



Supply Channels for Purebred Chicken Eggs

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Abstract

This research aims to analyze the supply channels and selling prices for purebred chicken eggs from South Sulawesi entering the Wameo market in Baubau City, the transportation routes for purebred chicken eggs entering the Wameo market, and the margin between the selling price of intermediary traders and the buying price of Wameo market egg traders. The samples used in this research were 13 brokers of purebred chicken eggs who entered the Wameo market, and all the purebred chicken egg traders in the Wameo market were 40 people, which was carried out by census and analyzed descriptively. The results of the analysis show that 1) Producers supplying purebred chicken eggs entering the Wameo market consist of 4 regions in South Sulawesi, namely Sidrap, Soppeng, Bulukumba, and Pangkep. 2) The distribution route for suppliers of purebred chicken eggs from South Sulawesi entering the Wameo market only uses one seaport route, namely Bajoe – Baubau. 3) The marketing margin for purebred chicken eggs entering the Wameo market for intermediary traders is IDR 2,000 per shelf and for holding traders IDR 5,000 per shelf.

Keywords: Supplier channels, chicken eggs, Wameo

A. Introduction

As the population increases in urban areas and coastal areas, the community's needs and awareness regarding nutritional needs will also increase, this shows that the need for livestock products as a source of animal protein will also increase, including the need for purebred chicken eggs. The livestock sector in Southeast Sulawesi in the period 2015 - 2021 continues to experience increased efforts and the community is aware that human needs for animal protein are increasing along with the increase in population in Southeast Sulawesi (Sani, *et al.* 2021). The large population means that mathematically the demand for livestock products such as meat, eggs and milk will also increase. One of the livestock sub-sectors that plays a role in providing animal protein is the poultry sector (Lestari, *et al.* 2011).

The need for purebred chicken eggs on Buton Island and its surroundings still plays an important role in fulfilling the need for animal protein as a companion to fish side dishes. Apart from being used as a side dish, purebred chicken eggs are also used as ingredients for making cakes and other snacks which are practical and easy to obtain. Apart from that, in the western season the price of fish soars because it is difficult for fishermen to go to sea, so people turn to eggs as a substitute for side dishes. Therefore, people in the Buton Islands and surrounding areas cannot be separated from the need for eggs.

Laying chickens are adult female chickens that are kept specifically for their eggs (Ivory *et al.* 2019). Eggs as one of the poultry products have high nutritional value, including protein which

plays a very important role in the body because humans function as a component of materials that form new tissue in the body and control various systems in the body (Fausayana and Marzuki, 2017). Eggs are a storage place for nutrients such as water, protein, carbohydrates, fats, vitamins and minerals which are needed for the growth of the embryo until it hatches (Daud *et al.* 2018).

Data submitted by the Ministry of Agriculture through the Directorate General of Animal Husbandry and Animal Health (2022), states that the availability of purebred chicken eggs for consumption in the Eastern Region of Indonesia is safe and sufficient. Directorate General of Animal Husbandry and Animal Health (Ditjen PKH), one of the laying hen farms in South Sulawesi, namely PT. Cahaya Mario in Sidrap Regency with a total population of laying hens (*layer*) in South Sulawesi Province of as many as 12,982,642 chickens and the projected production of purebred chicken eggs in South Sulawesi Province in 2022 is 188,248 tons, so there is a surplus of 13,215 tons. This potential harvest is used as *Buffer Stock* for as much as 264 tons (2%) and is sold outside Sulawesi Island, such as to Kalimantan, NTT, Maluku and Papua as much as 733 tons (5.55%) per year.

The geographical condition of the Buton Islands, which only relies on sea transportation, means that the selling price of eggs reaching consumers is different. This is influenced by transportation costs and distribution travel times which are different between islands. Supplier of purebred chicken eggs based on Lestari's statement *et al.* (2011), the selling price of purebred chicken eggs compared to three suppliers of purebred chicken eggs in West Java, Bali and South Sulawesi, obtained the highest price from Bali and the cheapest from South Sulawesi. Apart from that, the transportation costs for goods or livestock products are more efficient for marketing in eastern Indonesia, originating from South Sulawesi, compared to these two suppliers. Based on this, the egg suppliers entering Baubau City, especially the Wameo market, are eggs from South Sulawesi.

Wameo traditional market is the market with the largest number of purebred chicken egg traders around the city of Baubau, in which there are some traders involved in the process of distributing eggs from producers to final consumers (buyers). Wameo Market is a traditional market on a city service scale and is a distributor for other areas such as Buton Regency, South Buton Regency, Central Buton Regency, North Buton Regency, Bombana Regency, and Wakatobi Regency. This market has a land area of 2,649 m² and accommodates around 830 traders consisting of vegetable traders, fruit traders, basic food traders, fish traders, egg traders and others and integrates directly with the fish port because its location is right on the edge of the sea (Baubau City Regional Regulation, 2014).

Based on the description above, the objectives of this research are; 1) analyze the supply channels and selling prices of purebred chicken eggs from South Sulawesi that enter the Wameo market in Baubau City, 2) analyze the transportation routes for purebred chicken eggs that enter the Wameo market, 3) analyze the margin between the selling price of intermediary traders and the buying price of egg traders Wameo market.

B. Methodology

1. Research design

The method used in this research is a survey and interview method using a structured questionnaire. The interviews conducted were aimed at intermediary traders and retailers in the Wameo market to obtain data. The types of data obtained are primary and secondary data, primary data is data directly obtained from intermediary traders and egg traders at the Wameo market, while secondary data is data obtained from supporting articles and other reading materials which contain supporting data in this research. Data sources were obtained from interviews and direct observation of egg traders at the Wameo market.

2. Research Population and Sample

Population can provide information or data that is useful for research. The sample is part of the population which is expected to represent the population in the research. According to Sugiyono (2017), the sample is part of the number and characteristics of the population. The sample was carried out because researchers had limitations in conducting research in terms of time, energy, funds and a very large population. So researchers must take truly representative samples (can represent). The sample population in this study were 14 companies supplying purebred chicken eggs from South Sulawesi who entered the Wameo market, 13 broiler egg brokers who entered the Wameo market, and 40 purebred chicken egg traders in the Wameo market. carried out by census.

3. Data analysis

The data analysis technique in this research is descriptive analysis, the data collected in the form of numbers comes from interview scripts, field notes and other supporting reading sources. Then the data obtained will be analyzed descriptively using the Sudiyono (2004) formula, namely:

$$M = Pr - Pf$$

Information :

M = Margin

Pr = Price of eggs at intermediary traders

Pf = Price of eggs at the holding trader

C. Findings and Discussion

Manufacturers supplying purebred chicken eggs

Chicken eggs are part of the daily necessities that are in great demand by island communities. The need for purebred chicken eggs in eastern Indonesia, including the Wameo market in Baubau City, is mostly supplied from South Sulawesi. The need for purebred chicken eggs entering the Wameo market in Baubau City in the last three months is presented in Table 1.

Table 1. Supplier of purebred chicken eggs from South Sulawesi who enters Wameo Market

Name of Company/Farm Supplier of Purebred Chicken Eggs	Quantity supplied and price difference in the last three months		
	Number of Racks in One Supply	Price/Shelf Min	Price/Shelf Max
Sidrap			
PT. Mario Light	20.000	46.000	54.000
CV. Egg yolk	8.000	46.000	54.000
CV. Dirga Mandiri	5.000	46.000	54.000
CV. Three Princesses	5.000	46.000	54.000
Soppeng			
CV. Lagocci	13.000	46.000	54.000
Coppo Benteng	11.000	46.000	54.000
Dilla Livestock	7.000	46.000	54.000
Bulukumba			
CV. Gargang	8.000	46.000	54.000
CV. Human light	6.000	46.000	54.000
CV. Nahra Eggs	8.000	46.000	54.000
CV. Divine Blessing	10.000	46.000	54.000
Cahaya Teti Aji	6.000	46.000	54.000
CV. Independent Light	5.000	46.000	54.000
CV. Pangkep Blessed Eggs	10.000	46.000	54.000
CV. Farm Friends	12.000	46.000	54.000

Source: processed primary data, 2024

From the research results, Table 1 shows the suppliers of purebred chicken eggs in the last three months, namely March-May, which entered the Wameo market consisting of four egg-producing regions in South Sulawesi Province, namely Sidrap, Soppeng, Bulukumba and Pangkep. The amount of demand or supply of eggs for each egg supplier producer entering the Wameo market is different, influenced by the quality of eggs that consumers are interested in, such as egg size and different egg colours. Quality is the characteristics of a product that determine the degree of perfection that will influence consumer acceptance. Abiyani (2022), stated that the poor quality of purebred chicken eggs and the large number of purebred chicken eggs that are rotten when they reach the hands of consumers cause consumers of purebred chicken eggs to be reluctant to consume purebred chicken eggs and choose other types of protein to meet their needs temporarily, causing a decline level of demand for purebred chicken eggs. The selling prices of producers supplying purebred chicken eggs marketed in several regions in South Sulawesi are relatively the same, with a minimum price of 46,000/shelf and a maximum price of 54,000/shelf. This shows that egg sales in South Sulawesi are uniformly controlled.

Distribution Route for Purebred Chicken Eggs Entering Baubau City

The distribution channels for suppliers of purebred chicken eggs from South Sulawesi who enter the Wameo market use ship transportation from Bajoe Port to Baubau City Port, which is presented in Table 2.

Table 2. Sea transportation route for egg suppliers from South Sulawesi entering the Wameo market

No	Ship Routes	Number of Ships (pieces/month)	Transport Schedule (track/month)	Ship Load (rack/fruit)	Quantity (shelves/month)
1	Bajoe - Baubau	14	2	20.000	560.000

Source: processed primary data, 2024

From the research results in Table 2, it is known that the sea transportation route for transporting purebred chicken eggs from South Sulawesi entering the Wameo market only uses one seaport route, namely Bajoe - Baubau. This is influenced by cheaper costs because they use special wooden ships to transport goods such as rice, vegetables, fruit, building materials, necessities, eggs and others. This route is easier because 14 ships are operating and each ship has a day's interval between departures, so goods don't have to queue for days at the port, and the location of the Baubau City demolition port is close to the Wameo market. The travel time from Bajoe Port to Baubau City Port takes around one day and one night (24 hours), this time is not much different from using an iron transport ship or ferry. Jinca, (2011), that the sea transportation mode is more efficient for transporting goods in large quantities, the transport speed and ton/mile transport costs are relatively low and are very profitable for long-distance goods transport in island areas.

Egg Supply Channel from Intermediary Traders to Container Traders at Wameo Market

The supply channels for purebred chicken eggs entering the Wameo market consist of two channels, namely direct and indirect. The shape of the egg supply channel entering the Wameo market is presented in Figure 2.

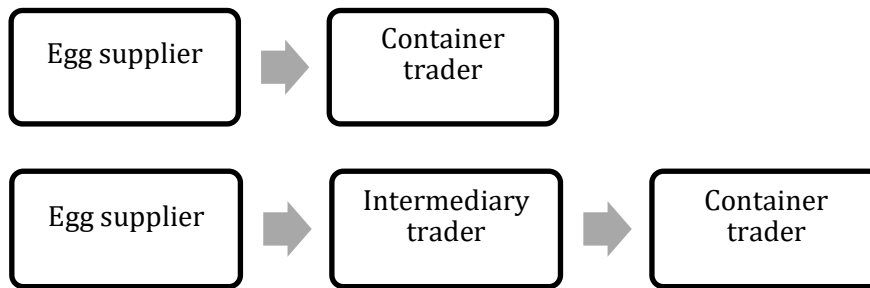


Figure 2. Egg supply channels at the Wameo market

The form of a direct supply channel, namely from supplier manufacturers - collecting traders in the Wameo market, provides selling prices to collecting traders as well as retailers that are more competitive to compete on selling prices with other traders. Meanwhile, indirect supply channels, namely supplier producers - intermediary traders - holding traders, provide selling prices to final consumers that are slightly higher or even the same, but with lower profits. Saptaryadi and Permatasari (2020), that egg marketing indirectly involves intermediary traders such as collectors and retailers, and the existence of intermediaries in marketing causes price differences at the level of traders and final consumers. Tobaol *et al.* (2018), revealed differences in selling prices in each marketing channel due to different marketing areas so that traders buy at cheaper prices to get maximum profits (Wicaksono *et al.* 2020).

Purebred chicken eggs that have been supplied from producers in the South Sulawesi region and arrive at the Baubau port will be received by intermediary traders who are ready to wait for unloading, of course at different acceptance prices. The receiving prices and selling prices of intermediary traders to the Wameo market holding places are presented in Table 3.

Table 3. Average marketing price for purebred chicken eggs in March – May 2024 at the Wameo market

Types of Traders	Number of Traders	Average price of purebred chicken eggs		
		Purchase Price (Rp/shelf)	Selling Price (Rp/shelf)	Margin (Rp/shelf)
Intermediary trader	13	56.000	58.000	2.000
Container trader	40	58.000	61.000	3.000
Total				5.000

Source: processed primary data, 2024

From the research results in Table 3, it is known that there are 13 intermediary traders of purebred chicken eggs entering the Wameo market as suppliers, with a purchase price of IDR 56,000 per shelf for resale at IDR. 58,000 per shelf, so it can be seen that the difference or margin from the sales of eggs from intermediary traders at the Wameo market is Rp. 2,000 per shelf. 40 traders are holding purebred chicken eggs at the Wameo market, with a purchase price of IDR 58,000 per shelf for resale at an average price of IDR. 61,000 per shelf, with a margin of IDR 3,000 per shelf.

D. Conclusion

Based on the results and discussion, it can be concluded that the producers supplying purebred chicken eggs to the Wameo market consist of 4 regions in South Sulawesi, namely Sidrap, Soppeng, Bulukumba, Pangkep. The distribution channel for suppliers of purebred chicken eggs from South Sulawesi entering the Wameo market only uses one seaport route,

namely Bajoe - Baubau. The marketing margin for purebred chicken eggs entering the Wameo market for intermediary traders is IDR 2,000/shelf and for holding traders IDR 5,000/shelf.

E. References

- Abiyani, E. 2022. Analysis of Factors that Influence the Demand for Purebred Chicken Eggs in Magetan Regency at the Household Level. *Journal of Economics and Science*. Vol. 1, No. 1: 11-22.
- Daud, M., Mulyadi, M., and Fuadi, Z. 2018. Financial analysis of male egg-laying chicken farming businesses at different cage densities. *Agripet Journal*. Flight. 18, No. 2: 110–116.
- Directorate General of Animal Husbandry and Animal Health. (2022). Availability of Purebred Chicken Eggs in the Eastern Indonesia Region is Safe and Sufficient. 16 September 2022, <https://ditjenpkh.pertanian.go.id/Berita/1559>
- Fausayana, I. and Marzuki, M.A. 2017. Analysis of Factors that Influence the Demand for Purebred Chicken Eggs in Kendari City and Their Relationship with Farmer Empowerment. *Socio Agribusiness Journal*. Vol.1, No. 1: 32 - 46.
- Fridayanti, N. 2018. Analysis of Demand for Chicken Eggs in Magetan Regency. *Journal of Agricultural Socioeconomics and Business*. Flight. 1, No. 2: 1-10.
- Gading, J.F., I. Indra, and Fajri, F. 2019. Evaluation of the Feasibility of Egg-laying Chicken Farming in UPTD. Center for Non-Ruminant Livestock, Blang Bintang District, Aceh Besar Regency. *Agricultural Student Scientific Journal*, Flight. 4, No. 4: 141–150.
- Jinca, M.Y. 2011. Indonesian Sea Transportation System Analysis and Case Study. National Library of the Republic of Indonesia. Surabaya, Brilliant International
- Lestari, V.S., H.M. Saadah, H.M. Ali, and A. Natsir. The Role of Several Marketing Glues in Selling Eggs to Laying Chicken Farmers in Indonesia, Case Studies in West Java, Bali and South Sulawesi. *JITP*. Flight. 1, No. 2: 138-145
- Baubau City Regional Regulation Number 4 of 2014 concerning Baubau City Regional Spatial Planning for 2014 – 2034.
- Sani, L.O.A., R. Aka, L.O.M. Munadi, and Ansaruddin. 2021. Marketing Channels for Purebred Chicken Eggs on Kaledupa Island, Wakatobi Regency, Animal Husbandry Scientific Magazine. Vol. 24, No.3: 110–115, October 2021.
- Saptaryadi, M., and Permatasari, F. 2020. Risk Analysis of Purebred Chicken Egg Business in Baturaja. *Joseph*, Flight. 6, No. 2: 58–65.
- Sudiyono, 2004. *Agricultural Marketing*, Muhammadiyah University of Malang Press, Malang.
- Sugiyono. 2017. *Quantitative Qualitative Research Methods and R & B*. Bandung: Alfabeta.
- Tobaol, D., Rundengan, M., Endoh, E.K.M., and Pangemanan, S.P. 2018. Marketing Efficiency of Purebred Chicken Eggs in Manado City. *ZOOTEC*, Flight. 38 No. 2. P: 416-428.
- Wicaksono, D., Zakaria, W. A., and Widjaya, S. 2020. Evaluation of the Financial Feasibility and Benefits of PT SPU and AF Layer Chicken Farming in Jati Agung District, South Lampung Regency. *Journal of Agribusiness Science*, Flight. 8, No. 1: 23–29.