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# Goat agribusiness extension in Komala Village, South Wangi-Wangi District

H. Hafid \*¹, Anfas², La Ode Arfan Dedu³, Achmad Selamet Aku¹, Siti Hadrayanti Ananda⁴, and Rina Astarik⁴, and Rina Astarik⁴,

<sup>1</sup>Department of Animal Science, Faculty of Animal Science, Halu Oleo University, Kendari, Indonesia.

\*Corresponding Author: harapin.hafid@uho.ac.id

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#### **ABSTRACT**

The Komala Village community has many goats but there are many problems faced by the community such as dead fetuses, malnutrition, limited health care, environmental conditions, lack of knowledge and training and limited infrastructure. Therefore, the aim of this extension activity is to provide education to the farming community about the correct way to raise goats. This activity was carried out on Friday, March 26, 2023 at 16.00 WITA - Finish, located at the Gazebo of the Komala Village Head's House, South Wangi-Wangi District, Wakatobi. Counseling materials presented to the community: (1) Types of appropriate and balanced feed for goats, (2) Natural feed, supplementary feed, and fermented feed, (3) How to organize feeding according to age, weight, and maintenance objectives, (4) Efficient feeding methods, and (5) Mixing and serving feed techniques. After following the goat farming extension, the community response was as follows: (1) enthusiasm and participation, (2) increased understanding, (3) interest in new practices, (4) awareness of the importance of improving goat rearing practices (5) satisfaction with information, (6) positive perception of benefits, (7) desire for further training, and (8) better collaboration. The conclusion from this community service activity is that the community in Komala Village still has low knowledge regarding how to raise goats. Although they have experience in raising goats, many things can still be improved in farming practices to achieve better results. As for what needs to be improved in community knowledge, such as feed management, care, production management, use of technology, and business management skills.

Keyword: goat farming, goat husbandry management, komala village,

#### ABSTRAK

Masyarakat Desa Komala banyak yang memelihara kambing tetapi banyak masalah yang dihadapi oleh masyarakat seperti fetus mati, kekuragan gizi, perawatan kesehatan yang terbatas, kondisi lingkungan, kurangnya pengetahuan dan pelatihan dan keterbatasan infrastruktur, Tujuan dari kegiatan penyuluhan ini adalah untuk memberikan edukasi kepada masyarakat peternak tentang cara beternak kambing yang benar. Kegiatan ini dilaksanakan pada hari Jum'at, 26 Maret 2023 pukul 16.00 WITA - Selesai, bertempat di Gazebo Rumah Kepala Desa Komala, Kecamatan Wangi-wangi Selatan, Wakatobi. Materi penyuluhan yang disampaikan kepada masyarakat: (1) Jenis pakan yang tepat dan seimbang untuk kambing, (2) Pakan alami, pakan tambahan, dan pakan fermentasi, (3) Cara mengatur pemberian pakan sesuai usia, berat, dan tujuan pemeliharaan, (4)



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<sup>&</sup>lt;sup>2</sup>Management Study Program, Faculty of Economics and Business, Open University, UPT UPBJJ-UT Kendari, Indonesia.

<sup>&</sup>lt;sup>3</sup>Department of Agribusiness, Faculty of Agriculture, Halu Oleo University, Southeast Sulawesi, Kendari, Indonesia.

<sup>&</sup>lt;sup>4</sup>Department of Nutrition Science, STIKES Karya Kesehatan, Southeast Sulawesi, Kendari, Indonesia.

<sup>&</sup>lt;sup>5</sup>Department of Aquaculture, Faculty of Fisheries and Marine Sciences, Halu Oleo University, Southeast Sulawesi, Kendari, Indonesia.

<sup>&</sup>lt;sup>6</sup>Department of Agribusiness, Faculty Sains and Tecnology, Open University, UPT UPBJJ-UT Kendari, Indonesia.

Metode pemberian pakan secara efisien, dan (5) Teknik pencampuran dan penyajian pakan. Setelah mengikuti penyuluhan peternakan kambing, respon masyarakat sebagai berikut: (1) Antusiasme dan partisipasi, (2) Pemahaman yang meningkat, (3) minat pada praktik baru, (4) kesadaran perlunya pengetahuan tentang praktik pemeliharaan kambing (5) kepuasan dengan informasi, (6) persepsi positif terhadap manfaat, (7) keinginan untuk pelatihan lanjutan, dan (8) kolaborasi yag lebih baik. Disimpulkan bahwa tingkat pengetahuan masyarakat Desa Komala terhadap budidaya ternak kambing masih relatif awam. Meskipun mereka memiliki pengalaman dalam memelihara kambing, banyak hal yang masih bisa ditingkatkan dalam praktik peternakan untuk mencapai hasil yang lebih baik. Adapun yang perlu ditingkatkan pada pengetahuan masyarakat yaitu seperti pengolahan pakan, perawatan, manajemen produksi, penggunaan teknologi, serta keterampilan pengelolaan usaha.

Keyword: desa komala, manajemen pemeliharaan kambing, ternak kambing

#### 1. Introduction

Komala Village is one of the villages in the South Wangi-Wangi sub-district and an island area with a temperature of approximately 32-38 degrees Celsius with a village area of  $\pm$  7.2 km<sup>2</sup>. Komala Village is located on the coast with a distance to the sub-district office of about 5 km and the distance to the district capital is about 7 km. The main commodity in this village is seaweed fishing.

In Komala Village, the community raises various types of livestock to support food security, including chickens and goats. Chickens and goats are the main choices because they have great benefits in maintaining food availability. Chickens can produce nutritious eggs and meat, while goats provide meat that is useful for daily needs. With these two types of livestock, people can fulfil their protein and nutrition needs well and maintain the sustainability of their food sources.

In general, goat farming in Indonesia is cultivated by small farmers in rural areas [1-4]. The pattern of raising goats is still traditional where people have been raising them simply for generations. Here are some ways to raise goats that are commonly done in villages:

- 1) Grazing: Goats are left to graze in fields or open fields to find natural food. People rely on the land around the village to provide grass and leaves for the animals.
- 2) Simple Stables: Goats are usually kept in simple cages made of wood or bamboo. These pens serve as a place for the goats to rest and shelter at night or during bad weather.
- 3) Supplementary Feeding: In addition to grazing, people also provide additional feed such as leaves or crop residues to ensure the goats get adequate nutrition.

Goat rearing in Komala village faces several challenges that can affect the health and productivity of the animals, such as dead fetuses and malnourished goats. The following are some of the challenges faced by the community in raising goats:

- 1) Fetal mortality in goats can be caused by various factors, such as lack of nutrition during pregnancy, infection, or genetic problems. This can reduce the number of goat births and affect livestock production.
- 2) Malnutrition: Malnutrition in goats can be caused by insufficient feed availability or lack of essential nutrients in the feed. This can result in slow growth, low milk production, and a weak immune system.
- 3) Limited Health Care: Communities may face limited access to veterinary services or modern medicines, resulting in suboptimal health care for goats.
- 4) Environmental Conditions: Environmental factors such as erratic weather, drought, or flooding can affect the availability of feed and clean water for goats.
- 5) Lack of Knowledge and Training: People may not have sufficient knowledge on better goat rearing practices, such as balanced feeding or effective health management.
- 6) Infrastructure Limitations: Lack of infrastructure such as adequate housing or goat manure management facilities can impact the quality of life and health of the animals.

The purpose of the Community Service Team in conducting goat farming counseling in Komala Village is to provide education to the community about how to properly manage goats because Komala Village still needs knowledge and skills in animal husbandry management, especially healthy goats, good feed, marketing and animal health. In connection with the above, community service activities have been carried out in the form of counseling on goat farming starting from preparatory activities involving many aspects in it, starting from

determining the location, supporting facilities and infrastructure to determining the type of livestock to be developed or farmed, the type of goat feed, housing, post-harvest and marketing, disease and treatment, and manure processing [5].

#### 2. Methods

This activity was realized on Friday, March 26, 2023 at 16.00 WITA - Finish, located at the Gazebo of the Komala Village Head's House, South Wangi-Wangi District, Wakatobi. The activity implementers, namely lecturers from the Faculty of Animal Husbandry and the Faculty of Agriculture UHO, assisted by students as field assistants, acted as agents of transfer of knowledge. The livestock community, as the target of the extension, participates in good cooperation by being calm and orderly in listening to the material and asking questions in the discussion session about material that is not yet understood. Conditions like this support the knowledge transfer process to run well.

Participants in the goat farming extension program in Komala Village consisted of various parties who play an important role in the development of animal husbandry in the village. They are:

- 1) Village Head: As the village leader, the village head has a central role in supporting the extension program and ensuring that it meets the needs of the community.
- 2) Village Secretary: The village secretary assists in the planning and implementation of the extension program, as well as documenting the results of the activities for administrative and follow-up purposes.
- 3) 3) Village communities: A total of 15 village residents who raise goats were the targets of this outreach. There were 10 men and 5 women aged around 20 to 60 years. It is hoped that they will gain new knowledge and skills to increase the productivity of their goat farming.
- 4) KKN friends: Friends from the Community Service Program (KKN) group participate in the counselling as assistants and facilitators.

Counseling materials delivered to the community [6]:

- 1) Types of feed that are appropriate and balanced for goats.
- 2) Natural feed, supplementary feed, and fermented feed.
- 3) How to adjust feed according to age, weight, and purpose of rearing.
- 4) Efficient feeding methods.
- 5) Feed mixing and serving techniques.
- 6) Feeding schedule and recommended portions.

### 3. Results and Discussion

In general, the knowledge of the Komala Village community regarding how to raise goats is still relatively low. Even though we have been raising goats for a long time, there are still many things that need to be improved in order to achieve better results. The following is an overview of the community's knowledge level and the benefits of goats that still need to be improved:

- 1) Feed Management: Communities may not fully understand how to manage balanced feed for goats. This can lead to a lack of nutrition which impacts the growth and productivity of the livestock.
- 2) Health Care: Knowledge on goat health care is limited, including vaccination, medication and disease management. This can hinder the growth and sustainability of the farm.
- 3) Reproductive Management: Understanding of reproductive management, such as handling pregnant goats and caring for goat kids, still needs to be improved to increase reproductive success and the continuity of goat generations.
- 4) Economic Benefits: People may not fully realize the economic potential of goats, such as the sale of meat, milk, and skin. An understanding of marketing and product diversification can help increase income.
- 5) Environmentally Friendly Practices: Knowledge of environmentally friendly farming practices, including livestock waste management, still needs to be improved to preserve the surrounding environment.
- 6) Use of Technology: Communities may not have fully adopted modern technology in goat farming, such as the use of more efficient pens or feed processing equipment.
- 7) Business Management Skills: The community's ability to effectively manage livestock businesses,

including planning, record-keeping, and financial analysis, can still be improved.

Specialized counselling and training are needed to improve the community's knowledge and skills in goat farming. With better information and guidance, villagers can optimally utilize goats to improve their economic welfare. Farmer resources are an important production factor and have a direct impact on improving business competitiveness [7,8].

The community's response to goat farming extension activities in Komala Village showed high enthusiasm and interest in the topics presented. The following is an overview of the community's level of understanding and perception of the material presented in the extension program:

- 1) Enthusiasm and Participation: The community showed great interest by actively participating in the counselling. They asked questions and shared experiences related to goat rearing.
- 2) Improved Understanding: After attending the counselling, the community showed an increased understanding of proper feeding, goat health care, and reproductive management.
- 3) Interest in New Practices: Communities were open to new ideas and practices presented, such as the use of fermented feed, better housing management, and modern health care methods.
- 4) Awareness of the Importance of Improvement: Communities realize the importance of improving goat rearing practices to support better animal health and productivity.
- 5) Satisfaction with Information: Communities are satisfied with the information provided, finding it useful to apply in their daily livestock activities.
- 6) Positive Perception of Benefits: Communities have a positive perception of the benefits that can be gained from applying extension materials, including increased production yields and economic welfare.
- 7) Desire for Further Training: Communities expressed a desire to participate in further training and explore specific topics related to goat farming.
- 8) Better Collaboration: The community is open to working with the village government, educational institutions, and livestock experts to improve the quality of goat rearing.



Figure 1 (a) Discussion with goat farmers; (b) Goat extension activitie; (b) goats kept in semi-extensive pens; (d) some goats kept in Komala.

Explained that collecting traders in determining the selling price only use the science of estimation in selling goats in the field because collecting traders do not use weighing tools to measure goats to be sold [9,10]. The selling price of goats in Komala Village:

- 1) Male Goat Price: Male goats that are ready to be sold are valued at around Rp 3,500,000.
- 2) Price of Female Goats: Female goats that are ready to be sold are valued at around IDR 3,000,000.
- 3) Price of Goat Kids: Goat kids are not ready to be sold at this time. The price will be determined once the goats reach the age and weight that meets the market selling standards. Prices may vary depending on the goat's quality, age, weight, and other market factors.

Goat farming in Komala Village can be influenced by various supporting and inhibiting factors. The following is about these factors:

### 1) Supporting Factors

- Availability of Natural Feed: Availability of grasslands or fields for grazing goats helps fulfil the need for natural fodder.
- Suitable Climate: Stable and suitable climatic conditions for goat farming promote good livestock growth.
- Government and Extension Support: Government or livestock extension programs provide technical assistance and updated information to farmers.
- Local Culture: People who are used to raising goats have basic knowledge and useful skills.
- Local Marketing: The existence of local markets to sell livestock products, such as goat meat and milk, helps farmers generate income.

# 2) Inhibiting Factors

- Limited Feed Availability: Lack of access to high-quality feed or supplementary feed can hamper goat growth due to water areas.
- Limited Health Care: Lack of access to veterinary services or medicines can affect the health of livestock.
- Lack of Technical Knowledge: Lack of knowledge on good goat rearing practices can hinder productivity.
- Limited Capital: Limited capital for investment in facilities or quality feed can be a barrier for farmers.
- Volatile Market Prices: Unstable changes in goat market prices can affect farmers' income.
- Market Competition: Competition with farmers from other regions can affect selling prices and demand.

# 4. Conclusions

In general, the knowledge of the Komala Village community regarding how to raise goats is still relatively low. Although they have experience in raising goats, many things can still be improved in animal husbandry practices to achieve better results. The things that need to be improved in community knowledge are feed management, care, production management, use of technology, and business management skills.

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