

# Management Practices in Rearing Buffalo Viewed from The Technical Aspect Management in Gayo Lues District

(Tatalaksana pemeliharaan kerbau ditinjau dari aspek teknis pemeliharaan di kabupaten gayo lues)

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**ABSTRAK** Survey lapangan telah dilakukan untuk mengetahui tatalaksana pemeliharaan ternak kerbau di Kabupaten Gayo Lues Nangroe Aceh Darussalam. Empat puluh empat peternak kerbau di wawancara dan observasi langsung pada tiga daerah yang berbeda yaitu Blangkejeren, Kutapanjang dan Rikit Gaib. Data yang diperlukan dalam penelitian ini berasal dari pengukuran dan perhitungan terhadap aspek-aspek teknis pemeliharaan ternak yang mengacu kepada pedoman yang dikeluarkan oleh Direktorat Jenderal Peternakan Indonesia tahun

1992, meliputi: pemuliaan dan reproduksi, makanan ternak, tatalaksana pemeliharaan, tujuan pemeliharaan dan kesehatan ternak. Hasil penelitian menunjukkan bahwa tatalaksana pemeliharaan kerbau di Kabupaten Gayo Lues masih rendah, yaitu 42.33 % dari standart Direktorat Jenderal Peternakan Indonesia. Penerapan aspek teknis dari pemuliaan dan reproduksi, makanan ternak, tatalaksana pemeliharaan, tujuan pemeliharaan dan kesehatan ternak masing-masing 52.95%, 18.22%, 38.46%, 60.71%, dan 74.73%.

**Key words:** Traditional buffalo management, Gayo Lues district.

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## INTRODUCTION

Developing of national livestock sector depends on the possession, reservation, and livestock resource both those improved or unimproved breed. Buffalo (*Bubalus bubalis*) is one of ruminantia livestock which has special advantages to improve such as that it can survive with the low quality food, and its existence has been united with the social life and the culture of farmer in Indonesia. Buffalo production of the traditional management applied by farmers has many advantages as the traditional farming tool, meat, organic fertilizer, leather, and social-culture equipment. Therefore, domestic buffalo is germ source that could be applied to improve food supply, social prosperity, create job, and foreign exchange. The genetic livestock which adapt to the specific environment will be more productive because of the low cost, and support the food variety, farming and culture, and more efficient in achieving the high supply (FAO, 2000)

In improving the productivity of buffalo, it is necessary to sort the breed, know

the breeding practices, feed and feeding practices, rearing practices health aspect and marketing so it can give profit in productivity. In Gayo Lues District, the people have bred buffaloes for long time for livings, meats and invest. They practice breeding traditionally considering their lack of interest in buffalo breeding management.

In addition, it is also necessary to recognize the good and right techniques in buffalo breeding applied in Gayo Lues. The objectives of this research were to find the technical aspects of applying in buffalo breeding management compared with the standard guideline buffalo management from the Directorate General of Livestock Services (DGLS).

It was hoped that this research could support the valuable information for the people who has connection with livestock breeding to improve the buffalo livestock in Gayo Lues District. In making decision of the development policies and planning they would always consider all these technical aspects.

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## MATERIAL AND METHOD

### Respondent Research

The respondents are the buffalo farmers in Gayo Lues District. Determining of respondents used the proportional Simple Random Sampling (Singarimbun, 1981) to the people who had minimal two buffaloes.

### Research Field

A field survey has been conducted in the three selected sub district of Blangkejeren, Kutapanjang, and Rikit Gaib in Gayo Lues. This selection was based on the buffalo population bred by the people. The research was held using the survey and directly observation to the breed location, and interview using the questionnaires prepared before.

Tabel 1. Spreading of Respondents in the Selected Subdistrict.

| No    | Distric      | Livestock breeder | Sample |
|-------|--------------|-------------------|--------|
| 1.    | Blangkejeren | 60                | 12     |
| 2.    | Kutapanjang  | 130               | 20     |
| 3.    | Rikit Gaib   | 95                | 11     |
| Total |              | 185               | 43     |

### Collecting Data

The necessary data in this research was taken from measuring and estimating on the technical aspects of livestock management based on the standard guideline buffalo management from the Directorate General of Livestock Services (1992), including of:

1. Breed and breeding performance
2. Feed and feeding performances
3. Management practices
4. Health practices
5. Rearing practices

Beside the primer data above, the secondary data is also necessary to support this research. It was taken from the institution which has connection with this research.

### Analysis of Data

The data were tabulated in frequency and percentage according to the standard guideline buffalo management from the Directorate General of Livestock Services (DGLS) (1992).

## RESULT AND DISCUSON

Applying the technical aspects of in buffalo breeding showed that management practices of buffalo production applied by farmers in Gayo Lues were found very low, only 42.33% (423.59/1000x100%) of the standard management from the Directorate General of Livestock Services (1992) DGLS. The low percentage was caused by many external factors of that area, such as: traditional management or followed their ancestor. It was paralleled with the result of Rahim and Arlinda's research (1998) that management practices of buffalo in West Sumatera was low (43.09%). Based on the research above, it showed that applying the technical aspects of buffalo breeding in Gayo Lues District was lower compared with the technical aspects applied by farmers in West Sumatera. Applying the technical aspects of in buffalo breeding in Gayo Lues District was shown in the Table 2.

Applications of breed and breeding in Gayo Lues were found very low, (52.95%) compared with the standard guideline buffalo management from the Directorate General of Livestock Services in 1992. It was caused that most farmers in Gayo Lues District had used the domestic buffaloes as the germ. The buffaloes had adapted and had been well known for long time. Beside as the farming tools (plough), the buffaloes were also used for livings, meats and invest in accordance with the FAO (2000).

Table 2: Applying the Technical Aspects of Buffalo Breeding in Gayo Lues District

| Technical Aspect     | Standard value | Average | Percentage (%) |
|----------------------|----------------|---------|----------------|
| Breeding performance | 350            | 185.34  | 52.95          |
| Feed and feeding     | 300            | 54.18   | 18.22          |
| Management practices | 175            | 67.31   | 38.46          |
| Health practices     | 100            | 60.71   | 60.71          |
| Rearing practices    | 75             | 56.05   | 74.73          |
| Total                | 1000           | 423.59  | 42.33          |

Source: The result of research

Applications of Management practices of livestock in Gayo Lues were found low (38.46%) so, there were many factors to improve. The farmers did not make use of livestock manure as biogas or fertilizer because they did not know the advantage of the manure. In caring the buffalo, the farmers never clean the buffalo because they think that

it usually mallows in mud holes. Mud protects buffalo from flies, mosquitoes, fleas and suffocating heat of the sun. Sudarsono (1995) stated that rearing buffaloes is as the plough in muddy field and it is accordance with rearing buffaloes in Gayo Lues district.

Application of health practices is Gayo Lues was about 60.71% (Table 2), the farmers had got the traditional prevention and recovery treatment on their buffaloes such as puffed up and diarrhea. Meanwhile it was necessary to give them current information about livestock pest and methods of prevention and recovery treatment especially for framers who were far away from the livestock official service.

Application of technical aspect on each sub district was the samples which were shown on the Table 3.

Based on the table 3, it showed that the average of application the technical aspects in each sub district was 38.32%, 42.94% and 45.79% (Blankejeren, Kutapanjang, and Rikit Gaib) compared with the standard guideline buffalo management from the Directorate General of Livestock Services in 1992. The highest percentage aspect among the sub districts was the stalls and tools because most farmers made the open-spaced stalls from wood and wires that were good for buffaloes in those hilly areas.

Table 3: Application of Management Practices of Buffalo Breeding in Blangkejeren, Kutapanjang and Rikit Gaib

| Technical Aspect     | Standard value | Blang kejeren | Kuta panjang | Rikit Gaib | Blang Kejeren (%) | Kuta panjang (%) | Rikit Gaib (%) |
|----------------------|----------------|---------------|--------------|------------|-------------------|------------------|----------------|
| Pemuliaan&Reproduksi | 350            | 160.75        | 178.00       | 217.27     | 45.93             | 50.86            | 62.08          |
| Makanan              | 300            | 55.95         | 70.13        | 36.45      | 18.65             | 23.38            | 12.15          |
| Tata Laksana         | 175            | 53.30         | 66.44        | 82.18      | 30.46             | 37.97            | 46.96          |
| Kesehatan            | 100            | 57.78         | 60.25        | 64.09      | 57.78             | 60.25            | 64.09          |
| Kandang/Peralatan    | 75             | 55.50         | 54.66        | 58.00      | 72.88             | 72.88            | 77.33          |
| Total                | 1000           | 383.28        | 429.48       | 457.99     |                   |                  |                |

Source: The result of research

Meanwhile, feed and feeding performances was the lowest percentage aspect among the sub district with about 18.65% (Blangkejeren), 23.38% (Kutapanjang), and 12.15% (Rikit Gaib). It was caused that most of the farmers had not planted the high quality grass and had not had the concentrate yet. They also had no water supply for their livestock because they thought that the water was still founded enough grass on the field. Meanwhile the supplement was not so necessary because they thought that the grass on the grassland was enough for their buffaloes. In Gayo Lues, the grass grows on the grass land along the year that caused the farmers did not do grass plantation or grass preserving.

### Marketing

Livestock marketing was very influenced on profit of livestock business. Poor management in marketing might inflict a loss upon the farmers. The result of research in Gayo Lues showed 97.5% of the farmers sold their buffaloes by cash, and only 2.5% sold it by credit. They used traditional trade system

by selling it directly to the agents or livestock market. Based on the respondents statement it was only 3.3% of the farmers sold their buffaloes directly to the livestock market. 96.7% sold their buffaloes via agent. 11.6% the farmers stated that they sold their buffaloes on the religion holidays, and 88.4% of farmers sold their buffaloes continually.

### Conclusion

Based on the research of the livestock farmers in Gayo Lues on rearing aspect management, it showed that management practices of buffalo production applied by farmers in Gayo Lues were found very low compared with the standard guideline buffalo management from the Directorate General of Livestock Services (1992). It was caused by other factors, such as education level which impacted the farmers' skill, infrastructure and facilities in livestock treatment, and long distance between the livestock with the livestock official service.

The traditional and hereditarily buffalo management caused the farmer accepted sluggishly the change by the authority. In

improving the weaknesses, it was necessary to give current information for the farmers to increase the buffalo productivity such as improving the high quality feed and germ, based on the technical management aspects of the Directorate General of Livestock Services.

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