



## Goat Livestock Business Potential Viewed from Population and Production in Indonesia

**Baharuddin Baharuddin<sup>1\*</sup>, Andi Tenri Fitriyah<sup>1</sup>, Aylee Christine Alamsyah Sheyoputri<sup>1</sup>, Sulfiana<sup>2</sup>**

<sup>1</sup>Department of Agribusiness, Faculty of Agriculture, Bosowa University

<sup>2</sup>Department of Agribusiness, Faculty of Agriculture, Universitas Islam Makassar

\*Corresponding author's E-mail: [baharuddin@universitasbosowa.ac.id](mailto:baharuddin@universitasbosowa.ac.id)

Article History	Abstract
Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 11 Nov 2023	<i>Judging from the development aspect, the goat livestock business is very potential, easy to cultivate, both daily and commercially. Goats have several advantages and economic potential, their bodies are relatively small, they reach maturity quickly, and they are easy to maintain. Goat farming business is very easy, does not require large areas of land, relatively small business capital investment, easy to market and business capital rotates quickly. This paper aimed to determine the potential for goat farming in terms of the population and production of goats in Indonesia. This paper examines quantitative data from the last 5 years. The results show that the demand for goat meat in Indonesia is quite high because goats are one of the most consumed livestock by the people of Indonesia, the high level of demand is inseparable from the function of goat farming.</i>
CC License CC-BY-NC-SA 4.0	<b>Keywords:</b> Population, Production, Economic Potential, Business Goat, Advantages

### 1. Introduction

Indonesia is known as a country rich in natural resources. One of the sources of natural wealth in Indonesia is the potential of the agricultural sector in a broad sense, including the food sub-sector, food crops sub-sector, fisheries sub-sector, plantation sub-sector and livestock business sub-sector. Indonesia as an agricultural country always focuses on the utilization of agricultural resources as one of the mainstay commodities in collecting foreign exchange, so that Indonesia can survive in the face of the economic crisis that has occurred (Soedjana and Priyanti, 2017; Budiarto, et al, 2019)

The livestock sub-sector has a strategic value in meeting the ever-increasing food needs in line with the increasing population and the increase in the average income of the Indonesian people. Increased public awareness regarding the need to consume foods that have sufficient nutritional value has also contributed to the increase in the number of requests and the public's need for foodstuffs that have a high protein value, such as meat, milk, and eggs.

Goats have several advantages and economic potential, their bodies are relatively small, they reach maturity quickly, and they are easy to care for. Goat livestock business is very easy, does not require large areas of land, relatively small business capital investment, easy to market and business capital rotates quickly (Maesya and Rusdiana, 2018). Goats are an integral part of rural farm households from the early days of civilization. Goats are the most popular ruminant animal, which provides employment to women and young children (Panth et al, 2021)

Judging from the development aspect, the goat livestock business is very potential, easy to cultivate, both daily and commercially. In the following years the goat population continues to increase so that it can contribute beef. Goats can be cultivated by raising them from a scale of 2-5 heads/breeder, which can be increased to 5-10 heads/breeder (Sutama et al, 2011; Rusdiana and Hutasoit, 2014).

Soedjana (2017) states that, until now, the role of goats has not been significant, either as a source of meat or as a source of milk. The export prospects for goats and sheep are wide open for neighboring countries such as Malaysia, Brunei Darussalam, and the Middle East (Wibowo et al., 2016). The prospects for the local market and the domestic market are quite good, in the country alone it takes

about 5.6 million head/year (Leo, 2004). Rusdiana et al., (2014), stated that for this reason breeders are immediately encouraged to move towards commercial businesses. Djoko et al., (2004) stated that, goats have a high opportunity as an export commodity, until now Indonesia has not been able to fill goat export opportunities continuously, because the population is still very small, also the export requirements for average body weight are between 50-60 kg/head. Goats have considerable potential and are capable of breeding well for more than 1 (one) calving, and have many advantages and many benefits (Sutama et al., 2011).

Goats as meat producers are still unable to meet the needs of the community, so they still must import meat from abroad (Sodiq and Abidin 2009). The development of the goat livestock business is considered very suitable in the conditions of agricultural land, because goats are known to easily adapt to various rural agro-ecosystem conditions and are complementary businesses in a food crop farming system (Winarso 2010). The prospect of developing a goat livestock business can be done by cultivating seed multiplication (Maesya et al., 2018). Therefore, it is necessary to know the potential of goat farming in Indonesia in terms of the population and production of goats in Indonesia

### Goat Livestock Prospects

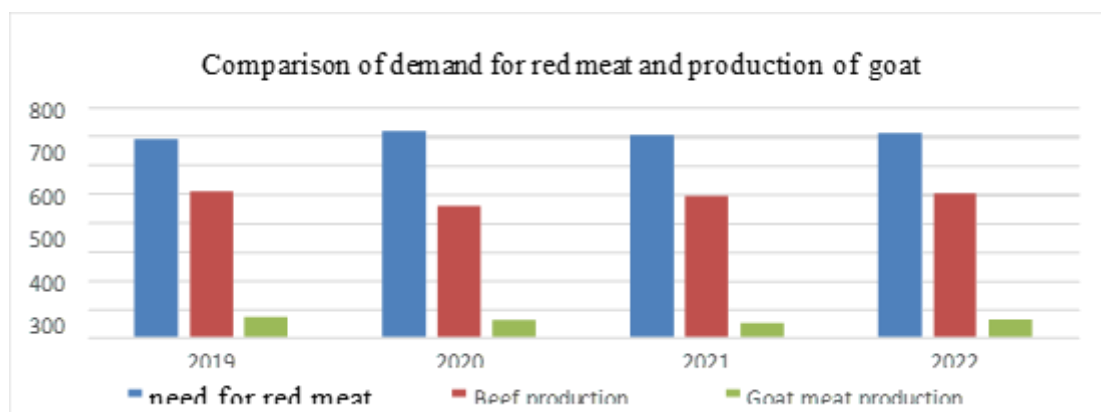
The prospect of developing a goat farming business in Indonesia has great opportunities, and the benefits are numerous in all directions, including the adequacy of meat, income for breeders, additional foreign exchange for the country and so on. The livestock sector has a very strategic role, to provide enough food, absorb labor, increase breeder income (Diwyanto, et al, 2005; Kuo et al. 2016). According to the Directorate General of Livestock and Animal Health (2022), the population of goats in Indonesia is recorded at around 19,237,960 heads spread across several regions such as South Sulawesi Province with 844,076 heads.

Goats as meat producers are still unable to meet the needs of the community, so they still must import meat from abroad (Sodiq and Abidin 2009). The development of the goat livestock business is considered very suitable in the conditions of agricultural land, because goats are known to easily adapt to various rural agro-ecosystem conditions and are complementary businesses in a food crop farming system (Winarso 2010). The prospect of developing a goat livestock business can be done by cultivating seed multiplication (Maesya et al., 2018). The entry of large farmers, who have better access to technical knowledge, resources, and market, into this activity would help in realizing the potential of goat enterprise. Most commercial goat farms have been found operating with positive net returns. Goat rearing has been found equally rewarding under both intensive and semi-intensive systems of management. Intensification and commercialisation of goat enterprise has been recorded important because of shrinking of resources for extensive grazing. Commercialisation would help in increasing the goat productivity and bridging the demand-supply gap.

### Demand for goat meat consumption

Participation in expanding markets for livestock products does not occur automatically. Wherever there are profits to be made in an emerging urban consumption sector, larger commercial suppliers will compete to capture market share for any product. When household producers are unable to participate in the growing markets that attract larger commercial producers, it is generally because of barriers to market access or entry (Otte et al, 2012). Goats provide precious meat and milk for immediate family consumption to overcome both malnutrition and under nutrition. Small size of goats is significant in that it provides multifunctional socio-economic, managerial and biological advantages (Devendra, C., 2012). Therefore, it is necessary to know the demand of which can be seen in figure 1.

**Figure 1.** Comparison of demand for red meat and production of goat



Based on figure 1, with a large population of goats, this provides great potential to meet market demand for goat meat. The demand for goat meat in Indonesia during the Covid-19 pandemic experienced several obstacles that affected the production and supply of goat meat in the market, which can be seen in table 1. In 2020-2021, there will be a decline in goat meat production, in 2022 meat production will increase in line with the community's economic recovery. The demand for goat meat in Indonesia is quite high because goats are a type of livestock that is widely consumed by the people of Indonesia, this is in line with the opinion (Maesya and Rusdiana 2018) which emphasizes that the high level of demand is inseparable from the function of the goats themselves. Goat meat has a distinctive taste and is widely used in various traditional dishes. The popularity of goat meat is no longer in doubt in Indonesia because goat meat is believed to have higher properties than beef and lamb (Asnavy, M, 2017). Goats play a major role in fulfilling national food as a source of nutrients such as protein, fat, vitamins, minerals, and other nutrients (Andi et al, 2022).

The Covid-19 pandemic has had an impact on various economic sectors, including the livestock industry. The declining economic conditions of the community due to the impact of this pandemic have caused most people to be unable to meet their family's nutritional needs (Agung 2022). The Covid-19 pandemic has reduced people's purchasing power, this has an impact on the demand for goat meat because the price of meat is relatively more expensive than chicken meat. The decline in celebratory activities due to social restrictions and the closure of places of worship also affected the demand for mutton because goat meat is often consumed in celebratory events such as Eid and other holidays.

Goat meat can be an alternative for the community in fulfilling food intake and immunity against the covid 19 pandemic (Winarso, 2010), argues that goat farming can improve life and increase the nutritional level of farmers and family welfare. PE Goat meat production is higher than local goats

#### Population and goat meat products

Production of goat meat is the activity of rearing goats with the aim of producing meat as a food ingredient. Goat production can be done on small- or large-scale farms, and is usually done in rural areas. Production of goat meat in Indonesia is still high, because Indonesia has many goats and the demand for goat meat is high, especially at certain moments such as Eid al-Adha.

**Table 1.** Goat population and production in 2019-2022

No	Year	Goat population	Production (Tons)
1	2019	18.463.115	72.852
2	2020	18.689.711	61.711
3	2021	18.904.347	59.730
4	2022	19.397.960	63.658

Source: Secondary data,2023

Based on table 1, with a large population of goats, this provides great potential to meet market demand for goat meat. The demand for goat meat in Indonesia during the Covid-19 pandemic experienced several obstacles that affected the production and supply of goat meat in the market, which can be seen in table 1. In 2019-2022, there was a decrease in goat meat production. increase in line with the community's economic recovery

The demand for goat meat has decreased due to social restrictions that limit market access, so goat meat production can also be hampered due to supply chain constraints, such as difficulties in the transportation and distribution of feed ingredients, and disruptions in the process of butchering and processing meat. Indonesia has implemented policies in the spread of the Covid-19 virus, one of which is a policy in medical management, namely large-scale social restrictions (PSBB) in every region in Indonesia, this affects economic sectors so that it disrupts the supply of production and consumption of goods and services that exist in society, especially Indonesia (Misno, 2020).

#### 4. Conclusion

The demand for goat meat in Indonesia is quite high because goats are a type of livestock that is widely consumed by the people of Indonesia, the high level of demand is inseparable from the function of the goats themselves. The Covid-19 pandemic has had an impact on the livestock sector, a decrease in celebration activities due to social restrictions and the closure of places of worship has also affected the demand for meat. The demand for goat meat in Indonesia during the Covid-19 pandemic experienced problems that affected the production and supply of goat meat in the market.

## References:

- Agung, A. A. G., & Handayani, R. 2022. Blockchain for smart grid. *Journal of King Saud University-Computer and Information Sciences*, 34(3), 666-675.
- Andi I.N.Z., Christoporos. and Afandi. 2022. Goat Livestock Business Development Strategy at CV Prima Breed, Tondo Village, Mantikulore District, Palu City. *Agrotekbis* 10 (2): 283 – 290.
- Asnavy, M, 2017 Etawa Farm Goat Farm Business Development Strategy in Tawangmangu District, Karanganyar Regency, AGRISTA. 5(2): 1-11. Faculty of Agriculture, Eleven March University, Surakarta
- Birmanto, M. 2004. The Economic Pre-feasibility Study of Madura Nuclear Desalination System. *Journal of Nuclear Energy Development*, 6(1, 2), 21-34.
- Bishnu Prasad Panth, Nirajan Bhattarai, Puja Baral, Mahesh Karki, Anita Bhattarai and Saroj Sapkota.2021. Factors affecting the profitability from goat farming in Gulmi, Nepal. *Cogent Food & Agriculture* .7: 1-10. <https://doi.org/10.1080/23311932.2021.1963928>
- Budiarto, A., Ciptadi, G., Hakim, L., & Putri, A. I. 2019. Reproductive performance and fertility index of swamp buffalo (*Bubalus bubalis*) in ngawi regency, east java. In *Journal of Physics: Conference Series* (Vol. 1146, No. 1, p. 012024). IOP Publishing.
- De Leo, D., & Heller, T. S. 2004. Who are the kids who self-harm? An Australian self-report school survey. *Medical journal of Australia*, 181(3), 140-144.
- Devendra, C..2012. Dairy Goats in Asia: Multifunctional Relevance and Contribution to Food and Nutrition Security. Proceedings of the 1st Asia Dairy Goat Conference, Kuala Lumpur, Malaysia, 9–12 April 2012.pp 1-5
- Dwiyanto, A Priyanti and I Inounu.2005. Prospects and Development Direction of Livestock Commodities: Poultry, Cattle and Goats and Sheep. *WARTAZOA*.15(1):11-25
- Kuo, R. J., Wibowo, B. S., & Zulvia, F. E. (2016). Application of a fuzzy ant colony system to solve the dynamic vehicle routing problem with uncertain service time. *Applied Mathematical Modelling*, 40(23-24), 9990-10001.
- Maesya, A, and Rusdiana, S, 2018. Prospects for the Development of Goat Livestock Businesses and Stimulating the Improvement and Farmer's Economy. *Agri Economica*. 7(2): 135-148. DOI: <http://doi.org/10.21107/agriekonomika.v7i2.4459>
- Misno, B. P., Shi, M. E. I., & Sabri Mohamad Sharif, P. D. (2020). *Menggemang Nusantara Raya*. Gramedia Pustaka Utama.
- Otte, M.J., V. Ahuja & D. Roland-Holst.2012, Linking Smallholders to Markets – Opportunities and Challenges. Proceedings of the 1st Asia Dairy Goat Conference, Kuala Lumpur, Malaysia, 9–12 April 2012.pp7-10
- Rusdiana and Hutasoit.2014. Increasing Goat Livestock Business in Sumber Sari Farmer Group in Income Economic Analysis. *SEPA*: 11(1) : 151 – 162
- Rusdiana, L. Praharani dan U. Adiati.2014. Prospects and Goat Livestock Trading Strategies in Seizing World Market Opportunities.*Agriekonomika*, ISSN 2301-9948. 3(2);203-223
- Sodiq, A., & Abidin, Z. 2009. Practical Instructions for Fattening Sheep, Goats and Beef Cattle.*Jakarta [ID]: Agromedia Pustaka*.
- Soedjana, T. D., & Priyanti, A. 2017. Competitiveness of Indonesian livestock production among ASEAN countries. *WARTAZOA. Indonesian Bulletin of Animal and Veterinary Sciences*, 27(1), 1-14.
- Sutama, D., & Lisa, E. 2018. Effect of leverage and profitability on firm value. *JSMA (Jurnal Sains Manajemen Dan Akuntansi)*, 10(1), 21-39.
- Winarso. B. 2010. Prospects and Constraints for the Development of Goat and Sheep Agribusiness in Indonesia. National Seminar Proceedings. Farmer Welfare Oriented Agribusiness Competitiveness Improvement. Center for Socioeconomic Analysis and Agricultural Policy, Ministry of Agriculture, p. 246-264