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Demand And Supply Of Chicken Egg In South Sulawesi

Zulkifli Maulana¹, M. Nur Mustakim Hamzah², Muh. Wahyu Kusuma²,
Faikatushalihat²

¹Faculty of Agriculture, University of Bosowa,

² Faculty of Animal Husbandry, Hasanuddin University

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Corresponding author's E-mail: zulkifli.maulana@universitasbosowa.ac.id

Article History	Abstract
Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 26 Nov 2023	<p>This research aims to analyze the factors that influence the demand and supply of chicken eggs in South Sulawesi. The research method used was a literature study with data sourced from Central Statistics Agency data and other sources in the form of scientific journals, scientific articles, and other valid information from print and digital media. Data analysis was carried out using descriptive analysis techniques. Based on the data obtained, it is known that the development of the purebred chicken population and demand for chicken eggs in South Sulawesi from 2018-2022 fluctuates and tends to increase. along with population growth in South Sulawesi. The production of purebred chicken eggs in South Sulawesi over the last 5 years has fluctuated. The number of egg production increased significantly by 38% from 2018 to 2019 and decreased in 2020 and 2021. Then the number of egg production increased again by 6.49% from 2021 to 2022. This happened because consumer demand for purebred chicken eggs increased. Thus, it can be said that people need purebred chicken eggs to meet their needs for animal protein sources. Factors that influence the demand and supply of broiler eggs in South Sulawesi are fluctuating egg prices, producer profits, raw materials (feed and seeds), demand, and disease outbreaks.</p> <p>Keywords: Purebred Chicken Eggs, Demand, Supply</p>

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1. Introduction

The livestock sector has a strong and strategic role in economic sustainability and human resource development. This role can be seen in the livestock sector which provides animal protein that is important for the growth and development of the human body (Putritamara., et al, 2018). One of the livestock subsectors that makes a big contribution to the animal welfare needs of Indonesian society is chicken farming.

People's need for animal products such as meat, milk, and eggs continues to increase. This is in line with the increase in population, level of education, and public attention to the role of nutrition and food, especially protein, in daily life, as well as the increasing ability of society to utilize animal products and has a significant impact on livestock industry players, especially increasing welfare (Ningsih, 2017).

Eggs are a good source of protein, rich in nutrients and minerals. Several animal products can produce eggs, but only certain types of eggs can be consumed and traded by humans, such as chicken eggs, quail eggs, duck eggs, and fish eggs. The taste and tendency of consumers to prefer purebred chicken eggs for consumption is also the reason for the increase in sales of purebred chicken eggs (Hilman 2021). The chicken eggs that are popular among the public are free-range chicken eggs (buras) and laying hen eggs (ras). Eggs contain essential amino acids and high animal protein value. Only fish protein is equivalent to eggs, but egg protein is superior as a source of amino acids for humans. The egg protein content is 12.80% therefore, laying hen farming needs to be developed

The Indonesian market's interest in egg products never seems to decline. The reason is none other than that because these commodities can be used for various things, especially to make various types of food. This condition proves that demand for eggs always increases from year to year. Many people choose eggs to fulfill their family's need for animal protein. Knowing this, it can be said that the laying chicken

business in Indonesia is currently quite promising. It is not impossible that cultivating this type of chicken will still promise long-term profits for the owner (Nella, 2021)

South Sulawesi is one of the regions in Indonesia that has a fairly stable population of laying hens in line with population development. This is in line with the increasing public awareness of consuming eggs as a source of animal protein and the price of eggs is very affordable for all levels of society. The level of egg consumption will continue to increase every year, this is due to the characteristics of the price of purebred chicken eggs which can be reached by all levels of society and are easy to find in markets, both traveling traders, traditional markets, and supermarkets and have very strong nutritional quality as protein intake. animal-based and enjoyed by people of all ages. This is the background for research regarding the demand and supply of chicken eggs in South Sulawesi Province.

RESEARCH METHODS

This research is research using the literature study or literature review method. A literature review is a comprehensive overview of research that has been conducted on a specific topic to show readers what is already known about the topic and what is not yet known, to find a rationale for research that has been conducted or for ideas for further research (Denney & Tewksbury, 2013).

This research aims to analyze the demand and supply of chicken eggs in South Sulawesi Province. The material in this research comes from Central Statistics Agency data and other sources in the form of scientific journals, scientific articles, and other valid information from print and digital media. The data in this research is the trend in the amount of egg meat production in South Sulawesi Province from 2020 to 2022.

The data analysis used is descriptive analysis to scientifically explain the demand and supply of chicken eggs in South Sulawesi. According to Sugiono (2013), descriptive analysis is statistics used to analyze data by describing or illustrating the data that has been collected as it is without the intention of making general conclusions or generalizations.

RESULTS AND DISCUSSION

The development of the laying hen population in South Sulawesi from 2018-2022 fluctuates and tends to increase, which can be seen in Figure 1. This is an indication of the successful development of the poultry industry. The poultry industry, especially laying hens, has several advantages, such as an intensive rearing system, efficient use of feed, and a short production cycle, so this condition helps meet the supply of broiler chicken products (eggs) nationally. Riwukore et al., (2020) stated that the benefits of having a purebred chicken farming business at a production center have the potential to increase local income (PAD), reduce unemployment due to job opportunities, increase the productivity of the working-age community, and increase the availability of cheap sources of animal protein in the area public.

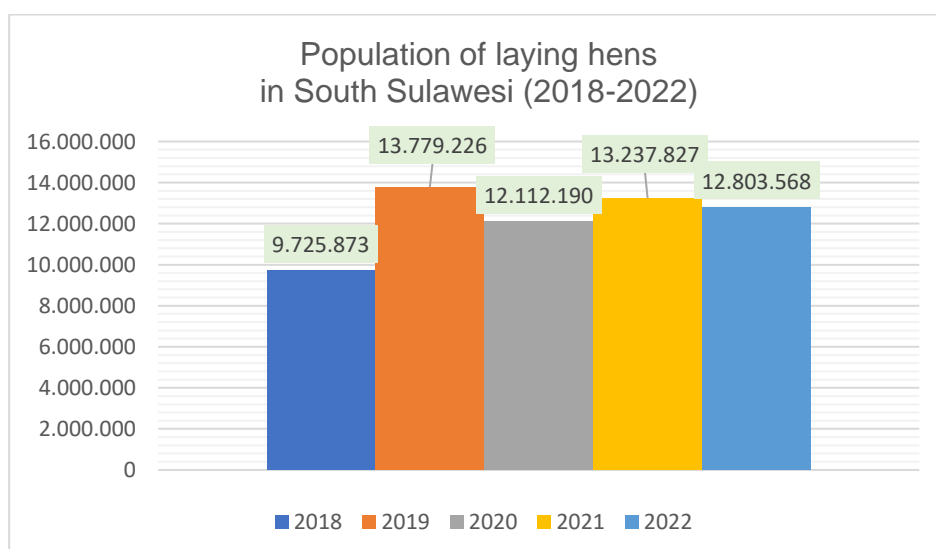


Figure 1. Population of Laying Breeds in South Sulawesi in 2018-2022
Source: Livestock and Animal Health Statistics, 2022

The demand for purebred chicken eggs in 2018-2022 will significantly increase in line with population growth in South Sulawesi and public awareness of the importance of adequate protein of animal origin.

The more people there are, the higher the need for survival food. Data on consumption of purebred chicken eggs in South Sulawesi for 2018-2022 can be seen in Figure 2 below.

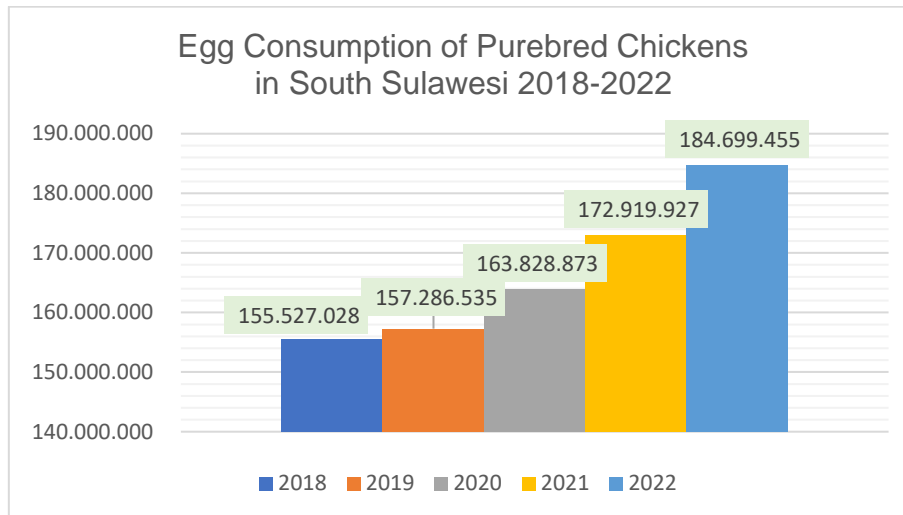


Figure 2. Consumption of Purebred Chicken Eggs in South Sulawesi in 2018-2022
Source: Livestock and Animal Health Statistics, 2022

Egg production for purebred chickens in South Sulawesi over the last 5 years has fluctuated as seen in Figure 1. The number of egg production increased significantly by 38% from 2018 to 2019 and decreased in 2020 and 2021. Then the number of egg production increased again by 6.49% from 2021 to 2022. This happens because consumer demand for purebred chicken eggs increases. Thus, it can be said that purebred chicken eggs are needed by the community to meet the need for a source of animal protein.

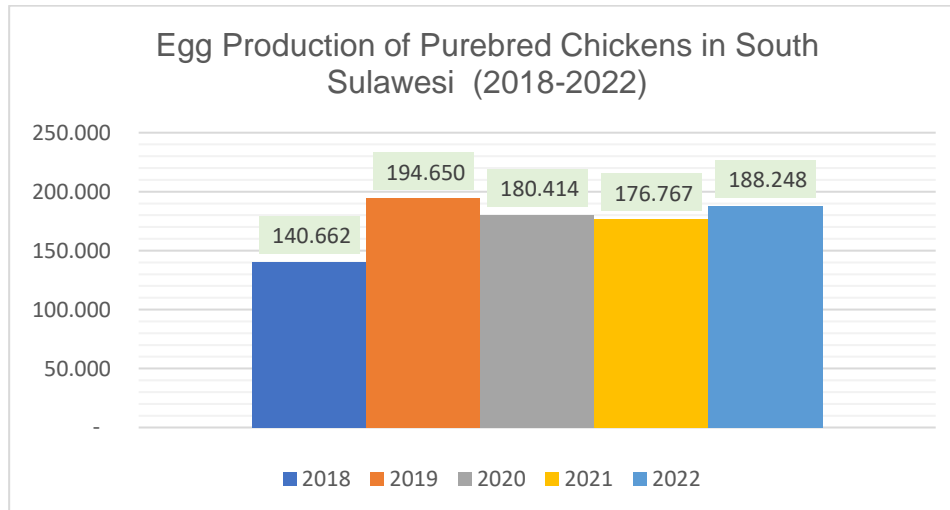


Figure 3. Egg Production of Purebred Chickens in South Sulawesi in 2018-2022
Source: Livestock and Animal Health Statistics, 2022

Eggs are one of the oldest sources of animal protein known to humans. Chicken eggs are categorized as meat by the United States Department of Agriculture (USDA) in the Food Guide Pyramid because they contain protein and choline which are important for health and can be a substitute for beef or chicken (Ramadhan et al., 2022). Purebred chicken eggs are the main choice that is most widely consumed by every level of society, this is because the price of purebred chicken eggs is relatively more economical when compared to other poultry eggs (Sudaryani, 2003). Factors that influence the demand and supply of chicken eggs in South Sulawesi are as follows.

1. Egg prices fluctuate

The price of purebred chicken eggs in South Sulawesi fluctuated from 2018 to 2022. Fluctuating prices certainly affect the amount of egg production. The tendency for the price of chicken eggs to increase is before certain holiday celebrations, such as the Idul Fitri holiday, this causes producers as suppliers to

increase the amount of egg production. However, if prices fall, producers reduce production to avoid losses.

The price of chicken eggs during the COVID-19 pandemic tends to be stable with a coefficient of variation level ($< 9\%$). However, the price of chicken eggs also continues to fluctuate and it is still normal for prices to increase and decrease. It's just that the trigger for fluctuations in the price of purebred chicken eggs is the decline in people's purchasing power. Prices experienced fluctuations during the UKBN Eid Al-Fitr and Christmas 2020, but the increase was not sharp. During the Chinese New Year, the price of chicken eggs also increases. The research results show that the price movement of chicken eggs during the pandemic is in line with research by Agustin, Perdana, and Rachman (2020) that the commodity of purebred chicken eggs also fluctuated, in May 2020 the price of purebred chicken eggs fell due to the start of the pandemic and the rate of movement of the price of purebred chicken eggs showed a trend. positive.

Price is positively correlated with supply. This is the opinion of Djodipuro (1991), namely that the number of goods/services produced by producers can be influenced by an increase or decrease in the price of these goods/services. The quantity will increase when the price increases and the quantity demanded decreases when the price decreases, so it can be said that price is positively related to the amount of production.

2. Manufacturer's Profits

The laying hen farming business has promising opportunities. This motivates farmers as producers to supply goods, in this case, eggs. The number of goods offered by sales will influence the size of the profits that will be generated. If the greater the desired profit, the greater the number of goods offered. This is by the law of supply, the higher the profit, the more goods will be offered.

In any business, the aim of doing business is to make a profit, the same as those who are involved in the laying chicken business, especially in this business, profits can be obtained more quickly or the profit turnover is faster, so breeders in Indonesia will prefer this business by doing a business like Farmers don't wait too long and get profits, even though the amount is small, their capital turnover is faster (Bahrul 2014).

A very important influence in knowing the income received by farmers is price, both product selling prices and production costs. The price of this product is revenue from the business, namely in the form of sales of chicken eggs, rejected chickens, and chicken droppings, while the price of production inputs, which are more commonly called costs, also need to be taken into account, namely cage costs, seed costs, labor costs, feed costs, drug and vaccine costs, and electricity infrastructure costs. In the case of laying hens, the manager can control production costs more than increasing the selling price of production because the egg market is perfectly competitive (Ali et al. 2018).

3. Raw materials (Feed and Seeds)

The livestock business, especially laying hens, is greatly influenced by production factors such as feed and seeds. An increase in input costs such as feed and seed costs can cause producers to suffer losses and therefore stop production. A decrease in the number of egg production can occur amidst an increase in the price of the main means of production, namely feed.

Feed availability is often an obstacle for producers, especially livestock breeders. Therefore, concrete solutions are needed to support the availability of this feed. One solution that can be taken is to utilize local feed through the establishment of a feed factory. The establishment of this feed factory can help maintain the availability of feed at affordable prices, as well as support the continuity of feed supply. Utilizing local feed sources can also create efficiency and empower the potential that exists around laying hen farming centers. Apart from that, the use of local feed sources can encourage increased production in livestock businesses and of course increase competitiveness in the market (Rohani et al., 2019).

Apart from feed, seeds are also a very important factor in supporting egg production. Seeds are the main factor in the laying chicken farming business to achieve the expected productivity. In choosing quality seeds, producers must understand the guidelines for selecting chickens, such as choosing based on the production capabilities of the laying hen breed (Salele et al., 2014). Usually, day-old chicks (DOC) seeds are obtained by breeders through breeding companies.

4. Request

Consumer demand or needs are closely related to the quantity of production produced by suppliers. The increasing demand for chicken eggs causes supply or production to increase. This influences chicken

egg producers to increase the number of chicken egg production based on the increasingly high demand for chicken eggs. The amount of production is increased by breeders to meet market needs.

The demand for purebred chicken eggs in South Sulawesi increases every year. This is influenced by consumers' per capita income, number of dependents, consumer preferences regarding purebred chicken eggs, and a government program called BPNT. Producers then responded to this increase in demand by increasing the number of purebred chicken egg production (Ilham and Saptana, 2019).

Egg production is expected to continue to increase so that it can meet people's consumption levels. Information about market conditions related to consumer demand for eggs is needed by farmers to regulate production and sales. Without information regarding this matter, production and sales planning will fail or even not be as expected. Therefore, it is necessary to estimate future demand for eggs so that it can help in planning production and sales to meet the demand for eggs and can assist local governments in planning egg supply (Nizhamuddien et al., 2013).

5. Epidemic of a disease

In March 2020, to be precise, the Covid 19 pandemic hit various regions in Indonesia, having an impact on various sectors, especially the economy. One of the economic sectors affected is the laying hen farming business. This condition has pushed demand for livestock products such as eggs to decline further. Changes in demand for laying hen eggs have also caused production to decrease (Sarlan and Murah, 2022).

Disease outbreaks such as the COVID-19 pandemic have had an impact on various sectors, especially the egg-laying chicken farming sector. Based on Figure 1. Data on egg production from laying hens in South Sulawesi, the number of chicken egg production in 2019 was 194,650 and in 2020 it decreased to 180,414. This is the impact of the Covid-19 pandemic. Disease attacks in livestock can also cause a decrease in production. This disease attacks the chicken's reproductive system. Young laying hens can recover 80%, while old hens are all damaged and egg production drops sharply.

CONCLUSION

The egg production of purebred chickens in South Sulawesi has fluctuated in the last 5 years. The number of egg production increased significantly by 38% from 2018 to 2019 and decreased in 2020 and 2021. Then the number of egg production increased again by 6.49% from 2021 to 2022. This happens because consumer demand for purebred chicken eggs increases. Thus, it can be said that purebred chicken eggs are needed by the community to meet the needs of animal protein sources. The factors that influence the Demand and Supply of Chicken Eggs in South Sulawesi are fluctuating egg prices, producer profits, raw materials, demand, and disease outbreaks.

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