Study of Kacang Goat Breeding Program Using Qualitative Analysis Methods

Apri Irianto
Department of Animal Husbandry Faculty of Agriculture, Universitas Musamus
apri_irianto@unmus.ac.id
+6281293792321

Wiyan Afriyanto Pamungkas*
Department of Agricultural Engineering Faculty of Agriculture, Universitas Musamus
wiyan_pamungkas@unmus.ac.id
+6285197135887

Nurcholis
Department of Animal Husbandry Faculty of Agriculture, Universitas Musamus
nurcholis@unmus.ac.id
+6282248877056

Syetiel Maya Salamony
Department of Animal Husbandry Faculty of Agriculture, Universitas Musamus
salamony@unmus.ac.id
+6281248687688

Desmina K. Hutabarat
Department of Animal Husbandry Faculty of Agriculture, Universitas Musamus
desminakristianihutabarat@unmus.ac.id
+6285270390394

(*) Corresponding Author

Abstract

Merauke has several kinds of livestock that have the potential to be well-developed to meet the needs of animal protein. This study aims to find out how the Kacang goat breeding program in Tanah Miring District by looking at several qualitative parameters on breeders including; education level, livelihood, rearing system, livestock origin, and ownership status. Data were collected using questionnaires and analyzed using descriptive analysis assisted by MS Excel for data tabulation. The results showed that the level of formal education at the elementary level dominated the characteristics of Kacang goat breeders in Tanah Miring District with the main livelihood as a farmer. The intensive maintenance system predominates in Tanah Miring District. As many as 80% of respondents answered that Kacang goats were livestock purchased from outside the Tanah Miring District area and the rest were those born in the area.

Keywords: Kacang goat, breeding program, livestock, Merauke District
A. Introduction

Merauke has several kinds of livestock that have the potential to be well-developed to meet the needs of animal protein. One of the livestock that has quite good potential in its development is the Kacang goat. The goat population in Merauke increases every year when compared to 2021 totaling 11,375 heads and in 2022 totaling 12,415 heads (BPS Merauke, 2021; BPS Merauke, 2022). This number has a significant increase when seen from the data on the addition of goats in 2021 and 2022. One of the districts that has the largest number of goats is the Tanah Miring District. Tanah Miring District ranks second in the number of goats kept in Merauke. The population of Kacang goats in the Tanah Miring District in 2022 is 2,741 based on the data collected and is the second largest population after the Semangga District (BPS Merauke, 2022).

Kacang goat is one of the livestock that can adapt to various environments. Based on the Laya & Ilham report (2019) local goats are in great demand by the community because they give birth quickly, are easy to care for, and are resistant to the environment in Indonesia.

Kambing Kacang is a native Indonesian local goat whose existence has spread in almost all parts of Indonesia (BSN, 2018). These goats are kept by the community as savings or on a large scale as a business (Tagoi et al., 2020). Goats are also a unique genetic resource for use in the improvement of nations through crossbreeding, more productive at a very low cost, support food, agricultural and cultural diversity, and are more effective in achieving local security goals (Tagoi et al., 2020). Goats are widely cultivated in Indonesia both intensively and semi-intensively. Most breeders in the villages develop their goats with a semi-intensive system. Semi-intensive maintenance, livestock are reared by grazing, tied up in the area of grazing area, and at night the cattle are moved into the pen (Ilham et al., 2019).

The Kacang goat breeding program has many benefits when it is carried out using good and correct methods. Farmers in Indonesia on average raise livestock as savings or as a sideline to their main job (Irianto et al., 2020; Tagoi et al., 2020). So that many people’s farms are still developing livestock using simple maintenance methods and facilities. The development of animal husbandry has not been matched by the application of good technology, thus giving the impression of underdevelopment of animal husbandry in Indonesia, especially smallholder farms. The skills and hard work of smallholder breeders need to be balanced with a good maintenance program where all processes are managed in a good system. The number of livestock if not balanced with good livestock management knowledge will result in unfavorable results. Based on the results of research by Bukhori et al. (2017) that knowledge in the field of animal husbandry is very important to be obtained by breeders as capital for developing livestock businesses.

Based on the description above, it is necessary to conduct a study to gather information about how far the Kacang goat breeding program has been carried out on people’s farms in Tanah Miring District by looking at several parameters that affect the maintenance and development process of both livestock and livestock in general.

B. Methodology

1. Instruments and Design of Research

The research instruments included cameras, stationery, and questionnaires. The sampling method is by using Purposive Sampling to determine the location based on consideration of the total population of goats in the Tanah Miring District. While the respondents in this research were goat breeders who were adjusted to the sample selection.

2. The Technique of Data Collection.

This research is based on the results of interviews conducted with 41 people using a prepared questionnaire. Data collection techniques were carried out by (a) Observation, namely direct observation of research objects in the field (b) Interviews, carried out directly to respondents, namely farmers, interviews assisted by using a structured questionnaire containing a list of questions adapted to research needs and (c) Documentation, namely data collection in the form of taking pictures, data, and others. The data collected includes; education level, livelihood, rearing system, livestock origin, and ownership status.

3. Parameters of Research

The parameters of this research are the education level of Kacang goat breeders, the livelihoods of Kacang goat breeders, the Kacang goat management system, and the origin of Kacang goats in the Tanah Miring district.
4. Data Analysis
   This study was analyzed using a descriptive method based on the results of the questionnaire by tabulating the data in MS Excel.

C. Result and Discussion
   1. Results
   a) Education Level of Kacang Goat Breeders
      Based on the results of interviews conducted with respondents in Tanah Miring District, the highest percentage of the education level of Kacang Goat breeders is dominated by breeders with Elementary School (ES) education which consisted of 20 respondents (48.78%). The lowest percentage of education level is Diploma (D3) consisting of 1 respondent (2.44%). In addition, there were 11 breeders with junior high school education (JHSE), 7 breeders with senior high school education (SHSE), and 2 breeders with bachelor’s degrees. Data on the education level of Kacang Goat breeders can be seen in Figure 1.

   ![Graph showing education level of Kacang Goat Breeders in Tanah Miring District]

   Figure 1. Education level of Kacang Goat Breeders in Tanah Miring District.

   b) Livelihoods of Kacang Goat Breeders
      Livelihoods for Kacang Goat breeders in Tanah Miring District are dominated by respondents who work as farmers 75.61% (31 respondents), 14.63% (6 respondents) work as employees. Respondents as soldiers (Indonesia National Army) and housewives each as much as 2.44% (1 respondent). Living as a Kacang Goat breeder mainly is 4.88% (2 respondents). The data for Kacang Goat breeders in Tanah Miring District can be seen in Figure 2.

   ![Graph showing livelihoods of Kacang Goat Breeders in Tanah Miring District]

   Figure 2. Livelihoods of Kacang Goat Breeders in Tanah Miring District.
c) Kacang Goat Management System

The Kacang Goat Management system in Tanah Miring District is dominated by an intensive management system with a percentage of 53.66%, while the rest is a semi-intensive management system with a total of 46.34%. The percentage of the Kacang Goat management system in this study can be seen in Figure 3.

![Figure 3. Kacang Goat Management System in Tanah Miring District](image)

**Figure 3. Kacang Goat Management System in Tanah Miring District**

<table>
<thead>
<tr>
<th>MANAGEMENT SYSTEM</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive</td>
<td>53.66</td>
</tr>
<tr>
<td>Semi Intensive</td>
<td>46.34</td>
</tr>
</tbody>
</table>


d) Origin of Kacang goat in Tanah Miring District

Figure 4 shows the origin of Goat Kacang in the Tanah Miring District. Based on the data, most of the Goat Kacang are livestock purchased from outside the Tanah Miring District. 33 respondents (80%) answered that their livestock came from outside Tanah Miring District, while 8 respondents (20%) stated that their livestock had been there since birth from the Kambing Kacang, which had been kept previously by breeders.

![Figure 4. Origin of Kacang Goat in Tanah Miring District.](image)

**Figure 4. Origin of Kacang Goat in Tanah Miring District.**

- 80% Existed since birth in Tanah Miring District
- 20% Purchased from outside Tanah Miring District


e) Kacang Goat Ownership Status

The ownership status of Kambing Kacang in Tanah Miring District is divided into self-ownership and cooperation (Gaduh). Based on the data obtained shown in Figure 5, it can be seen that 95.12% or 39 of the respondents kept the Kacang goat with ownership status as their own, while 4.88% or 2 respondents kept the Kacang goat with the status of shared ownership (Gaduh).
2. Discussion

Based on the research, the majority of Goat Kacang breeders in Tanah Miring District have an elementary school education (SD) with a percentage of 48.78% (20 respondents), and only 4.88% (2 respondents) have a bachelor’s degree. The low level of education among Kacang Goat breeders is an obstacle to understanding development patterns and business management and accelerating the adoption of innovations because the breeding practices carried out are conventional management (Tulle et al., 2021). The education level of the breeder has an impact on the ability to manage the livestock business. The breeder’s education level affects the ability to manage a livestock business. The higher level of education attained impacts breeder behavior change, decision-making, and application of innovations in will be formed (Efu & Simamora, 2021; Pakpahan & Pane, 2019).

The results of the study show that only 4.88% have their main livelihood as breeders and 95.12% have multiple activities as farmers, as soldiers (TNI), as employees, and as housewives. This livelihood is related to the allocation of time available in carrying out the activities of caring for the Kacang Goat so that the existing contribution of the Kacang Goat livestock has not become the main livelihood and is still limited to a side business. These results are also similar to the research of (Tulle et al., 2021), which stated that farming activities are the main livelihood compared to raising Kacang Goats and other livestock. In addition, all respondents who mainly livelihood as breeders (4.8%) have an education level in elementary. Their skill with Kacang goat may be good level but their innovation absorption regarding livestock technology is lower. In agreement with the resulting study of the level of education of breeders significantly to the behavior of breeding goats in Wonosari village (Mulyawati et al., 2016).

The management system by the Goat Kacang breeders in Tanah Miring District is mainly the Intensive Management System with more than 53% of breeders, while the rest are Semi-Intensive Management Systems. The implemented management system will affect the productivity of the raised Kacang Goats. According to Joseph (2018), the productivity of goats kept intensively is better than that of goats kept semi-intensively. This is thought to be related to the provision of quality feed in sufficient quantities in intensive management systems. On the other hand, livestock kept in a semi-intensive system obtain feed that is not good in quantity and quality.

Based on the data, the Kacang Goats raised in Tanah Miring District are livestock from outside the area (80%), while the remaining 20% are born there. We predict that their competition to livestock Kacang goats is lower, particularly in the technology breeding of Kacang goats. The arrangement of human resources significantly impacts the efficiency of goat production (Ogunniyi, 2010).

Most of these Kacang goats have self-ownership status (95.12%), and the rest are livestock owned under a gaduh or profit-sharing system (4.88%). The self-ownership and shared ownership (gaduh) each have their advantages. In a system with self-ownership, all profits from the livestock business are owned by themselves (Bahar et al., 2022), whereas shared ownership (gaduh) can increase the income of breeders (Solikin et al, 2019). According to Harsita & Amam (2021), the pattern of shared ownership (gaduh) is a form of local wisdom that can positively
impact the breeders’ economy. Livestock ownership status is related to business capital owned (Rouf & Munawaroh, 2016).

D. Conclusion

Based on the research, it can be concluded that the level of formal education of Kacang goat breeders in Tanah Miring at the elementary level dominates. The maintenance system is dominated by intensive systems rather than semi-intensive maintenance. More than 80% of respondents answered that the goats they owned were purchased from outside the Tanah Miring District area and the rest were those born in the area. The Goat Kacang in Tanah Miring District is privately owned with a percentage of more than 95%, and the rest are livestock owned under a profit-sharing system (gaduh).

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F. References


