demand for poultry products. (Demmeke Wendimagegn and Getnet Hailu, 2020). The frequently fabricated lies are diverse in nature having direct and fatal consequences to the poultry pricing, such as the probable sharp price decline, false disease outbreak alarming, over production and excessive product supply, false rumors about the probable product importation and dumping. The key actors in the dissemination of fabricated information are brokers and merchants.

In another study, Aklilu et al found out that because of a variety of intermediaries, at least 50% of the marketed birds and eggs go from the producers to the consumers in an indirect manner. Low market access is characterized by long market chains, which increase farmers' transaction costs by involving more middlemen. (Aklilu Hailemichael et al, 2016). From this finding, we can infer that the length of the marketing channel is diverting a huge margin of profit from the farmers to the actors in the marketing channel.

The cost of feed and day-old chicks (DOCs) has soared by at least 100% in just the last few years. The main causes of the increase in feed prices are the rising cost of maize, which makes up the majority of feed compositions, and the scarcity of foreign currency and rising cost of imports of feed premixes (according to Regulation (EC) No 1831/2003 of The European Feed Manufacturer’s Federation (FEFAC), Premix, which is not meant for direct feeding to animals, is defined as "combinations of feed additives or mixtures of one or more feed additives with feed items or water employed as carriers". The increase in the price of maize is mainly attributed to the political instability in the areas of main maize producing parts of the country, mainly Western Oromia. On top, the unbalanced supply-demand maize market also played its adverse effect. The

DOC price increment is also traced in an increase in foreign exchange rate which is needed for the importation of parent stock ((Elsever Saunders, 2012) Livestock used for breeding) that are being solely imported from abroad.

On the other hand, the issue of the dearth of companies that process chicken has not yet been resolved. Modern chicken processing and storage facilities are hard to come by for farmers. This in turn forced farmers to undertake poultry slaughtering in their backyard, selling their poor quality products without adding any value and hence, they have no price makers' role. Furthermore, they will be hurried to sell their products at hand in fear of perishability due to lack of a good freezing and storage facilities. This made them lose a reasonable margin of profit if they would have waited for price peak periods.

The Ethiopian poultry market is not yet formally structured. The main actors in price setting are brokers. This inappropriate line of market channel made it difficult for the farmers and traders and/or final consumers to directly interacting and setting mutually beneficial prices

In addition, the poultry market in Ethiopia is well-known for its seasonality. For instance, there are peak price periods such as holiday seasons (New Year, Mesqel, Ethiopian Christmas, Easter and other religious holidays) and the dry (Bega) seasons of October-January and (Belg) seasons of February-May seasons. On the other hand, there are price recession periods such as Christian and Muslim fasting seasons and the rainy (Kiremt) seasons of June-September.

In conclusion, factors such as fluctuating feed prices, unorganized markets, seasonality, a lack of facilities for processing and storing chicken, and a lack of hatcheries can all affect the amount of poultry produced and its price in Ethiopia. (Abera Geleta, 2022). Almost all of these value chains' impacts on pricing decision have not been properly investigated before. Hence, this research tries to correlate the aforementioned value chain determinants on the poultry pricing in Ethiopia's Bishoftu or Debre Zeit town.

1.3 Basic Research Questions

The following study questions are identified based on the previously mentioned research problems, and this research attempted to respond to them accordingly.

- Does volatility of feed price impacts the poultry pricing?

- Does market informality affect poultry pricing?
- Does market seasonality affect poultry pricing?
- Does the lack/availability of poultry processing and storage facilities impact pricing of poultry farmers?
- Does the lack of hatching factories affect pricing in the poultry sector?
- Does the meager Day Old Chicks (DOC) supply affect poultry pricing?

1.4 Research Objectives

1.4.1 General Research Objectives

The general objective of research was to assess the impact of poultry production value chain on the pricing of poultry sector in the town of Bishoftu.

1.4.2 Specific Research Objectives

To address the above general objective, the following specific objectives were pin-pointed.

- To examine the impact of feed price fluctuation on poultry pricing
- To examine the effect of market informality on the poultry pricing
- To assess the impact of market seasonality on poultry pricing
- To analyze the effect of lack of poultry processing and storage facilities on the poultry pricing
- To assess the effect of lack of hatching firms and
- To examine the effect of scarcity of DOC supply on poultry pricing

1.5 Research Hypothesis

H1: The ever increasing feed price influences poultry pricing

H2: The arbitrary price fixing of actors in the informal market impacts poultry pricing

H3: The seasonality of the market impacts poultry pricing

H4: The lack of poultry processing and storage facilities impact the poultry pricing

H5: The absence of hatchery firms will have an on poultry price setting.

H6: Shortage of DOC supplies will have an effect on poultry price setting

1.6 Definition of Terms

Value Chain: - is a collection of internal divisions that work together to design, produce, promote, deliver, and support a company's products. A tool for finding ways to increase consumer value is also termed as value chain (Philip T. Kotler et al, 1999).

Poultry: - (Roger A. Kerin et al, 1987) Domesticated birds kept for eggs or meat. (Elsever Saunders, 2012). Poultry are chicken farmed, domestic birds including fowls, turkeys, ducks, and geese.

Pricing: - Price, one of the 4Ps of marketing, refers to how much is charged for a product or service. A pricing strategy is the process and methodology used to determine prices for products and services (https://coursera.org/share/9a7f815acef9818647812cb3226f5f73. **(**Roger A. Kerin et al, 1987) defined pricing as to find out the monetary value of goods and services.

Feed: - Poultry feed is food for farm poultry, including chickens, ducks, geese and other domestic birds (https://r.search.yahoo.com). Feed is defined as food for livestock, a mixture or preparation for feeding livestock **(**Roger A. Kerin et al, 1987).

Day-Old Chicks (DOCs): - (Elsever Saunders, 2012) the normal hatchery output for producers of broilers and eggs in the poultry industry. (www.lawinsider.com/dictionary/day-old-chicks) chickens that are less than 72 hours old and have not yet been fed are called day-old-chicks (DOCs).

Hatchery –er.ies:- (Merriam Webster, 1987) a place for hatching eggs (as of poultry or fish). (Elsever Saunders, 2012) A business entity that specializes in hatching eggs to supply day-old chicks to the poultry industry is termed as hatchery.

Price Fixing: - (Roger A. Kerin et al, 2002) A conspiracy among few firms or actors to set price for a product. (Merriam Webster, 1987) Price fixing is the process of setting prices artificially (as by producers or government or other market actors) contrary to free market operation.

Breed: - (Merriam Webster, 1987) a collection of animals or plants that are clearly connected to one another and differ from the wild type under the influence of man, likely descended from common ancestors. (Elsever Saunders, 2012) 1. Ancestry. 2. The act of physically mating. 3. Capability of replication use. 4. regulated animal or plant reproduction.

Parent Stock: - The Parent Stocks are the breeders used to produce the layers or broilers used it in the production house. Usually, the parent stock consists of male line and female line. It is also defined as the livestock used for breeding (Elsever Saunders, 2012).

Broiler: - (Merriam Webster, 1987) a bird fit for broiling; *especially:* a young chicken of up to 2½ pounds dressed weight. (Elsever Saunders, 2012) a young (about 6 weeks old) male or female chicken weighing 4–5 lb.[when] processed.

Layer: - (Merriam Webster, 1987) One that lays (as a workman who lays brick or a hen that lays eggs). (Elsever Saunders, 2012) a commercial fowl which is laying eggs, i.e. a female of more than about 5 months of age, up to the stage of being a 'spent hen' suitable only for slaughter.

1.7 Significance of the Study

1.7.1 Practical Significance

The Ethiopian poultry sector is one of the most underrated, yet promising and profitable agricultural sector with huge and underutilized potential that takes a fair share of the country's economy by mobilizing huge financial resource and by creating a large employment opportunity. Albeit these facts, however, the farmers are getting a far lesser share of profit, often making poultry profitability easier said than realizing it. These serious problems left many entrants out of the business bankrupt and empty-handed. The researcher believes that this price setting fails to consider the value chain anecdotes.

In the country like Ethiopia, where the average poultry meat and egg consumption accounts meager proportion than the global average poultry consumption, it is highly important to find out the root cause of this problem and forward plausible solution. More often, researches focus on non-price aspects as to why the poultry industry is not well developed. Having an authentic and an answer to the problems on the ground is what make a research having a practical relevance. Hence this research aspired to come up with practical and useful solutions to the problem in an effort to enable research and knowledge based price setting.

1.7.2 Theoretical Significance

Based on personal experience and practical observation, the researcher believes that much research has been conducted in the areas of poultry disease, medicine, vaccination and other related aspects. Unfortunately, there remains a huge gap in the areas that could benefit the farmers in terms of a fair share of profit from the sector. Therefore, this research tried to contribute in the theoretical/conceptual realm of poultry pricing in considering its value chain aspects in the production process.

An entrepreneur may realize a short-term profit from engaging in a particular business without the support of scientific knowledge. But a long way and enduring business needs a scientific back-up in any decision making aspects. Any business endeavor needs to be backed-up by knowledge based management in every aspect, including marketing and sales so as to realize sustainability and consistency. The poultry business, in particular, should be supported by well-researched scientific findings. The majority of Ethiopian poultry farmers had failed and failing in this respect. Hence, the need for conducting and archiving researches that would help pricing decision is an urgent and pressing issue in the current Ethiopian poultry pricing. To this end, the value chain aspects are highly needed to be taken in to account, for the cost of the value chain variables of the poultry industry are shooting through the roof both globally and locally. This way, a win-win price can be achieved both for the farmer and for traders.

1.8 Scope of the Study

Bishoftu (Debre Zeit), the location of this investigation, is 47 KMs south-east of Addis Abeba, the nation's capital. For the sake of data and information availability, a number of governmental and non-governmental organizations who actively engages in the livestock sector in general and in the poultry sector in particular that are being head quartered in the town and availability of the majority of poultry farms in the town, the research was required to be limited to Bishoftu (Debre Zeit) town.

1.9 Organization of the Study

There are five (5) chapters in this study project. The background of the study, the problem statement, the research questions, the research objectives, the significance of the investigation, the scope of the study, its limitations, and its organization were all included in chapter one. Review of pertinent literatures, conceptual/theoretical relevance or significance of the study, empirical investigations, and formulation of research hypotheses were all topics covered in chapter two. The third chapter covered the research's methodology. The observations, analysis, and interpretation of the data were provided in the fourth chapter. The fifth and last chapter included a summary of the key findings, conclusions, recommendations, and areas for further study.

1.10 Limitation of the Study

The researcher encountered the following obstacles while doing this study. To begin with, the researcher was given a short deadline to complete the investigation within. Second, the responders lack motivation and cooperation to respond the questions properly. The lack of pertinent materials for review was the greatest challenge, for the topic is somewhat new to the field of marketing research.

CHAPTER TWO

2. REVIEW OF RELAED LITERATURE

2.1 Theoretical Review

2.1.1 Concepts of Value Chain

2.1.1.1 Value Chain Defined

Michael E. Porter is one of the early marketing experts to define the value chain. He states that the definition of the value chain is that "every firm is a collection of activities that are performed to design, produce, market or deliver, and support its product." A value chain can be used to illustrate each of these actions. The value chain of a company and the manner in which it carries out specific tasks are reflections of its background, strategy, method of putting that plan into practice, and underlying economics of those tasks (Michael E Porter, 1998).”

Michael E. Porter added that the aforementioned description might not apply to all businesses and might change based on the types of customers and geographical areas. "A company's value chain within an industry may alter slightly for various products in its line, as well as for various customers, regions, or distribution routes. However, because of their tight ties, the value chains for these parts of a company can only be understood in the context of the chain of business units (Michael E Porter, 1998).”

The entire life cycle of a product or process, including the processes for obtaining raw materials, producing the product, consuming it, and disposing of it or recycling it, is referred to as a value chain. (World Business Council for Sustainable Development /WBCSD/ (2011) as cited by University of Cambridge).

In an environmental perspective, Greenhouse Gas (GHG) Protocol (2011), as cited by University of Cambridge, it is described as "the term 'value chain' refers to all upstream and downstream activities associated with the operations of the reporting company, including the use of sold products by consumers and the end-of-life treatment of sold products after consumer use."

In a more sector specific definition, David Neven (2014) "The full range of farms and firms and their successive coordinated value-adding activities that produce particular raw agricultural materials and transform them into particular food products that are sold to final consumers and

disposed of after use, in a manner that is profitable throughout, has broad benefits for society, and does not permanently deplete natural resources," is the agricultural industry's definition of the value chain, according to an FAO journal.

2.1.1.2 Characteristics of Value Chain

Value chains can be described in terms of its drivers, such as buyers or producers. According to Elvina Zamora (2016), Producer-driven chains are typical of capital-intensive and technology-oriented industries dominated by large transnational corporations that play a key role in managing the production networks. Buyer-driven chains are typical of labor-intensive, consumer goods industries where large retailers, merchandisers, and trading companies play a central role in establishing production networks typically in developing (exporting) countries.

Michael Porter (1998) outlined the following two crucial components of contemporary value chain analysis:

- The many tasks that were carried out in specific chain links. Here, he distinguished between various phases of the supply chain (inbound logistics, operations, outbound logistics, marketing and sales, and after-sales service), the processes that turn these inputs into outputs (production, logistics, quality, and continuous improvement processes), and the support services the company mobilizes to complete this task (strategic planning, human resource management, technology development, and procurement).
- His concept of the value chain (as outlined in the preceding paragraph) is basically expanded by the value system to include interlink relationships.

Importance of Value Chain Analysis

Since the introduction of the concept of value chain for the first time by Michael Porter, further researches had been conducted on it by various scholars concerning its nature, characteristics, importance and so on. For instance, Raphael Kaplinsky and Mike Morris (2000) had outlined the importance of value chain analysis in this era of globalization. They pin-pointed three sets of reasons about the importance of value chain analysis. These are:

- With the expanding division of labor and the globalization of component production, systemic competitiveness has gained significance.

- Production effectiveness is merely a prerequisite for effectively entering international markets.
- In order to enter international markets and achieve sustainable revenue development, or to take full advantage of globalization, it is necessary to comprehend the dynamics that affect the entire value chain.

2.1.2 Concepts of Pricing

2.1.2.1 Pricing Strategies

Tanya Sammut-Bonnici and Derek F. Channon (2015) Pricing can be defined as "the policy a firm adopts to determine what it will charge for its products and services." They provided a number of pricing strategy possibilities, including:- Markup pricing: - Markup pricing is a price strategy that is based on the demand schedule of the consumer, the business's cost function, and the pricing strategy of competitors. The most widely utilized tactic entails raising the price of the goods. Many businesses figure out how much it costs to produce a product and then add a certain margin.

Target return on investment pricing: is used as a safeguard to recoup the expenses of establishing complicated infrastructure in businesses that need a significant capital investment.

Pricing based on perceived value: Many businesses base their prices on what the customer perceives to be worth. The price is intended to reflect as much of the utility that the consumer attributes to the product as possible. The price of ancillary goods, the usability or utility of the product, and intangible elements like product quality, service, or brand qualities all contribute to how much value is perceived to be. When the perceived value of the product is significantly higher than its price, this pricing approach is used.

Pricing based on competition: In this type of pricing, prices are chosen in relation to those of rivals.

Penetration pricing: - The goal of penetration pricing, often referred to as promotional pricing, is to temporarily cut prices below the market price or even below the cost price. This is frequently employed to maximize new product launches or quick market penetration into established markets.

2.1.2.2 Objectives of Pricing

Regardless of the type of pricing strategy a firm follows, there are certain objectives to be achieved in pricing of its products or services. According to Andrew D. Zimbroff and Marilyn R. Schlake (2015), Depending on its state, health, and other factors, a firm will have different goals. These goals may have an indirect impact on price by influencing how a company sells its goods to clients. There is no equation to model how company objectives affect pricing because there is no direct relationship between them. To ensure that a corporation responds effectively, it is crucial to be aware of these scenarios. They made note of the following circumstances that could either directly or indirectly affect the goals the company seeks to achieve when setting the price for its goods or services:

Maximizing Profitability: For many businesses, determining the right price is all about maximizing profits. Pricing can be used to impact either the volume of units sold or costs in order to affect profitability.

Promoting Future Sales: On occasion, a business will offer a base product for less than its true worth, or even at a loss, knowing that it would generate further sales or income in the future.

The phrase "*switching cost*" refers to the ease or difficulty of switching to a competitor's good or service. For instance, after purchasing a printer, a person must next purchase printer cartridges that are compatible with that model, typically from the same manufacturer.

Beating out Competitors: It goes without saying that a corporation has a variety of rivals, thus it may employ a range of strategies to set itself apart from them. One strategy used by firms is to reduce their pricing to the same level as or less than that of a rival good.

Gaining Exposure/Entering a New Market: Sometimes, it's more crucial to boost sales and market share than it is to maximize profitability when entering a new market. Price reductions can be a powerful strategy for luring in new clients. However, despite some dangers including decreased profitability and customer resentment, this strategy is still used. It may also encourage competitors to follow suit, which could result in an expensive pricing war.

2.2 Empirical Review and Hypothesis Formulation

2.2.1 Effect of Feed Price Fluctuation on Poultry Pricing

When thinking about poultry feed, the most important raw material is maize, accounting at about 70% of input for the formulation of feed. Coupled with the need for human consumption, the price of maize is presumably to increase at an alarming rate with the growth of livestock feed production in general and poultry feed in particular (Ashok Gulati et al, 2022). The primary ingredient in chicken feed, maize, will be in greater demand as poultry output rises.

One of the major obstacles, according to the commercially focused producers surveyed for this study, is the escalating cost of concentrated feed available in Ethiopia. There are various causes for the rising price of feed. First, fierce supply competition for domestic human consumption has contributed to grain price rise. Government subsidies for oil seed exports to produce foreign currency also limit local oil processing, which in turn reduces the amount of oil cake that is available to feed processors. There are 15 pre-mix importers in Ethiopia but no local pre-mix production when it comes to pre-mix that contains vital amino acids and other nutrients for concentrated feed. Again, reliance on pre-mix imports drives ingredient costs higher due to the lack of foreign currency. Last but not least, a lot of interested parties claim that the VAT on animal feed raises the price of the finished good, thus reducing affordability. (USAID-Feed the Future, 2017). In another study, Paulos Desalegn (2018) concluded that “the main cost element (about 75%) is feed”.

The issue of feed price inflationary trade is concurrent in various countries of the world. The cost of maize, which has been said that it is the main input for feed production, constitutes the largest challenge for the production of poultry feed in particular. In a recent research conducted in Japan for instance, the leading challenge in the Japanese poultry industry is found to be feed price escalation, especially when the given country largely relies on the imported maize. (H Kato et al, 2022) “Feed costs account for the highest percentage of production costs for egg-laying hens, and are an important factor in production costs. In Japan, imported corn is the main feed source for poultry farms.” In another study conducted in Bangladish cemented this fact as follows (M. Kamruzzaman et al., “the components variable costs were feed, day-old chick, labor, veterinary,

utility, veterinary, etc. As expected, feed cost accounts for the highest amount (74.52%) of the total cost."

What makes commercial poultry feed quite different is that, the raw materials are all complimentary, non- substitute. Replacing any of them will have an adverse effect on the poultry productivity and product quality. For example, any effort to replace corn or maize with other cereal such as rice will decline production performance and will deteriorate the product quality ultimately, though the cost of feed production is relatively lesser. For instance, (H. Kato et al., 2022) found out in their research that "The retail price of eggs produced using domestic feed rice was the lowest. However, replacing corn with whole rice grain in diets for laying hens alters the production capacity of the eggs. Moreover, the yolk of eggs produced with feed rice turns white, and the albumen (i.e., the colorless inside part of an egg that is white when cooked) loses its elasticity". Hence, the cost of feed will stand out tall and will keep on being the greatest challenge for the poultry pricing.

H1: The ever increasing feed price has an influence on the poultry pricing

2.2.2 Effect of Market Informality on Poultry Pricing

There are dangers associated with raising poultry, particularly with regard to the support systems for marketing. Weak market organization and regulation, as well as a lack of suitable cold chain facilities, contribute to the unstable pricing of poultry goods. Smallholders in rural and underdeveloped areas are rarely given priority when it comes to procurement since marketing is controlled by commission agents and private traders. (Ashok Gulati et al, 2022). The above statement is taken from the experience of Indian poultry value chain stating similar impact of the lack of regular market infrastructure on the Indian poultry farmers. Unfortunately, the farmers are not price determinants so often. The price is determined by the mercy of agents and brokers, the so called market intermediaries.

In general, backyard and small-scale farms are more significant to the commercial sector than traders and collectors. More than 50% of marketed eggs and 70% of marketed chicken are handled by dealers for certain seasonal markets, especially around holidays (Gezahign Ayele and Karl M. Reich, 2010). This is often times a lose-win trading partnership for the farmers. The farm-gate price is usually lower than what the farmers are investing and the large chunk of marginal profit is earned by the traders and the brokers at the expense of the farmers.

In a study conducted in Adwa Woreda of central Tigray region, the result shows that there is no formal and mutually conductive relationship among value chain actors along the poultry marketing structure. Goitom G. et al., 2017 stated that "The actors in the chicken value chain in the research area have very shaky relationships with one another. Instead of thinking for the sake of everyone, the majority of actors just consider how to grow their fortune. The focus group discussion revealed that a lack of infrastructure, organization, and awareness were the primary causes of the players' weak relationships. The quantity, quality, and cost of eggs were moderately correlated across cafeterias and restaurants in the research area. The owners of cafeterias and restaurants claim that they use the telephone to communicate and reach agreements over price and required volume. But in the research domain, this relationship is being practiced informally. Relationships between the other poultry marketing actors were lacking, which showed that the research area's poultry value chain was weak and more conventional. They added that there were no ongoing business relationships amongst market participants in the research area." While most farmers did not account for the value addition they incurred, particularly for their labor and transportation expenses, marketing actors added a selling price for their value-adding operations including transportation and storage. The research further noted that the weak link along the value chain emanates mainly from the lack of strong information flow mainly due to the absence of formal market structure. "The research area's entire poultry value chain map has severe weaknesses and is more conventional. Because there isn't a significant forward and backward flow of information for mutual advantage, the relationship between producers, traders, and consumers is weak."

H2: The arbitrary price fixing of actors in the informal market has an impact on the poultry pricing

2.2.3 Effect of Market Seasonality on Poultry Pricing

According to Paulos Desalegn, 2018 who have conducted a research on Poultry Value Chain in west Amhara, market problems were identified as the main challenges among many others. He stated that "the main constraints identified in all segments of the value chain includes, *among others*, market seasonality and weak linkage, and exhibited poor coordination within the sector. Chicken is sold mainly during the holiday seasons". He further identified that, many farmers are not having a direct relationship between final consumers, i.e., there are informal market chain

actors who have hurt farmers in price terms. “Most of the farmers sell their egg or chicken collectors/traders. Egg sold on weekly markets to collectors usually through brokers’ intermediation.” This in turn created havoc and hustling on the farmers took price setting privilege away from farmers.

It is evident that the Ethiopian poultry market lucks suffice well-structured market. Paulos Desalegn (2018) stated that “As a very short chain with limited actors, the relationship is based on one time transaction that depends on demand and supply situation in the market. There is no organized entity or platform to address joint issues for better competitiveness.”

H3: The seasonality of the market has an impact on the poultry pricing

2.2.4 Effect of Lack of Poultry Processing and Storage on Poultry Pricing

There are just a few privately owned, massively commercial chicken farms, and they are all in Debre Zeit. The top 3 largest commercial poultry farms with up-to-date production and processing facilities are ELFORA, Alema, and Genesis. (www.ethiomarket.com). Every year, ELFORA sends approximately 34 million eggs and about 420,000 hens to the Addis Abeba market. The second-largest commercial chicken farm in the nation, Alema chicken Farms, sends about 500,000 broilers to the Addis Ababa market annually. The farm has its own hatchery, slaughterhouses, cold storage, feed processing facilities, and broiler parent stock. The farm is the owner of the parent stock of broilers, the feed processing plants, the hatchery, the slaughterhouses, the cold storage, and the transportation facilities (Bush, 2006).

H4: The lack of poultry processing and storage facilities has an impact on the poultry pricing

2.2.5 Effect of Hatchery Problem on Poultry Pricing

Fertile eggs, DOC, pullets (3 months old), and occasionally table eggs are the major products of hatchery farms like those found in Addis Abeba and the Debre Zeit region. The minimal number of hatcheries in the industry limits the volume of each product's output. Due to the import requirement for some inputs, foreign exchange becomes a constraint. The few remaining hatchery farms support small-scale growers who depend on their output in addition to meeting their own requirements. With the help of foreign exchange authorizations given by the National Bank of Ethiopia, hatcheries obtain some of their DOC from Holland. Approximately one

million DOC are reportedly imported into the nation each year, of which 650,000 are used by industrial farms. Small-scale farms receive the remaining imported DOC once hatchery needs are satisfied (Gezahign Ayele and Karl M. Reich, 2010).

Although the extent to which DOC problem varies from country to country, it is bullet-pointed as DOC setback is one of the poultry sector challenge. M. Kamruzzaman, 2021 stated the case of Bangladesh as “The day-old chick represents around 5.76% of the entire cost of producing poultry and is the second most expensive component after feed. The cost of production was positively and significantly impacted by the normalized price of feed and the cost of day-old chicks. This finding illustrates how rising feed and day-old chick costs will raise production costs, which will have a negative influence on chicken pricing”.

H5: The absence of adequate hatchery firms has an impact on poultry price setting.

2.2.6 Effect of DOC Supply Status in Poultry Pricing

The Ethiopian poultry sector is one of the very challenging sectors with many bottlenecks though profitable and promising. Ethiopia does not produce its own breed of either grand parent or parent stocks. All of the modern and commercial poultry breeds are being imported from abroad. The need for foreign currency for the importation of parent stock DOCs from Europe makes it difficult due to the country’s foreign currency scarcity. The USAID-Feed the Future (2020) study states that “Day-old chicks (DOCs) are a crucial component of poultry production systems. In order to produce DOCs in Ethiopia, parent stock that can raise and hatch fertilized eggs must be imported.” The document further states the difficulty for raising the imported parent stocks up to the point of laying fertilized eggs for hatching as a tiresome and expensive due process as follows “There is an intermediate stage of poultry rearing to lower mortality risks for smaller scale egg producers prior to production because bringing DOCs to full maturity is capital-intensive with significant mortality risks. This entails rearing DOCs for about four weeks and selling young animals known as "pullets" that are more likely to survive and closer to egg-laying age.”

There are two main product channels, which include those for table eggs and chicken meat. Before being slaughtered, broilers are reared for about 45 days, whereas layers are raised for table eggs over a 12- to 18-month production cycle. Given that genetics affect poultry resilience,

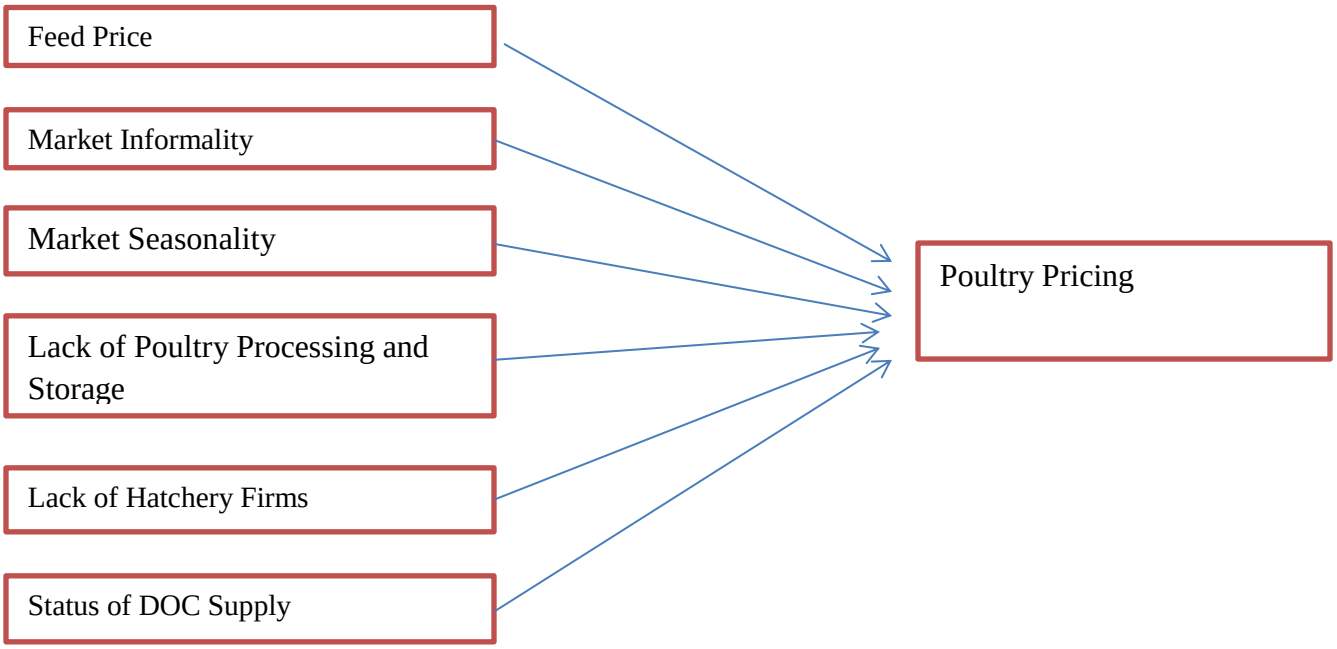
growth rate, and laying ability, breed selection is important for each (or both). High-quality feed, immunizations, and medications must be used at all phases of production in both channels in order to maximize productivity and minimize morbidity or mortality (USAID-Feed the Future, 2020).

H6: Shortage of DOC supplies has an impact on poultry price setting.

2.3 Conceptual Framework

As it is clearly stated above, the theoretical framework is established based on two concepts, i.e., the concepts of value chain and the concepts of pricing. Hence, the upcoming conceptual model is being developed on the basis of well-established theories from previous studies. In this research proposal, the definition and characteristics of value chain was taken from Michael E. Portal (1998) and Elvina Zamora (2016), while the importance of value chain is well-explained by Kaplinsky, R. and Morris, M. (2000). On the other hand, Bonnici, T.S. and Channon, D.F. (2015) defined pricing and suggested pricing strategies while Zimbroff, A.D., and Schlake, M.R. (2015) explained pricing strategies.

After the concepts of value chain and pricing being operationalized, they are found to be testable. Figure -1 illustrate the relationship between value chain and pricing. As a result, this model is used as a framework while exploring the effect of poultry value chains on poultry pricing. Therefore, the six poultry value chains, namely feed price, market informality, market seasonality, poultry processing and storage, hatchery problem and DOC supply status are considered as independent variables while poultry pricing is being taken as a dependent variable.



Source: - Based on the literature review

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 Research Type/Design

Since the research aspired to examine the relationship between poultry production value chain factors and poultry pricing, it adopted explanatory research design. Quantitative research approach was used. The data was obtained from the questionnaires.

3.2 Sampling Strategy

The target population included the poultry farmers in Bishoftu town. The Cluster Sampling technique was applied. The two kebeles in Bishoftu town, i.e., Jittu and Kudada kebeles was targeted. The population of Jittu Kebele was 69 and the population of Kudada Kebele was 55, so I had the total of 124 targeted populations. The focus was both medium scale and large scale commercial poultry farmers, excluding backyard scavenger and open space small scale poultry owners of the local breed. The reason why only medium and large scale commercial poultry farms included was that they represented the target population area, I.e., Bishoftu town, is an urban area having commercial farming practices for the large part.

3.3 Methods of Data Collection

Different types of data gathering tools were used in the study. The most important one was structured questionnaires. In the questionnaires, the respondents were asked to rate each statement using Likert Scales of 1 to 5 (1 strongly disagree, 5 strongly agree).

3.4 Questionnaire

Structured questionnaires that were taken from the previously used study (Yaboneh Bonge, 2020; and Samuel Deribew, 2019) and were modified for this particular study were used. The questionnaires had close ended questions.

3.5 Sample Size

One hundred twenty four (124) participants were selected with cluster sampling techniques so as to avoid bias.

$n = \frac{N}{1+N(e)^2} = \frac{124}{1+124(0.05)^2} = 124$

Where n was the sample size,

N was the population size, and

e was the level of precision/margin of error

Source: Solvin's formula for sample size determination

Sample size of Jittu Kebele $n_1 = \frac{N*n}{N} = \frac{69*124}{124} = 69$

Sample size of Kudada Kebele $n_2 = \frac{N*n}{N} = \frac{55*124}{124} = 55$

3.6 Procedures of Data Collection

First, the data collection instrument was prepared in English and after getting approval, the questionnaire was translated in to Amharic for ease of understanding and to obtain the ultimate data possible, or otherwise, the language problem could have been a major barrier to attain the desired result.

3.7 Data Analysis

The numerical data was obtained from these structured questionnaires and was further quantified, interpreted and analyzed using Statistical Package for Social Science (SPSS) software. Descriptive and inferential analysis were mainly used to analyze the collected data

3.8 Ethical Considerations

Permission was gained from the participants in the farm since the researcher had used questionnaires to collect data from the farmers and other stakeholders, including veterinary doctors and employed farm managers. The respondents were given instructions not to write their names on the questionnaire and assurances that the answers would only be used for academic purposes and kept private in order to safeguard the confidentiality of the information they supplied. In order to encourage respondents to participate in the study and provide pertinent data about the industry under study, a brief explanation of the main objectives or purpose of the study and the potential benefit of the research outcome to respondents and to the industry at large were given in the introductory section of the questionnaire. Finally, questionnaires were filled out by

respondents who were willing to take part in the study. All other authors' works that were cited and completely cited in this study's various sections.

CHAPTER FOUR

4. RESULTS AND DISCUSSION

4.1. Introduction

Major conclusions and analyses of the sample population based on information received from participants or respondents are presented in this chapter. Using SPSS-2019, version 26, the respondents' replies were analyzed and condensed. The data were interpreted using descriptive analytic methods (percentage, mean, and standard deviation) and inferential statistics tools (correlation and multiple regressions).

4.2. The Questionnaire Response Rate

A total of 124 questionnaires, having 34 items each, were handled to respondents with a close follow up and guidance. All the 124 participants were able to fill and return all the questions. This accounts for about a 100% response rate.

Several questions that aimed to measure the relationship between poultry value chain characteristics and poultry products' pricing were prepared. The questionnaire had two parts. The first part dealt with the respondents' personal profile. The second part tried to obtain the general information related to the six value chain factors that are presumed to affect the poultry pricing.

The coming sections will present the output of descriptive analysis of frequencies that are generated using SPSS software version 26 for which tables, and charts will be used. The first section discusses the demographic characteristics of respondents. The second section will elaborate the effect of feed price fluctuation on the poultry pricing. The third part will discuss the impact of poultry marketing situation on pricing. The fourth part deals with the impact of seasonal change on the poultry price setting. The fifth part will discuss the problem of lack of hatchery on the poultry pricing. The sixth and final part will be dealing with the effect of lack of poultry products value adding processing firms on the poultry products pricing.

4.3. Respondents' Personal Profile

In this section, the demographic statuses of the participants of the questionnaire are presented. The section will be further broken down in to eight subsections. Apart from being an indication

of personal profile of participants, some of the subsections directly impact the poultry products pricing as we will discuss in detail as follows.

4.3.1. Gender of Respondent

From the total of 124 participants, 114 of them were male and 10 of them were female which is 91.9% of male and 8.1% of female respectively. This indicates that the business is a male dominating business only employing less than 10% of the female population.

Table 4.1: Gender of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	114	91.9	91.9	91.9
	Female	10	8.1	8.1	100.0
	Total	124	100.0	100.0	

Source: - SPSS Software

4.3.2. Age of Respondents

This section tried to figure out the age group that the poultry industry employed. The question presented five age groups, i.e., 18-25, 26-30, 31-40, 41-50 and > 50 years of age. From the result, the two age groups, namely 26-30 and 31-40 are largely participating in the poultry industry which is 25% and 57.3% respectively. This indicated that the sector employed more of the young segment of the work force as a means of livelihood.

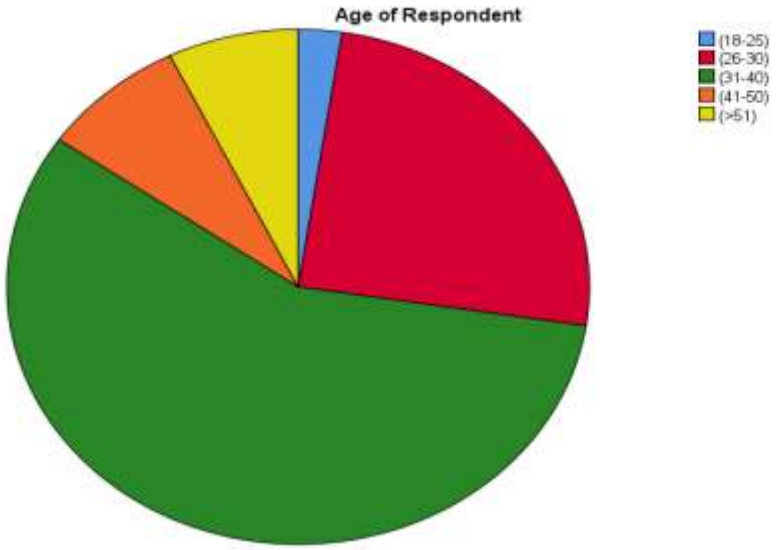
Table 4.2: Age of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(18-25)	3	2.4	2.4	2.4
	(26-30)	31	25.0	25.0	27.4
	(31-40)	71	57.3	57.3	84.7
	(41-50)	10	8.1	8.1	92.7
	(>51)	9	7.3	7.3	100.0

	Total	124	100.0	100.0	

Source: - SPSS Software

Figure 4.1: Age of Respondents

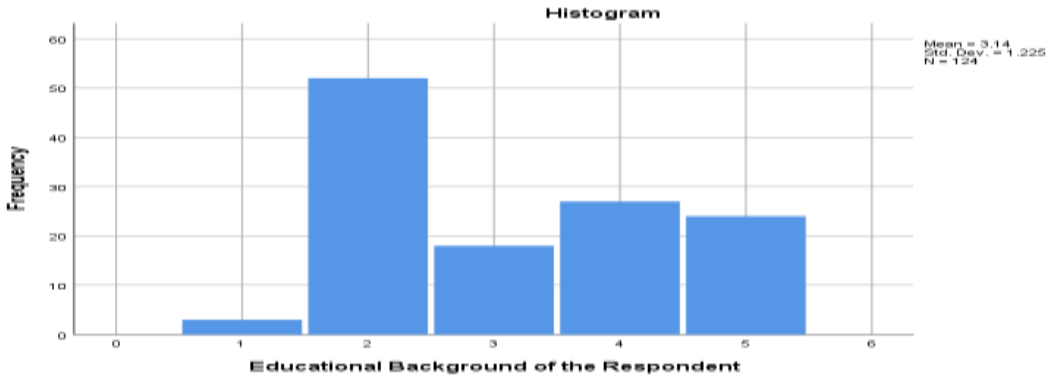


Source: - SPSS Software

4.3.3. Educational Background of the Respondents

The educational background of the respondents varies with the least figure as 3 (2.4%) having no formal education and the highest figure as 52 (41.9%) reaching secondary education. The sector also becomes an alternative means of livelihood for the persons holding diploma, degree and master's degree which are 18 (14.5%), 27 (21.8%) and 24(19.4%) respectively. This implies that the sector employs more of the educated people with diploma, degree and master's degree holders accounting for about 55.7% of the total participants.

Figure 4.2: Educational background of respondents



Source: SPSS

Table 4.3: Educational background of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No Formal Education	3	2.4	2.4	2.4
	Secondary Education	52	41.9	41.9	44.4
	Diploma	18	14.5	14.5	58.9
	Degree	27	21.8	21.8	80.6
	Masters	24	19.4	19.4	100.0
	Total	124	100.0	100.0	

Source: SPSS

4.3.4. Breed Type on Which Participants Engages

There are four major types of poultry breeds that are widely known in the country. These are broiler, layer, commercial layer and saso breeds with each having their own unique characteristics. Broilers are reared for meat purpose especially used in hotels and restaurants for preparing modern dishes while the saso breed is also used for meat purpose, it is used to prepare traditional Ethiopian dish known as Doro Wet more particularly in the holiday seasons. The other two are related with egg production. Those who are engaged in layer are purely engaged in egg production, the commercial layer growers are those who rear the day old chicks (DOCs) that

are egg laying for resale at age of two to three months of age for egg producers. Based on the result obtained, the large part of participants is engaged in the combination of the four breed types accounting for about 59 people or 47.8 % of the total respondents.

Table 4.4: Breed type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Broiler	16	12.9	12.9	12.9
	Layer	17	13.7	13.7	26.6
	Commercial Layer Growing	11	8.9	8.9	35.5
	Saso	21	16.9	16.9	52.4
	Combination of all	59	47.8	47.8	100.0
	Total	124	100.0	100.0	

Source: SPSS

4.3.5 Round of DOC Received Per Year

This part is related to the fifth section which deals with the status of hatchery and DOC supply that we will discuss in the future. Although it may seem insignificant or has no impact on the poultry products pricing at face value, it will have a huge indirect impact on it. This is because, the lesser round of DOC the farmer gets, the higher the price that they will be fixing up on their products. In other words, they would have get a comparative profit advantage would have they got adequate rounds of DOC per year. But, if they get few rounds of DOCs per year, they will consider the idle times they will spend without having DOCs in their farm while setting the prices for their products aiming to secure a good profit from the few rounds of DOCs they get. The obtained result proofs this logical assumption. Based on the result, the large part of respondents are getting only from one up to five round of DOC supply which is 111 respondents or 89.5% while the number of respondents who get more than five rounds of DOC are only 13 people or 10.5% only. This problem of DOC supply shortage will be discussed in detail in the next sections of this chapter.

Table 4.5: Round of DOC received

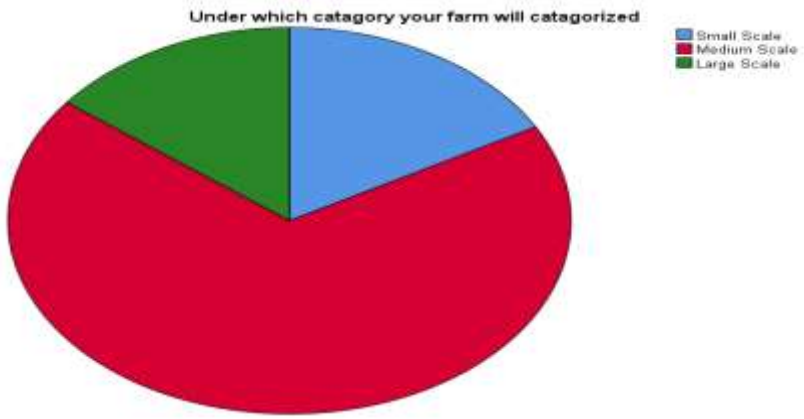
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	12.9	12.9	12.9
	2	27	21.8	21.8	34.7
	3	20	16.1	16.1	50.8
	4	24	19.4	19.4	70.2
	5	24	19.4	19.4	89.5
	More	13	10.5	10.5	100.0
	Total	124	100.0	100.0	

Source: - SPSS

4.3.6. Scale of the Farms

The farms are graded as small scale, medium scale and large scale. Based on the result, 21 of them are small scale, 85 of them are medium scale and 18 of them are large scale or 16.9%, 68.5% and 14.5% respectively. Therefore, the sector is predominantly dominated by small and medium scale farmers. Here again, the obtained result entails that the fact that the meager portion of farmers being a large scale farmers tells us that the farmers will presumably ought for profit maximization from the little that they have having no comparative profit advantage in producing in large quantity.

Figure 4.3: Farm scale category chart



Source: SPSS

4.3.7. Respondents' Role in the Farm

Respondents were asked to choose from among the four roles in their respective farms, namely owner only, both owner and general manager (GM), manager only and veterinary doctor only. As per the obtained result, the vast majority of participants take the role of both ownership and general management which is 86 respondents or 69.4%. This result is related to the above farm size graded result in which 106 (86.4%) of them are falling in either of the small or medium scales. Hence, it is logically expected result that we should not expect for small and medium scale farm owners to hire a manager for their farm for which they can manage their farms' daily affairs to avoid extra cost of management for trivial daily routine follow-ups since the sector by itself is a job opportunity for them. The owner only category implies that they are either a large scale farm owners or they are engaged in the business as an extra means of income generation apart from their formal job. The rest two categories, i.e., manager or veterinary doctors are employees of the farms which took 11 people only or 8.8% of the total participants in the questionnaire.

Table 4.6: Respondents' role in the business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Owner	27	21.8	21.8	21.8
	Owner & GM	86	69.4	69.4	91.1
	Manager	5	4.0	4.0	95.2
	Veterinary Doctor	6	4.8	4.8	100.0
	Total	124	100.0	100.0	

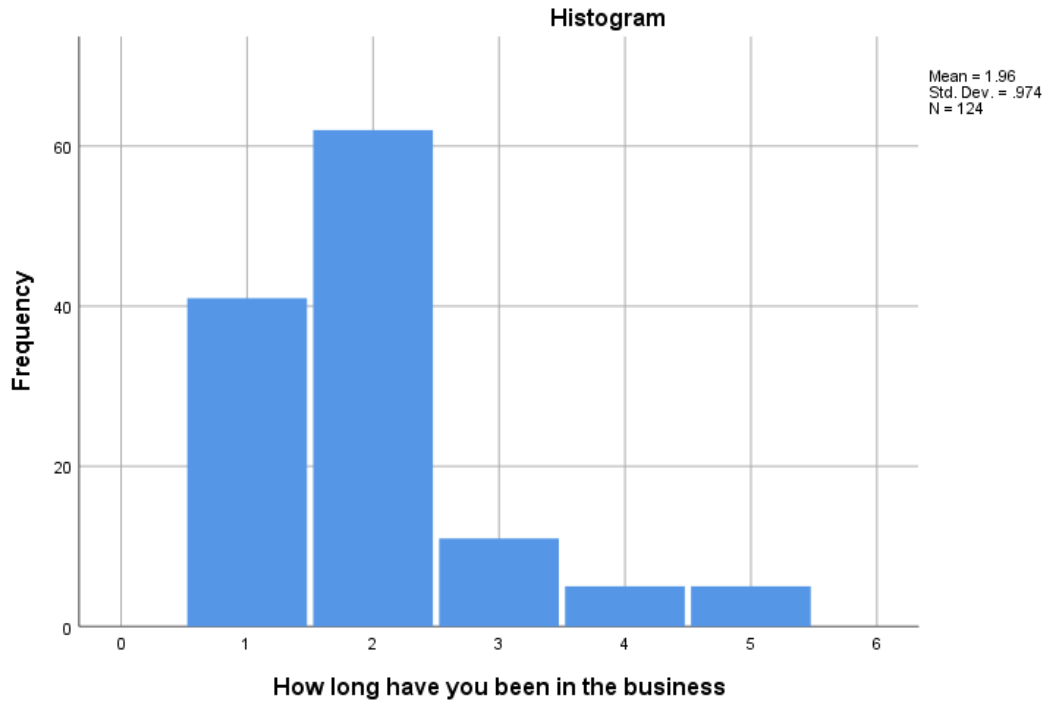
Source: - SPSS

4.3.8. How Long Respondents' Stayed in the Business

This sub-section of the questionnaire tried to address the number of years the participants stayed in the business. Based on the obtained output, the half of respondents have stayed in the business for 6-10 years as a means of livelihood which is 62 respondents (50%) followed by new entrants which stayed 1-5 years which are 41 participants or 33.1%. Those who stayed for 16-20 or more

than 20 years take 5 persons or 4% each. These figures told us that the poultry sector's, potential for economic development and means of livelihood for the Ethiopian people is not much explored and the work force that it can employ needs a serious attention to be given. In short, the sector, compared to other countries, is in its infant stage of growth in Ethiopia. Guided with proper government policy, appropriate financial support from the financial institutions, establishment of formal marketing platform, supply of necessary materials such as hatchery, processing, and storage and so on, the Ethiopian poultry sector is a sector with much growth potential yet to be realized.

Figure 4.5: Years of Experience in the Business



Source: SPSS

Table 4.7: Experience in the Business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	(1-5)	41	33.1	33.1	33.1
	(6-10)	62	50.0	50.0	83.1

	(11-15)	11	8.9	8.9	91.9
	(16-20)	5	4.0	4.0	96.0
	(>20)	5	4.0	4.0	100.0
	Total	124	100.0	100.0	

Source: SPSS

4.4. Reliability

How consistently a method assesses something is described by its reliability. The same approach should yield the same results when applied to the same sample under the same circumstances. If not, your measurement technique might not be accurate, or bias might have affected your analysis. (Fionna Middleton, 2023). The author further states that internal consistency is one of the four types of reliability tests which measures the consistency of the individual items of a test. To measure the internal consistency, Crombach's alpha is being used, which is a reliability coefficient used to measure the scale's internal consistency

Analysts frequently use 0.7 as a benchmark value for Crombach's alpha. At this level and higher, the items are sufficiently consistent to indicate the measure is reliable (Jim Frost, 2023). Therefore, for the purpose of conducting this research, an alpha coefficient of 0.7 and higher is taken as sufficient to assess reliability test.

Table 4.8: Reliability Test

Variables	N	Crombach's Alpha
Feed Price Fluctuation	5	.853
Market Informality	5	.783
Market Seasonality	6	.754
Lack of Hatchery Firms	4	.748
DOC Supply Shortage	4	.768
Lack of Poultry Processing and Storage Facility	4	.875

Effect of poultry products value chain on poultry products pricing	6	.829
Total	34	.907

Source: SPSS

Having a Crombach's alpha of 0.7 and above as shown on the table above, all the results are found to be within acceptable range. Hence, all the six attributes of value chain characteristics (Feed price fluctuation, market informality, market seasonality, lack of hatchery firms, DOC supply shortage, and Lack of poultry processing and storage facility) are above 0.7.

4.5. Descriptive Analysis

Table 4.9: Descriptive Analysis

Item	Mean	Std. Deviation
Feed Price Fluctuation		
1. Feed cost takes the huge percentage of poultry production cost	**3.76**	**0.38**
2.Feed pricing shows only increasing trend		
3.I highly consider my feed cost while setting price for my products		
5. I believe that an increase in foreign exchange rate adversely affects feed pricing		
Informality of the market		
1.There are no formal poultry marketing platform in Ethiopia	**3.94**	**0.42**
2.I never set the price for my products		
3.Brokers usually set the price of poultry products		
4.There is no government organ which regulates poultry market in Ethiopia		
5. Brokers usually disseminate wrong information like false disease alarm, price decline, product dumping, etc		
Seasonality of the market		
1.There is absolutely seasonal price variation of poultry products in		

Ethiopia		
2.The dry Belg(Oct.-Jan.) and Bega(Feb.-May) seasons of Ethiopia yields high price		
3.The holiday seasons (such as NY, Mesqel, Christmas, Easter . . .) show high poultry price increment in Ethiopia		
4.The fasting seasons show high price decline on the poultry products	**4.06**	**0.41**
5.The rainy Kiremt (June-Sep.) season of Ethiopia causes high price decline in Ethiopia		
6. I usually sell my products in bulk before rainy seasons in fear of disease outbreak		
Lack of hatchery firms		
1.There are no adequate hatchery firms in the country		
2.The hatchery firms are not performing in their good capacity		
3.I usually have direct contact with hatchery firms	**4.21**	**0.35**
4.I do not have my own hatchery facility		
DOC supply shortage		
1.I do not get DOC supply at a fair interval within a year		
2.I usually get DOCs from brokers at a higher cost than the original factory gate price	**4.02**	**0.42**
3.DOC suppliers usually violate the business ethics while supplying their products to the farmers		
4.There are long periods in a year where my farms get closed due to DOC supply shortage		
Lack of poultry processing and storage firms		
1.I believe that there are no enough poultry processing and storage firms in the country		
2.Due to lack of modern processing facilities, my products luck quality and are not value added which negatively impacted me in price setting	**3.95**	**0.38**

3.Due to lack of cold storage facility, I am obliged to sell my products at market given price		
4.I usually slaughter my chicks in my own backyard using traditional method by employing only human labor		
Effect of poultry production value chain on poultry products pricing		
1. I believe that feed price fluctuation has a huge impact on poultry pricing	**4.00**	**0.43**
2.I am convinced that the absence of formal poultry market is affecting poultry pricing		
3. I believe that the seasonality of the market impacts poultry pricing		
4. I believe that the lack of hatchery facilities impacts poultry pricing		
5. I am convinced that shortage of DOC supply affects poultry pricing		
6. I believe that the lack of poultry products processing and storage facilities impacts poultry pricing		

Source: - SPSS

To analyze the above tabular descriptive data, the researcher applied a measurement scale intervals as formulated by Poonlar Btawee, 1987 as cited by Samule Deribew (2019). According to him, mean scores ranging from 4.51-5.00 are considered as "Strongly Agree", 3.51-4.50 as "Mostly Agree", 2.71-3.50 as "Moderately Agree", 1.51-2.70 as "Fairly Agree", and 1.00-1.50 as "Disagree".

The mean score of feed price fluctuation is 3.76 which are under the range of "mostly agree". The result tells us the fact that feed price volatility and/or constant increment in the price of feed highly impacts the pricing of poultry products.

The second variable, I.e. market informality, has scored 3.94, a result that is classified under the interval of "mostly agree" again. Hence, it is safe to argue that market informality is another predictor in the poultry price setting.

Market seasonality has scored 4.06 of mean. This variable also rests under the range of “mostly agree” category. Therefore, the seasonal variation of the poultry market impacts its pricing.

The forth variable in the list is lack of hatchery firms and it has scored the mean of 4.19 as per the obtained result. The variable scored the highest result which is classified under the interval of “strongly agree”. The result tells us that the ardent lack of hatchery firms in the poultry industry has a strong impact on the pricing of poultry products.

The day-old-chicks (DOC) supply shortage scored the mean of 4.01. The score is found under “mostly agree” range. Hence, we can say that most of the respondents are in agreement to the fact that DOC supply shortage really impacts the pricing of poultry products.

The lack of poultry processing and storage facilities has scored the mean result of 3.95. The score is found under the mean range of “mostly agree” interval. Therefore, it is concluded that the variable has mostly impacts the pricing of the poultry products.
The last variable which is the dependent variable, i.e. effect of poultry production value chain on the poultry products pricing, has scored the mean result of 4.00. The score is again categorized under the echelon of “mostly agree” interval. Hence, we can conclude that the overall value chain factors affect the poultry products price setting.

The overall result shows that the variable with the least mean score is “Feed Price Fluctuation” with the score result of 3.76, and the variable with the highest mean score is “Lack of Hatchery Firms” with the score result of 4.19. From these results, we can conclude that all the variables’ central tendency is considered as normal.

On top of that, all the variables have scored the low scales of standard deviation which indicates that the data are narrowly spread. In other words, this fact tells us that the respondents have much closer opinion with each other regarding each variable.

4.6 Correlation Analysis

The technique used to determine the link between a research's independent and dependent variables is known as correlation analysis. The fluctuating feed prices, informality of the market, seasonality of the market, absence of hatchery companies, scarcity of DOC supplies, and a lack of facilities for processing and storing chicken are the independent variables of this study. The

impact of the value chain in the production of poultry on poultry pricing, on the other hand, is the dependent variable. According to the table below, the researcher employed "Pearson's Correlation" for this particular study.

In general, a positive correlation value indicates that the independent and dependent variables are strongly associated. Based on this assumption, the following table depicts that there is a strong positive correlation between the independent and dependent variables. The values are ranked as follows in their descending order; feed price fluctuation = 0.861, lack of poultry processing and storage facilities= 0.853, lack of hatchery firms = 0.844, seasonality of the market = 0.822, and DOC supply shortage = 0.769, and market informality=768. The highest correlation impact with the dependent variable poultry pricing was found to be 0.861 for feed price fluctuation and the lowest correlation impact was found to be 0.768 for the informality of the market.

Therefore, based on the numeric correlation analysis result presented below, the variables of this research are positively correlated to one another. In addition each independent variable tested in the correlation table below proven that each of them has a positive impact on the dependent variable.

Correlations

Table 4.10: Correlation table

		FPF	MI	MS	LoHF	LoPPSF	DOCSS	EoVCoPPP
FPF	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	124						

MI	Pearson Correlation	.752**	1					
	Sig. (2-tailed)	0.000						
	N	124	124					
MS	Pearson Correlation	.714**	.688**	1				
	Sig. (2-tailed)	0.000	0.000					
	N	124	124	124				
LoHF	Pearson Correlation	.740**	.652**	0.752	1			
	Sig. (2-tailed)	0.001	0.000	0.528				
	N	124	124	124	124			
LoPPSF	Pearson Correlation	.715**	.723**	.699**	0.665	1		
	Sig. (2-tailed)	0.000	0.000	0.000	0.590			
	N	124	124	124	124	124		
DOC SS	Pearson Correlation	.662**	.531**	.537**	.635**	.648**	1	
	Sig. (2-tailed)	0.932	0.891	0.209	0.934	0.247		
	N	124	124	124	124	124	124	

EoVCoPPP	Pearson Correlation	.861**	.768**	.822**	.844**	.853**	.769**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.001	
	N	124	124	124	124	124	124	124

**.

Correlation is significant at the 0.01 level (2 tailed).

Source: - SPSS

4.7 Regression Diagnosis

Analysis of multiple regression testing was performed to identify the relationship between one single dependent variable and a number of independent variables. In this section, tests of multi-colliniarity, normality and multiple linear regressions will be conducted as follows.

4.7.1 Test of Multicolliniarity

Multicolliniarity is a situation whereby the test of interconnectedness or interrelationship between the independent variables or the predictors is conducted. In other words, the type of data disturbance among the independent variables is observed.

As the table below shows, all of the values of the Variance Inflation Factor (VIF) for all independent variables or predictors are less than 10 and all the variables have tolerance value below .20. According to Weisburd & Britt (2013), any tolerance value under .20 suggests serious multicolliniarity in a model. In that case, we can conclude that there is no multicolliniarity among the independent. Hence, it is safe to perform multiple regression analysis.

Table 4.11: Taste of multicolliniarity

Model		Collinearity Statistics Tolerance	VIF
1	(Constant)		
	Feed Price	.279	3.59

	MrktInformality	.345	2.90
	Market Seasonality	.354	2.82
	Lack of Hatchery Firms	.344	2.91
	LoPPSF	.336	2.98
	Shortage of DOC supply	.469	2.13

Source: - SPSS

4.7.2 Normality of the Error Term Distribution

According to George and Mellary as sited by Yaboneh Gonge (2020), the acceptable value is set to be between ±2. Hence, as the following outcome states, the obtained result is within the acceptable range.

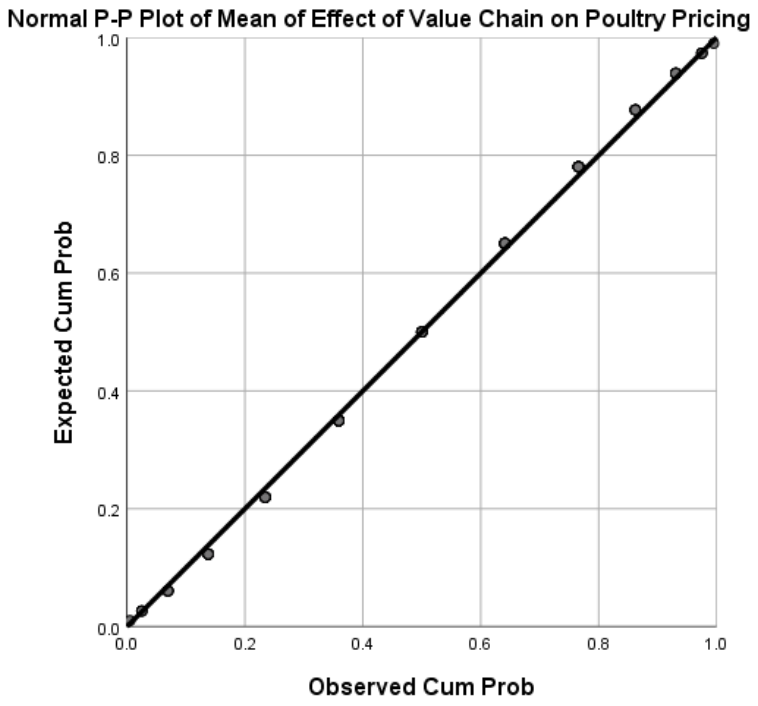
Table 4.12: Normality of error distribution

	Kolmogorov-Smirnov[a]			
	Statistic	Df	Sig.	Statistic
Effect of Value Chain on Poultry Pricing	.078	124	.062	.982

Source: - SPSS

Another way with which we test normality is through the normal probability (P-P) plot as shown in the figure below. The result shows that all the points are in alignment with the diagonal straight-line rising from the bottom left to the right corners. Hence, the result is a testimony of a nonexistence of a major detour or detachment from normality.

Figure 4.6: Normal probability plot



Source: - SPSS

4.7.3 Multiple Linear Regression

In the model summary chart, Adjusted R Square indicates a coefficient of determination which tells us the variation caused in the dependent variable due to the changes in the independent variable. On the other hand, R is the correlation coefficient which measures the association or the interrelationship between the study variables and the dependent variable.

According to the model summary chart below, the value of adjusted R square is found to be 0.93, an indication that there is 65% variation in the pricing of poultry products which is caused due to the poultry production value chain factors such as feed price fluctuation, market informality, market seasonality, lack of hatchery firms, day-old-chicks (DOC) supply shortage, and lack of poultry processing and storage facilities at a 95% confidence level.

On the other hand, the chart depicted that there is a strong positive association or correlation (r=0.966) between the study variables and the dependent variable.

Table 4.13: Multiple regression

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.966[a]	.934	.930	.11

Source: - SPSS

a. Predictors: (Constant), Market Seasonality, Lack of hatchery firms, DOC supply shortage, Feed Price Fluctuation, Market Informality, Lack of poultry processing and storage firms.

b. Dependent Variable: Effect of poultry products value chain on poultry products pricing

4.8 Analysis of Variance (ANOVA)

To ascertain whether the entire regression model had a satisfactory fit for the gathered data, Analysis of Variance (ANOVA) was carried out. It was intended to find out whether the observed variation in poultry product prices could be adequately explained by the variation in the independent variables (feed price fluctuation, market informality, market seasonality, lack of hatchery firms, shortage of day-old-chicks (DOC) supply, and lack of poultry processing and storage facilities). The graphic below displays the final outcome.

Table 4.14: ANOVA table

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	21.316	6	3.553	.	0.000.[b]
	Residual	1.518	117	.013		
	Total	22.833	123			

Source: - SPSS

a. Dependent Variable: Mean of Effect of Value Chain on Poultry Pricing

b. Predictors: (Constant): Feed price fluctuation, market informality, market seasonality, lack of hatchery firms, shortage of DOC supply, and lack of poultry processing and storage

The obtained result shows that the regression model has less than 0.001 likelihood of giving a wrong prediction. Hence, the regression model has a 95% confidence level.

4.9 Validating the Proposed Hypothesis

4.9.1 The Regression Model

The regression model is used to establish the relationship between the independent variables and dependent variable.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.16	.000		.000	.000
	Mean FPF	.245	.051	.217	4.803	.000
	Mean MI	.031	.042	.030	.745	.000
	Mean MS	.208	.042	.197	4.909	.000
	Mean LoHF	.271	.049	.223	5.482	.000
	Mean LoPPSF	.307	.047	.268	6.511	.000
	Mean DOC SS	.192	.035	.189	5.429	.000

Source: - SPSS

a. Dependent Variable: Mean of Effect of Value Chain on Poultry Pricing

It can be noted that the independent variables were all significant at 95% confidence level. The regression model was obtained as:

$$Y=0.16+0.343X1+0.397X2+0.173X3+0.304X4+0.310X5+0.262X6$$

As per the established regression equation, all the other factors such as feed price fluctuation, market informality, market seasonality, lack of hatchery firms, DOC supply shortage, and lack of poultry processing and storage forms constant at zero, the poultry products pricing will be 0.16.

4.9.2 Hypothesis Test Result

As it is already presented in the first chapter of this research, the student researcher forwarded six hypothesis to cross examine if these seven predictors or independent variables (feed price fluctuation, market informality, market seasonality, lack of hatchery firms, DOC supply shortage, and lack of poultry processing and storage facilities) could have an impact on poultry products pricing (price setting of the poultry products). The researcher compared the hypothesis with both the ß- and P- results as will be discussed below:

H1: The ever increasing feed price has a positive influence on the poultry pricing

As the result shown in the table below indicates, feed price fluctuation resulted in a 0.000 p-value which was less than 0.05 at a 95% confidence level, and hence the hypothesis was accepted, and it was confirmed that feed price fluctuation had a positive significant effect on the price of poultry products. And the variable also recorded a positive beta result of 0.343, i.e., a one percent change in the price of feed will result in 34.3% change in the price of poultry products.

H2: The informal nature of the market has positive impact on poultry pricing

As the result shown in the table below indicates, informality of the market resulted in a 0.000 p-value which was less than 0.05 at a 95% confidence level, and hence the hypothesis was accepted, and it was confirmed that informality of the market had a positive significant effect on the price of poultry products. And the variable also recorded a positive beta result of 0.300, i.e., a one percent change in the value of informality of the market will result in 30% change in the price of poultry products.

H3: The seasonality of the market has positive impact on poultry pricing

According to the result shown in the table below indicates, seasonality of the market resulted in a 0.000 p-value which was less than 0.05 at a 95% confidence level, and hence the hypothesis was accepted, and it was confirmed that seasonality of the market had a positive significant effect on the price of poultry products. And the variable also recorded a positive beta result of 0.197, i.e., a one percent change in the value of seasonality of the market will result in 19.7% change in the price of poultry products.

H4: The lack of hatchery firms will have a positive effect on poultry price setting.

As per the result shown in the table below indicates, lack of hatchery firms resulted in a 0.000 p-value which was less than 0.05 at a 95% confidence level, and hence the hypothesis was accepted, and it was confirmed that lack of hatchery firms had a positive significant effect on the price of poultry products. And the variable also recorded a positive beta result of 0.223, i.e., a one percent change in the value of lack of hatchery firms will result in 22.3% change in the price of poultry products.

H5: Shortage of DOC supplies will have a positive effect on poultry price setting

Based on the result shown in the table below indicates, shortage of DOC supply resulted in a 0.000 p-value which was less than 0.05 at a 95% confidence level, and hence the hypothesis was accepted, and it was confirmed that shortage of DOC supply had a positive significant effect on the price of poultry products. And the variable also recorded a positive beta result of 0.268, i.e., a one percent change in the value of shortage of DOC supply will result in 26.8% change in the price of poultry products.

H6: The lack of poultry processing and storage facilities will positively impact the poultry pricing

According to the result shown in the table below indicates, lack of poultry processing and storage facilities resulted in a 0.000 p-value which was less than 0.05 at a 95% confidence level, and hence the hypothesis was accepted, and it was confirmed that lack of poultry processing and storage facilities had a positive significant effect on the price of poultry products. And the variable also recorded a positive beta result of 0.189, i.e., a one percent change in the value of lack of poultry processing and storage facilities will result in 18.9% change in the price of poultry product

Table 4.16: Summary of Hypothesis Testing

No.	Hypothesis	ß	P	Results
1	***H1: The ever increasing feed price has a positive influence on the poultry pricing***	**.217**	**.000**	**Accepted**
2	***H2: The informal market has positive impact on poultry pricing***	**.30**	**.000**	**Accepted**
3	***H3: The seasonality of the market has positive impact on poultry pricing***	**.197**	**.000**	**Accepted**
4	***H4: The lack of hatchery firms will have a positive effect on poultry price setting.***	**.223**	**.000**	**Accepted**
5	***H5: Shortage of DOC supplies will have a positive effect on poultry price setting***	**.268**	**.000**	**Accepted**
6	**H6:** The lack of poultry processing and storage facilities will positively impact the poultry pricing	**.189**	**.000**	**Accepted**

Source: SPSS

CHAPTER FIVE

5. SUMMARY OF THE MAJOR FINDINGS, CONCLUSION AND RECOMMENDATION

5.1. Introduction

In this chapter of the research, the researcher will present a brief summary of the major findings that are obtained in the analysis stage, draws conclusion based on the major findings, and thereby forwards recommendations to the concerned and pertinent stakeholders to find solutions to the problems outlined in the research. Finally, the chapter will wrap up by suggesting future areas of research for the researchers and/or student researchers with keen interest in the area of the topic raised to undertake further studies that this research has failed to cover-up due to various setbacks.

5.2. Summary of the Major Findings

As a person who is engaged in the poultry sector, the researcher was highly motivated to undertake this research which involves in the area of the impacts that poultry production value chain has on the pricing of poultry products. This is because, the researcher believes that the major virtues of a scientific research is addressing the problems in our immediate vicinity and raising new problems that are not much explored before. With these motivating factors in mind, the study selected six major poultry production value chain factors that are affecting the poultry price setting process. These factors are feed price fluctuation, market informality, market seasonality, lack of hatchery firms, shortage of DOC supply, and lack of poultry processing and storage facilities.

The instrument (the questionnaire) consists of 34 items which are categorized in to seven sections was personally distributed to the 124 respondents, out of which a 100% response rate was obtained as useful for further analysis. The returned instruments were tasted for reliability using SPSS-2019 version 26 before proceeding to the actual analysis. The obtained result shows a Crombach coefficient alpha value of 0.907 for the aggregated seven factors, for which is greater than the bottom-line requirement of 0.7.

The descriptive analysis test result shows 3.76 mean and 0.31 SD for feed price fluctuation, mean of 3.76 and SD of 0.38 for market informality, 4.06 mean and 0.41 SD for market seasonality, mean of 4.80 and SD of 0.55 for lack of hatchery firms, 4.19 mean and 0.35 SD of shortage of DOC supply, 4.01 mean and 0.42 SD for lack of poultry processing and storage firms; and mean of 4.00 and SD of 0.43 for the effect of poultry production value chain on the poultry products pricing.

The next test targeted to establish the relationship among the dependent and independent variables. To that end, Pearson's Correlation coefficient is being used. The obtained result shows the following results in their descending order; feed price fluctuation = 0.861, lack of poultry processing and storage facilities= 0.853, lack of hatchery firms = 0.844, seasonality of the market = 0.822, and DOC supply shortage = 0.769, and market informality=768. Hence, all the above results indicate that there is a strong positive correlation between the independent variables and the dependent variable.

The regression diagnosis encompasses the following tests; the test for normality which is conducted using multicolliniarity (a test for the measure of interconnectedness among the independent variables). The least result is for shortage of DOC supply which is 2.13 VIF while market informality scored the highest VIF of 3.59. To test the normality of the error term distribution, Kolomogrov-Smirnov model was applied which shows 0.062 level of significance. The points on the p-p plot also shows no detachment from the central diagonal line

The multiple linear regression diagnosis shows 0.93 of adjusted R-square and R=0.966 at a 95% confidence interval. The analysis of variance (ANOVA) diagnosis shows the p value of 0.000.

Finally, the entire hypotheses that are formulated at a proposal stage were tested. The results of empirical testing suggested that the effect of feed price fluctuation (B=0.217), the effect of market informality (B=0.30), the effect of market seasonality (B=0.197), the effect of lack of hatchery firms (B=0.223), the effect of shortage of DOC supply (B=0.268), and the effect of poultry processing and storage facilities (B=0.189) on the poultry products pricing has been proven.

5.3. Conclusion

Unlike the government's narrative that the agricultural sector in general and the poultry sub-sector in particular are given the attention it deserves, the reality on the ground tells the contrary. The poultry products price is increasing day-in, day-out. Consuming poultry products now a day is becoming an unaffordable luxury for so many. To proof this, a walk of price inspection in a few grocery stores in town would suffice it. The critical question is what causes this high price increasing trend on a daily basis? That is what this research is trying to address.

From its conception, the research aimed to find out the poultry production value chain factors that are affecting its price setting process. The researcher listed six critical poultry production value chain factors that are believed to have a higher sphere of influence on the pricing. These are feed price fluctuation, market informality, market seasonality, lack of hatchery firms, shortage of DOC supply, and lack of poultry processing and storage facilities. Based on these aforementioned six factors, the research instrument of data collection (the questionnaire) was developed and distributed to the 124 participants. All the 124 respondents have appropriately filled the questionnaires.

As it is shortly summarized in this chapter, needless to mention the overall analysis in the previous chapter, all the six value chain factors have played a critical role in the price increment of the poultry products.

Therefore, the formulated hypotheses that are stated in the proposal are proven to be true. As a logical flow, the researcher will forward the possible recommendations that he believe will be an input to the stakeholders in their future plan of action.

5.4. Recommendations

The researcher observed in the process that there are quite a number of stakeholders in the poultry industry of the country. Those who play the greatest of the role are the farmers, the government and policy makers and the banking institutions. Hence, the researcher will forward some recommendations for each of them as follows.

For the Farmers

The farmers are on the top in the echelon of poultry production and marketing chain. This makes them the highest risk takers and burden bearers. Almost half of the burden in the process from the point of production to the point of sales rests in their shoulder.

Albeit this sour fact, they seems to be the least beneficiaries in terms of profit margin earning. Forming a union (a union that is really functioning and not of a pseudo one) of poultry producers, the researcher believes, will solve so many of their problems.

First, as they come closer together as a union, they will have a good chance of getting a better financial benefits and services from both governmental and private banks. They will have a better chance of getting foreign currency supply from the banks to import feed additives, veterinary drugs and veterinary equipment. On top, since the poultry sector is highly capital intensive, they will be able to enjoy some credit supplies.

Second, as a union, they will have a better bargaining power in setting the price of their products. They will also be able to establish a formal marketing platform and to directly reach out to the distributors, merchants and consumers without any other third party involvement such as brokers who are playing a negative market disturbance role.

Third, in a union, they will have a better chance in dealing with the problems of lack of hatchery firms and the shortage of DOC supply. As a union, they can have direct contacts with huge international foreign companies that are engaged in the production and installation of hatchery machineries and thereby, will be able to solve the problem of DOC supply shortage once and for all.

Last but not least, as a union, they will also be able to have their own poultry processing facilities such as slaughter machine and value adding facilities. Once processed, the poultry products needs appropriate storage facilities which are equipped with freezing temperature systems. These cold storages will enable poultry products to be stored for quite a long time. A value added products will obviously have a better market value for the farmers. Having a good storage facilities will enable the farmers to have a comparative market advantage and will make them price makers than price takers. On top, keeping the products for long time will solve the

farmers' problem of market seasonality and hence, will enable them to sell their products in good market seasons that will not bankrupt them.

For the Government and the Policy Makers

As we speak, the Ethiopian economy, in the wake of the costly and disastrous civil war in the northern part of the country, is heading down to the bottomless pit and the inflation is sky rocketing at a very scary rate. In terms of food price in particular, life in Ethiopia is getting from worse to worst for her citizens. According to IMF's annual inflation index published in April 2023, the country's consumer price rate recorded an annual percentage change of 31.4% increase from the previous years (IMF World Economic Outlook, April 2023).

Even though the country presumably pursues a free market economy, the government is responsible in regulating and/or monitoring the economy to alleviate the consumers' burden from high food price inflations. The researcher would like to suggest the following government regulatory actions to the poultry sector in its policy formulation.

First, the government should avail a fair share of the overall foreign currency distribution to the poultry sector. Unfortunately, it failed to do so as we are witnessing. Due to this the importer of the poultry feed additives, veterinary drugs and equipment are obliged to purchase and to fulfill their currency need from the black market at a higher exchange than the country's national bank legal exchange rate. This in turn, will have a spillover effect in the price of poultry production inputs such as feed additives and other veterinary drugs and equipment. On top, the government should formulate a good policy that will empower and subsidize and facilitate credit services to the poultry farmers and should make sure in its proper implementation.

Second, the government should immediately establish a government organ that will be able to regulate the poultry market. The poultry farmers of the country, as this research found out, have no formal marketing platform. This absence of formal marketing platform is opening a window of opportunity to the informal actors such as brokers and oligopolistic traders to play an inflationary role.

Third, the government should also encourage investors, both foreign and domestic, who have shown a keen interest to invest in the establishment and installation of hatchery and poultry

processing & storage facilities. This will in turn be able to alleviate the farmers' problems in DOC supply shortage and poultry processing and storage problems.

Finally, the government should invite a group of economic and marketing experts together to establish the replica of Ethiopian Commodity Exchange (ECX) Agency to formalize the Ethiopian poultry market. Albeit its pitfalls, ECX was a pioneer in liaising cash crop farmers with the export traders. Due credit to this first of its kind exchange platform, the life of so many cash crop farmers have significantly changed once and for all in the space of last few years.

For the Banking Institutions

Banking institutions are so busy with facilitating and creating hospitable conditions for credit and foreign currency supply to other sectors than the poultry sector. Ironically, even agricultural food items importers are enjoying a better credit and foreign currency supply than the agricultural investors who can be able to produce all the required import substitution agricultural products. The researcher believes that the banking institutions should alter the status quo's priorities.

They should facilitate credit arrangements for the farmers to support their farming practices. They should facilitate a reasonable amount of hard currency supply for the good reasons that are mentioned above.

They should also incorporate the poultry sub-sector in their attempt to develop information and communication technology so as to enhance the farmers to easily undertake their transaction.

5.5. Suggestions for the Future Research

Any scientific research is not holistic and final by itself. It's just some miles down in the road to the quest for scientific solutions to the society's problems. This is because, there is always some limitations that the researcher will encounter, such as time, budget, content and so on. Given this, the researcher will recommend the following suggestions to the future researchers to take-off the stick in the race for scientific fulfillment.

Some of the variables such as feed price need to be explored more by themselves. The need to find out what marketing factors are affecting the price of feed is open for further researching and investigation.

The possible ways for the establishment of formal poultry marketing platforms in Ethiopia is another topic which is widely open for further investigation.

What are the opportunities and challenges for the formation of Ethiopian Poultry Exchange (EPX) Agency? This topic is also very much alluring to pursue the next research undertaking that this researcher highly recommends.

References

- Abera Geleta. 2022. Review on Poultry Production, Processing, and Utilization in Ethiopia
- Aklilu Hailemichael et al. 2016. Analysis of Village Poultry Chain in Ethiopia: Implications for Action Research and Development. *Livesworking Paper 10*
- Andrew D. Zimbroff and Marilyn R. Schlake. (2015). Introduction to Pricing for a Product or Service. *University of Nebraska, Institute of Agriculture and Natural Resources*
- Ashok Gulati et al. 2022. Agricultural Value Chains in India. *India Studies in Business and Economics*
- Atsbeha H/Mariam and Lemma Zewdu. 2018. Analysis of Current Status of Poultry Value Chain in Ethiopia: Implication for Information Generation and Exchange: A Review, *Industrial Engineering Letters*
- Awol Zeberga Kerbega. 2010. Analysis of Poultry Markey Chain: The Case of Dale and Alaba Special Woredas of SNNPS, Ethiopia. *Haromaya University School of Agricultural Economics and Agri-business Management*
- David Neven. (2014). Developing sustainable food value chain. Food and Agricultural Organization of the United Nation
- Dawit et al. 2003. Overview and Background Paper on Ethiopia's Poultry Sector: Relevance for HPAI Research in Ethiopia, *Africa/Indonesia Team Working Paper, No.1*
- Demmeke Wendimagegn and Getnet Hailu. 2020. BUSINESS OPPORTUNITY REPORT: Invest in Ethiopian Poultry Sector. *Prepared by ENTAG*
- Elsevier Saunders. 2012. Saunders Comprehensive Veterinary Dictionary, 4th Edition. *Elsevier Ltd*
- Elvina Zamora. (2016). Value Chain Analysis: A Brief Review. *Asian Journal of Innovation and Policy*
- EPPPA (Ethiopian Poultry Producers and Processors Association). 2020. Broiler Management Technical Manual
- Eskedar Getachew. 2022. THE EFFECT OF CORPORATE SOCIAL RESPONSIBILITY ON BRAND LOYALTY: THE CASE OF ONE WATER BRAND OF MOGLE BOTTLED WATER MANUFACTURING PLC
- FAO (Food and Agricultural Organization), 2018. OECD-FAO Agricultural Outlook 2018-2027
- FAO (Food and Agricultural Organization), 2021. OECD-FAO Agricultural Outlook 2021-2030
- Gezahign Ayele and Karl M. Rich. 2010. Poultry Value Chains and HPAI in Ethiopia. *Africa-Indonesia Team Working Paper*, 25 October 2010
- Goitom G. et al. 2017. Mapping Poultry Value Chain Functions in Adwa Wereda, Central Zone of Tigray, Ethiopia
- H. Kato et al. 2022. Estimating production costs and retail prices in different poultry housing systems: conventional, enriched cage, aviary, and barn in Japan

- https://search.yahoo.com/search/?p=feed%20premixes#:~:text=fefac.eu/about%2Dour%2Dindustry/what%2Dis%2Da%2Dpremix/
- https://www.amazon.com/Statistics-Criminal-Justice-David-Weisburd
- Jennifer Bush. (2006). The Threat of Avian Flu - Predicted Impacts on Rural Livelihoods in SNNPR (Ethiopia)
- M. Kamruzzaman et al. 2021. Financial and factor demand analysis of broiler production in Bangladesh
- Merriam-Webster. 1987. Webster's Ninth New Collegiate Dictionary. *MERRIAM-WEBSTER INC., Publishers Springfield, Massachusetts, USA*
- Paulos Desalegn. 2018. Poultry Value Chain in West Amhara: Bahir Dar Zuria and Libokemkem Woredas, Program for Agro-Business Induced Growth in the Amhara National Regional State
- Philip T. Kotler et al. 1999. Principles of Marketing, 2nd Edition. *Prentice Hall Inc, Europe*
- Raphael Kaplinsky and Mike Morris. (2000). A HAND BOOK FOR VALUE CHAIN RESEARCH
- Roger A. Kerin et al. 2002. Marketing, 7th Edition. *McGraw-Hill Higher Education*
- safacts.co.za/where-to-buy-broiler-parent-stock-in-south-africa/
- Samuel Deribew. 2019. FACTORS AFFECTING THE ADOPTION OF ELECTRONICS MARKETING AMONG THE ETHIOPIAN SUPERMARKETS IN ADDIS ABABA
- Seyoum Bediye et al. 2018. Ethiopian Feed Industry: Current Status, Challenges and Opportunities. *Broadening Horizons*, February 2018
- Tanya Sammut-Bonnici and Derek F. Channon. 2015. Pricing Strategy. *Research Gate* / https://www.researchgate.net/publication/272352932 /
- University of Cambridge. ( ). 'Value Chain' Definitions and Characteristics. Institute for Sustainability Leadership
- USAID-FTFE. (2020). The Poultry Market System in Ethiopia: Challenges from COVID-19 https://agrilinks.org/post/poultry-market-system-ethiopia-challenges-covid-19
- USAID-FTFE. (2017). Value Chain Analysis: POULTRY. Partnering with the Agricultural Growth Program
- www.ethiomarket.com
- www.lawinsider.com/dictionary/day-old-chicks
- Yaboneh Bonge. 2020. Determinants of customers' imtention to use e-payments services evidences from Addis Ababa

Appendix A: Survey Questionnaire (English)

ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
SCHOOL OF COMMERCE
DEPARTMENT OF MARKETING MANAGEMENT
GRADUATE PROGRAM UNIT

Dear respondents,

This questionnaire is designed to collect information from either the farm owners or the farm managers on "HOW VALUE CHAIN AFFECTS POULTRY PRICING: EVIDENCE FROM POULTRY FARMS IN BISHOFTU TOWN" for educational purposes. The information is solicited for the partial fulfillment of a Master of Arts Degree in Marketing Management at Addis Ababa University School of Commerce. All the information you provide will be kept confidential and used only for academic purpose. Thank you in advance for you time and kind cooperation.

Part -1 General Information
Please put an "X "mark of your choice on the space provided.

1.Gender?

Male □ Female □

2. Age group?

□ 18 -25 □ 26 –30 □ 31 –40 □ 41 –50 □ Above 51

3. Education Level

□ No formal education
□ Secondary education
□ Diploma
□ University degree / college graduate
□ Master's Degree
□ PhD

4. On which breed of chicken are you working on?

□ Broiler □ Layer □ Commercial layer growing □ Sasso □ Combination of all

5. How many round of DOC do you receive per year?

□ 1 □ 2 □ 3 □ 4 □ 5 □ more

6. Under which category does your farm categorized?

□ Small scale
□ Medium scale
□ Large scale

7. What is your role in the farm?
□ Owner □ Owner and General Manager □ Manager □ Veterinary doctor

8. How many years have you been in the business?

□ 1-5 years □ 6-10 years □11-15 years □ 16-20 years □ more than 20 years

Part II – Basic Information

Please put "X "in the space provided on the appropriate response category against each question where 5= strongly agree (SD). 4= Agree (D). 3= Neutral (N). 2= Disagree (A). 1= Strongly Disagree (SA).

	The Impact of value chain on poultry pricing: the case of Bishoftu town	Statements	Scale				
			5	4	3	2	1
			SA	A	N	D	SD
1.	Feed Price Fluctuation	1. Feed cost takes the huge percentage of poultry production cost					
		2.Feed pricing shows only increasing trend					
		3.I highly consider my feed cost while setting price for my products					
		4.I believe that political instability played a key role					

		in feed price fluctuation					
		5. I believe that an increase in foreign exchange rate adversely affects feed pricing					
2.	Informality of the market	1.There are no formal poultry marketing platform in Ethiopia					
		2.I never set the price for my products					
		3.Brokers usually set the price of poultry products					
		4.There is no government organ which regulates poultry market in Ethiopia					
		5. Brokers usually disseminate wrong information like false disease alarm, price decline, product dumping, etc					
3.	Seasonality of the market	1.There is absolutely seasonal price variation of poultry products in Ethiopia					
		2.The dry Belg(Oct.-Jan.) and Bega(Feb.-May) seasons of Ethiopia yields high price					
		3.The holiday seasons (such as NY, Mesqel, Christmas, Easter . . .) show high poultry price increment in Ethiopia					
		4.The fasting seasons show high price decline on the poultry products					
		5.The rainy Kiremt (June-Sep.) season of Ethiopia causes high price decline in Ethiopia					
		6. I usually sell my products in bulk before rainy seasons in fear of disease outbreak					

4.	Lack of hatchery firms	1.There are no adequate hatchery firms in the country					
		2.The hatchery firms are not performing in their good capacity					
		3.I usually have direct contact with hatchery firms					
		4.I do not have my own hatchery facility					
5.	DOC supply shortage	1.I do not get DOC supply at a fair interval within a year					
		2.I usually get DOCs from brokers at a higher cost than the original factory gate price					
		3.DOC suppliers usually violate the business ethics while supplying their products to the farmers					
		4.There are long periods in a year where my farms get closed due to DOC supply shortage					
6.	Lack of poultry processing and storage firms	1.I believe that there are no enough poultry processing and storage firms in the country					
		2.Due to lack of modern processing facilities, my products luck quality and are not value added which negatively impacted me in price setting					
		3.Due to lack of cold storage facility, I am obliged to sell my products at market given price					
		4.I usually slaughter my chicks in my own backyard using traditional method by employing only human labor					
7.	Effect of poultry products value chain	1. I believe that feed price fluctuation has a huge					

	on poultry products pricing	impact on poultry pricing					
		2.I am convinced that the absence of formal poultry market is affecting poultry pricing					
		3. I believe that the seasonality of the market impacts poultry pricing					
		4. I believe that the lack of hatchery facilities impacts poultry pricing					
		5. I am convinced that shortage of DOC supply affects poultry pricing					
		6. I believe that the lack of poultry products processing and storage facilities impacts poultry pricing					

Appendix B: Survey Questionnaire (Amharic)

አዲስ አበባ ዩኒቨርሲቲ የንግድ ሥራ ት/ቤት
የማርኬቲነግ ማኔጅመንት ት/ክፍል

ውድ የዚህ መጠይቅ ተሳታፊ፣

ይህ መጠይቅ በገበያ አስተዳደር የሁለተኛ ዲግሪ ማሟያነት ጥናት ለማካሄደው የተዘጋጀ ነው። የጥናቱ አላማም **በዶሮ እርባታ የምርት ሂደት ያሉ የእሴት ሰንሰለቶች በዶሮ ምርት ውጤቶች የዋጋ ትመና ላይ ያላቸውን ተጽዕኖ ምን እንደሆነ ለመለየት የታቀደ ነው።** ለዚህ መጠይቅ የሚሰጡት ማንኛውም መረጃ በሚስጥር የሚያዝ እና ለትምህርታዊ ዓላማ ብቻና ብቻ የሚውል መሆኑን ከወዲሁ አረጋግጥልዎታለሁ። ውድ ጊዜዎን ሰጥተው መጤይቆቹን ስለመለሱልኝ አስቀድሜ አመሰግናለው።

ክፍል አንድ፡- የመላሽ አጠቃላይ መረጃ

1. ጾታ
   □ ወንድ □ ሴት

2. የእድሜ ክልል (በአመት)፡-
   □ 18-25 □ 26-30 □ 31-40 □ 41-50 □ ከ50 በላይ

3. የትምህርት ደረጃ
   □ መደበኛ ትምህርት ያልተማረ/ች
   □ የመጀመሪያ ደረጃን ያጠናቀቀ/ች
   □ ሁለተኛ ደረጃን ያጠናቀቀ/ች
   □ ዲፕሎማ ያለው/ያላት
   □ ዩኒቨርስቲ/ኮሌጅ ዲግሪ ያለው/ላት
   □ ማስተርስ ዲግሪ ያለው/ላት
   □ ዶክትሬት ዲግሪ ያለው/ላት

4. በየትኛው አይነት የዶሮ ዝርያ እርባታ ላይ ተሰማርተው ይገኛሉ

□ በስጋ ዶሮ (ብሮይለር) □ በእንቁላል ማስጣል □ ቄብ አሳድጎ መሸጥ □ በሳሶ □ በሁሉም (የተቀናጀ)

5. በአመት ምን ያክል ዙር የአንድ ቀን ጫጩት ይረከባሉ
   □ 1 □ 2 □ 3 □ 4 □ 5 □ ከ5 በላይ
6. የእርሶ ዶሮ እርባታ ቀጥሎ ከተዘረዘሩት ውስጥ በየትኛው ደረጃ ይመደባል
   □ አነስተኛ ደረጃ
   □ መካከለኛ ደረጃ
   □ ትልቅ ደረጃ
7. በዶሮ እርባታው ውስጥ የእርሶ ድርሻ ምንድን ነው
   □ ባለቤት □ ባለቤትና ዋና ስራ አስኪያጅ □ ዋና ስራ አስኪያጅ □ የእንስሳት ህክምና ዶክተር
8. በዶሮ እርባታ ስራው ውስጥ ለምን ያክል ጊዜ ቆዩ
   □ 1-5 አመት □ 6-10 አመት □ 11-15 አመት □ 16-20 አመት □ ከ20 አመታት በላይ

ክፍል ሁለት፡- መሰረታዊ መረጃዎች

እባክዎ ለሚከተሉት ጥያቄዎች የስምምነት ደረጃዎን/መጠን **5. በጣም እስማማለሁ፣ 4 እስማማለሁ፣ 3. ገለልተኛ ነኝ፣ 2. አልስማማም እና 1. በጣም አልስማማም** ተብለው በተቀመጡ ቦታዎች ትይዩ የ √□ምልክት ያድርጉ።

	ጥቅል አረፍተ ነገር	ዝርዝር ጥያቄዎች	Scale				
			5	4	3	2	1
			በጣም እስማማለሁ	እስማማለሁ	ገለልተኛ ነኝ	አልስማማም	በጣም አልስማማም
1.	የመኖ ዋጋ ተለዋዋጭነት (በፍጥነት መጨመር)	1. በዶሮ እርባታ ስራ ውስጥ የመኖ ዋጋ የአንበሳውን ድርሻ ይወስዳል					
		2.የመኖ ዋጋ ሁል ጊዜም የመጨምር እንጂ የመቀነስ አዝማሚያ አያሳይም					
		3. የምርቶችን የዋጋ ተመን በማወጣበት ጊዜ የመኖ					

		ወጪዬን በከፍተኛ ሁኔታ ከግምት አስገባለሁ					
		4.በመኖ ዋጋ መዋዠቅ ላይ የአገራችን የፖለቲካ አለመረጋጋት የራሱ የሆነ ቁልፍ ሚና ተጫውቱኣል					
		5. የውጭ ምንዛሬ መጨመር በመኖ ዋጋ መጨመር ላይ የራሱን አሉታዊ ሚና ይጫወታል					
2.	የኢ-መደበኛ የገበያ ስርዓት	1.በኢትዩጵያ መደበኛ የሆነ የዶሮ ምርቶች መገበያያ አውድ/ስርዓት የለም					
		2. ለምርቶቼ ዋጋ አውጥቼ አላውቅም።					
		3.ብዙውን ጊዜ የዶሮ ምርቶችን ዋጋ የሚተምኑት በኢ-መደበኛነት የሚንቀሳቀሱ ደላሎች ናቸው					
		4.በኢትዩጵያ የዶሮ ምርቶች ገበያን የሚቆጣጠር የመንግስት አካል የለም					
		5. ደላሎች ወረርሺኝ ተከስተ፤ ዋጋ ረከሰ/ሊረክስ ነው፤ ምርት በብዛት አለ . . . ወዘተ የሚሉ አፍራሽና አሉታዊ መረጃዎችን በብዛት ያሰራጫሉ					
3.	የገበያው/የግብይቱ ወቅታዊነት	1.በኢትዩጵያ የዶሮ ምርቶች ዋጋ እንደየ ወቅቱ ከፍና ዝቅ ይላል					
		2.ደረቃማዎቹ የኢትዩጵያ የበልግ (ከጥቅምት-ጥር) እና የበጋ (ከየካቲት-ግንቦት) ከፍተኛ የሆነ የዶሮ ምርቶች ዋጋ ጭማሪ የሚመዘገብባቸው ወቅቶች ናቸው					
		3. የበዓላት (እንደ አዲስ አመት፣ መስቀል፣ ገና፣ ፋሲካ .					

		. . ወዘተ) ወቅቶች ከፍተኛ የሆነ የዶሮ ምርቶች ዋጋ ጭማሪ ይታይባቸዋል					
		4. የጾም ወቅቶች ላይ የዶሮ ምርቶች ከፍተኛ የሆነ የዋጋ ቅናሽ ያሳያሉ					
		5. ዝናባማዎቹ የኢትዩጵያ የክረምት (ከሰኔ-መስከረም) ወቅቶች ከፍተኛ የሆነ የዶሮ ምርቶች የዋጋ ቅናሽ ያስመዘግባሉ					
		6. ብዙውን ጊዜ ወረርሺኝ ሊከሰት ይችላል በሚል ፍራቻ ምርቶቼን የክረምት ወቅት ከመግባቱ በፊት በብዛት እሸጣለሁ					
4.	የጫጩት ማስፈልፈያ ድርጅቶች በበቂ ሁኔታ አለመኖር	1 በሀገሪቱ በቂ የሆኑ የጫጩት ማስፈልፈያ ተቋማት የሉም					
		2. የጫጩት ማስፈልፈያ ተቁኣማት በሙሉ አቅማቸው ያመርታሉ ብዬ አላስብም።					
		3. ከጫጩት ማስፈልፈያ ተቁኣማት ጋር ቀጥተኛ ግንኙነት አለኝ					
		4. የእራሴ የሆነ የጫጩት ማስፈልፈያ ድርጅት የለኝም።					
5.	የአንድ ቀን ጫጩት አቅርቦት እጥረት	1 በአመት ውስጥ የአንድ ቀን ጫጩቶችን በአጠረ የጊዜ ልዩነት በበቂ ሁኔታ አላገኝም።					
		2. ብዙውን ጊዜ የአንድ ቀን ጫጩቶችን ከደላሎች ላይ ከዋናው የፋብሪካ ዋጋ ላይ በብዙ ብር ጭማሪ እገዛለሁ					
		3. የጫጩት አቅራቢ ድርጅቶች አሰራር ብዙውን ጊዜ የቢዝነስ ህግን (Business Ethics) የተከተለ አይደለም					
		4. በየአንድ ቀን ጫጩት አቅርቦት እጥረት ምክንያት					

		እርባታዬ የአሞቱን አብዛኛውን ጊዜ ዝግ ሆኖ ይቆያል					
6.	የዶሮ ምርቶች ማቀናበሪያ እና ማከማቻ ተቋኣማት በበቂ ሁኔታ አለመኖር	1.በኢትዩጵያ የዶሮ ምርቶች ማቀናበሪያ እና ማከማቻ ተቋኣማት በበቂ ሁኔታ አሉ ብዬ አላምንም					
		2 የዶሮ ምርቶች ማቀናበሪያ ተቋማት በበቂ ሁኔታ አለመኖር በምርቶቼ ላይ እሴት እንዳልጨምርና የምርቶቼ ጥራት አነስተኛ እንዲሆን አድርጓል					
		3. የምርቶች አቀዝቅዞ ማቆያ (Cold Storage) በበቂ ሁኔታ አልመኖር ምርቶቼን ገበያ በሰጠኝ ዋጋ እንድሸጥ አስገድዶኛል					
		4. ብዙውን ጊዜ ለእርድ የደረሱ ዶሮዎቼን በእርባታ ቦታዬ ጓሮ በባህላዊ መንግድ የሰው ሃይል በመቅጠር አከናውናለሁ					
7.	በዶሮ ምርት ሂደት ላይ ያለ የእሴት ሰንሰለት (Value Chain)	1. በኢትዩጵያ አየታየ ያለው የዶሮ መኖ ዋጋ በየጊዜው መናር ለዶሮ ምርቶች ዋጋ መዋዠቅ ከፍተኛ ሚና ይጫወታል።					
		2. በኢትዩጵያ መደበኛ የሆነ የዶሮ ምርቶች መገበያያ አዉድ አለመኖር የዶሮ ምርቶች ዋጋ ላይ አሉታዊ ሚና ይጫወታል።					
		3. በኢትዩጵያ የዶሮ ምርቶች የገበያ ተለዋዋጭነት የዶሮ ምርቶች ዋጋ መዋዠቅ ሊያስከትል ችሎአል።					
		4. የአንድ ቀን ጫጩት ማስፈልፈያ ተቋማት በበቂ					

		ሁኔታ አለመኖር የዶሮ ምርቶች ዋጋ ላይ ተጽዕኖ ያሳድራል።					
		5. በኢትዩጵያ ያለው የአንድ ቀን ጫጩት አቅርቦት እጥረት በዶሮ ምርቶች ዋጋ ላይ አሉታዊ አስተዋጽዖ አለው ብዬ አምናለዉ።					
		6. በኢትዩጵያ የዶሮ ምርቶች ማቀነባበሪያ (እሴት መጨመሪያ) ተቋማተ በበቂ ሁኔታ አለመኖር ለምርቶች ዋጋ መናር እንደ አንድ ምክንያት ሊጠቀስ ይችላል።					