

Supply Chain Analysis of Village Chicken Business Provider of Meat in Central Lombok District

Totok Blegoh Julianto^{1*}), Hermasyah²⁾, Bulkaini³⁾, Syamsul Multazam⁴⁾

¹Master of Animal Resources Management, Faculty of Animal Husbandry, University of Mataram

Email: totokblegohjulianto@gmail.com

²Master of Animal Resources Management, Faculty of Animal Husbandry, University of Mataram

Email: hermasyah.alam@gmail.com

³Master of Animal Resources Management, Faculty of Animal Husbandry, University of Mataram

Email: bulkaini.b@gmail.com

⁴Master of Animal Resources Management, Faculty of Animal Husbandry, University of Mataram

Email: syamsul.mltzm@gmail.com

DOI: <https://doi.org/10.35719/pneka450>

Received: June 25, 2024

Revised: September 5, 2024

Approved: September 30, 2024

*Corresponding Author: Totok Blegoh Julianto. Email: totokblegohjulianto@gmail.com

Abstract

This study aims to analyze the supply chain of free-range chicken meat suppliers in Central Lombok Regency in order to find out efficient distribution channels/supply chains for free-range chickens and large marketing margins obtained by business actors. The number of respondents in this study was 54 people who were obtained randomly.purposive samplingAndsnowball samplingby survey method. The data obtained were analyzed using the Marketing Margin Analysis method. The results of the study showed thatThe efficient marketing channel for native chicken meat providers in Central Lombok Regency is Farmers → Chicken and Carcass Collectors → Restaurants → End Consumers and the income margin of each business actor marketing native chicken meat providers in Central Lombok Regency is that farmers get a profit of IDR..4,600/live chicken, live chicken collectors get a profit of IDR..2,000/live chicken, chicken and carcass collectors get IDR..12,000-18,000/chicken carcass, retail traders get IDR..1,000/chicken carcass, traveling traders get IDR..2,000/chicken carcass and restaurants get IDR..22,000-38,000/portion of ready-to-eat native chicken.

Keywords: Supply Chain, Kampung Chicken, Central Lombok

1. INTRODUCTION

Free-range chicken farming on a business scale is a form of capital-intensive agribusiness. A number of free-range chicken farmers on Lombok Island have been running it for years. However, farmers also experience failure due to disease attacks and others. Raising chickens is high risk if the implementation of maintenance management is not properly considered, especially the form and type of disease that attacks chickens. Whereas on the other hand, the demand for broiler chickens from free-range chickens tends to be higher, thus encouraging free-range chicken farmers to continue to cultivate.

The application of low cultivation technology will result in losses for farmers. The fluctuating price of native chickens will also cause losses for farmers. Most people in rural areas in West Nusa Tenggara, especially in Central Lombok Regency, always keep native chickens ranging from 5 to 10, but this is not done intensively (Bulu, et al., 2023). The purpose of keeping native chickens is not only to meet family needs but also to be marketed.

Marketing is all business activities aimed at providing satisfaction from goods or services exchanged to consumers or users (Sa'id et al, 2001). Marketing is a combination of interrelated activities to find out consumer needs through the creation, offering and exchange of valuable products and services and developing promotions, distribution, services and prices so that consumer needs can be satisfied well at a certain level of profit (Bakari, 2013).

The potential for developing native chickens in Central Lombok Regency tends to increase from year to year. This is due to the increasing need for broiler chickens from native chickens. Consumer interest in consuming native chicken meat is increasing, which is one of the things that encourages native chicken farmers to increase the number of native chickens raised, both ordinary native chickens, Arab chickens, coper native chickens, and KUB chickens. As a note, the population of native chickens in the province of West Nusa Tenggara is 9,206,819 and in Central Lombok Regency it reaches 42.30% of the population of the province of West Nusa Tenggara, which is 3,894,376.(One Data NTB, 2022).

At the end of 2023, the availability and population of Kampung chicken in Central Lombok Regency had increased because there were several farmers who were doing chicken breeding businesses. In addition to KUB chickens, other kampung chickens experienced an increase in line with the increasing demand for carcasses by a number of restaurants both in Central Lombok Regency and outside Central Lombok Regency (BSIP, 2023). This condition has re-created a network of businesses and marketing of kampung chickens in Central Lombok in particular and Lombok Island in general. Kampung chicken marketing activities and increasing consumer needs encourage institutions or value chain actors in marketing channels to distribute kampung chicken products to end consumers. Marketing of kampung chickens through various

marketing channels according to the functions and roles of each institution thus creates a marketing margin.

The availability of native chickens at the local level, especially in Central Lombok Regency, has begun to increase because farmers have generally started to maintain and raise native chickens due to increasing consumer demand. In marketing their products, farmers have not yet carried out supply chain management, therefore farmers still do not know the cost strategy based on efficient product distribution, controlled work and are able to increase profits.

Distribution issues are one of the issues that need to be considered in the marketing field. Distribution channels have a very important meaning for achieving company success in marketing their products. In order for a product to be said to exist and be useful, the product must be available in the market when consumers need it and can be reached by consumers.

2. LITERATURE REVIEW

Free Range Chicken in West Nusa Tenggara Province

Based on data from BPS NTB 2023, the population of native chickens in the last 5 years has increased. To find out the population of native chickens from 2018 to 2022, see table 1.

Table 1. Total population of free-range chickens 2018-2022 in NTB

Regency/City	2018	2019	2020	2021	2022
City of Mataram	78,128	59,324	62,290	49,806	53,804
West Lombok	1,187,910	1,242,689	1,256,477	1,214,399	1,200,369
Central Lombok	3,078,320	3,074,683	2,273,969	3,693,440	3,894,376
East Lombok	1,485,844	1,488,996	1,606,542	1,624,236	1,417,488
North Lombok	126,754	132,368	128,268	132,621	136,985
West Sumbawa	103,537	93,820	104,414	101,049	106,991
Sumbawa	893,279	900,436	779,476	700,024	701,489
Dompu	518,754	555,062	577,259	592,574	583,970
Bima	540,505	569,531	613,332	723,238	734,086
Bima City	142,737	145,737	295,817	369,865	377,261
NTB	8,155,768	8,262,646	7,697,844	9,201,252	9,206,819

Source: BPS NTB 2023

The district/city with the largest population of native chickens is Central Lombok Regency with a population of 3,894,376 or 42.30% of the population of native chickens in NTB. These native chickens consist of KUB chickens, Jopper chickens, Arab chickens and other chickens. Raising native chickens has long been eyed by prospective breeders. Every year, the demand for native chickens increases

by an average of 15%. Seeing the relatively high demand, of course the opportunity to do a native chicken business is still wide open. Moreover, the profits are large and promising. The taste is savory, delicious, and has a distinctive taste, making native chickens a favorite for consumers. Native chickens are indeed relatively easier to raise compared to other types of chickens. However, raising native chickens still requires intensive care.

Agricultural Product Marketing Concept

The production of agricultural products such as native chicken commodities is directly related to marketing activities. Production and marketing activities are agribusiness activities through certain management. Marketing activities are important in the agribusiness system starting from the provision of agricultural production facilities (input subsystem), farming (cultivation subsystem), marketing (marketing subsystem) and processing of agricultural products (processing subsystem), as well as supporting institutions (institutional subsystem) (research, extension, financing/credit, marketing and price information, marketing institutions) (Asmarantaka, et al., 2017). The purpose of marketing is to bridge what producers and consumers want in completing the production process. Marketing activities that are carried out efficiently and fairly, then overall marketing activities can increase economic efficiency, increase the profits of producers and value chain actors and increase consumer satisfaction through various approaches.

The definition of marketing or commerce (marketing) can be approached through two approaches, namely the economic and managerial approaches. The economic approach is an overall marketing approach (macro approach) from farmers/livestock breeders or commodity flows after the farm level until the commodity/product is received/consumed by the end consumer (Asmarantaka, et al., 2017). Thus, the economic approach involves many companies or value chain actors (institutional approach), productive activities and added value (functional approach), and system approach (input-output system).

Asmarantaka, et al (2017) explained that marketing activities can be carried out with a functional, institutional and system approach. The functional approach is a marketing study approach from business activities that occur or treatments that exist in the process in the marketing system that will increase and create value to meet consumer needs. The institutional approach is the involvement of various business organizations, business groups that carry out or develop business activities (marketing functions). The system approach emphasizes the entire continuous and efficient system of all sub-systems in the flow of products/services from primary producer farmers to end consumers.

Marketing Channels

Distribution of goods and services in agricultural product marketing will go through marketing channels which are marketing institutions as value chain actors.

Marketing institutions are business entities or individuals/individuals who carry out marketing activities, distribute agricultural products or services to end consumers, and have networks and connectivity with other business entities and/or individuals (Soerkartawi 2001).

According to Kotler and Armstrong (2008) marketing channels are a group of companies or individuals who have the ownership rights of a product and depend on each other so that the product can be consumed by the end user in the marketing channel. In product marketing, it often happens that sellers do not directly sell products to users, but through marketing channels or distribution channels (Kotler, 2005: Kotler and Keller, 2016). Marketing channels (distribution channels) are a collection of interdependent individuals or organizations that help provide products or services for use or consumption by consumers or user industries (Kotler & Armstrong, 2017).

Marketing channels are channels that connect buyers with sellers. Marketing institutions emerge as a result of consumer needs to obtain the desired products according to time, place and form. For example, free-range chickens in several marketing channels require live chickens and end users require them in carcass form. Even end users such as restaurants require free-range chicken carcasses with a certain weight (Bulu, et al., 2023). This description shows that the role of marketing institutions is to carry out marketing functions and fulfill consumer needs and desires to the maximum. Consumers provide compensation for the marketing functions carried out by consumer institutions. The value of this compensation is reflected in the size of the marketing margin. According to Utama et al., (2019) explains that the marketing institution environment consists of actors and forces that influence the market and have the ability to develop and maintain profitable transactions with customers.

According to Pranatagama et al, (2015), agricultural marketing distribution channels organize agricultural commodities from producers to consumers, through several marketing channels: 1). Zero-level channels, where this zero-level channel is also better known as a direct channel, meaning that producers directly sell their goods to consumers, so in this case producers do not use intermediaries. The flow is: Producer -> Customer; 2). One-level channels, called one-level channels because there is only one intermediary institution, where the intermediary institution for consumer goods is generally through retailers. The flow is: Producer -> Retailer -> Customer (Consumer); 3). Two-level channels (To Level Channel), called two-level channels because there are two intermediaries and for consumer goods in general the intermediary institutions are wholesalers and retailers. The flow is: Producer -> Wholesaler -> Retailer -> Customer; 4). Multi-level channels, called multi-level channels because they involve many intermediaries, this is usually in addition to wholesalers and retailers there are also collectors and each intermediary has other

intermediaries, and usually this form of channel is more suitable for marketing / distributing consumer goods and not industrial goods. The flow: Producer -> Wholesaler -> Distributor -> Retail Customer.

Marketing margin

Product distribution in indirect marketing or sales through channels will have a price difference between the price received by the producer and the price paid by the end consumer or there is a price difference at each level of the marketing channel. The difference in price received by the producer and the price paid by the end consumer is the marketing margin. Marketing margin can be defined as the difference in price paid by the consumer and the price received by the producer. Marketing margin can also be interpreted as the value of services for implementing business activities from the producer level to the consumer level (Limbong Sitorus, 2010).

The costs incurred in marketing are mainly in increasing the usefulness of the product related to time, form, place, weight and ownership (Achike & Anzaku, 2010). The more marketing channels, the higher the marketing costs and the higher the margins (Aswathy et al., 2014). Direct product distribution has several advantages, namely allowing producers to reduce marketing costs so that they can maintain a larger price share than the retail price (Low et al., 2015) and receive greater profits (Printezis & Grebitus, 2018).

Marketing margin is often used as the difference between prices at various levels of marketing institutions in a marketing system. Kohls (2002) stated that two alternatives to marketing margin are: (1) The difference in price paid by consumers and the price received by producers; (2) Is the price of a collection of marketing services as a result of demand and supply of these services. The length of a marketing channel can affect its margin, the longer the marketing channel, the greater the marketing margin, therefore the more institutions involved. The large number of marketing margins can cause the portion of the price received by producer farmers to be smaller compared to the price paid directly by farmers' consumers, so that the marketing channel that occurs or is getting longer can be said to be inefficient.

Marketing Efficiency

Marketing efficiency can be seen from the "farmers Share". According to (Downey & Erickson, 1992; Asmarantaka, 2012), marketing is said to be efficient if it has met two requirements, namely delivering results or products from producers to consumers at the lowest possible cost and being able to make a fair distribution to all parties involved in the production and marketing activities of the product (Sudiyono, 2001). According to Hanafiah and Saefudin (1983) it is different from what consumers mean. This difference arises because of the difference in interests between entrepreneurs and consumers. Entrepreneurs consider a marketing system efficient if the sale of their products can bring them high profits. Conversely,

consumers consider the marketing system efficient if consumers can easily get the desired goods at low prices.

Farmer's share is the comparison between the price received by farmers and the price paid by end consumers. Farmer's share is the portion received by farmers expressed in percentage. Farmer's share between one commodity and another is different, this depends on the amount of use, place, weight and time added by farmers and intermediary traders connected in a marketing channel. Farmer's share is the portion of the price paid by end consumers to farmers in percentage. The amount of Farmer's share is influenced by the level of processing, transportation costs, product durability and quantity of products. The higher the Farmer's share, the higher the price portion received by farmers (Kohls and Uhl. 2002).

Farmer's share is the percentage of price received by farmers compared to the selling price of collectors. According to Siregar (2010), the size of the farmer's share does not always indicate the size of the profit received by farmers. The longer the marketing channel, the smaller the share (farmer's share) received by farmers, even though the price paid by consumers is higher.

The distribution of prices received by farmers (farmer share) which is a comparison of prices paid by farmers with prices at the consumer or retail level (Sazmi et al., 2018) can describe one indicator of marketing efficiency (Erzal et al., 2015) and marketing fairness. The greater the proportion of prices received by farmers, the fairer the existing marketing system because farmers have the largest functional role (Muslim & Darwis, 2012). Farmer share for each level of marketing channel has different amounts (Ifanda, 2017). These results can be interpreted that each marketing channel has a different level of efficiency.

Supply Chain

Supply Chain is a network of companies that work together to create and deliver a product to the end user. These companies usually include suppliers, factories, distributors, stores or retailers, and supporting companies such as logistics service companies (Pujawan, 2010). According to Darajat and Yunitasari (2017) Supply chain is an integrated process where a number of entities work together to obtain raw materials, change raw materials into finished products, and send them to retailers and customers. In addition to being a unity of Supplier, Manufacturing, Customer, and Delivery Process, supply chain is also a system where organizations distribute their production goods and services to their customers. Anititawati et al (2016) said that Supply Chain is a set of activities related to the network of facilities and distribution options that include all interactions between suppliers, companies, manufacturers, distributors, and consumers who carry out the functions of procuring materials, processing these materials into semi-finished or finished goods, and distributing finished goods to customers.

Pujawan (2010) added concretely, In a supply chain there are usually 3 types of flows that must be managed. The first is the flow of goods that flows from upstream to downstream. An example is raw materials sent from suppliers to factories. After the products are finished being produced, they are sent to distributors, then to retailers, then to end users. The second is the flow of money and the like that flows from downstream to upstream. The third is the flow of information that can occur from upstream to downstream or vice versa. Information about the stock of products that are still available in each supermarket is often needed by distributors and factories. Information about the availability of production capacity owned by suppliers is also often needed by factories.

Previous Research

Muhammadet al., (2014) with the research title "Evaluation of Supply Chain Management Performance at Jeky PM Chicken Meat Supplier". The Jeky PM chicken meat supply chain, starts from farmers who are suppliers of live chickens, the next chain is Jeky PM as a supplier of chicken meat, in this chain there is a production process where live chickens from farmers are processed into chicken meat, and distributed to agents and wholesalers and sold directly to the surrounding community, after going through the main chain, there are 5 chains that are Jeky PM's distribution lanes, namely: the surrounding community, wholesalers, supermarkets, hotels, and restaurants. Of the five chains, there are three final chains, namely the surrounding community, buyers in traditional markets and supermarkets, and culinary connoisseurs.

English(2019), with the title of the study "Supply Chain Analysis of Free-Range Chicken Meat in Restaurants (Gandu Roast Chicken) in Ponorogo Regency". The results of the study found a supply chain flow that includes the flow of information on farmers and the flow of products containing live chickens that are taken or harvested directly by the restaurant, then cut and cleaned into carcasses after which they are processed into processed chicken meat at the Gandu Roast Chicken restaurant in Ponorogo. The market flow occurs in 1 flow with a cash payment transaction system used during the distribution process greatly affecting the performance of each link, while to measure added value using BEP (Break Even Point) at the chicken farmer level.

3. RESEARCH METHOD

The method used in this study is the survey method. Survey research is an activity in collecting quantitative data in a structured manner. There are important

differences between surveys and survey research. Survey is research that takes samples from one population and uses questionnaires as the main data collection tool (Singarimbun et al., 2009). "Surveys are a basic form of quantitative research". Survey research asks respondents about their beliefs, opinions, characteristics, and behaviors that have occurred or are occurring (Groves, 2010).

The sample population includes free-range chicken farmers and free-range chicken traders, both those selling live free-range chickens and carcasses. The respondent sample was selected from the population of native chicken farmers and traders. The number of samples in this study was selected intentionally (purposive sampling) consisting of 20 farmers, 10 live chicken collectors, 5 live chicken and carcass collectors, 7 retail traders/market traders, 5 restaurants and 7 traveling traders so that 54 respondents were obtained. Purposive sampling is classified as non-probability sampling (Serra et al, 2018), used by researchers with certain considerations to select subject/unit samples from a population.

To identify the marketing channels of native chickens, a snowball sampling technique was used, where after the research was conducted, a classification of traders was carried out based on their status in marketing native chickens to provide an overview of the marketing channels of native chickens. Snowball sampling is one of the reliable sampling techniques for obtaining data from respondents to answer specific field research problems (Nurdiani, 2014).

The types of data collected include secondary and primary data. Secondary data can be collected from agencies that have data and information on the marketing of native chickens. Primary data is obtained from respondents through observation and interviews. Primary data collection techniques are carried out through observation, recording and in-depth interviews with respondents using a structured questionnaire, and documentation.

Qualitative data and information are analyzed using qualitative analysis methods through the process of codification, categorization, meaning, and abstraction (Purwandari, 1998). The collected data and information are then analyzed using descriptive and qualitative analysis methods. The analytical descriptive method according to (Sugiyono, 1997) is a method that functions to describe or provide an overview of the object being studied through data or samples that have been collected.

Marketing Margin Analysis:

According to Sudiyono (2004), to determine the size of the marketing margin for free-range chickens, the following formula is used.

$$MP = Pr - Pf$$

Information :

MP = Marketing Margin (IDR/head)

Pr = Price at retail level (IDR/head)

Pf = Price at farmer level (IDR/head)

To determine the amount of marketing profit obtained by the marketing institution, the following formula is used (Sudiyono, 2004):

$$\Pi = TR - TC$$

Information :

P = Profit

TR = Amount of revenue

TC = Total cost amount

The marketing margin analyst is then continued to calculate the distribution of marketing margins which is a comparison between the marketing agency's marketing margin and the total margin. Mathematically it can be written:

$$DM_i = \frac{M_i}{M_{all}}$$

Information:

DM_i = Distribution of marketing margin of institution i

M_i = Marketing margin of institution i

M_{tot} = total marketing margin

Farmer Share The size of the price share received by farmers/producers (farmer's share) can be calculated using the formula:

$$Sp = \frac{Pf}{Pr}$$

Information;

Sp = Portion of price received by producer farmers

Pf = Price at producer level

Pr = Price at consumer level.

The marketing efficiency assessment criteria were adopted from Sutrisno et al. (2015) and (Abhar et al., 2018): (a) If farmer's share ≥60%, then marketing is efficient; (b) If farmer's share <60%, then marketing is inefficient.

4. RESULTS AND DISCUSSION

The marketing channel of the supply chain of the free-range chicken meat provider business in Central Lombok Regency in the research that has been carried out can be seen from the channel process, namely using a simple distribution channel (distribution channel model 1 to 6 levels).

Respondent Characteristics.

There are several types of respondent characteristics in this study, namely: (a) Respondent gender, (b) Age, (c) Last education, (d) Occupation and (e) Experience, (f) Number of livestock owned by farmers.

Respondent Gender

According to Hungu (2016) gender is the difference between women and men biologically since a person was born. The biological differences and biological functions of men and women cannot be exchanged between the two, and their functions remain with men and women on earth. The diversity of respondents based on gender is presented in Table 2.

Table 2. Respondent Diversity Based on Gender

Gender	Number of Respondents (People)	(%)
Man	40	74
Woman	14	26
Amount	54	100

Source: Processed Primary Data, (2024).

Based on the data in Table 2, the gender of respondents is dominated by men with a total of 74% while women are 26%. This can happen because respondents consist of farmers and traders. This is supported by the opinion of Su'aidah (2005) who stated that activities that require greater physical strength, higher levels of risk and danger, and are carried out outside the home are generally intended for male workers. With an interest in farming and good physical abilities will advance the broiler farming business. Proper handling and placement of the right work position will increase effectiveness and productivity as a trigger for the success of a business (Wahyono, 2013).

Respondent Age

Age is one of the indicators that shows a person's physical ability. People who are older are physically weaker than people who are younger. The age of a farmer can affect their work productivity in livestock business activities. Age is also closely related to the mindset of farmers in determining the management system that will be applied in livestock business activities (Karmila, 2013). The diversity of respondents based on age is presented in Table 3.

Table 3. Respondents' Age

Respondent Age (Year)	Number of Respondents (Person)	(%)
30-40	20	37
41-50	21	39
>50	13	24
Amount	54	100

Source: Processed Primary Data, (2024).

Based on Table 3. It is known that the age of respondents varies from 30 years to >50 years, it can be said that the respondents in this study are still in a productive state, this is in accordance with the Manpower Law No. 13 of 2003. That people aged between 15-64 years are residents of productive age.

Productive age determines work enthusiasm and the level of adoption of an innovation. One of the factors that has an influence on employee productivity is the age factor (Mahendra and Woyanti, 2014). Workers with productive age have a higher level of productivity compared to workers who are already old because they are physically weak and limited.

Respondent's Last Education

Education level is an internal factor that influences the motivation of farmers in running their businesses. This is in accordance with the opinion of Hendrayani (2009) who stated that the higher the level of formal education taken by farmers, the higher their level of motivation in running their businesses. The diversity of respondents based on their last education is presented in Table 4.

Table 4. Respondents' Last Education

Respondent's Last Education	Number of Respondents (Person)	(%)
SD	-	-
JUNIOR HIGH SCHOOL	15	28
SENIOR HIGH SCHOOL	32	59
Diploma/S1	7	13
Amount	54	100

Source: Processed Primary Data, (2024).

Based on the data in Table 4, it is known that respondents with high school education have a larger number, namely 32 people or 59% of the total respondents. According to Murwanto (2008), the level of education of farmers is an indicator of population quality and is a key variable in human resource development. In livestock farming, the education factor is expected to help the community in efforts to increase production and productivity of livestock being raised. An adequate level of education will have an impact on improving the performance and management capabilities of the livestock business being run. The level of education of a population or community is very important, because the level of education of a person also affects a person's ability to think, in the sense of developing and improving the standard of living through creative thinking and seeing every opportunity and creating a job field (Sari, 2014).

Respondent's Occupation

There are several respondent jobs where the job is in the marketing activities of free-range chicken meat starting from farmers as producers to restaurant

entrepreneurs as the last or dominant place as a provider of final products from free-range chicken that are ready to be eaten by end consumers. The diversity of respondents based on respondent jobs is presented in Table 5.

Table 5. Respondents' occupations

Respondent's Occupation	Number of Respondents (Person)	(%)
Breeder	20	37
Live Chicken Collector	10	19
Live Chicken and Chicken Carcass Collectors	5	9
Retail Trader	7	13
Traveling Merchant	7	13
Restaurant Entrepreneur	5	9
Amount	54	100

Source: Processed Primary Data, (2024).

Jobs are generally defined as an active activity carried out by humans. Jobs are the scope, depth, and purpose of each job that distinguishes one job from another. Job objectives are implemented through job design, according to Handoko (2000) who states that job design is a function of determining the work activities of an individual or group organizationally which aims to organize work assignments that meet the needs of the organization, technology, and behavior.

Respondent Experience

The diversity of respondents based on their experience in pursuing their respective professions is presented in Table 6.

Table 6. Respondents' Experience in Carrying Out Their Profession

Profession	Length of Experience (Year)	Number of Respondents (Person)	(%)
Breeder	1-10	20	37
Live Chicken Collector	6-15	10	19
Live Chicken and Chicken Carcass Collectors	5-18	5	9
Retail Trader	4-12	7	13
Traveling Merchant	2-12	7	13
Restaurant Entrepreneur	5-15	5	9

Amount	54	100
--------	----	-----

Source: Processed Primary Data, (2024).

Livestock experience is a variable that plays a very important role in determining the success of farmers in increasing the development of livestock businesses and at the same time efforts to increase farmer income. Livestock experience is a good teacher, with sufficient cattle farming experience farmers will be more careful in their efforts and can improve past shortcomings (Murwanto, 2008). Experience is a factor that greatly determines the success of a business, with experience farmers will obtain very valuable guidelines for achieving business success in the future.

Number of Free-Range Chickens kept by Farmers per Maintenance and Sales Period.

To find out the number of livestock kept by each free-range chicken farmer, see Table 7.

Table 7. Number of Free-Range Chickens Raised by Farmers per Raising and Sales Period

No	Number of Livestock per Maintenance Period (tail)	Number of Livestock per Sales Period (tail)	Breeder (People)	(%)
1	200-500	200-500	13	65
2	600-1,000	600-1,000	6	30
3	2,000	2,000	1	5
Amount			20	100

Source: Processed Primary Data, (2024).

Based on the data in Table 7. Farmers who keep 200-500 native chickens have the largest number, namely 13 farmers (65%) because the business of raising native chickens in Central Lombok Regency is still a small business/home scale, with an intensive maintenance system or with closed cage maintenance. This is in accordance with the opinion of Sudrajat (2004). stated that intensive maintenance is the life of the chicken regulated by the farmer starting from the cage, feeding, mating and hatching to obtain optimal results.

The maintenance period of native chickens in Central Lombok Regency is 7-8 weeks in the grower phase or until the chicken weighs 500-1,000 grams. This maintenance is in accordance with consumer demand which is dominated by demand from restaurants. In general, the maintenance phase of native chickens, both on a small scale and an industrial scale, can be grouped based on their growth phase. There are 4 periods or phases in the maintenance of native chickens, namely the

starter phase (age 0-6 weeks), the grower phase (age 6-12 weeks), the developer phase (age 12-20 weeks), and the layer phase (age 20-60 weeks) (Suprijatna, 2008).

Number of Free-Range Chickens Purchased by Distributors per Day

To find out the number of livestock purchased by each distributor of free-range chickens, see Table 8.

Table 8. Number of Free-Range Chickens Purchased by Each Distributor

Distributor	Distributor	Number of Purchases per Day
1	Live Chicken Collector	50-150 (tails)
2	Chicken and Carcass Collector	70-800 (tail)
3	Retail Trader	25-50 (chicken carcass)
4	Traveling Merchant	5-25 (chicken carcass)
5	Restaurant	30-100 (chicken carcass)

Source: Processed Primary Data, (2024).

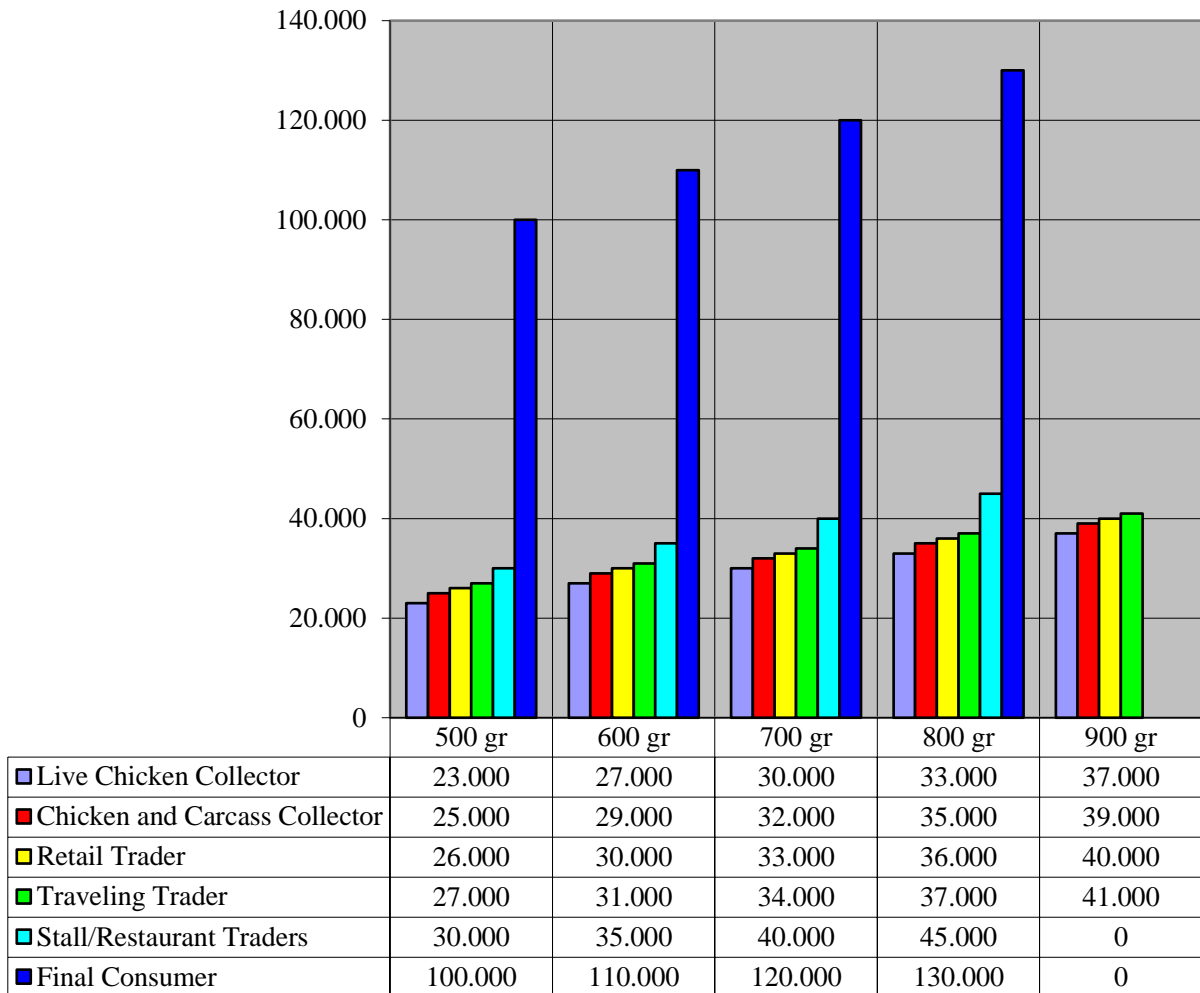
Distributors play an important role in people's daily lives because distributors are intermediaries between producers and consumers. Based on the data in Table 8. There are 5 distributors in the free-range chicken marketing business in Central Lombok Regency, each distributor has a different number of product purchases but has the same goal, namely to deliver/sell products to end consumers.

According to Anief (2000), the definition of a distributor is an intermediary who channels products from producers to consumers. The distributor then sells the product to retailers or directly to consumers.

Chicken Selling Price From Farmer to Distributor

To find out the selling price of native chicken based on weight from the farmer to the distributor and from distributor 1 to other distributors until the native chicken reaches the end consumer, see Figure 2.

Figure 1. Selling Price of Free-Range Chicken Based on Weight from Farmer to Distributor



Price is an element of the marketing mix that can generate revenue through sales. Based on data from Figure 2. The price of free-range chicken in Central Lombok Regency has different prices from each distribution, from the lowest price to the highest, namely live chicken collectors by buying chickens from breeders at a price of IDR. 23,000-37,000 with a chicken weight of 500-900 gr/head (live chicken

weight) while the highest price is the purchase of free-range chicken meat by end consumers at a price of IDR. 100,000-130,000.

Marketing Channels (Supply Chain) for Kampung Chicken in Central Lombok district

According to Lukman (2021), the supply chain is a series of activities or activities involved in delivering products in the form of raw materials to customers, both from sources of raw materials and spare parts.manufacturingas well as assembly, warehousing and inventory tracking, incoming orders and order management, distribution across channels, shipping and the information systems needed to monitor all activities.

This free-range chicken distribution activity involves several intermediary traders whose roles are very important in order to deliver or distribute free-range chicken meat in the Central Lombok Regency area in a series of marketing activities. The free-range chicken marketing actors in Central Lombok Regency include:

Live Chicken Collector

Live chicken collectors are traders who buy free-range chickens from breeders to resell to chicken and carcass collectors, and some even sell directly to end consumers. These live chicken collectors are traders located around Central Lombok Regency.

Chicken and Carcass Collector

Chicken and carcass collectors are traders who buy free-range chickens from breeders and live chicken collectors to resell to restaurants, retail traders, traveling traders and to end consumers. These chicken and carcass collectors are traders located around Central Lombok Regency.

Retail Trader

Retail traders are traders who buy free-range chickens from chicken and carcass collectors to resell to retail traders and to end consumers. These retail traders are traders located around the market in Central Lombok Regency.

Traveling Merchant

Itinerant traders are traders who buy free-range chickens from chicken and carcass collectors and retail traders to resell to end consumers. These itinerant traders are traders located around Central Lombok Regency who usually sell free-range chickens using motorbikes or on foot.

Stall/Restaurant Trader

Stall/restaurant traders are traders who buy free-range chickens from chicken and carcass collectors and retail traders to resell to end consumers in the form of processed/ready-to-eat dishes. These stall/restaurant traders are traders located around Central Lombok Regency and Mataram City.

The marketing channel (supply chain) for free-range chicken in Central Lombok has 6 channels.

Channel 1:

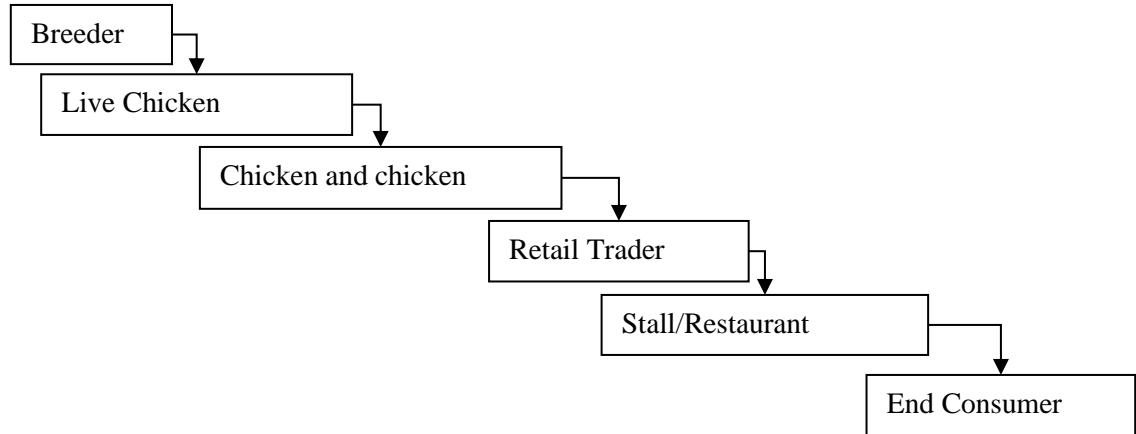


Figure 3. Marketing Channel 1

Based on Figure 3. It is known that there are 5 business actors who provide goods and 4 business actors as intermediaries until the goods reach the final consumer. This channel is included in the Multi Level Channel (Pranatagama et al, 2015).

Channel 2:

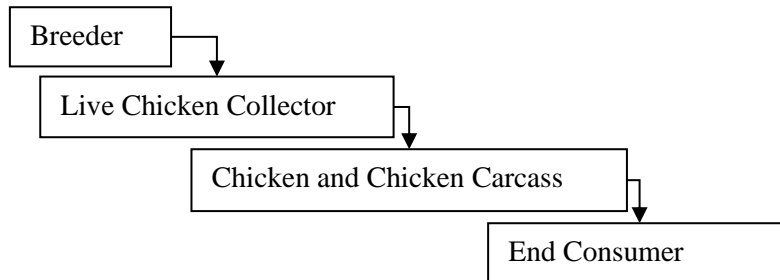


Figure 4. Marketing Channel 2

Based on Figure 4. Marketing channel 2, it is known that there are 3 business actors and 2 intermediaries who distribute the goods to the final consumer. This channel is included in the second level channel (To Level Channel) (Pranatagama et al, 2015).

Channel 3:

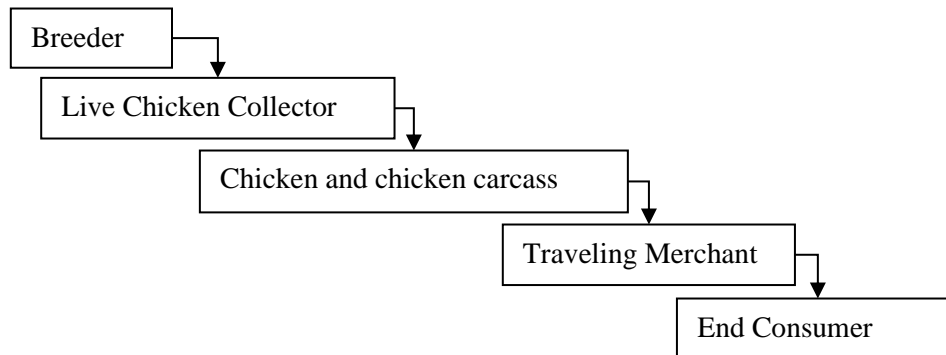


Figure 5. Marketing Channel 3

Based on Figure 5. It is known that there are 4 business actors or 3 intermediaries who distribute the goods to the final consumer. This channel is included in the Multi Level Channel (Pranatagama et al, 2015).

Channel 4:

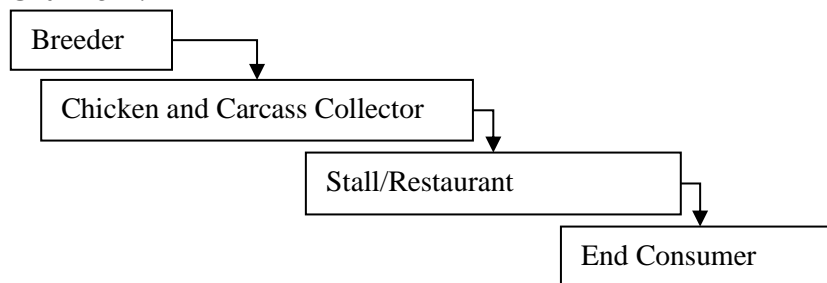


Figure 6. Marketing Channel 4

Based on Figure 6. Marketing channel 4, it is known that there are 2 business actors who act as intermediaries for goods to final consumers. This channel is included in the second level channel (To Level Channel) (Pranatagama et al, 2015).

Channel 5:

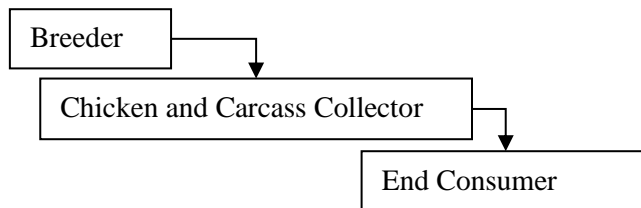


Figure 7. Marketing Channel 5

Based on Figure 7. It is known that there is 1 business actor who acts as an intermediary to the end consumer. This channel is included in the one-level channel (Pranatagama et al, 2015).

Channel 6:

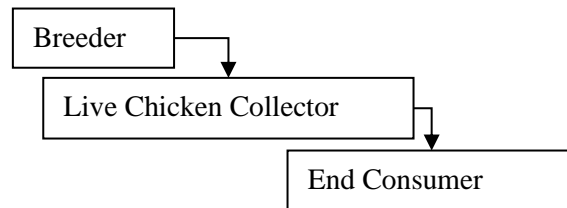


Figure 8. Marketing Channel 6

Based on Figure 7. It is known that live chicken collectors are intermediaries to end consumers. This channel is included in the One Level Channel (Pranatagama et al, 2015).

Of the 6 marketing channels (supply chains), there are 2 channels called level 2 channels (To Level Channel), namely channels 5 and 6, where channels 5 and 6 have two distribution derivatives, while channels 1-4 are multi-level channels (Multy Level Channel), namely having derivatives of more than two distribution channels.

According to Pranatagama, et al (2015), the shorter the chain of trade of agricultural products, the lower the marketing/trade costs; 2). The marketing/trade margin is also lower; 3). The price paid by consumers is also lower and; 4). The price received by producers is higher.

Cost and Revenue Analysis

The profit/income of each business actor in marketing native chicken in Central Lombok Regency gets different profits/income obtained from the product value minus the production value of each business actor. The profit/income and average cost of production of native chicken from each business actor can be seen in Table 9.

Table 9. Profit/income and average cost of production of free-range chickens for each business actor

No	Businessmen	Production Value (IDR/Head)	Production Cost (IDR/Head)	Income (IDR/Head)
1	Breeder	23,000	18,400	4,600
2	Live Chicken Collector	25,000	23,300	1,700
3	Chicken and Carcass Collector	37,000	27,500	9,500
4	Retail Trader	39,000	37,200	800

5	Traveling Merchant	40,000	38,200	1,800
6	Restaurant	100,000	67,000	33,000

Source: Processed Primary Data, (2024).

Based on the data in Table 9, the business actors who gain the most profit/income are restaurants and chicken and carcass collectors with each income being restaurants as much as IDR. 33,000 and chicken and carcass collectors IDR. 9,500. This happens because there is an increase in the value of a product after going through a process, such as in chicken and carcass collectors, chickens purchased from live chicken collectors will be slaughtered and cleaned so that whole chicken carcasses/meat are obtained and the additional selling value of chicken innards is IDR. 2,000/chicken, while restaurants chicken meat/chicken carcasses purchased from chicken and carcass collectors will be processed into ready-to-eat food such as grilled Taliwang chicken which makes the selling price high. The income from live chicken collectors, retail traders and traveling traders get the lowest profit because these business actors sell products without changing/processing the product from the previous product. Profit is the profit obtained by the company/business actor from the results of its business activities. Profit or gain is one of the main objectives of a company/business actor in carrying out its activities. By grouping elements of income and costs, different profit measurement results can be obtained between gross profit, profit before tax, operating profit and net profit (Firdhausya, 2019).

Marketing Analysis

Distribution of free-range chicken products and free-range chicken meat from producers to end consumers involves various business actors in product marketing. This will cause a price difference between the purchase price of the product and the selling price of the product as well as marketing costs incurred by each marketing business actor. The difference between the selling price and the purchase price of a product for each marketing business actor involved in a marketing activity is called the Marketing Margin. To find out the purchase price and selling price and marketing of each marketing business actor, one can see Table 10.

Table 10. Purchase Price, Selling Price and Marketing Margin of Free-Range Chicken and Free-Range Chicken Meat in Central Lombok Regency

Businessmen	Chicken Weight (gr)	Purchase Price (IDR)	Selling Price (IDR)	Marketing Margin
Live Chicken Collector	500	23,000	25,000	2,000
	600	27,000	29,000	2,000
	700	30,000	32,000	2,000
	800	33,000	35,000	2,000
	900	37,000	37,000	2,000

Chicken and Carcass Collector	500	25,000	37,000	12,000
	600	29,000	42,000	13,000
	700	32,000	47,000	15,000
	800	35,000	52,000	17,000
	900	39,000	57,000	18,000
Retail Trader	500	37,000	38,000	1,000
	600	42,000	43,000	1,000
	700	47,000	49,000	1,000
	800	52,000	53,000	1,000
	900	57,000	58,000	1,000
Traveling Merchant	500	38,000	40,000	2,000
	600	43,000	45,000	2,000
	700	49,000	50,000	2,000
	800	53,000	55,000	2,000
	900	58,000	60,000	2,000
Restaurant/Shop	500	37,000	60,000	23,000
	600	42,000	70,000	28,000
	700	47,000	80,000	33,000
	800	52,000	90,000	38,000
	900	-	-	-

Source: Processed Primary Data, (2024).

Based on the data in Table 10, each business actor gets a purchase price and has a different selling price from each business actor. The change in product type from live chicken to chicken carcass/ready-to-process chicken meat and from ready-to-process chicken meat/free-range chicken carcass to ready-to-eat dishes will cause a difference in price from live chicken collectors, chicken and carcass collectors, retailers, street vendors, restaurants and even consumers. The difference in purchase price and selling price from one business actor to another or from a business actor to the end consumer creates different marketing margins, where the marketing margin of restaurants is greater than other business actors with a margin value of IDR. 38,000 for 800 gr of cooked free-range chicken products. While the marketing margin for chicken and carcass collectors weighing 900 gr is IDR. 18,000, the large marketing margin of the two business actors is due to the processing of free-range chicken from live free-range chicken to carcass/free-range chicken meat and from carcass/free-range chicken meat to ready-to-eat dishes.

Cost Analysis, Margin Distribution (DM) and Marketing Price Share of Free-range Chicken in Central Lombok Regency

To find out the costs and what is incurred by each business actor in marketing free-range chickens in Central Lombok Regency and the amount of profit obtained by each business actor, as well as the value of Distribution Margin, Price Share and Efficiency of free-range chicken marketing in Central Lombok Regency can be seen in Table 11.

Table 11. Average Cost and Price, Margin Distribution, Price Share and Profit Ratio of Free-Range Chicken Business in Central Lombok Regency

Business Actors and Components	Costs and Prices (IDR)	DM (%)	Share (%)	Marketing Efficiency (%)
1. Breeder				
➤ Business costs	18,400	80	-	-
➤ Selling price	23,000			
➤ Profit	4,600			
2. Live Chicken Collector				
➤ Transportation costs	300	93.2	92	1.2
➤ Purchase price	23,000			
➤ Selling price	25,000			
➤ Profit	1,700			
3. Chicken and Carcass Collector				
➤ Labor costs	2,000	74.32	67.57	6.76
➤ Processing costs	200			
➤ Transportation costs	300			
➤ Purchase price	25,000			
➤ Selling price	37,000			
➤ Profit	9,500			
4. Retail Trader				
➤ Transportation costs	200	97.89	97.37	0.53
➤ Purchase price	37,000			
➤ Selling price	38,000			
➤ Profit	800			
5. Traveling Merchant				
➤ Transportation costs	300	95.75	95	0.75
➤ Purchase price	38,000			
➤ Selling price	40,000			
➤ Profit	1.7000			

6. Restaurant/Shop	10,000			
➤ Labor costs	30,000			
➤ Processing fees and others		77	37	40
➤ Purchase price	37,000			
➤ Selling price	100,000			
➤ Profit	33,000			

Source: Processed Primary Data, (2024).

Based on the data in Table 11. There are 4 business actors who have a price share $\geq 60\%$, namely live chicken collectors 92%, chicken and carcass collectors 67.57%, retail traders 97.37% and traveling traders 95%, while the price share value of restaurants is $< 60\%$ this is because the products sold by restaurants are in the form of ready-to-eat processed products where the processed products have been processed from raw materials to cooked materials.

Price share is the percentage of the price received by the producer with the price paid by the consumer. Several factors affect farmer share, including processing level, transportation costs, product quantity, and product durability. Farmer share is negatively related to marketing margin. If the marketing margin is higher, the portion received by the business actor is lower.

The village chicken business actors in Central Lombok Regency who have marketing efficiency values in order from the highest to the lowest are restaurant business actors with an efficiency value of 40%, chicken and carcass collectors 6.76%, live chicken collectors 1.2%, traveling traders 0.75% and retail traders 0.53%.

The occurrence of changes in the form (processing) of a product can increase the selling price and value of a product because it is influenced by the costs incurred in the process.

5. CONCLUSION

Supply Chain The supply chain of the free-range chicken meat supplier business in Central Lombok Regency has several marketing channels to distribute free-range chicken to its consumers.

Based on the results of the research, the following conclusions can be drawn:

Marketing channels for free-range chickens that provide efficient meat in Central Lombok Regency are:

Farmers → Chicken and Carcass Collectors → Restaurants → Final Consumers

The income margin of each business actor marketing native chicken meat providers in Central Lombok Regency, namely farmers get a profit of IDR. 4,600/live chicken, live chicken collectors get a profit of IDR. 1,700/live chicken, chicken and

carcass collectors get a profit of IDR. 9,500/chicken carcass, retail traders get IDR. 800/chicken carcass, traveling traders get IDR. 1,800/chicken carcass and restaurants get IDR. 33,000/portion of ready-to-eat native chicken. The income margin of each business actor marketing native chicken meat providers in Central Lombok Regency, namely farmers get a profit of IDR. 4,600/live chicken, live chicken collectors get a profit of IDR. 2,000/live chicken, chicken and carcass collectors get IDR. 12,000-IDR. 18,000/chicken carcass, retail traders get IDR. 1,000/chicken carcass, traveling traders get IDR. 2,000/chicken carcass and restaurants get IDR. 22,000-IDR. 38,000/portion of ready-to-eat native chicken.

Suggestion

The high income value of restaurant business actors in selling free-range chicken products, researchers suggest that research be conducted to determine the feasibility of restaurant businesses that provide free-range chicken products, whether they are feasible to be developed in the future.

6. REFERENCES

- Anief, M., 2000, Principles and Basics of General and Pharmaceutical Marketing Management, Gadjah Mada University Press, Yogyakarta.
- Asmarantaka, RW (2012). Agribusiness Marketing (Agrimarketing). Department of Agribusiness, Faculty of Economics and Management. Bogor Agricultural University.
- Groves RM 2010. Survey Methodology, Second edition of the (2004) first edition ISBN 0-471-48348-6.
- Hanafiah A. M, Saefuddin. (1986). Agricultural Product Trading. UI Publisher. Jakarta
- Handoko, T. Hani.(2000). Personnel and Human Resources Management, (Yogyakarta: BPFE)
- Hungu. (2016). Gender or Sex. Angewandte Chemie International Edition, 43.
- Kohls and Uhl. 2002. Marketing of Agricultural Products. Ninth Edition. Prentice Hall, New Jersey.
- Kotler, F. (2005). Marketing Management. Jakarta: Indeks Publisher.
- Kotler, P., & Keller, K. (2016). Marketing Management (Global Edition). Harlow: Pearson Education Limited.
- Kotler, P., & Armstrong, G. (2017). Principles of Marketing (seventeenth). United Kingdom: Pearson.
- Limbong, S. (2010). Introduction to Agricultural Commerce. Bogor Agricultural Institute, Bogor.
- Lukman (2021) Supply Chain Management. Gowa: CV Cahaya Bintang Gemerlang
- Nuryadi, Tutut Dewi Astuti, Endang Sri Utami, M. Budiantara. 2017. Basics of Research Statistics. BUSY MEDIA. Ngringinan, Palbapang, Bantul, Bantul, Yogyakarta, 55713.

- Pujawan, I., N., and Mahendrawathi. (2010). Supply Chain Management, Second Edition, Guna Widya, Surabaya.
- Sa'id, Gumbria. 2001. Agribusiness Technology Management (Key to Global Competitiveness of Agribusiness Products. Ghalia Indonesia; Jakarta.
- Serra M, Sophia Psarra and Jamie O'Brien. 2018. Social and Physical Characterization of Urban Contexts: Techniques and Methods for Quantification, Classification and Purposive Sampling. ACADEMIA Accelerating the world's research. Urban Planning (ISSN: 2183 – 7635) 2018, Volume 3, Issue 1, Pages X-X.
- Singarimbun, M., and Efendi,. (2009). Survey Research Methods, Jakarta: PT. Pustaka LP3ES.
- Soekartawi. 2001. Agribusiness Theory and Its Application. PT Raja Grafindo Persada, Jakarta.
- Sudiyono, A. 2004. Agricultural Marketing. University of Muhammadiyah Malang Press. Malang.
- Sugiyono. 1997. Statistics for Research. ALPABETA Publisher. Bandung.
- Suprijatna, E., U. Atmomarsono, R. Kartasudjana. 2008. Basic Science of Poultry Livestock. Penebar Swadaya, Jakarta. 163-165.

Article:

- Achike, A., & Anzaku, T. A. (2010). Economic Analysis of The Marketing Margin of Benniseed in Nasarawa State, Nigeria. Agro-Science Journal, 9(1), 47–55.<https://doi.org/10.4314/as.v9i1.57459>
- Asmarantaka RW, Juniar Atmakusuma, Yanti N Muflikh, and Nia Rosiana. 2017. Agribusiness Marketing Concept: Economic and Management Approach. Indonesian Agribusiness Journal (Vol 5 No 2, December 2017); pages 151-172.
- Aswathy, N., Narayanakumar, R., & Harshan, N. K. (2014). Marketing Costs, Margins and Efficiency of Domestic Marine Fish Marketing in Kerala. Indian Journal of Fisheries, 61(2), 97–102.
- Bulu YG, I Putu Cakra Putra Adnyana, and Ika Novita Sari. 2023. Baseline Survey Report. "Identification of Potential Areas and Institutions of Corn and Chicken Agribusiness KUB in Central Lombok Regency. West Nusa Tenggara Province. Agricultural Instrument Standardization Agency. Jakarta.
- Erzal, MF, Taslim, & Masdar, AS (2015). Analysis of Channels, Margins, and Marketing Efficiency of Local Meat Ducks. E-Journal of the Faculty of Animal Husbandry, Unpad, 2, 1-12.
- Hendrayani. 2009. Analysis of Factors Influencing Motivation to Raise Cattle in Koro Benai Village, Benai District, Kuantan Singingi Regency. Journal of Animal Husbandry. 6 (2): 53-62

- Murwanto, AG 2008. Farmer Characteristic and Level of Technology Inputs of Beef Husbandry at Prafi Valley, Regency of Manokwari. *Journal of Animal Science*, Vol. 3 No. 1 pp. 8-15.
- Muhammad, MR, and Sumarauw, JSB 2014. Evaluation of Supply Chain Performance at Jeky PM Chicken Meat Supplier. *EMBA Journal*. Vol. 2 No 4. December 2014, Pages 195-202.
<http://ejournal.unsrat.ac.id/index.php/emba/article/download/14368/13940>
- Nurdiani N. 2014. Snowball Sampling Technique in Field Research. *JournalComTech* Vol. 5 No. 2 December 2014: 1110-1118.
- Printezis, I., & Grebitus, C. (2018). Marketing Channels for Local Food. *Journal of Ecological Economics*, 152 (March), 161 – 171.<https://doi.org/10.1016/j.ecolecon.2018.05.021>.
- Sazmi, RM, Haryono, D., & Suryani, A. (2018). Analysis of Revenue and Marketing Efficiency of Patin Fish in Seputih Raman District, Central Lampung Regency. *JOURNAL OF AGRICULTURE SCIENCES*, 6(1), 133–141.
- Tashakkori, A. and Ch. Teddlie. 1998. *Mixed Methodology, Combining Qualitative and Quantitative Approaches*. SAGE Publications. Thousand Oaks London-New Delhi.
2019. Marketing Channels of Sengon Sawn Timber (*Falcateria moluccana*) in the Community Sawmill Industry in Sukamarga Village, Abung Tinggi District, North Lampung Regency. *Sylva Lestari Journal* Vol. 7 No. 2, May 2019 .195-203.

Dissertation:

- Mahendra, AD, & Woyanti, N. (2014). Analysis of the Influence of Education, Wages, Gender, Age and Work Experience on Labor Productivity (Study in Small Tempe Industry in Semarang City). Doctoral dissertation, Faculty of Economics and Business, Diponegoro University.

Thesis:

- Amrulsyah, DI (2019). Supply Chain Analysis of Free-Range Chicken Meat at Restaurants (Gandu Grilled Chicken) in Ponorogo Regency. (Thesis). Animal Husbandry Study Program. Faculty of Animal Husbandry. Brawijaya University. Malang.
- Anititawati. 2016. Analysis of Supplier Selection Criteria Using Analytic Network Process Method (Case Study at PT. XYZ). Thesis. Independent Research. Bakrie University. Jakarta.
- Darojat, & Yunitasari, EW (2017). Measuring Company Performance Using the Supply Chain Operation Reference (SCOR) Method. IDEC 2017 National Seminar and Conference, 152–151. Yogyakarta: Sarjanawiyata Tamansiswa University.

- Firdhausya, A. 2019. The Effect of Debt on Operating Profit in Consumer Goods Companies Listed on the Indonesia Stock Exchange. Thesis. Sunan Ampel State Islamic University. Surabaya.
- Karmila. 2013. Factors Determining Farmers' Decision Making in Starting a Layer Chicken Farming Business in Bissappu District, Bantaeng Regency. Thesis. Faculty of Animal Husbandry, Hasanuddin University. Makassar.
- Bakari, Indriyati. 2013. Analysis of Rice Marketing Margin in Kabila District, Bone Bolango Regency. Thesis. Faculty of Agriculture, State University of Gorontalo.
- Pranatagama, MF 2015. Efficiency and Marketing Mix of Peanut Farming in Darungan Village, Tanggul District, Jember Regency. Thesis. Agribusiness Study Program, Faculty of Agriculture. University of Jember.
- Poerwandari, EK 1998. Qualitative Approach in Psychological Research. Institute for the Development of Measurement Facilities and Psychology Education. Thesis. Faculty of Psychology, University of Indonesia. Jakarta.
- Siregar, EL. 2010. Analysis of Farming Income and Marketing of Bogor Pineapples (Case Study of Sukaluyu Village, Taman Sari District, Bogor Regency). [Thesis]. Bogor: Faculty of Economics and Management, Bogor Agricultural University

Website:

BPS NTB. 2022. West Nusa Tenggara in Figures. Central Statistics Agency. West Nusa Tenggara Province.

<https://ntb.bps.go.id/publication/2022/02/25/81b407c481be37affd75d6f5/provinsi-nusa-tenggara-barat-dalam-angka-2022.html>

BSIP. 2023. Agricultural Instrument Standardization Agency. West Nusa Tenggara Province. <https://ntb.bsip.pertanian.go.id/>

Internet:

Wahyono. 2013. Differences Between Men and Women in Work. Accessed {May 20, 2024}. <http://www-puncakbukit.blog.com/perbedaan-pria-dan-wanita-dalampekerjaan.html>.