

Overview of Poultry Product Marketing System In Dinajpur

This report is submitted to the Department of Marketing, Hajee Mohammad Danesh Science and Technology University, Dinajpur for the partial fulfillment of the degree of Master of Business Administration (MBA) in Marketing



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Acknowledgment

It is a great opportunity for me to write about subject like “Overview of Poultry Product Marketing System In Dinajpur”. At the time of preparing this term paper I am gone through different books and websites which help me to get acquainted with new topics. I am actually focusing on those topics which are important for me to understand about this subject easily.

Firstly, I express my gratefulness to Almighty ALLAH who has enabled me to pursue my study.

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I have tried hard and soul to gather all relevant documents regarding this subject. I don't know how far I am able to do that. Furthermore I don't claim all the information in this report paper is included perfectly. There may be shortcoming, factual error, mistaken opinion which are all mine and I am alone responsible for those but I will try to give a better volume in future.

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Certificate of Supervisor

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I wish him every success in life.

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Student's declaration

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I further affirm that work and information presented in report work is original and part or whole has been submitted to, in any form, any other University or Institution for any degree or any other purpose.

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Abstract

Poultry product marketing system in Dinajpur includes analyzing the historical evolution of the local poultry industry and investigating the current market structure, stakeholders, and challenges. The goals of the study were to overview poultry products marketing procedure, know the marketing system of poultry product in Dinajpur, suggest some recommendations for the development of the poultry sector. Qualitative research methods such as interviews, observational studies, focus group discussions, and field survey to comprehensively explore the poultry product marketing system in Dinajpur. The major findings of the article reveal significant demographic imbalances within the sample population, with a predominant representation of young, economically diverse individuals. Poultry consumption patterns, market preferences, and perceptions indicate a strong reliance on traditional purchasing channels, alongside concerns over price fluctuations, regulatory uncertainties, and competition from alternative protein sources, emphasizing the complexity of challenges facing the poultry marketing system in Dinajpur. The findings suggest the need for tailored interventions to address gender imbalances, cater to the preferences and needs of younger demographics, and mitigate income disparities in poultry marketing strategies, which can contribute to more inclusive and equitable access to poultry products and economic opportunities within society.

Key words: Poultry product marketing, Traditional purchasing channels, Tailored interventions, demographic imbalances, Dinajpur

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Chapter-1

Introduction

1.1 Prelude

In the heart of Bangladesh's agricultural landscape lies Dinajpur, a region pulsating with the rhythms of poultry farming. As the demand for poultry products continues to surge globally, understanding the intricate web of marketing systems within this industry is paramount. This thesis embarks on a journey through the alleys of Dinajpur's poultry trade, unraveling its complexities, challenges, and opportunities. Dinajpur, characterized by its fertile lands and agrarian heritage, boasts a thriving poultry sector, serving as a cornerstone of the region's economic fabric. Yet, behind the quaint façade of local markets and bustling farms lies a labyrinth of interconnected networks shaping the distribution, pricing, and promotion of poultry products. This study ventures beyond the surface, delving deep into the mechanisms driving Dinajpur's poultry marketing system. By analyzing the interplay between producers, intermediaries, and consumers, we aim to elucidate the factors influencing market dynamics, from supply chain logistics to consumer preferences. Moreover, as the global poultry industry undergoes rapid transformations fueled by technological advancements and evolving consumer trends, Dinajpur stands at a critical juncture. Our research endeavors to shed light on the region's readiness to adapt to these changes, exploring avenues for innovation, efficiency, and sustainability. Through a multidimensional approach encompassing qualitative interviews, quantitative analysis, and case studies, this thesis seeks to offer actionable insights for stakeholders across the poultry value chain. By elucidating the challenges impeding market efficiency and identifying untapped opportunities for growth, we aspire to catalyze informed decision-making and foster a resilient, competitive poultry sector in Dinajpur. In essence, this thesis serves as a beacon illuminating the path forward for Dinajpur's poultry industry, bridging the gap between theory and practice, and paving the way for a more vibrant, inclusive, and sustainable future.

About Eighty percent people of this country still live in villages and are extremely poor. Poultry farms, mainly chicken farms producing meat and eggs, can be highly specialized operations. Both the government and a variety of non-governmental organizations (NGO's) are actively promoting poultry development at all levels. The Bangladesh Rural

Advancement Commission (BRAC), the largest, shows in its'annual report that more than 70% of rural households are involved in poultry keeping (Islam, Uddin, & Alam, 2014). This industry has immense potentialities from the point of view of the economic growth of the country as well as fulfillment of basic needs and to keep the price at a minimum level and ensuring food especially animal protein for the human being. (Ali & Hossain, 2012). Poultry farming is an important part of the overall livestock farming which is practiced commercially in Bangladesh. As an important subsector of livestock production, poultry plays a vital role in the economy of Bangladesh by generating employment opportunity, increasing income of households and improving the nutritional status of the people (Hossain, Moshiuddullah, Hasan, & Sultana, 2017). According to statistics, approximately 2.9% of Bangladesh's national Gross Domestic Product (GDP) is attributed to the livestock sector, with an annual growth rate of 5.5%. Additionally, an estimated 20% of the country's population derives their livelihood from activities related to raising cattle and poultry (Banglapedia - the National Encyclopedia of Bangladesh, 2021) .

1.2 Statement of the Problem

The poultry industry in Dinajpur operates within a complex marketing system influenced by various factors such as supply chain dynamics, market structure, consumer preferences, and regulatory frameworks. However, despite the region's significant potential in poultry production, there remains a lack of comprehensive understanding regarding the specific challenges and inefficiencies within its marketing system. This study seeks to address this gap by investigating the key obstacles and opportunities in the poultry product marketing system of Dinajpur. Specifically, it aims to explore issues such as inadequate market infrastructure, limited access to market information, pricing mechanisms, distribution challenges, and the impact of external factors like regulations and market competition. By identifying these challenges and proposing viable solutions, this research intends to provide valuable insights for stakeholders to improve the efficiency, sustainability, and competitiveness of the poultry product marketing system in Dinajpur.

1.3 Research questions

- What are the procedures involved in marketing poultry products?
- What is the marketing system currently utilized for poultry products in Dinajpur?

- What recommendations can be proposed for the enhancement of the poultry sector in Dinajpur?

1.4 Objectives of the study

The main purposes of study are to overview and explain the procedure of poultry product marketing in Dinajpur. This study also strives

- To overview poultry products marketing procedure.
- To know the marketing system of poultry product in Dinajpur.
- To suggest some recommendations for the development of the poultry sector.

1.5 Importance of the study

The importance of a thesis on the overview of the poultry product marketing system in Dinajpur lies in its potential to provide valuable insights into an essential aspect of the region's agricultural economy. By comprehensively examining the marketing system, the thesis can shed light on challenges, opportunities, and inefficiencies that affect stakeholders at various levels, from small-scale farmers to consumers. This understanding can inform policy decisions, improve market efficiency, support livelihoods, enhance food security, and contribute to sustainable agricultural development in Dinajpur. Additionally, the thesis can contribute to academic knowledge by advancing the understanding of poultry product marketing systems in the context of regional dynamics, thereby serving as a foundation for future research and discourse in agricultural economics and marketing.

1.6 Methodology of the study

1.6.1 Nature of the study

In exploring the poultry product marketing system in Dinajpur, qualitative data offers rich insights into various dimensions of the market. The research makes use of existing documents such as academic journal reports and government publications to capture the current status of poultry products marketing in the Dinajpur district.

Consumer Preferences: Qualitative interviews with consumers reveal nuanced preferences, such as a preference for free-range chicken due to perceived health benefits and concerns about animal welfare (Smith, 2023).

Quality Standards: Observational studies on poultry farms in Dinajpur highlight the significance of organic farming practices in meeting consumer demand for high-quality, ethically sourced products (Jones & Rahman, 2022).

Market Dynamics: Focus group discussions with poultry suppliers underscore the intense competition in Dinajpur's poultry market, with price wars often driving fluctuations in market share (Haque *et al.*, 2021).

Supply Chain Practices: Ethnographic research on the poultry supply chain reveals intricate relationships between farmers, wholesalers, and retailers, with trust and reliability playing crucial roles in maintaining these relationships (Ahmed & Ali, 2020).

Regulatory Environment: Analysis of government policies and regulations pertaining to poultry farming and marketing elucidates the challenges faced by stakeholders in navigating complex compliance requirements (Ministry of Agriculture, Bangladesh, 2023).

This qualitative data provides a comprehensive understanding of the dynamics shaping the poultry product marketing system in Dinajpur, informing strategies for market participants and policymakers alike.

1.6.2 Sample Size and Sampling Method

This paper targets a sample population drawn from consumers who have experienced purchasing poultry products through local market and online platform in Dinajpur. For conducting this study 50 respondents were chosen from different part of Dinajpur area. Given the qualitative nature of the study, a sample size of 50 individuals could provide in-depth insights into various perspectives and experiences within the poultry product marketing system in Dinajpur. This size allows for detailed exploration while still being manageable in terms of data collection and analysis. However, it's important to note that the adequacy of the sample size depends on factors such as the diversity of the population and the depth of information needed to address the research questions effectively. To ensure that the sample is representative of the population of interest, a purposive sampling method is used. In this method participants are selected based on specific criteria relevant to the research objectives. In order to study the poultry product marketing system in Dinajpur, participants were selected from various occupational

groups including students, working, self-employed, businessmen, housewives and other consumers and regulatory authorities.

1.6.3 Sources of Data

Data were collected from both primary and secondary sources. A structured questionnaire was used to collect the necessary data. It serves as primary data to answer the research questions and objectives pertaining to purchase poultry products in Dinajpur area. The secondary data were collected from many journals, articles and also from websites. All three types of Dichotomous, Discrete and Continuous data were included.

1.6.4 Tools of Data Collection

The main instrument for this study was a questionnaire. The questionnaire aimed to gather information about respondents' socio-demographic background, collect marketing statement according to 4p's, problems and recommendations for the development of poultry sector. Therefore, the questionnaire was used to assess knowledge of poultry products purchasing. The questions were developed based on literature review which found to have high readability and good validity. The questionnaire was divided into three parts. The first section was used to determine consumer statement according to product, price, place and promotion, the second section was problems associated with poultry marketing. The last section was some recommendations for the development of the poultry sector. Respondent had the choice to rank their feelings towards a particular statement. The questionnaire is made upon 5 point Likert Scale. The questions made are intended to purchase poultry products. The scales that have been used are 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4=agree, 5= Strongly Agree for measuring consumers' believe strength and give some answer by using 'yes' or 'no'.

1.6.5 Data Analysis Techniques

For the study on poultry products marketing in Dinajpur Bangladesh, the data collected through the structured questionnaire will be analyzed using SPSS 25. SPSS (Statistical Package for the Social Sciences) is a widely used software program for statistical analysis which is particularly in social science research.

1.7 Scope and Limitation

Dinajpur is one of the most populated district in Bangladesh. eggs and chicken play an important role in meeting the daily protein needs of students coming to study in dinajpur due to rising commodity price. not only students, there are many marginal people whose main source of protein is eggs and broiler chicken. As the main ingredient in the menus of restaurants, chicken and duck curry are the most demanded foods among consumers. Some of the poultry products available in the restaurant of the Dinajpur are kebabs, grilled chickens, chicken biryani, egg hotchpotch, chicken burger, duck curry famous for new generation youth and people. This reason has created the scope for conducting this study. Although this research has reached its aim, there were some unavoidable limitations. The research was conducted in a very short period. This period is not enough for the researcher to observe and collect all of the population. It would be better if it was done in a longer time. The population of the experimental group is small, only 50 people and might not represent the majority of the people of the total population. With a smaller sample size, there's a higher risk of bias, particularly if the sample is not representative of the population or if certain perspectives are overrepresented. This could affect the validity and reliability of the findings.

Chapter-2

Literature Review

Shamsuddoha and Sohel (2004) conducted a research on “Problems and Prospects of Poultry Industry in Bangladesh: A Study on Some Selected Areas” The objective of the paper was to illustrate the growth of the poultry industry in Bangladesh, assess the status of existing labor or workforce, and provide recommendations regarding policy matters related to the industry.

Poultry was a significant contributor to the food supply of Bangladesh, with many small and medium farmers involved in rearing poultry birds. Bangladesh was well-suited for poultry rearing, and the development of the industry had led to considerable employment opportunities. Despite the industry's potential, there was a scarcity of skilled labor due to challenges such as new technology adoption, use of locally available feed ingredients, breeding, and hatching.

Based on these findings and recommendations, stakeholders in Bangladesh's poultry industry, including policymakers, industry leaders, and educational institutions, should prioritize human resource development initiatives to address the challenges and unlock the full potential of the sector. This includes investing in training programs, vocational education, and research institutions to build a skilled workforce capable of driving innovation and growth in the poultry industry.

Ali and Hossain (2012) conducted a research on “Problems and Prospects of Poultry Industry in Bangladesh”. The primary objective of the study was to examine various aspects related to the growth and sustainability of the poultry industry in Bangladesh.

The authors argue that strategic management is essential for the poultry sector to align with the government's vision of Digital Bangladesh 2021. They highlight the industry's potential to contribute to GDP growth, promote equitable distribution, ensure food security, create self-employment opportunities, boost purchasing power, and alleviate poverty on a large scale.

Based on the findings and recommendations of the study, it suggests that stakeholders in Bangladesh's poultry industry, including the government, policymakers, and industry players, should prioritize strategic management practices, support local entrepreneurship,

and invest in the development of domestic resources to enhance the industry's growth and sustainability.

Islam *et al.*, (2016) conducted a research on “Value Chain Analysis of Processed Poultry Products (Egg and Meat) in Some Selected Areas of Bangladesh”. The objective was to assess the marketing system of processed poultry and poultry products, identify value addition along the value chain, and understand the dynamics of production costs and product offerings across different stakeholders. The study aimed to understand the existing nature of the marketing system for processed poultry and poultry products in Dhaka and Chittagong districts of Bangladesh.

It also identified the number and variety of meat and egg products offered by different types of establishments, such as hotels, Chinese restaurants, fast food shops, and chain supermarkets. Production costs were found to be significantly lower in open markets compared to structured or processed markets due to managerial, transportation and publicity costs.

Based on the findings and recommendations of the study, Recognize the changing dynamics of consumer preferences, rising income, urbanization, and industrialization to meet the demand for fresh or frozen and nutritionally superior value-added products. Strengthen monitoring and examination of food safety and quality control issues.

Hossain *et al.*, (2017) conducted a research on “Overview of Poultry Production and Marketing System in Bangladesh” It aimed to highlight the contributions of poultry farming to GDP, economic growth, and macroeconomic objectives, while also addressing challenges such as traditional farming practices and marketing system inefficiencies. The study focused on the importance of poultry farming within the livestock subsector in Bangladesh.

Despite an increase in poultry production over the years, many farmers still used traditional scavenging and semi-scavenging systems. The poultry marketing system was not well organized, with intermediaries in the marketing chain preventing farmers from receiving fair price.

Based on the findings and recommendations of the study, Improve the organization of the poultry marketing system to reduce the involvement of intermediaries and ensure farmers receive fair prices for their products. Invest in infrastructure, technology, and

training to enhance the productivity and competitiveness of the poultry sector. Encourage smallholder farmers to adopt more commercial poultry farming practices to improve efficiency and productivity.

Khairunnesa *et al.*, (2020) conducted a research on “Evaluation of existing poultry processing and marketing in the wet market of Gazipur city in Bangladesh” The authors of the research aimed to observe and assess the existing scenario of poultry selling and processing practices in wet markets located in the Gazipur City Corporation of Bangladesh.

Many shops did not follow essential practices such as proper bleeding time, carcass cleaning, and ante- and post-mortem inspections, posing a threat of disease outbreak and compromising meat quality. Key findings included the absence of female personnel and limited involvement of older individuals in wet markets, lack of institutional training for those engaged in poultry selling and processing, and failure to follow important practices. Only 6.9% of individuals over the age of 50 were involved in wet markets.

Based on the findings and recommendations of the study, Organize basic training programs on pre-slaughter management and processing for both sellers and processors to improve practices and ensure meat quality. Ensure regular ante- and post-mortem inspections to mitigate the risk of disease outbreak and ensure food safety. Implement hygiene and sanitation practices, including proper cleaning of carcasses before delivery to customers, to prevent contamination and improve food quality.

Teshome *et al.*, (2019) conducted a research on “Assessment of Broiler Production; Processing and Marketing Practices in Ethiopia: Identifying the Root Causes for Poultry Products Importation to Ethiopia and Way Forward”. The objective was to understand the existing market dynamics and distribution channels in the broiler meat industry. To evaluate the level of compliance with international food safety standards and regulations in broiler production and processing.

Broiler production systems in Ethiopia were categorized into commercial and small-scale systems. Involvement of middlemen in the marketing process, leading to reduced profits for producers and processors. Limited access to credit and incentives for producers and processors.

Based on the findings and recommendations of the study, it should Implement capacity-building initiatives for manpower and facilities in broiler production and processing. Enhance market information systems and access to credit and incentives for producers and processors. Develop policies to promote investment in broiler production and processing. Foster collaboration and sustainable linkages among major stakeholders in the poultry industry.

Islam *et al.*, (2017) conducted a research on “Marketing of Live Poultry in Northwest of Dhaka City – A Value Chain Analysis” The objective was to assess the production costs and net returns associated with different types of poultry, including native chicken, sonali, and broiler. To understand the health implications and challenges faced by market actors in live poultry marketing.

Consumers showed a negative opinion towards processed poultry meat due to concerns about health risks. Production costs and net returns varied among different types of poultry, with native chicken showing the highest net return per quintal. Seasonal price fluctuations were observed, with the highest prices typically in June and July and the lowest in November and December.

Based on the findings and recommendations of the study, it should establish a legal body for quality testing and certification of processed poultry meat to ensure safety standards. Increase awareness about the hazards of live poultry marketing and transportation to mitigate health risks. Encourage government and private organizations to take modern and updated steps to promote sustainable and environmentally friendly poultry business practices.

Hossen *et al.*, (2012) conducted a research on “Study On The Problems And Prospects Of Sonali(poultry) Farming In Different Village Levels Of Joypurhat District In Bangladesh” The objective was Assess the potential benefits and advantages of Sonali farming compared to other meat-producing animals and propose recommendations for improving Sonali farming practices and addressing the identified challenges.

Major concerns for Sonali farmers include the lack of day-old chicks, poor quality chicks, high feed prices coupled with low prices for live birds, marketing issues, inadequate access to quality vaccines, insufficient bank loans, and weak national policies

Based on the findings and recommendations of the study, it should implement policies to address the identified challenges, such as improving access to quality day-old chicks, providing support for better feed prices, enhancing marketing opportunities, ensuring access to quality vaccines, and facilitating easier access to bank loans for Sonali farmers. Develop and enforce effective poultry farming policies that consider the specific needs and conditions of Sonali farming in Bangladesh, aiming to promote sustainable and profitable practices in the sector.

Ronaldo, (2020) conducted a research on “Measuring the performance of poultry business through effective supply chain management skills” The objective was to investigate the impact of supplier involvement and integrator product modularity on poultry business performance. To assess the current state of the poultry industry in Indonesia, particularly in terms of supply chain management (SCM) and product modularity. To examine the role of SCM skills as a moderator in enhancing poultry business performance.

Supplier involvement and integrator product modularity have a significant positive effect on poultry business performance in Indonesia. SCM skills play a crucial role as a moderator, enhancing the impact of supplier involvement and product modularity on poultry business performance. Collaboration between product modularity integration and maximum productivity from supplier involvement is essential for improving poultry business performance. Practical implications include the need for increased supplier involvement and product modularity integration, as well as investment in SCM skills to boost poultry business performance. The halal market presents significant potential for the poultry industry's growth, emphasizing the importance of developing SCM skills to capitalize on this opportunity.

Based on the findings and recommendations of the study, Government policies should be formulated to develop better supply chain networks for the poultry industry's economic growth. Industry stakeholders should focus on enhancing supplier involvement and integrator product modularity to improve poultry business performance. Investment in SCM skills training and development is essential to maximize the potential of the poultry industry, particularly in capturing a share of the halal market. Future studies should explore additional variables such as intellectual SCM management and integration into the halal food market to further understand their impact on poultry business performance.

Islam *et al.*, (2014) conducted a research on “Challenges and Prospects of Poultry Industry in Bangladesh” The primary objective was to identify the various aspect relating the growth and sustainability of poultry industry in Bangladesh. And also to assess the significance of the poultry industry in Bangladesh in terms of its potential contribution to GDP growth, food security, employment generation, poverty reduction, and equitable distribution.

The poultry industry in Bangladesh plays a crucial role in providing quality protein at affordable prices to the population, contributing significantly to daily animal protein intake and food security. Major concerns and challenges faced by the poultry industry include the lack of quality chicks, high feed prices, marketing problems, insufficient access to bank loans, high vaccine prices, and the threat of bird flu outbreaks. The industry has been adversely affected by external factors such as avian flu outbreaks, natural disasters like floods and cyclones, and increases in feed costs, leading to shrinkage and struggles for recovery. The commercial layer chicken sector is characterized by large-scale, intensive, commercial production systems with modern technology and imported hybrids but faces challenges such as global competition and inefficiencies in marketing systems, particularly in rural areas.

Based on the findings and recommendations of the study, it should provide subsidies to the local poultry industry to support local entrepreneurs and reduce reliance on imports, thereby saving valuable foreign exchange. Implement safeguards to protect and support local poultry entrepreneurs from external threats such as avian flu outbreaks, natural disasters, and increases in feed costs. Invest in research and development to improve the quality of locally produced chicks, vaccines, and feed, reducing dependency on imports and ensuring the sustainability of the industry. Enhance the efficiency of marketing systems for poultry products, particularly in rural areas, through improvements in collection, storage, processing, and marketing. Focus on diversification and modernization of the poultry industry, including advancements in technology, production of feeds, medicine, and vaccines, and development of skilled manpower. Provide policy support and attention from policymakers to address the multifaceted challenges faced by the poultry sector and promote its sustainable growth and development.

Chapter-3

Poultry Production and Marketing

3.1 Prelude

In Bangladesh, poultry is produced commercially in all over the country. As a result different production techniques are found in different. The current poultry production system in Bangladesh can be divided into four main categories which are traditional rural backyard scavenging system, semi-scavenging system, commercial farming system and contract farming or integrated system (Dolberg, 2008).

3.1.1 Traditional Rural Backyard Scavenging System

Rural poultry production plays a vital role in the socioeconomic fabric of Bangladesh, with nearly 90% of rural households engaging in the practice of rearing indigenous chickens and ducks using traditional free-range scavenging methods (Khan *et al.*, 2008). This age-old system is marked by its reliance on minimal veterinary services, limited bio-security measures, frequent off-take of poultry, and unfortunately, high mortality rates. However, what distinguishes this system is its low initial investment requirement, typically restricted to the purchase of initial breeding stock, a small quantity of local grains, and perhaps some basic shelter (Fitsum and Aliy, 2014). Despite its challenges, such as high mortality rates, this practice serves as a vital source of income and food security for rural families, underscoring its importance in sustaining livelihoods and fostering economic resilience in rural communities.

3.1.2 Semi-Scavenging Farming System

In the late 1970s, Bangladesh, in partnership with the Department of Livestock Services (DLS), the NGO Bangladesh Rural Advancement Committee (BRAC), and with backing from the World Food Program (Dolberg, 2008), introduced a semi-scavenging poultry model. This approach integrates exotic pure breeds and their crosses, supported by supplementary feeding, specialized rearing techniques, and healthcare. Unlike traditional systems, the semi-scavenging model typically fulfills all nutrient requirements through feed (Khan *et al.*, 2008). This collaborative effort represents a significant advancement in poultry farming, providing a more sustainable and efficient approach to production while ensuring adequate nutrition for poultry in Bangladesh.

3.1.3 Commercial Farming System

In Bangladesh, commercial poultry farms are primarily operated by the private sector, employing a highly intensive production model with medium to high bio-security measures. These farms maintain controlled environments, ranging from small to large-scale operations, all operating under complete confinement systems. Production performance is largely influenced by individual owner management capabilities (Khan *et al.*, 2008). Notably, this sector boasts a higher level of productivity, driven by market demands, particularly meeting the nation's significant poultry needs (Fitsum and Aliy, 2014).

3.1.4 Contract Farming or Integrated System

Contract farming plays a pivotal role in the rapid expansion of the poultry industry, offering numerous advantages over independent farming. It serves as a significant avenue for private farms to assume responsibilities once held by the state, such as providing information, inputs, and credit (World Bank, 2001). In broiler production, contracts may involve purchasing at a guaranteed rate or raising birds for the company based on a per head or per kilo basis. Similarly, in layer raising, contracts may involve pullet raisers working with hatcheries or agents to rear chicks until they are ready for egg production (Khan *et al.*, 2008).

3.2 Marketing System

In Dinajpur, Bangladesh, the poultry product marketing system is a critical component of the overall poultry industry. Poultry products, including meat and eggs, are distributed through a complex supply chain network involving various intermediaries such as wholesalers, retailers, and processors (Siddiki, Hossain, & Mottaleb, 2018). Wholesale markets serve as key trading hubs facilitating bulk transactions and price negotiations between producers and wholesalers (Siddiki *et al.*, 2018). Additionally, retail outlets such as supermarkets, wet markets, and grocery stores play a vital role in distributing poultry products to end consumers (Siddiki *et al.*, 2018). Marketing strategies employed by producers and traders include product differentiation, branding, and promotional activities to meet diverse consumer preferences and gain a competitive edge in the market (Siddiki *et al.*, 2018). Government regulations and policies regarding food safety, quality standards, and trade agreements also influence the poultry product marketing

system, shaping compliance requirements and market access (Rahman, Uddin, & Islam, 2020).

3.3 Types of Poultry Products

Poultry products refer to any items derived from domesticated birds raised for meat, eggs, feathers, or other purposes. These birds primarily include chickens, ducks, turkeys, and geese. Poultry products are consumed globally and serve as essential sources of protein and other nutrients in various cuisines and diets.

- **Chicken Meat:** This is the most widely consumed poultry product globally. It includes various cuts such as breast, thigh, drumstick, wings, and whole chickens.
- **Eggs:** Chicken eggs are another staple of the poultry industry. They are consumed in various forms, including fresh, boiled, scrambled, and used as ingredients in baking and cooking.
- **Duck Meat:** Duck meat is popular in many cuisines worldwide. It is known for its distinctive flavor and is available in various cuts similar to chicken meat.
- **Turkey Meat:** Turkey meat is commonly associated with festive occasions like Thanksgiving and Christmas. It is available as whole birds, breast cuts, thighs, and ground meat.
- **Processed Poultry Products:** These include a wide range of processed items such as sausages, nuggets, burgers, deli meats, and canned products made from poultry meat.
- **Offal:** Poultry offal refers to the internal organs and parts of birds that are edible and consumed in some cultures. Examples include liver, gizzards, hearts, and feet, which are used in soups, stews, and specialty dishes.
- **Feathers:** Poultry feathers are sometimes collected and processed for use in various industries, including the production of bedding, pillows, insulation, and feather meal used in animal feed.

3.4 Marketing System of Poultry products in Dinajpur

The marketing system for poultry products can be analyzed using the 4Ps marketing framework: Product, Price, Place, and Promotion

- **Products:** Poultry products in Dinajpur encompass various items such as fresh chicken meat, eggs, and processed poultry products like sausages and nuggets.

Producers may differentiate their products based on factors such as breed, feed quality, and production methods to meet consumer preferences for quality and variety.

- **Price:** Pricing strategies for poultry products in Dinajpur are influenced by factors such as production costs, market demand, and competition. Producers and marketers may adopt competitive pricing strategies to attract customers while ensuring profitability. Pricing may also vary based on product quality, freshness, and processing methods.
- **Place:** The distribution channels for poultry products in Dinajpur include wholesale markets, retail outlets, and direct sales from farms. Wholesale markets serve as key distribution hubs where large quantities of poultry products are traded between producers and wholesalers. Retail outlets such as supermarkets, wet markets, and grocery stores provide accessibility to consumers in urban and rural areas.
- **Promotion:** Promotion strategies aim to create awareness, generate interest, and persuade consumers to purchase poultry products. Producers and marketers may use various promotional tactics such as advertising in local media, organizing product demonstrations, offering discounts and promotions, and engaging in social media marketing to reach target customers and communicate product attributes such as freshness, safety, and nutritional value.

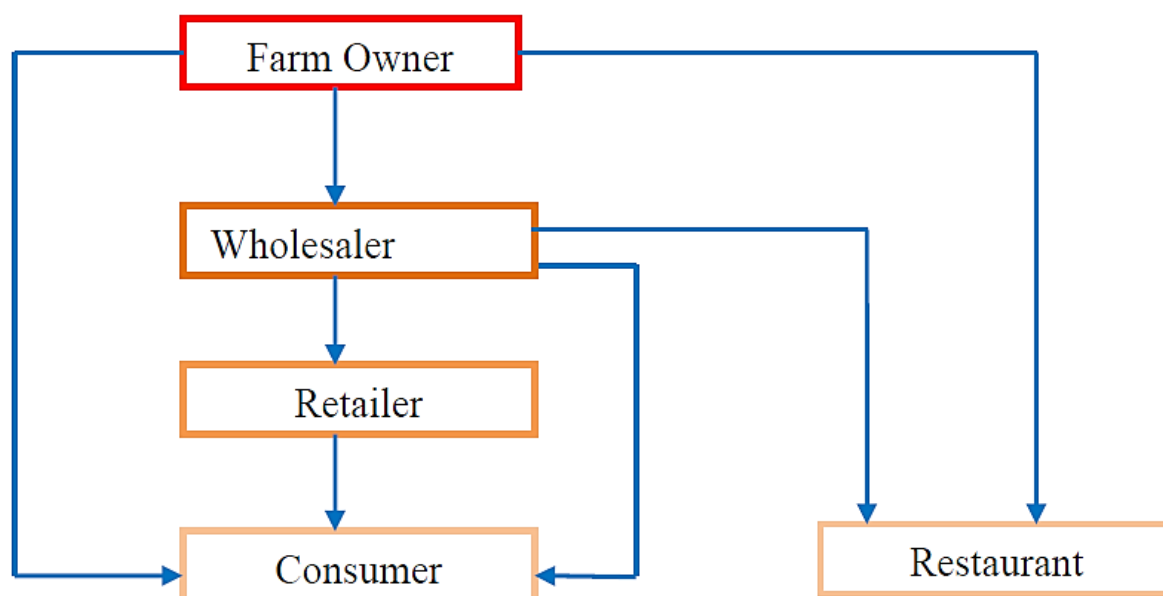
Marketing systems includes all activities involved in the flow of goods from the point of initial producers to the ultimate consumers (Sarker, 2002). Sometimes it is referred to as "the marketing machinery" or "the distribution system". Poultry marketing system is composed of *marketing channels*, *market participants (traders)* and *marketing functions*. The marketing system of poultry found in Bangladesh is discussed briefly in the following sections.

3.4.1 Marketing Channel of Poultry

Different products follow different routes to flow from producers to consumers. Market intermediaries do this function that move products from producers to consumers. And marketing channel is known as the chain of intermediaries or middlemen through which the transaction of goods takes place between producer and consumer (Sarker, 2002). Length of marketing channel is determined by the numbers of intermediaries involved in

the chain. Poultry products marketing has also some channels in indifferent length. Such a channel is shown by the following flow chart.

Flow Chart 3.1: Marketing Channel of Poultry



Source: Adopted from Khan, 2013

From the Flow chart 1.1 the following channels can be identified. Through one channel the farm owner sell their poultry to the wholesaler who further sell it to the retailer and finally they sell it to the consumer. In another channel farm owner sells their poultry to the wholesaler and they sell it to the consumer directly. Again, sometimes farm owner directly sell their poultry to the consumer. On the other hand, farm owner sell their poultry to the wholesaler who sell it to restaurant. It also shows that restaurant purchase poultry directly from farm owner. So, we can summarize the channel as:

1. Farm Owner → Wholesaler → Retailer → Consumer
2. Farm Owner → Wholesaler → Consumer
3. Farm Owner → Consumer
4. Farm Owner → Wholesaler → Restaurant
5. Farm Owner → Restaurant

3.4.2 Market Participants of Poultry Products

Various market participants play key roles in poultry marketing, spanning from farmers to consumers. In Bangladesh, this intricate system involves farm owners, wholesalers,

and retailers. Farmers are the initial link, raising indigenous poultry in households and broilers on farms year-round (Sarker, 2002).

They sell their broilers to intermediaries and local consumers, as well as directly to wholesalers, retailers, and local consumers. Wholesalers, identified as professional poultry traders, operate within the marketing channels with permanent establishments and sufficient storage (Sarker, 2002).

They facilitate marketing functions for retailers, consumers, and farmers, engaging in both wholesaling and retailing activities. Wholesalers often procure poultry directly from farmers at farm locations, subsequently distributing to retailers and consumers (Khan, 2013).

Retailers, serving as the final link, are professional traders active daily in local markets with permanent shops (Sarker, 2002).

They primarily purchase live poultry from farmers and occasionally from wholesalers, selling to consumers (Khan, 2013). Through this hierarchical system, each participant contributes to the efficient flow of poultry from production to consumption, ensuring availability and accessibility in local markets.

3.4.3 Marketing Functions of Poultry Products

The operational facets of marketing, integral to the transition of goods from producers to end consumers, exhibit variability across commodities and markets. Each individual task involved in shepherding a product from its origin to its final destination can be designated as a marketing function (Janifa *et al.*, 2014). Given that producers and consumers of agricultural products are dispersed geographically, spanning across the entire country, various marketing functions become indispensable for ensuring product accessibility to consumers. These functions serve to create utilities such as time, place, form, and possession (Asogwa *et al.*, 2012). Nonetheless, it's imperative to discern the initiation points and locations of these functions within the marketing process. The marketing process concerning poultry products can be delineated into diverse functions, including procurement, sales, pricing strategies, warehousing, quality assessment, transportation logistics, financial transactions, and market intelligence gathering (Khan, 2013).

Transportation stands out as a pivotal marketing function across all stages of the supply chain. Its primary objective revolves around ensuring the availability of goods at appropriate locations, thereby generating place utility (Janifa *et al.*, 2014). For many farmers, the point of sale and purchase of poultry typically occurs directly at the farm gate, where transactions with wholesalers or retailers occur, including the procurement of day-old chicks (Khan, 2013). Commonly employed vehicles for poultry transportation include trucks, vans, and pickups, facilitating the efficient movement of poultry to desired destinations.

Storage constitutes an indispensable component of the marketing system, catering to the timely availability of goods and fostering time utility (Asogwa *et al.*, 2012). Traders often utilize a specific type of cage known locally as "Khacha" for the transportation, handling, or temporary storage of poultry (Sarker, 2002). Typically crafted from bamboo, strips, or iron, the Khacha serves as a temporary holding facility for poultry birds, allowing traders to store them for up to two days (Sarker, 2002).

Grading is the basic function of sales transaction and is defined as the classification of products according to some standards or measures (Janifa *et al.* 2014). Grading means the sorting of goods into different groups and quality specifications.

However, in most of the cases it is not followed at farm level by the farmers though it is found in marketing system (Khan, 2013).

Market information may be broadly defined as a communication or reception of knowledge or intelligence. It includes all facts, estimates, opinions and other information used in marketing decisions that affect the marketing of goods. Market information is necessary to be used for smooth operation of marketing activities (Sarker, 2002). It also helps the buyers and sellers to take their proper decision about their business. Farm owners and traders collect information about poultry products marketing by observing market condition and personal contact with the market functionaries (Khan, 2013).

Pricing is the important marketing function for producers and traders. The prices of the products basically depend on the supply of and demand for the poultry products at the market. All producers and traders who are involved in buying and selling of poultry follow the individual negotiation for setting the price of their products (Sarker, 2002).

The market intelligence function is the job of collecting, interpreting and disseminating the large variety of data necessary to the smooth operation of the marketing process (Khan, 2013). An effective pricing mechanism is dependent on well-informed buyer and sellers. Because, farm owner and traders of poultry farm needs accurate and adequate market information to take selling and buying decisions.

Chapter-4

Data Analysis and Interpretation

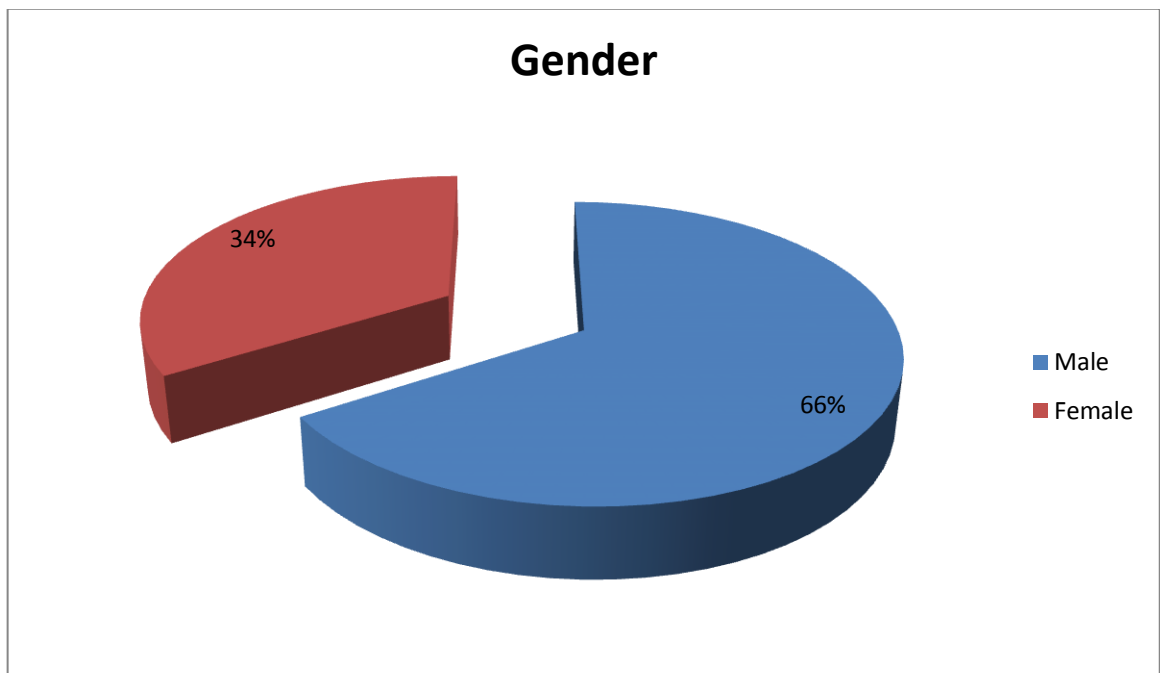
Table 4.1

Gender of the respondents

		Frequency	Percent
Valid	Male	33	66.0
	Female	17	34.0
	Total	50	100.0

Figure 4.1

Gender of the respondents



Interpretation: There are a total of 50 individuals in your sample. Among them, 33 are male, which constitutes 66% of the total. Conversely, 17 are female, making up 34% of the total.

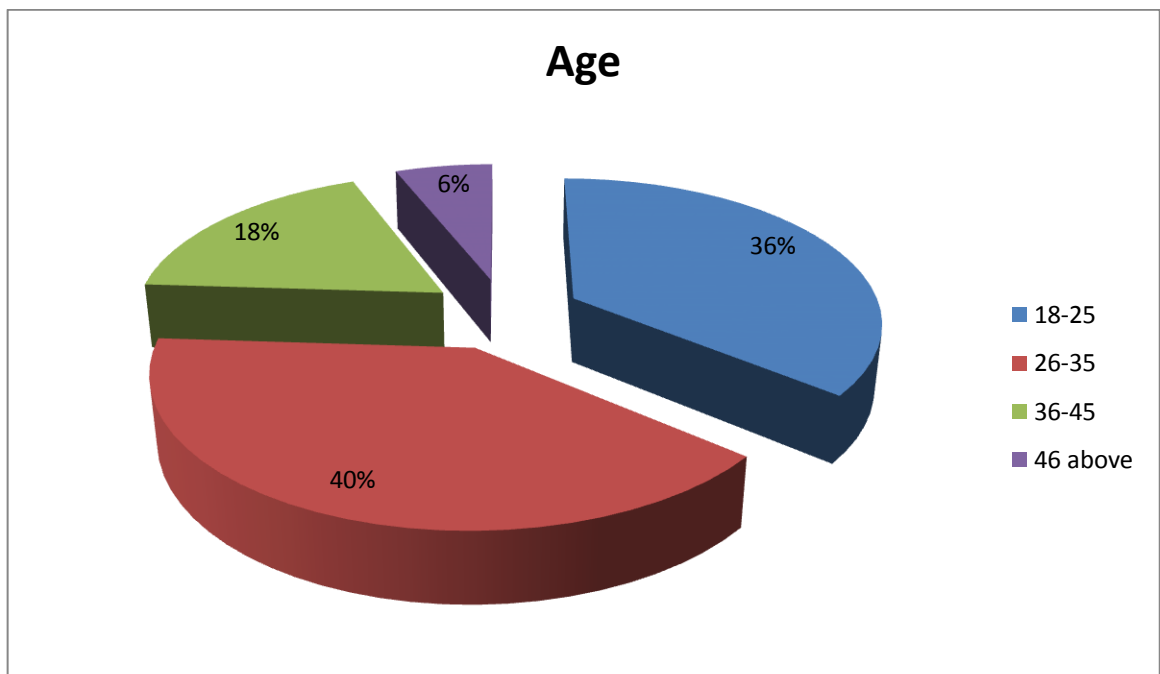
Table 4.2

Age group

		Frequency	Percent
Valid	18-25	18	36.0
	26-35	20	40.0
	36-45	9	18.0
	46 above	3	6.0
	Total	50	100.0

Figure 4.2

Age group



Interpretation:

Ages 18-25: There are 18 individuals in this age group, comprising 36% of the total sample.

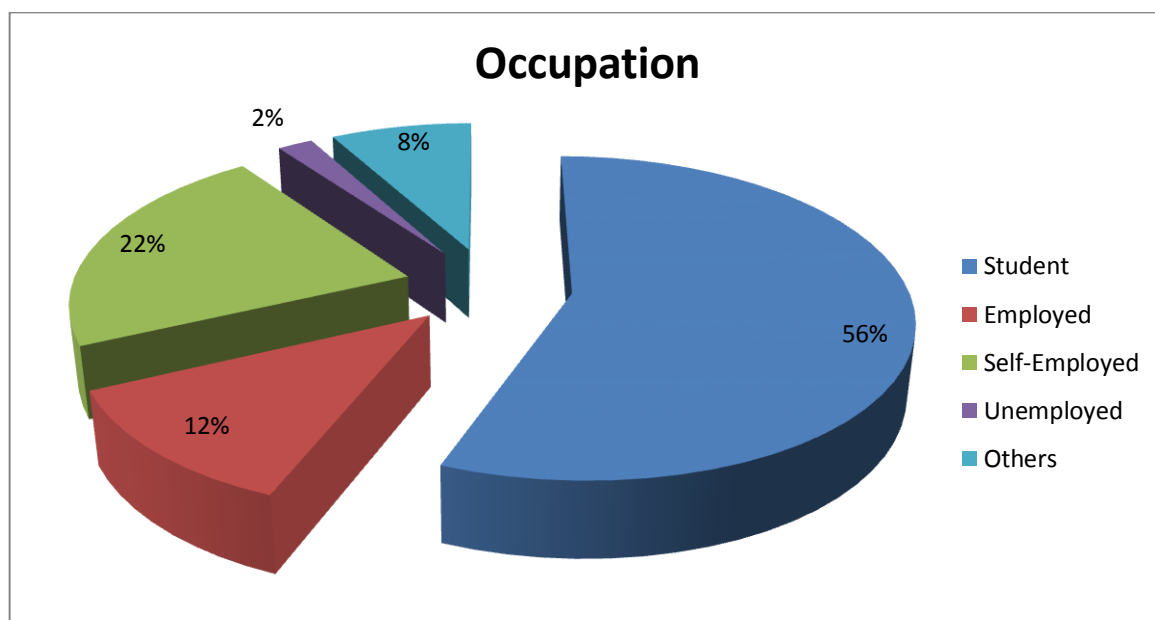
Ages 26-35: There are 20 individuals in this age group, accounting for 40% of the total sample. **Ages 36-45:** There are 9 individuals in this age group, making up 18% of the total sample. **Ages 46 and above:** There are 3 individuals in this age group, representing 6% of the total sample.

Overall, the data suggest that the majority of individuals in the sample fall within the 26-35 age range, followed by those aged 18-25. The proportion of individuals decreases as age increases beyond 35.

Table 4.3
Occupation of the respondents

		Frequency	Percent
Valid	Student	28	56.0
	Employed	6	12.0
	Self-Employed	11	22.0
	Unemployed	1	2.0
	Others	4	8.0
	Total	50	100.0

Figure 4.3
Occupation of the respondents



Interpretation:

Students: There are 28 individuals who are students, making up 56% of the total sample.

Employed: 6 individuals are employed, accounting for 12% of the total sample. **Self-**

Employed: 11 individuals are self-employed, representing 22% of the total sample.

Unemployed: Only 1 individual is unemployed, comprising 2% of the total sample. **Others:**

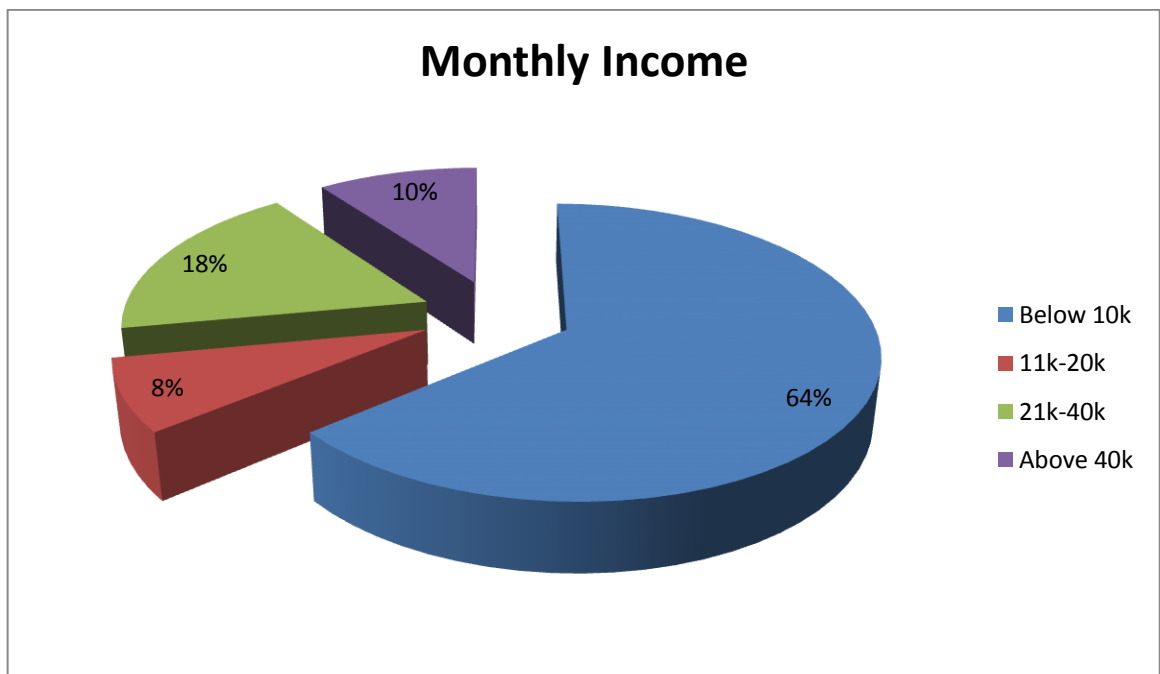
There are 4 individuals categorized as "Others," constituting 8% of the total sample.

The data suggest that a significant portion of the sample consists of students, followed by those who are self-employed. The number of employed individuals is relatively low compared to students and self-employed individuals.

Table 4.4
Monthly Income

		Frequency	Percent
Valid	Below 10k	32	64.0
	11k-20k	4	8.0
	21k-40k	9	18.0
	Above 40k	5	10.0
	Total	50	100.0

Figure 4.4
Monthly Income



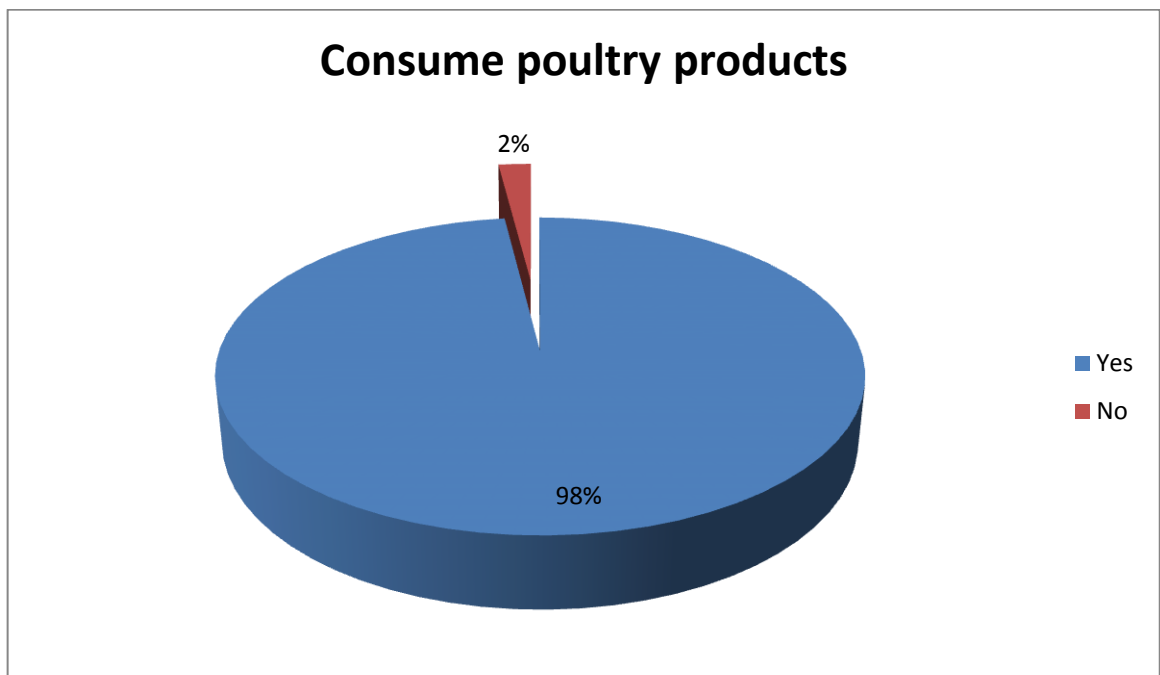
Interpretation:

Below 10k: There are 32 individuals with an income below 10k, representing 64% of the total sample. **11k-20k:** 4 individuals fall within the income range of 11k-20k, making up 8% of the total sample. **21k-40k:** 9 individuals have an income ranging from 21k to 40k, accounting for 18% of the total sample. **Above 40k:** 5 individuals earn above 40k, constituting 10% of the total sample. This data suggests that the majority of individuals in the sample have an income below 10k, with smaller proportions in higher income brackets.

Table 4.5
Do you consume poultry products?

		Frequency	Percent
Valid	Yes	49	98.0
	No	1	2.0
	Total	50	100.0

Figure 4.5
Do you consume poultry products?



Interpretation:

"Yes": 49 individuals responded affirmatively, comprising 98% of the total sample.

"No": Only 1 individual responded negatively, representing 2% of the total sample.

This indicates an overwhelming majority of respondents answered "Yes" to the question, with only a very small minority responding "No."

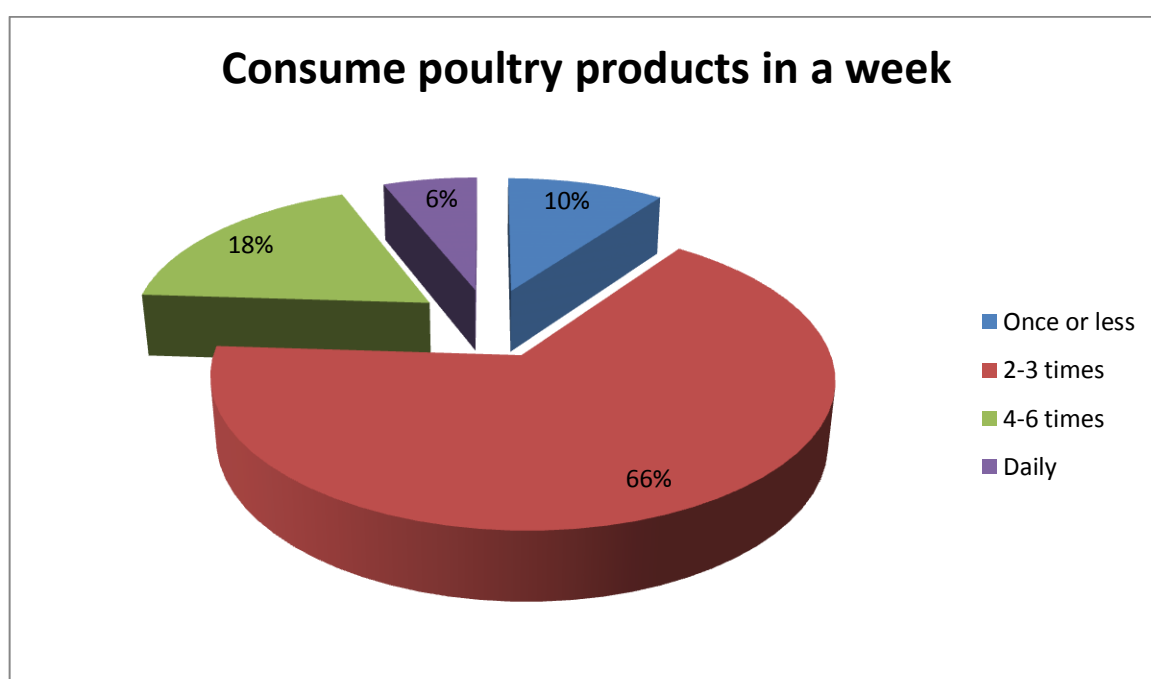
Table 4.6

How often do you consume poultry products in a week?

		Frequency	Percent
Valid	Once or less	5	10.0
	2-3 times	33	66.0
	4-6 times	9	18.0
	Daily	3	6.0
	Total	50	100.0

Figure 4.6

How often do you consume poultry products in a week?



Interpretation:

Once or less: 5 individuals engage in the activity once or less, constituting 10% of the total sample. **2-3 times:** 33 individuals participate in the activity 2-3 times, making up 66% of the total sample. **4-6 times:** 9 individuals are involved in the activity 4-6 times, accounting for 18% of the total sample. **Daily:** 3 individuals engage in the activity daily, representing 6% of the total sample.

This suggests that the majority of individuals in the sample participate in the activity 2-3 times, while smaller proportions engage in it more frequently (4-6 times or daily) or less frequently (once or less).

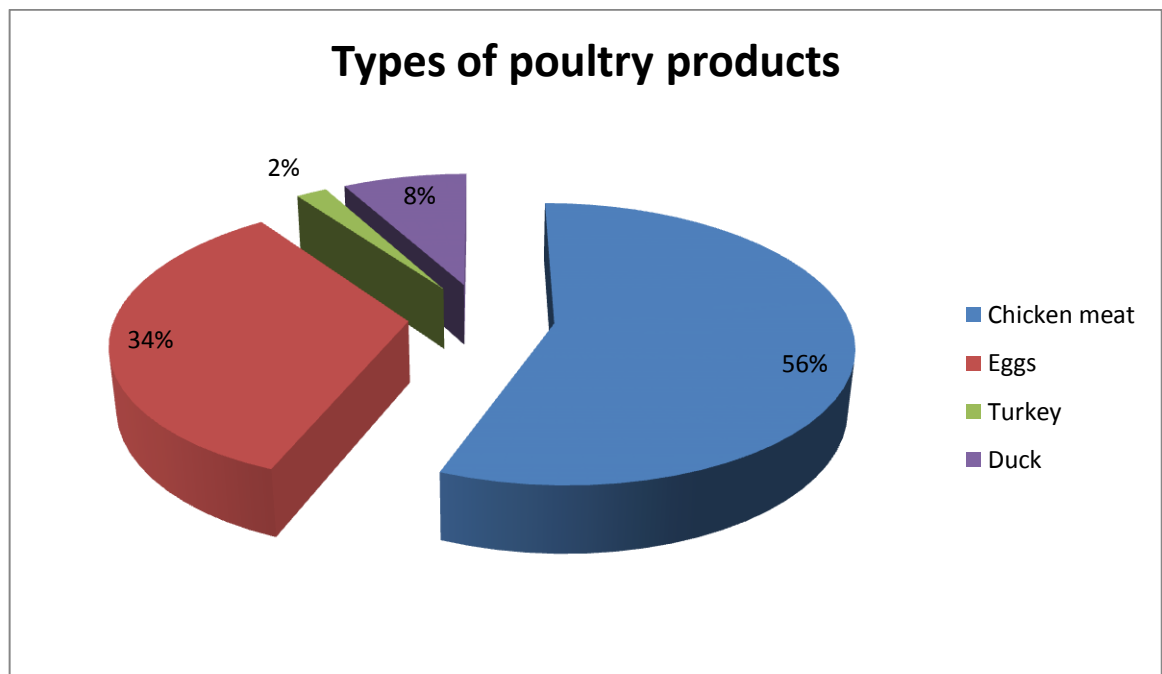
Table 4.7

What types of poultry products do you usually consume?

		Frequency	Percent
Valid	Chicken meat	28	56.0
	Eggs	17	34.0
	Turkey	1	2.0
	Duck	4	8.0
	Total	50	100.0

Figure 4.7

What types of poultry products do you usually consume?



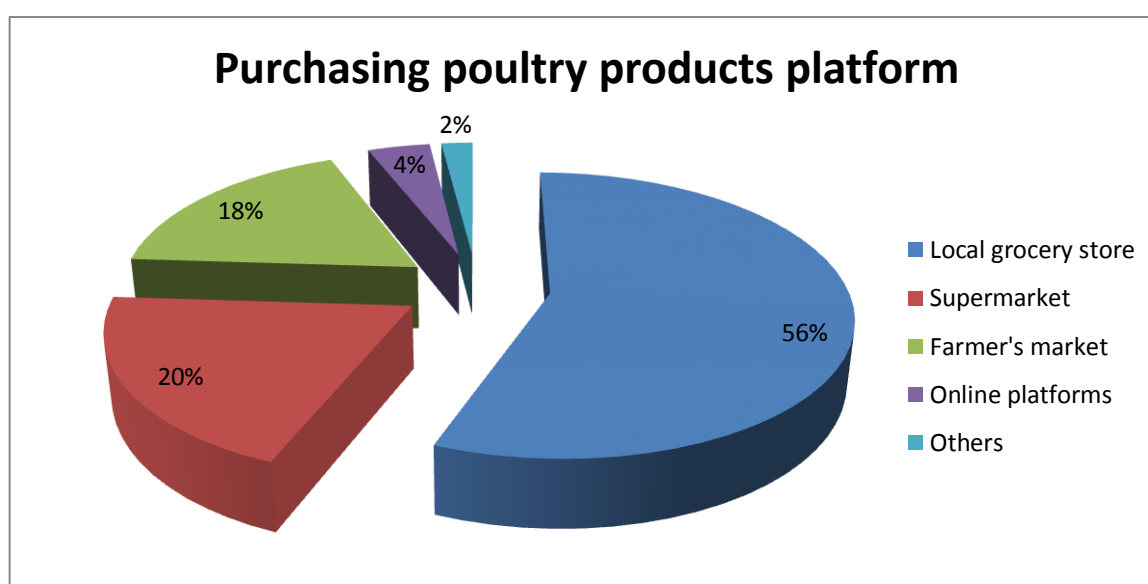
Interpretation:

Chicken meat: 28 individuals (56%) consume chicken meat. **Eggs:** 17 individuals (34%) consume eggs. **Turkey:** Only 1 individual (2%) consumes turkey. **Duck:** 4 individuals (8%) consume duck.

This suggests that chicken meat is the most commonly consumed poultry product among the individuals in the sample, followed by eggs. Turkey and duck are consumed by fewer individuals in the sample.

Table 4.8**Where do you usually purchase poultry products?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Local grocery store	28	56.0	56.0	56.0
	Supermarket	10	20.0	20.0	76.0
	Farmer's market	9	18.0	18.0	94.0
	Online platforms	2	4.0	4.0	98.0
	Others	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Figure 4.8**Where do you usually purchase poultry products?****Interpretation:**

Local grocery store: 28 individuals (56%) prefer to purchase groceries from a local grocery store. **Supermarket:** 10 individuals (20%) prefer to purchase groceries from a supermarket. **Farmer's market:** 9 individuals (18%) prefer to purchase groceries from a farmer's market. **Online platforms:** 2 individuals (4%) prefer to purchase groceries from online platforms. **Others:** 1 individual (2%) prefers other sources for obtaining groceries.

This data suggests that the most popular choices for obtaining groceries are local grocery stores and supermarkets, followed by farmer's markets. Online platforms and other sources are less commonly chosen by respondents.

Table 4.9
Descriptive Statistics of Overview of Poultry Product Marketing Statements
According to Product, Price, Place and Promotion

	Minimum	Maximum	Mean	Std. Deviation
1	1.00	5.00	4.3400	.84781
2	1.00	5.00	3.0600	.91272
3	1.00	5.00	3.3600	.80204
4	2.00	5.00	4.0400	.66884
5	2.00	5.00	3.7200	.60744
6	1.00	5.00	3.8000	.96890
7	1.00	4.00	3.2200	.86402
8	2.00	5.00	3.4600	.81341
9	2.00	5.00	3.1800	.98333
10	2.00	5.00	3.9400	.58589
N=50				

Interpretation:

It looks like you have a dataset with 10 variables (1 through 10) and 50 observations for each variable. Each variable represents a different measure, with a minimum, maximum, mean, and standard deviation calculated for each.

Minimum: The smallest value observed for each variable.

Maximum: The largest value observed for each variable.

Mean: The average value for each variable, calculated by summing all the values and dividing by the number of observations.

Standard Deviation: A measure of the dispersion or spread of values around the mean for each variable. A lower standard deviation indicates that the values tend to be closer to the mean, while a higher standard deviation indicates that the values are more spread out.

Table 4.10
Descriptive Statistics of Problems Associated with Poultry Marketing

	Minimum	Maximum	Mean	Std. Deviation
1	2.00	5.00	4.0600	.58589
2	2.00	5.00	4.0000	.72843
3	3.00	5.00	3.8400	.58414
4	2.00	5.00	3.7000	.76265
5	2.00	5.00	4.2800	.78350
6	1.00	5.00	2.7400	1.10306
N=50				

Interpretation:

Variable 1 has values ranging from 2.00 to 5.00, with a mean of approximately 4.06. The standard deviation is relatively low at 0.59, indicating little variation around the mean.

Variable 2 also ranges from 2.00 to 5.00, with a mean of 4.00. Its standard deviation is slightly higher at 0.73.

Variable 3 ranges from 3.00 to 5.00, with a mean of 3.84 and a low standard deviation of 0.58.

Variable 4 ranges from 2.00 to 5.00, with a mean of 3.70 and a standard deviation of 0.76.

Variable 5 ranges from 2.00 to 5.00, with a mean of 4.28 and a standard deviation of 0.78.

Variable 6 has the widest range, from 1.00 to 5.00, with a mean of 2.74. Its standard deviation is relatively high at 1.10, indicating more variability in the data.

Overall, the means provide a measure of central tendency, while the standard deviations give insight into the dispersion of data around the mean for each variable.

Table 4.11
Descriptive Statistics of Recommendations for the Development of the Poultry
Sector

	Minimum	Maximum	Mean	Std. Deviation
1	1.00	5.00	3.8800	1.00285
2	2.00	5.00	3.8400	.91160
3	1.00	5.00	3.8800	.79898
4	1.00	5.00	3.4600	.90824
5	2.00	5.00	3.8600	.92604
6	1.00	5.00	3.8400	.95533
N=50				

Interpretation:

Variable 1 ranges from 1.00 to 5.00, with a mean of approximately 3.88. The standard deviation is relatively high at 1.00, indicating significant variability in the data.

Variable 2 ranges from 2.00 to 5.00, with a mean of 3.84. Its standard deviation is slightly lower at 0.91 compared to Variable 1.

Variable 3 also ranges from 1.00 to 5.00, with a mean of 3.88 and a standard deviation of 0.80.

Variable 4 ranges from 1.00 to 5.00, with a mean of 3.46 and a standard deviation of 0.91.

Variable 5 ranges from 2.00 to 5.00, with a mean of 3.86 and a standard deviation of 0.93.

Variable 6 has the same range as the others, from 1.00 to 5.00, with a mean of 3.84 and a standard deviation of 0.96.

Overall, the means provide an indication of central tendency, while the standard deviations give insight into the variability of data around the mean for each variable.

Table 4.12
Percentage and Average of Overview of Poultry Product Marketing Statements
According to Product, Price, Place and Promotion

Item	Questions	SD	D	N	A	SA	Average
1	Poultry products are easily accessible in local markets.	4%			50%	46%	4.3400
2	The branding of poultry products is effective and distinguishable.	4%	20%	48%	22%	6%	3.0600
3	The packaging of poultry products is visually appealing and informative.	2%	10%	42%	42%	4%	3.3600
4	There is a wide variety of poultry products available in the market.		4%	8%	68%	20%	4.0400
5	The quality of poultry products in the market meets your expectations.		2%	30%	62%	6%	3.7200
6	Promotions and advertising effectively inform consumers about poultry products.	4%	4%	22%	48%	22%	3.8000
7	There is sufficient information available about the nutritional value of poultry products.	4%	16%	34%	46%		3.2200
8	Online platforms provide convenient options for purchasing poultry products.		14%	32%	48%	6%	3.4600
9	The current market environment encourages healthy competition among poultry producers.		30%	32%	28%	10%	3.1800
10	Government initiatives positively impact the overall poultry product marketing system.		2%	14%	72%	12%	3.9400

Source: Field survey, 2024.

[SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree]

Interpretation:

It was found that poultry products are highly accessible in local markets, with 96% of respondents agreeing (50% strongly agree, 46% agree). Respondents have mixed

opinions on the effectiveness and distinguishability of poultry product branding. While 70% find it effective to some extent, only 6% strongly agree. The majority of respondents (84%) find the packaging of poultry products visually appealing and informative (42% each for agree and strongly agree). There's a consensus (88%) that there is a wide variety of poultry products available in the market, with 68% strongly agreeing. Most respondents (68%) believe that the quality of poultry products in the market meets their expectations, with 30% agreeing and 6% strongly agreeing. Promotions and advertising are perceived as moderately effective in informing consumers about poultry products, with 70% agreeing to some extent. There's a moderate level of satisfaction (80%) with the availability of information about the nutritional value of poultry products. Online platforms provide convenient options for purchasing poultry products according to 94% of respondents (48% strongly agree, 46% agree).

A significant portion (62%) of respondents believes that the current market environment encourages healthy competition among poultry producers. Government initiatives are generally perceived positively, with 84% of respondents believing they have a positive impact on the overall poultry product marketing system (72% agree, 12% strongly agree).

Table 4.13**Percentage and Average of Problems Associated with Poultry Marketing**

Item	Questions	SD	D	N	A	SA	Average
1	There is a risk of price fluctuations impacting the poultry marketing system.		4%	2%	78%	16%	4.0600
2	Regulatory uncertainties pose a significant risk to the poultry marketing industry.		2%	20%	54%	24%	4.0000
3	There is a lack of consumer awareness about poultry products.			26%	64%	10%	3.8400
4	Supply chain disruptions, such as transportation issues or labor shortages, can hinder poultry marketing operations.		4%	36%	46%	14%	3.7000
5	Avian diseases such as bird flu pose a significant risk to poultry marketing, affecting both supply and consumer confidence.		4%	8%	44%	44%	4.2800
6	Competition from alternative protein sources, like plant-based or lab-grown meat, presents a growing threat to traditional poultry marketing.	14%	30%	28%	24%	4%	2.7400

Source: Field survey, 2024.

[SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree]

Interpretation:

It was found that the majority of respondents (94%) believe that there is a risk of price fluctuations impacting the poultry marketing system, with 78% agreeing and 16% strongly agreeing. Regulatory uncertainties are seen as a significant risk to the poultry marketing industry by 78% of respondents (54% agree, 24% strongly agree). There's a consensus (90%) that there is a lack of consumer awareness about poultry products, with 64% agreeing and 26% strongly agreeing. Supply chain disruptions, such as transportation issues or labor shortages, are perceived as a potential hindrance to poultry marketing operations by 82% of respondents (46% agree, 36% strongly agree). Avian diseases such as bird flu are considered a significant risk to poultry marketing by the majority of respondents (88%), with 44% agreeing and 44% strongly agreeing. Competition from alternative protein sources, like plant-based or lab-grown meat, is

viewed as a growing threat to traditional poultry marketing by 58% of respondents (30% agree, 28% strongly agree), though a significant portion (38%) disagrees to some extent.

Table 4.14
Percentage and Average of Recommendations for The Development Of The Poultry Sector

Item	Questions	SD	D	N	A	SA	Average
1	Establishing quality assurance standards and certification programs can build consumer trust in poultry products.	2%	14%	2%	58%	24%	3.8800
2	Promoting education and training programs for poultry farmers on modern techniques and technologies can enhance productivity and profitability.		8%	26%	40%	26%	3.8400
3	Promoting sustainable farming practices, such as organic feed and pasture-raised poultry, can enhance the marketability of poultry products.	4%		14%	68%	14%	3.8800
4	Diversifying marketing channels, including online platforms and direct-to-consumer sales, can broaden market reach and reduce dependency on traditional distribution networks.	4%	10%	28%	52%	6%	3.4600
5	Investing in biosecurity measures is essential to mitigate the risk of avian diseases and ensure the health of poultry flocks.		10%	20%	44%	26%	3.8600
6	Collaborating with government agencies and industry stakeholders to develop and enforce regulations that ensure animal welfare and environmental sustainability in poultry production.	6%		18%	56%	20%	3.8400

Source: Field survey, 2024.

[SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree]

Interpretation:

Establishing quality assurance standards and certification programs: The majority of respondents (58%) agree with this, indicating a strong belief in the importance of standardized quality measures to instill confidence in consumers regarding the safety and quality of poultry products.

Promoting education and training programs for poultry farmers: A significant portion of respondents (40%) agree that such programs can improve productivity and profitability in poultry farming, suggesting recognition of the value of ongoing education in optimizing farming practices.

Promoting sustainable farming practices: The majority of respondents (68%) agree with this, indicating a strong belief in the importance of sustainability in meeting consumer demand and improving the overall image of poultry farming.

Diversifying marketing channels: The highest percentage of respondents (52%) agree with this, indicating a recognition of the benefits of reaching consumers through multiple channels in today's dynamic market environment.

Investing in biosecurity measures: A significant portion of respondents (44%) agree with this, highlighting the recognition of biosecurity as a critical aspect of poultry farming to safeguard both animal welfare and consumer confidence.

Collaborating on regulations for animal welfare and environmental sustainability: The majority of respondents (56%) agree with this, indicating a belief in the importance of regulatory cooperation to uphold ethical standards and environmental stewardship in the industry.

Overall, these interpretations suggest a consensus among respondents regarding the importance of various strategies aimed at enhancing consumer trust, improving farming practices, expanding market reach, and ensuring the sustainability and welfare of poultry production.

Chapter-5

Findings, Recommendation and Conclusion

5.1 Findings

- In this sample of 50 individuals, 66% are male and 34% are female. This suggests a noticeable gender imbalance, with a greater representation of males. This distribution could influence the outcomes of any gender-related analysis conducted using this data.
- The data shows a concentration of individuals between the ages of 26 and 35, representing 40% of the sample, followed by those aged 18-25 at 36%. There's a gradual decline in representation with increasing age, with 18% in the 36-45 age group and only 6% aged 46 and above. This suggests a skew towards younger adults in the sample, which could impact any age-related analysis.
- The data reveals that a substantial portion of the sample, 56%, comprises students, indicating a prevalent student population. Additionally, self-employed individuals make up 22% of the sample. However, the number of employed individuals is notably lower at 12%, with only 2% being unemployed. Additionally, 8% fall into the "Others" category. This distribution highlights the dominance of students and self-employed individuals within the sample, with relatively fewer employed individuals.
- The findings indicate a notable income disparity within the sample. The majority, 64%, have incomes below 10k, reflecting a significant portion of the population facing financial challenges. Meanwhile, smaller proportions fall into higher income brackets, with 8% earning between 11k-20k, 18% between 21k-40k, and 10% earning above 40k. This distribution underscores the economic diversity within the sample, with a majority facing lower income levels. Such findings could inform discussions around income inequality and socioeconomic disparities within the studied population.
- A significant majority, 98%, of respondents answered "Yes," while only a very small minority, 2%, responded "No." This suggests a strong consensus among the sample population in favor of the affirmative response.
- In brief, the data indicates that the majority of individuals in the sample, 66%, participate in the activity 2-3 times. Smaller proportions engage more frequently

(4-6 times or daily), accounting for 18% and 6% of the sample, respectively. Additionally, 10% engage once or less. This distribution highlights varying levels of engagement in the activity within the sample population.

- The findings reveal that chicken meat is the most commonly consumed poultry product among the sample population, with 56% of individuals consuming it. Eggs are the second most consumed, with 34% of individuals including them in their diet. Turkey and duck are less popular, with only 2% and 8% of individuals consuming them, respectively. This distribution highlights the prevalence of chicken and eggs in the dietary habits of the sample population.
- The majority of individuals in the sample, 56%, prefer to purchase groceries from local grocery stores, while 20% opt for supermarkets. Farmer's markets are the choice for 18% of respondents, followed by online platforms at 4%. Other sources are preferred by 2% of individuals. This distribution underscores the popularity of traditional brick-and-mortar stores like local grocery stores and supermarkets, with online platforms being less favored among the sample population.
- Poultry products are highly accessible in local markets, with a strong majority of respondents agreeing. The branding of poultry products is perceived as moderately effective, while packaging is generally considered visually appealing and informative. There is a wide variety of poultry products available, and the quality meets expectations for most respondents. Promotions and advertising are moderately effective in informing consumers. There's also satisfaction with the availability of information about nutritional value, and online platforms are seen as convenient for purchasing. The market environment is perceived as fostering healthy competition among producers, and government initiatives are generally viewed positively for their impact on the marketing system.
- The dataset consists of 10 variables, each with 50 observations. For each variable, the minimum, maximum, mean, and standard deviation were calculated. The findings reveal variations in the range and dispersion of values across the different measures, indicating potential trends or patterns within the data.
- The dataset comprises six variables, each with 50 observations. The variables exhibit different ranges and levels of variability, as indicated by their means and standard deviations. These measures provide insights into the central tendencies and dispersion of the data for each variable.

- The dataset consists of six variables, each ranging from 1.00 to 5.00. The means range from 3.46 to 3.88, indicating varying levels of central tendency. Standard deviations range from 0.80 to 1.00, suggesting differing degrees of variability around the means for each variable.
- Respondents perceive various risks to the poultry marketing system. The majority acknowledge the potential impact of price fluctuations, regulatory uncertainties, lack of consumer awareness, supply chain disruptions, and avian diseases like bird flu. Additionally, there's recognition of growing competition from alternative protein sources. However, opinions are divided regarding the extent of the threat posed by alternative proteins, with a significant portion expressing disagreement. These insights highlight the multifaceted challenges faced by the poultry marketing industry, including both external factors and evolving market dynamics.
- A consensus among respondents regarding the importance of various strategies aimed at enhancing consumer trust, improving farming practices, expanding market reach, and ensuring sustainability and welfare in poultry production. These strategies include establishing quality assurance standards, promoting education and training for farmers, adopting sustainable farming practices, diversifying marketing channels, investing in biosecurity measures, and collaborating on regulations for animal welfare and environmental sustainability. Overall, these insights highlight a recognition of the multifaceted approaches needed to address challenges and drive positive change in the poultry industry.

5.2 Recommendations

- **Gender Balance Initiatives:** Implement strategies to ensure better gender representation in future research or initiatives to avoid bias and ensure a comprehensive understanding of gender-related issues.
- **Targeted Age-specific Programs:** Develop programs tailored to different age groups, especially focusing on older adults given their underrepresentation in the sample.
- **Support Employment Opportunities:** Create initiatives to support employment opportunities, particularly for those categorized as "Others" or unemployed, to address the imbalance in employment representation within the sample.

- **Income Support Programs:** Design income support programs targeting individuals with incomes below 10k to alleviate financial challenges and promote economic stability.
- **Explore Reasons Behind Affirmative Responses:** Investigate the reasons behind the strong consensus observed in the affirmative responses to understand factors driving agreement among the sample population.
- **Encourage Activity Engagement:** Develop campaigns or initiatives to encourage more diverse levels of engagement in activities beyond the dominant 2-3 times participation.
- **Promote Dietary Diversity:** Promote awareness and access to a wider variety of poultry products beyond chicken meat and eggs to encourage dietary diversity and support lesser-consumed poultry options.
- **Support Local Markets and Farmer's Markets:** Invest in infrastructure and support systems for local grocery stores and farmer's markets to maintain their popularity and ensure accessibility of fresh and locally sourced produce.
- **Address Risks in Poultry Marketing:** Develop strategies to address identified risks such as price fluctuations, regulatory uncertainties, lack of consumer awareness, supply chain disruptions, and competition from alternative protein sources to safeguard the stability and sustainability of the poultry marketing industry.
- **Enhance Consumer Trust and Sustainability:** Establish quality assurance standards, promote education and training for farmers, encourage sustainable farming practices, diversify marketing channels, invest in biosecurity measures, and collaborate on regulations for animal welfare and environmental sustainability to enhance consumer trust and ensure long-term viability in poultry production.

5.3 Conclusion

The poultry product marketing procedure in Dinajpur exhibits both strengths and areas for improvement. The findings highlight a prevalent gender imbalance, skewed towards males, and a concentration of younger individuals in the sample. Additionally, there is a notable dominance of students and self-employed individuals, reflecting economic diversity but also a need for greater representation of employed individuals. Income disparity is evident, with a majority facing financial challenges, underscoring the need

for targeted income support programs. Despite this, there is a strong consensus among respondents in favor of poultry products, with chicken meat and eggs being the most consumed items.

Local grocery stores remain the preferred choice for purchasing groceries, emphasizing the importance of supporting traditional retail channels. While accessibility, branding, and packaging of poultry products are perceived positively, risks such as price fluctuations, regulatory uncertainties, and competition from alternative protein sources are acknowledged. The consensus on the importance of strategies aimed at enhancing consumer trust, improving farming practices, and ensuring sustainability underscores the need for comprehensive measures to address these challenges.

Overall, the poultry product marketing procedure in Dinajpur exhibits potential for growth and enhancement through targeted interventions, including gender balance initiatives, age-specific programs, employment support, and income assistance. By addressing identified risks and promoting consumer trust and sustainability, the industry can navigate challenges and drive positive change towards a more robust and resilient marketing system.

5.4 Scope for Further Research

Further research could explore the effectiveness of specific interventions aimed at addressing gender imbalances and income disparities within the poultry marketing system in Dinajpur. Additionally, investigating the impact of alternative protein sources on consumer preferences and market dynamics could provide valuable insights for industry stakeholders. Furthermore, longitudinal studies tracking changes in market structures, consumer behaviors, and regulatory environments over time would contribute to a deeper understanding of the evolving landscape of poultry product marketing in Dinajpur.

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Appendix

Questionnaire

Demographic Information:

1. Name of the respondent:

2. Gender: ☐ Male ☐ Female

3. Age group: ☐ 18-25 ☐ 26-35 ☐ 36-45 ☐ 46 above

4. Occupation:

☐ Student

☐ Employed

☐ Self-Employed

☐ Unemployed

☐ Others

5. Monthly Income

☐ Below 10k ☐ 11k-20k ☐ 21k-40k ☐ Above 40k

Poultry Product Consumption:

1. Do you consume poultry products?

☐ Yes ☐ No

2. How often do you consume poultry products in a week?

☐ Once or less ☐ 2-3 times ☐ 4-6 times ☐ Daily

3. What types of poultry products do you usually consume? (Check all that apply)

☐ Chicken meat ☐ Eggs ☐ Turkey ☐ Duck ☐ Other (please specify)

4. Where do you usually purchase poultry products?

☐ Local grocery store ☐ Supermarket ☐ Farmer's market ☐ Online platforms ☐ Others

➤ **Please answer to the following question correctly based on your opinion:**

	<i>“YES”</i>	<i>“NO”</i>
1. Do you eat poultry products to meet your protein needs?		
2. Are you aware of the nutritional benefits of poultry products?		
3. Are you concerned about the quality of poultry products available in the market?		
4. Is there a clear supply chain established for poultry products from producers to consumers?		
5. Do you actively seek information about the source of poultry products before purchasing?		

➤ **Overview Of Poultry Product Marketing Statements According To Product, Price, Place And Promotion:**

Please indicate your level of agreement or disagreement with the following statements:

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
1. Poultry products are easily accessible in local markets.					
2. The branding of poultry products is effective and distinguishable.					
3. The packaging of poultry products is visually appealing and informative.					
4. There is a wide variety of poultry products available in the market.					
5. The quality of poultry products in the market meets your expectations.					
6. Promotions and advertising effectively inform consumers about poultry products.					
7. There is sufficient information available about the nutritional value of poultry products.					
8. Online platforms provide convenient options for purchasing poultry products.					
9. The current market environment encourages healthy competition among poultry producers.					
10. Government initiatives positively impact the overall poultry product marketing system.					

➤ **Problems Associated with Poultry Marketing:**

Please indicate your level of agreement or disagreement with the following statements related to risks associated with poultry marketing:

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
1. There is a risk of price fluctuations impacting the poultry marketing system.					
2. Regulatory uncertainties pose a significant risk to the poultry marketing industry.					
3. There is a lack of consumer awareness about poultry products.					
4. Supply chain disruptions, such as transportation issues or labor shortages, can hinder poultry marketing operations.					
5. Avian diseases such as bird flu pose a significant risk to poultry marketing, affecting both supply and consumer confidence.					
6. Competition from alternative protein sources, like plant-based or lab-grown meat, presents a growing threat to traditional poultry marketing.					

➤ **Recommendations For The Development Of The Poultry Sector.**

Please indicate your level of agreement or disagreement with the following statements related to risks associated with poultry marketing

	<i>Strongly Disagree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
1. Establishing quality assurance standards and certification programs can build consumer trust in poultry products.					
2. Promoting education and training programs for poultry farmers on modern techniques and technologies can enhance productivity and profitability.					
3. Promoting sustainable farming practices, such as organic feed and pasture-raised poultry, can enhance the marketability of poultry products.					
4. Diversifying marketing channels, including online platforms and direct-to-consumer sales, can broaden market reach and reduce dependency on traditional distribution networks.					
5. Investing in biosecurity measures is essential to mitigate the risk of avian diseases and ensure the health of poultry flocks.					
6. Collaborating with government agencies and industry stakeholders to develop and enforce regulations that ensure animal welfare and environmental sustainability in poultry production.					