
PRODUCTIVITY GOAT LAKOR FARMING ON LAKOR ISLAND SOUTHWEST MALUKU DISTRICT

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ABSTRACT

This study aims to determine the productivity of Lakor goats in rural conditions on Lakor Island, Southwest Maluku Regency. This research was conducted in October-November 2022 on Lakor Island. This research used This study used 60 Lakor goat breeders as respondents and the design. The results of this study showed that the average birth weight was 1kg, weaning weight was 13,15kg, bodyweight for kid goats aged 1-2 years was 86,91-22,84kg, number of matings 1,5-3 times, type of birth from a single sample village 11,32, twins 42,14, triplets 19,93, litter size 1,97, pre-weaning motility 7,33, sex ratio 3,31-3,70 and estrus cycle 18-24 days. It can be concluded that the productivity of Lakor goats in rural conditions in Pulau Lakor, West Maluku district the power is very good because even though the rearing of goats on Lakor Island is semi-intensive, green feed on Lakor Island really meets the needs of livestock so as to produce ideal body weight.

Keywords: productivity, goat, farming.

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INTRODUCTION

The development of the livestock sub-sector is part of the development of the agricultural sector. The livestock sub-sector has strategic value in meeting food needs (animal protein sources). The need for animal food consumption continues to increase as the population increases. People's consumption of protein continues to increase, such as meat, eggs, milk (Nugroho et al., 2012; Siregar, 2012). One of the ruminant livestock studied is lakor goats, which are small livestock that have many uses and benefits. Apart from being able to produce meat to meet animal protein needs, other products can also be used according to the commodities produced by the livestock (Firdaus, Kadir and Makmur, 2020). The goat farming business is quite promising, because it has the potential to develop farming businesses in agro-ecosystems. Goats have relatively good adaptability compared to other ruminants. Goats have a character that is able to survive in marginal conditions so that this livestock is often the choice of pet livestock (Sarwono, 2007).

The goat population in Southwest Maluku Regency is spread across all sub-districts. The largest population in Lakor District in the last three years starting in 2018, 2019 and 2020 respectively amounted to 11,792 individuals and 11,942 and 12,064 (Agency Southwest Maluku Regency Statistics Center, 2020). If we look at the population, goat farming has great potential to be developed, because one of the indicators of development in the livestock sub-sector can be seen by increasing the livestock population on existing commodities. Lakor Island with an area of 303.02 km², is one of the islands that has quite large potential for

goat farming. Lakor goat is one of them local Indonesian livestock groups determined through the Decree of the Minister of Agriculture of the Republic of Indonesia Number 2913/Kpts/OT.140/6/2011 (Director General of PKH, Directorate General of Animal Husbandry and Animal Health, 2015). As one of the "germplasm" of Maluku, the Lakor goat has have developed for a long time in their habitat, and have adapted to the local climate, so that they have formed distinctive characteristics. Goat Lakor is the main business has been preserved from generation to generation by the local community. Apart from being the main source of income, it is also a source of manure production and is used as traditional livestock. However, in its development until now the maintenance pattern is still traditional. Even though it is the main source of income, it is deep running his business is not yet fully business oriented. Maintenance systems with simple technology tend to create problems in both production and marketing.

The traditional production system involves only releasing livestock on pastures without monitoring the quality of feed and controlling mating tends to cause the quality of livestock to decrease with low body weight growth and the occurrence of inbreeding which causes a decline quality of Lakor goat seeds and if not handled seriously it will have an impact on population decline and extinction of local Maluku germplasm. Several previous studies that support this research are in the form of reviews from several scientific journals over the last three years, including Yuslizar and Syahrantau (2020) research on Analysis of Goat Buying and Selling Businesses in Tembilahan Village, Tembilahan City District; Tiven et al., (2019) conducted research regarding the Potential for Development of Goat Farming in Sir-Sir District and Aru Tengah District, Aru Islands Regency, Maluku Province; Wokan, et al (2020), conducted research on Analysis of Goat Farming in People's Farms East Flores Regency; Rusdiana and Maesya (2018) conducted research on the Prospects for Development of Goat Farming Businesses and Stimulating Economic Improvement Breeders; Asnavy, Harisudin and Setyowati (2017), conducted research on the Etawa Farm Goat Farming Business Development Strategy in Tawangmangu District, Karanganyer Regency; Firdaus, Kadir and Makmur (2020) did Research on Abu Aqiqah Beef Goat Business Development Strategy in Kruen Barona Jaya District, Aceh Besar Regency.

METHOD

This research is field research using high-quality action research methods and the research design used is a descriptive design (one of the many types of research that researchers can choose, a research method that describes the object or subject being studied in depth and in detail).

The tools used in this research were cameras, scales and stationery, while the materials used in this research included goat breeders (respondents), questionnaires (Koesioner), and goat livestock. The research time is planned to be carried out in 1 month, starting from October-November 2022. By determining 6 (six) research data collection locations, namely, Kettilepei, Sera, Letoda, Lolotwara, Yamluli and Werwawan Lakor Island, Southwest Maluku Regency. The method used in this research is a survey method with the determination of sample villages carried out using a purposive sampling method by looking at the largest number of livestock, while the determination of respondents for each sample, namely 10 respondents, is determined based on the random sampling method (simple random). The respondents to be selected are determined based on The criteria are to have a total of 5 livestock kept and there are parent livestock with a minimum of 3 years of business.

RESULTS AND DISCUSSION

The population of Lakor goats in Yamluli, Sera, Kettilepei, Letoda and Lolotwara Werwawan in Lakor District based on the results of field research that has been carried out can be seen in table 1.

Table 1. Population structure includes (mothers 12-15 months, adults 18-20 months, heifers 8 months and calves 1-5 months)

	Parent 12-25 Months		Adult 18-20 Months		Virgin 8 Months		Pedet 1-5 Bulan	
	♂ man	♀Female	♂ man	♀Female	♂ man	♀Female	♂ man	♀Female
Σ	467	891	283	609	185	236	191	227
%	34,389	65,611	31,942	68,274	43,942	56,058	45,693	54,307

Data: 2022

The structure of the livestock population is the pedigree of a group of livestock, in this case the Lakor goat breed. The livestock population structure can be differentiated based on gender and age, where the age

of Lakor goats is divided into parent groups aged 12-15 months, adults aged 18-20 months, heifers aged 8 months and calves aged 1-5 months. Based on Table, it is known that the number of Lakor goats for the six villages is 3,089, consisting of 467 male Lakor goats (34,389%) and the number of parent females is 891 (65.611%), the number of adult males is 283 (31,726%) and the number of adult females was 609 (68.274%), the number of male heifers was 185 (43.942%) and the number of female heifers was 236 (56.058%), the number of male calves was 191 (45.693%) and the number of female calves was 227 (54.307%). From the description of the population structure, it can be seen that the presence of mother and adult livestock is in the highest percentage, while the lowest is male heifers. The high population of male and adult livestock is due to the awareness of the local community to maintain the existence of female livestock as a source of seeds/parents which will be used in efforts to increase the population of adult male livestock due to the fact that many male livestock are sold to meet the economic needs of the family because they have higher.

The productivity of Lakor goats in rural conditions on Lakor Island, Southwest Maluku Regency can be seen in table 2 below.

Table 2. Productivity of Lakor goats

	Variabel			
	Birth Weight		Weaning Weight	Body Weight of Goats Aged 1-2 Years
	♂ man	♀ female	♂ man	♂ man
mean	1 kg	1 kg	13,15 kg	86,91 kg-22,84kg

Body weight is the body weight of a goat kid, namely body measurements such as chest circumference, shoulder height and body length. The research results in table show that the body weight of goat kids aged 1-2 years at the research location was 86.91-22.84 kg. The body weight of an animal is greatly influenced by the factors age, sex, height, body length and chest circumference as well as the type of feed and environmental conditions. In the same breed due to different environments including climate, vegetation type, soil elements, management methods and other factors are different. Body weight also depends on the feed that the farmer gives to the livestock for consumption, because the body weight of goats depends on how they provide good quality feed, the drinking water is also very good, which can also make the goat's body weight good, but the maintenance method is not good or not. Pay attention, but you can leave it alone, it can also cause weight loss or the livestock to experience disease, which can make the livestock thin.

Feed is anything that can be given directly to livestock for consumption, both green fodder and additional feed for livestock which is used to meet the needs of life, growth and good reproduction. There is sufficient forage for livestock and can be available throughout the year, even during the season. Dry (long dry) livestock can consume dry forage.

Respondent Characteristics

The characteristics of respondents in Lakor District include the diversity of respondents based on age, education level, occupation, source of seeds, how to choose seeds, length of business, business objectives, and maintenance system. The characteristics of the respondents can be seen in table 3 below.

Table 3. Characteristics of Respondents in Lakor District

	Age		Education			Work			
	Productive	Non-productive	SD	SMP	SMA	Farmer	Breeder	Fisherman	
Σ	55	5	28	11	21	23	33	4	
%	91,67	8,33	46,67	18,33	35	38,33	55	6,67	
	Seed Source			How to Choose Seeds			Length of Business		
	Buy	Inheritance	Give	Age	Body shape	Age and Form	0,15	16-30	≥ 31
Σ	32	25	3	10	46	4	40	19	1
%	53,33	41,67	5	16,67	76,67	6,67	66,67	31,67	1,67
	Business objectives			Maintenance System					
	Save	Income	Savings and Adding Income	Semi Incentive					
Σ	2	57	1	60					
%	3,33	95	1,67	100					

Data: 2022

Respondent characteristics are used to determine the diversity of respondents based on age, education level, occupation, source of seeds, how to choose seeds, length of business, business objectives and maintenance system. It is hoped that this will provide a fairly clear picture of the condition of the respondents and its relationship to the problem and objectives of the research. In managing a business such as the world of livestock business, the age factor plays an important role because it is one of the factors that influences a person's work ability and productivity. In table 1 it can be seen that the dominant age of respondents ranges from 15-64 years with a percentage of 90%, while the age of the lowest respondents ranges above 65 years with a percentage of 10%. In demographic analysis, the age structure of the population is divided into three groups, namely

- a) Easy age group under 15 years.
- b) Productive age group, aged 15 to 64 years.
- c) Old age group, aged 65 years and over.

In general, younger people will have more abilities or be active and creative in their business and will produce maximum production. Apart from that, the absorption of new information and technology, whether obtained in the mass media or conveyed by livestock extension workers, will be more quickly absorbed and applied in the world of livestock business. Job status is the most important thing because it determines the amount of time a person devotes to the business he is running. The work manager is divided into two, namely main work and side work. Basic work is work that is routinely done and is a source of family income to meet the needs of life and the family. Meanwhile, side work is work that is done only when there is free time and the results obtained are only additional income. Based on the research results in (table 1), it shows that almost all respondents have permanent or main work as livestock breeders, 33 people (55%), farmers. 23 people (38.33%), and fishermen 4 people (6.67%). This is because the presence of goats has quite an economic influence on the respondent's family income. Apart from this, the potential of natural resources really supports the existence of this livestock business. And the Lakor goat itself is one of the germplasm from Southwest Maluku district.

CONCLUSION

Respondent characteristics include: productive age (91.67%), non-productive (8.33%), occupation (farmers 38.33%, breeders 55%, fishermen 6.67%), source of seeds (purchased 53.33%, inherited 41.67%, giving 5%), how to choose seeds (age 16.67%, body shape 76.67%, age and body shape 6.67%), length of business (years) (0-15 66.67%, 16-30 3.67%, ≥ 31 1.67%), business goals (savings 3.33%, increasing income 95%, saving and increasing income 1.67%), maintenance system (semi-intensive 100%). The population structure includes: mothers 12-15 months (males 34.389% and females 65.611%), adults 18-20 months (males 31.726% and females 68.274%), heifers 8 months (males 43.942% and females 56.058%) and calves 1- 5 months (male 45.693% and female 54.307%). Child growth productivity includes: birth weight (1kg), weaning weight (13.15kg), body weight of goat kids aged 1-2 years (86.91kg -22.84kg) and type of feed (banyan leaves, pasture and kusambi leaves). Parent reproductive productivity includes: number of matings/pregnancies (1.5-3 times), type of birth (single 11.32%, twins 42.14% and triplets 19.93%), litter size (1.97), mortality pre-weaning (7.33%), sex ratio (3.31-3.70) and estrus cycle (18-24 days).

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