



Prospects for Free-Range Chicken Development in Meeting Market Demand in South Sulawesi

Ni Made Ayu Gemuh Rasa Astiti¹, Ilham Rasyid², Jalaluddin², Tenri Sa' na², Nurliani^{3*}

¹Faculty of Agriculture, University of Warmadewa

²Faculty of Animal Science, Hasanuddin University

³Agribusiness Study Program, Faculty of Agriculture, Universitas Muslim Indonesia

*Corresponding author's E-mail: nurliani.karman@umi.ac.id

Article History	Abstract
Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 10 Nov 2023	<p><i>Free-range chicken farming has promising prospects for development, whether we admit it or not, consumer appetite for free-range chicken is still very high, this can be seen from population growth and demand for free-range chicken which increases from year to year. So it is not surprising that the culinary business using free-range chicken as its raw material is mushrooming and increasing rapidly, especially in tourist destinations in Indonesia. It seems to be a breath of fresh air for beginner breeders and for those who want to try free-range chicken farming. This research aims to analyze the prospects, potential, and demand for free-range chickens in Indonesia. The increase in the free-range chicken population in the last 4 years, namely in 2019 as many as 30 038 625 birds, until in 2022 it will be 30 996 054 chickens, means that products in the form of free-range chicken meat and eggs also increase. The increase in the amount of production every year has not been able to meet the consumption needs of the population in South Sulawesi. Production of free-range chicken meat in 2022 will be 5,590,90 tons, while the amount of consumption required will be 63,697,438 tons. Likewise, free-range chicken egg products in 2022 will amount to 20 069.95 tons, while the need for eggs will reach 175 033 tons. The high demand for consumption shows potential business prospects in developing free-range chicken businesses in South Sulawesi Province.</i></p>
CC License CC-BY-NC-SA 4.0	Keywords: <i>Free-Range Chicken, Production, Demand, Development Prospects</i>

1. Introduction

The livestock subsector has a good strategy for meeting consumer demand for whole animal protein, this is because the population is increasing every year, increasing the level of education followed by the level of awareness of nutritional needs, thereby changing people's consumption patterns. There are many types of livestock businesses carried out by the community, one of which is chicken farming. Nowadays, the development of chicken farming is growing very rapidly compared to other livestock, including free-range chickens. Kampong chicken (*A domestic Frenchman*) is a type of poultry that has spread throughout the archipelago, where the term free-range chicken is now known, which is an abbreviation of "non-breed chicken" (Rintonga, 2018).

For the last ten years, the "prestige" of free-range chicken has been increasing in line with the growing trend among connoisseurs and business people in the culinary sector. They claim that consuming free-range chicken meat is healthier because the cholesterol content is lower than the cholesterol in broiler chickens. Apart from that, the taste of the meat is tastier and drier. Probably because these are the advantages that free-range chicken meat is starting to attract people, especially middle to upper-class people in urban areas (Ritonga, 2018). Demand for free-range chicken meat tends to increase from time to time. This is caused by increased living standards and awareness among some people to consume organic chicken meat or chicken meat that has not gone through a genetic engineering process. Like broiler chickens that have gone through a genetic engineering process. Apart from that, the increasing population means that the demand for free-range chicken meat will also increase. On the other hand, breeders are increasingly overwhelmed with supplies to meet demand occasionally (Amelia et al., 2018). Farmers have been facing this current demand for free-range chicken meat for a long time

because the breeders themselves have experienced many obstacles, so they have been unable to develop and increase the free-range chicken population to keep up with market demand (Hasriani et al., 2019).

In this case, commodity marketing, free-range chicken farmers do not experience significant obstacles because the number of free-range chicken consumers is quite large. Apart from that, breeders can choose to collaborate with partners who want to market free-range chickens. Then the business partner is obliged to market the free-range chicken products to buyers or large traders/collectors (agents). Marketing free-range chicken is relatively easy because market demand for free-range chicken meat is still high. The obstacle felt in terms of price is that free-range chicken meat tends to fluctuate because it is influenced by high and low market demand. The demand for free-range chicken meat soars, especially in certain months leading up to religious holidays such as Eid, Christmas, and New Year or traditional ceremonies. With this increase in demand, the price of free-range chicken meat inevitably fluctuates (Sudarmono, 2018).

The imbalance in production and demand has an impact on price increases. Specifically for the price of free-range chicken meat, typically after experiencing a price increase the price never decreases back to its initial position. Even if it falls, it remains at a price above the initial price, unlike other agricultural commodities, this behavior is caused by changes in production.

Information regarding market conditions related to the demand and supply of free-range chickens in Indonesia is important to know. Farmers need to estimate how much free-range chicken commodities are needed to provide stock or supplies that align with targets in the future. Production planning can be done by obtaining information regarding demand and supply so that sales can be as expected.

2. Materials And Methods

This research uses a literature study method (literature review). Literature study is a series of activities related to methods of collecting library data, reading and taking notes, and processing research materials (Zed, 2008). Sugiyono (2013) added literature studies related to theoretical research and other references related to values, culture, and norms that develop in the social context studied.

This research aims to analyze the prospects, potential, and demand for free-range chickens in Indonesia. The material in this research comes from Livestock and Animal Health Statistics Documents and other sources in the form of scientific journals, scientific articles, textbooks, literature reviews, and other valid information from print and digital media. The data in this research is the amount of free-range chicken meat production in South Sulawesi from 2019 to 2022. The results of various literature reviews will be used to identify the prospects, potential, and demand for free-range chickens in Indonesia.

The data analysis used is descriptive analysis to explain scientifically the prospects, potential, and demand for laying hens. According to Sugiyono (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.

3. Results and Discussion

Free-range or free-range chicken is one of the livestock commodities that has a high potential to be developed to fulfill the community's need for animal protein consumption. Apart from fish, poultry is the main commodity for public consumption, where demand reaches 7.8 kg/capita/year in Indonesia (Food Security Agency, 2022).

Demand for products from free-range chicken commodities is increasing from year to year. Knowledge of the nutritional content contained in free-range chicken makes people increasingly fond of free-range chicken products. Free-range chicken meat is one of the livestock commodities needed to provide animal protein from livestock, where the meat protein contains a complete composition of amino acids, but meat from free-range chickens is generally more expensive compared to broiler meat, while the weight is lower. The chemical composition of chicken meat is 74.86 percent water content, 23.20 percent protein, 1.65 percent fat, 0.98 percent minerals, and 114 kcal calories (Rosyidi et al., 2009). Besides that consumer preference for meat and eggs from free-range chickens remains high with prices being more expensive than pure-bred chickens. The growth of downstream businesses such as stalls that specifically sell free-range chicken products continues to thrive, showing that the market potential for free-range chickens can still be developed (Saptati and Priyanti, 2006).

Table 1. Free-range Chicken Population in South Sulawesi Province 2019-2022

No.	Year(s)	Population of Free-range Chickens (tails)
1	2019	30.038.625
2	2020	30.794.240

3	2021	30.903.344
4	2022	30.996.054

Source: Livestock and Animal Health Statistics, 2022

Total Production and Demand for free-range chicken meat

Table 2. Free-range Chicken meat production in South Sulawesi Province 2019-2022

No.	Year(s)	Production of free-range chicken meat (ton)
1	2019	26.392,32
2	2020	5.624,27
3	2021	5.481,27
4	2022	5.590,90

Source: Livestock and Animal Health Statistics, 2022

The increase in population from year to year is directly proportional to the increase in consumption demand for free-range chicken products. The population in South Sulawesi Province is 9,022,300 people with a per capita meat consumption requirement of 7.06 kg/cap/year in 2022 and continues to increase every year. So the total consumption requirement for chicken meat is 63 697 438 tons (Ministry of Agriculture, 2022). Table 1 shows that the total population of free-range chickens in South Sulawesi Province in 2022 will be 30 996 054 birds. The projected free-range chicken meat production for South Sulawesi Province in 2022 is 5,590,90 tons. This figure shows a significant amount of fulfilling the demand for chicken meat products with the amount of free-range chicken meat production in South Sulawesi.

Intense competition for developed broiler commodities, such as broiler chicken commodities that have higher productivity to meet the need for chicken meat consumption, actually has a positive impact on increasing the free-range chicken population, referring to Table 1. From 2019 to 2022 it shows an increase in the population of free-range chickens, where in 2019 it was 30 038 625 heads and continues to grow until 2022 it was 30 996 054 heads. This increase in population is expected to be able to make free-range chickens as local chickens become the main commodity in meeting the needs of chicken meat consumption at home. In terms of contribution to population, free-range chickens only contribute 23% of the total poultry population in Indonesia (Director General of Livestock, 2017).

Total Production and Demand for Free-range Chicken Eggs

Table 3. Free-range Chicken Egg Production in South Sulawesi Province 2018-2022

No.	Year(s)	Free-range chicken egg production (tons)
1	2019	19 450, 01
2	2020	19 939, 27
3	2021	20 009, 92
4	2022	20 069, 95

Source: Livestock and Animal Health Statistics, 2022

The same is the case with free-range chicken meat, other free-range chicken products such as Eggs are also greatly influenced by the increase in population which is directly proportional to the increase in the number of egg consumption needs. The total population in South Sulawesi Province is 9,022,300 people with chicken egg consumption per capita being 19.40 kg/cap/yr, so the egg demand in 2022 is 175,033 tons (Ministry of Agriculture, 2022). Table 1 shows the total population of free-range chickens in South Sulawesi Province as much as 30 996 054 heads and the projected egg production of free-range chickens in South Sulawesi Province in 2022 is 20 069.95 tons. There was a deficit of 154 963.5 tons. so that free-range chicken egg production has not been able to meet the needs of egg consumption in South Sulawesi Province.

The high demand for chicken eggs is directly proportional to the increase in free-range chicken egg production in South Sulawesi. In Table 3. Shows an increase in the egg production of buran chickens from year to year. Where in 2019 free-range chicken egg production amounted to 19 450.01 tons. This number continues. It increases every year, until in 2022 it reaches 20 069.95 tons.

Prospects for Free-range Chicken Development in Fulfilling Demand Consumption

Free-range chicken is one of the livestock commodities that is very promising in achieving the welfare of farmers in South Sulawesi. The high demand for consumption, of both meat and egg products, is not directly proportional to the amount of production each year. This is influenced by the development of broiler breeds and laying breeds that have high productivity compared to free-range chickens by large

companies. Therefore, the development of new innovations is needed to improve the quality and competitiveness of free-range chicken so that it can become the main product in the community, especially in South Sulawesi. Overall, product competitiveness is the ability of a commodity to enter foreign markets and the ability to survive in these markets, in the sense that if a product has competitiveness, the product is in great demand by consumers (Tambunan, 2001).

The high demand for free-range chicken products with limited production means that the price of free-range chicken products tends to be high. Consumers of free-range chicken meat consider the price of consuming free-range chicken meat. If the price of chicken meat rises, people will tend to reduce their consumption of free-range chicken meat (Bailey et al, 2015). In economics, the demand for a good is defined as the amount of goods that consumers want so that consumers can afford to buy that good (Mankiw, 2007). The number of goods demanded depends on the price of the goods. This is in accordance with the law of demand which states. If the price of a good rises, the quantity demanded will fall and vice versa. With the development of free-range chicken commodities to meet consumer demand, of course, it not only has an impact on farmers but also has a big impact on the economy in an area. Industry is one of the main areas of manufacturing and its level of development determines the country's economic strength, employment, and social welfare (Startienė and Remeikienė, 2014).

4. Conclusion

The increase in the free-range chicken population in the last 4 years, namely in 2019 as many as 30 038 625 heads, until in 2022 to 30 996 054 heads, making products in the form of free-range chicken meat and eggs also increased. The increase in the amount of production every year has not been able to meet the consumption needs of the population in South Sulawesi. Production of free-range chicken meat in 2022 is 5 590.90 tons while the amount of consumption required is 63 697 438 tons. Likewise, free-range chicken egg products in 2022 are 20 069.95 tons while egg needs to reach 175 033 tons. The high demand for consumption shows potential business prospects in the development of the free-range chicken business in South Sulawesi Province.

References:

- Amelia. D.P, S. H. Pusnomo, Sudiyono. 2018. Factors that Influence the Demand for Free-range Chicken Meat in the Traditional Market of Surakarta City. *Journal of Animal Science*. Vol. 16 (1): 23-29.
- Food Security Agency. (2022). Development of Food Consumption. Jakarta, Indonesia.
- Bailey. C.A, Bale-Therik. J.F, Henuk. Y. L. 2015. Free-range Chickens and Their Production Systems in Indonesia. Prosiding 1st International Conference on Native Chickens. *Journal Thailand*. Vol. 17(1): 20 - 24.
- Directorate General of Animal Husbandry and Animal Health, Ministry of Agriculture of the Republic of Indonesia. (2022). Monitor the Availability of Eggs in South Sulawesi.
- Directorate General of Animal Husbandry. 2017. Livestock Statistics 2016. Kementerian Pertanian Republik Indonesia, Jakarta.
- Hariani. Arifin. Pata, A, A. 2019. Factors influencing the demand for free-range chickens in Maros Regency. *Agribusiness Journal* Vol. 1 (1).
- Mankiw, N. Gregory, 2007. *Macroeconomics*. Sixth Edition. Jakarta: Erlangga.
- Ritonga, D, A. 2018. Factors influencing demand for free-range chickens (*Gallus domesticus*) in Medan Area District. Thesis. Faculty of Agriculture. Muhammadiyah University of North Sumatra. Medan
- Saptati, R.A. dan A. Priyanti. 2006. Economic approach to local chicken farming business in people's farms. Proceedings of the 2006 national workshop on local chicken development technology innovation; 205-217.
- Startienė, G. & Remeikienė, R., 2014. *Evaluation of Revealed Comparative Advantage of Lithuanian Industry in Global Markets*. *Procedia - Social and Behavioral Sciences*, 110, pp.428-38.
- Sudarmono. 2018. *Broiler chicken cultivation, broiler and egg laying agribusiness*. Agriflo. Jakarta.
- Sugiyono. 2013. *Quantitative, Qualitative and Combination of Research Methods*. Alfabeta, Bandung
- Tambunan, Tulus T.H. 2001. *Indonesian Economy Theory and Empirical Findings*. Jakarta: Ghalia Indonesia
- Zed, M. 2004. *Library Research Methods*. Indonesian Obor Foundation Jakarta.